The Work of Reform in Teacher Education

by

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Abstract

In this dissertation, I examine the work involved in attempting to rebuild teacher education into an enterprise more directly focused on the practice of teaching. As a vehicle for doing so, I analyze a significant instance of teacher education reform: efforts associated with the Holmes Group at Michigan State University (MSU) in the 1980s and 1990s. The Holmes Group was a consortium of research universities that committed to a common agenda of improving schools, teaching, and teacher education, and Michigan State was a flagship site of its efforts. By investigating the experience of this large, national consortium on this particular campus, I attempt to uncover the problems of reform and to explore why the improvement of teacher education has been so elusive in the United States.

I argue that "constrained capability" is a core problem in teacher education reform and one for which leaders of improvement efforts should deliberately design. Although faculty members involved with the Holmes Group effort at Michigan State had great interest in improving teacher education and many resources for the work, collective uncertainty across the field about what teaching is and what is required to learn it and to teach it slowed and impeded their efforts. Lacking were learning opportunities that might have provided knowledge and skill essential for the work and channels through which new knowledge being developed at the time might inform the change effort. Although the faculty did alter the structure of teacher education at MSU and achieve several substantive changes, they did not fundamentally redesign the core curriculum for learning to teach. This analysis suggests that change efforts in teacher education must attend directly to enactors' extant knowledge and skill and create organizational learning mechanisms to support collective learning from and for the work of reform.

Chapter One

Introduction

This dissertation is about the work involved in improving teacher education in the United States. By "teacher education," I mean the professional preparation that individuals who wish to become K-12 teachers receive before they are given full responsibility for a classroom. This includes their training in the subject or subjects they wish to teach, any program of professional studies that they follow, and supervised experience working in K-12 schools. Although a case of university-based teacher education is at the center of the study, my broader analysis is of the work of improving all forms of teacher education, including those that take place through so-called "alternate-route" programs. I use the terms "teacher education" or "teacher preparation" to refer to any form of initial teacher training.

I am persuaded by recent arguments that teacher education in all its forms needs to focus more deliberately on the practice of teaching (Ball & Cohen, 1999; Ball & Forzani, 2009; Lampert, 2006; Lampert, 2010). In most other fields of professional practice, from aviation to medicine to the clergy, novices learn to carry out specific elements of their work and must demonstrate their ability to perform key tasks before they are permitted to practice independently. Prospective pilots learn to execute takeoffs, landings, and turns, for example; medical students to conduct a physical examination and dress a wound; intending priests and rabbis to perform life-cycle rituals and to read religious text orally. Even plumbers learn a set of distinctive skills and must pass on-the-job performance evaluations before they may work on their own. In contrast, practitioners of teaching have never identified the core tasks of the work and designed performance-based professional education focused on helping novices learn to do

those tasks effectively. Teacher education has evolved as a haphazard jumble of poorlyarticulated coursework and vague "field experiences," and professional practice in teaching is rarely assessed directly.

Here, I examine the work involved in attempting to rebuild teacher education into an enterprise more directly focused on the practice of teaching. As a vehicle for doing so, I analyze a significant instance of teacher education reform: efforts associated with the Holmes Group at Michigan State University (MSU) in the 1980s and 1990s. The Holmes Group was a consortium of research universities that committed to a common agenda of improving schools, teaching, and teacher education, and Michigan State was a flagship site of its efforts. By investigating the experience of this large, national consortium on this particular campus, I attempt to uncover the problems of reform and to explore why the improvement of teacher education has been so elusive in this country. I use the term "elusive" because there has been no shortage of criticism, calls for reform, and even schemes for improvement in teacher education in the United States, yet the enterprise remains weak and the object of widespread skepticism.

Failing Schools, Teacher Education, and the Problem of Practice

For more than half a century, analysts have pointed to inadequate teacher education as a primary cause of failing schools in the United States (e.g., Carnegie Forum on Education and the Economy, 1986; Conant, 1963; Goodlad, 1990; The Holmes Partnership & Lanier, 2007; Koerner, 1963; Levine, 2006). Their criticisms span every element of the enterprise of preparing teachers, from the qualifications of education faculty members and students to the features of the institutions in which teacher education takes place (Lanier & Little, 1986; Levine, 2006). The curriculum for learning to teach has been the target of particular censure, often for what some contend are its insufficient attention to disciplinary knowledge and limited offerings in field experience. Increasingly, researchers have begun to charge that the curriculum is unfocused on the practice of teaching, with few opportunities for students to master the core tasks of novice practice (Ball & Cohen, 1999; Ball & Forzani, 2009; Grossman & McDonald, 2008; Lampert, 2010). Analysts have identified several ways in which the existing teacher education curriculum

fails to focus squarely on the work of teaching. Some have found that learning goals for student teachers are not referenced to the tasks and activities of teaching, but are instead focused on their ability to discuss and analyze schools and classrooms and to "reflect" on practice (e.g., Ball & Cohen, 1999; Ball & Forzani, 2009; Grossman & McDonald, 2008). Others have found that teacher education is significantly more concerned with "pre-active" phases of the work of teaching, including lesson and unit planning, and even with planning for classroom management, than it is with offering chances for students to practice enacting their plans (Grossman, Compton, Igra, Ronfeldt, Shahan, and Williamson, 2009). Opportunities to engage in what Grossman et al. (2009) have called "approximations" of practice, or carefully crafted instructional activities that engage novices in simplified but increasingly complex versions of the tasks of the profession—common in other fields of professional education—appear to be particularly lacking. Researchers have also suggested that teacher educators tend to ignore or shortchange the special kinds of academic content knowledge and knowledge about children, learning, and culture that underlie and enable the practice of teaching (e.g., Ball & Bass, 2003; Ball & Cohen, 1999; Lee, 2007; Shulman, 1987).

Some researchers and teacher educators working today have begun to imagine how professional preparation for teachers could look different. Drawing on the work of several other researchers, Ball and Forzani (2009) outlined three potential features of a teacher education curriculum focused on practice: (1) a clear articulation of the work of teaching, including "decompositions" of practice into its constituent parts (see Grossman, Compton, Igra, Ronfeldt, Shahan, & Williamson, 2009), the identification of "high-leverage" practices as foci for pre-service teacher education (see Sleep, Boerst, & Ball, 2007), and attempts to highlight and make studyable and learnable "invisible" aspects of the work (see Lewis, 2007); (2) carefully designed opportunities for novices to rehearse high-leverage practices and practice "approximations" of teaching prior to assuming full responsibility for a classroom (see Grossman et al., 2009); and (3) special settings for learning teaching, both virtual and actual, deliberately crafted so as to hold

constant some of the features of real classrooms that make teaching challenging work (see Lampert, 2006).

Similarly, Lampert and Graziani (2009) have identified clearly specified "instructional activities" as potential organizing foci for teacher education, and observed that such activities can serve as a "stable and rehearsable backdrop" for the dynamic work of teaching (p. 6). Ball and Cohen (1999) have theorized that teacher educators could situate novices' learning in practice by structuring it around records of teachers' work, including copies of student assignments and productions, videotapes of classroom lessons, and examples of curriculum materials. Others have argued that a practice-based curriculum would also emphasize knowledge that is essential to and useable in practice (e.g., Ball & Bass, 2003; Ball & Cohen, 1999; Shulman, 1987). Finally, Forzani and Ball (2010) have emphasized that this kind of curriculum would include direct assessments of knowledge for practice and of teachers' ability to carry out specific instructional tasks.

Although all of these researchers acknowledge the importance of many aspects of teacher education, including the students of teaching and the school settings in which they are trained, they focus in particular on the curriculum of teacher education. Because it specifies what students of teaching should learn to do and thus provides guidance to everyone involved in the enterprise of preparing teachers and because it remains underdeveloped, I, too, focus on the curriculum for learning to teach throughout this dissertation. When I use the term "curriculum," I refer not only to the knowledge and skills that teacher educators have decided prospective teachers should learn, but to the organization, presentation, and measurement of that knowledge and skill. This includes the way that learning goals are sequenced; the instructional activities and other learning opportunities offered to students, including the questions that are posed, the examples that are provided, and the things that students and teacher educators do together both on university campuses and in K-12 school settings that are designed to foster students' learning; and the assessments that are used to evaluate what students have learned. "Curriculum" thus refers comprehensively to learning goals, to the instruction that teacher educators provide, to assessment of learning, and to the ways in which these things are organized.

A practice-focused curriculum with the features identified above would likely be structured in ways that are fundamentally different from most existing curricula. Teacher education programs typically recommend students for state certification after they have completed a sequence of courses, usually including one each in content methods, educational psychology, educational foundations, and student teaching. Most programs also require either a content major or an "education" major. Students of teaching are evaluated primarily on their ability to complete traditional, written assignments in these courses (Levine, 2006). In contrast, a practice-focused curriculum for learning teaching would make specific practices of teaching its organizing foci, and students would not be able to graduate without demonstrating competence at each of a predetermined set of instructional activities or skills (see Lampert, 2010 for an extended discussion of the potential features of a practice-focused curriculum). It is possible that such a curriculum would not use a traditional course structure, and making practice the focus of teacher education could thus mean a wholesale redesign of the curriculum for learning to teach.

To date, teachers educators have not implemented such a curriculum. Deliberate efforts to improve teacher education—directed sometimes at making the curriculum more practice-focused and sometimes at other aspects of the endeavor—have started and stalled throughout the history of professional education for teachers in the United States. Few have had any lasting impact, and calls for change have only grown stronger in the first decades of the twenty-first century. By analyzing an effort on the part of administrators and faculty members at Michigan State University to implement ideas associated with the Holmes Group in the 1980s and 1990s, I intend to identify some of the challenges of and resources for implementing reform in teacher education, and in so doing to inform the design and implementation of policies and programs aimed at improving teacher education. My focus is on university-based teacher education, which remains the prevailing form of teacher training in this country. Some of the most important elements of my analysis, however, concern the work of improving teacher education wherever it takes place, including in the increasingly common programs based in nonprofits, school districts, and other organizations outside of higher education.

The Holmes Group and the Problem of Reform

A consortium of nearly 100 research universities with interests in teacher education, the Holmes Group was the largest reform network of teacher education programs ever assembled in the United States. Members committed to two goals: Reforming the teaching profession and reforming teacher education in schools of education.

As Judy Lanier recounts the story in the foreword to a recently republished trilogy of Holmes Group reports, she and two other education deans – John Palmer of the University of Wisconsin at Madison and Bob Koff of the State University of New York at Albany – found common ground in their concern over the weak quality of teacher preparation programs across the country while working in the early 1980s on a national taskforce on the accreditation of schools of education (The Holmes Partnership & Lanier, 2007). With support from the Johnson Foundation, they initiated a study group to consider the problem in detail. Their deliberations initially focused on standards for teacher preparation programs, but soon became a broader conversation about the strengths and weaknesses of teacher education. The deans eventually decided to form a collaborative of like-minded colleagues who they hoped would work together to develop and implement an agenda for improvement. They ultimately recruited nearly 100 members and began calling themselves "The Holmes Group," taking the name from Henry W. Holmes, a dean of the Harvard Graduate School of Education in the 1920s and a champion of university-based teacher education.

In 1983, the Holmes Group was formally born as a nonprofit, dues-paying organization of institutional members with a board of directors and a largely voluntary staff (see Appendix A for a timeline of events related to the consortium and Appendix B for a diagram of key structures of the Holmes Group). Leadership at the local level was meant to come from the deans and chief academic officers who would oversee change efforts on their own campuses. At the national level, consortium leaders concerned themselves primarily with developing, arguing for, and publishing an agenda for change, and with supporting the work on individual campuses. From 1983 to 1985, they met routinely to share ideas and discuss emerging knowledge of teaching and

teacher education. At times, they invited guests working in various education-related fields around the country to join them and share opinions and expertise. From these meetings and discussions they developed a comprehensive vision of school reform that targeted school organization, the profession of teaching, and the training of teachers.

With a membership of universities represented by faculty members, the Holmes Group's primary focus was the improvement of university-based teacher education. Consortium leaders viewed the problems of teacher education as inseparable from the problems of K-12 schools, however, and from the poor working conditions and status dilemmas of the teaching profession. Consequently, the Holmes Group agenda simultaneously addressed improvements in universities, in schools, and in the structure of the teaching profession. The consortium called for an overhaul of the teacher education curriculum, including the reconstruction of both liberal arts and pedagogical studies in order to make both more responsive to the intellectual and practical demands of teaching; the creation of "professional development schools" (PDSs), special public schools that would better support both research and teacher education; and the implementation of a tiered system of teacher licensure. Although the Holmes Group did not call for a practice-focused reform in the way that reformers working in the early twenty first century might, it had clear intentions to refocus teacher education on practice and to redirect education researchers' attention to the exigencies of the classroom.

In 1986, members of the Holmes Group published these ideas in their first of three major reports, *Tomorrow's Teachers*. The volume generated a great deal of interest and analysis from within the education community. *The Chronicle of Higher Education* published the report in full, and *Teachers College Record* devoted an entire issue to discussion of the ideas raised in it. Much of the response was critical, particularly from education school insiders who considered the consortium's strategy naive and its claims misleading. Larry Cuban (1987), for example, chastised the Holmes Group for their "selective amnesia" about previous efforts to reform teacher education and for an apparent unawareness of the magnitude of their task. Philip Jackson (1987) argued that the Holmes Group's claim that the field of teaching was in command of a significant

knowledge base was deceptive, and opined that "we may even know less today than we once did about how to teach" (p. 384). Others raised similar concerns, many focused on the enormity of the proposed agenda and the multitude of factors bearing on teacher education that seemed to be outside of the consortium's purview (e.g., Apple, 1987; Dreeben, 1987).

Other reactions were cautiously positive. Several observers identified the proposal for a network of professional development schools as an important step toward the professionalization of teaching and the improvement of clinical training for teachers (e.g., Darling-Hammond, 1987; Feinberg, 1987). Some pointed out a variety of problems the consortium would need to manage, from organizational challenges to a lack of knowledge of and for practice, but otherwise embraced the call for change (e.g., Joyce, 1987; Martin, 1987; Zumwalt, 1987). Many stakeholders external to the university, including U.S. Secretary of Education Terrel Bell and the leaders of both major teachers unions, among others, offered tentative support. In the end, the Holmes Group retained large numbers of supporters through the publication of its first major report and their constituents on many individual campuses proceeded with the implementation of its agenda.

From 1987 through 1995, faculty leaders on Holmes Group campuses across the United States launched a series of initiatives intended to improve teacher education and to strengthen connections with K-12 schools. At many institutions, initial efforts centered around trying to convince colleagues in arts and sciences departments to take teacher education more seriously and to tailor their courses to the needs of prospective teachers. Several Holmes Group schools also began to implement five-year undergraduate teacher education programs or post B.A. programs, usually to increase students' "field experiences" and to strengthen their liberal arts training. Many tried to forge closer partnerships with schools, sometimes launching pilot versions of the professional development schools for which *Tomorrow's Teachers* had called. The Holmes Group hosted numerous conferences and meetings for members, developed a Listserv, and published a quarterly newsletter. Increasingly, being part of the Holmes Group meant both

cachet and special opportunities for professional engagement for faculty members from across the country.

Meanwhile, consortium leaders at the national level began working on their second report, intended to explain the professional development school concept in detail. They convened a series of meetings, with participants from across the education sector, to think about what education's version of the teaching hospital would be like, and charged a writing team with developing the report. Published in 1990, *Tomorrow's Schools* offered six principles for the design of the PDS, intended to help university faculty members and practicing teachers collaborate in the development of K-12 schools that would simultaneously support practice-focused research and teacher education. The report met with less controversy than had *Tomorrow's Teachers*, perhaps because it was largely repetitive of the first report. Further, the basic concept underlying the idea for the professional development school was not new—it recalled the laboratory and demonstration schools with which teacher educators had been experimenting for decades. The report did seem to renew interest in university-school partnerships, and there is evidence that it prompted a number of Holmes institutions to begin creating professional development schools.

In the years that followed the publication of *Tomorrow's Schools*, however, energy for work on the Holmes Group agenda began to flag as consortium members confronted the difficulty of their task. By the time the writing team assembled to draft the third and final report, this one intended to outline an agenda for the reform of schools of education, many members of the Holmes Group were wrestling unhappily with the implications of their work for the identity of schools of education. The suggestion that they should repudiate their preoccupation with traditional social science research in favor of teacher education and R&D in schools seemed to threaten some, and the writing team struggled to reach consensus around the main ideas in the plan (The Holmes Partnership & Lanier, 2007). Five years in the making, the report bogged down in internal deliberations and its release was twice delayed (Fullan, Galluzzo, Morris, & Watson, 1998). Judy Lanier later observed that it "was easier to think about changing others – such as

teachers and schools - than changing one's own faculty in *Tomorrow's Schools of Education*" (The Holmes Partnership & Lanier, 2007, p. xix). By the time the report was published, many Holmes Group members seemed to have lost the energy to pursue the broad agenda for reform of their own institutions, and the report was greeted with more disappointment than controversy or fanfare.

In 1996, shortly after the publication of *Tomorrow's Schools of Education*, leaders of the Holmes Group decided during a national meeting that the challenges of implementing changes in university-based schools of education were too intractable for institutions to manage on their own. Convinced that strengthening the capacities of teachers and schools was essential to the reform of teacher education, the Holmes Group shifted the locus of its efforts from preservice teacher education to work with school professionals. They joined with several other organizations, including the American Federation of Teachers, the National Education Association, the American Association of Colleges for Teacher Education, and the National Board for Professional Teaching Standards, among others, to form the Holmes Partnership. The Partnership replaced the Holmes Group, and for the past decade has been concerned primarily with supporting school-university partnerships.

For a time, however, the Holmes Group had fostered an ambitious and far-reaching effort to reform teaching and teacher education. Teacher education had never been a priority of American research universities, and yet the consortium's leadership attracted a large, diverse, and potentially powerfully membership to tackle an agenda that stretched to virtually every problem in education. They worked during a period in which many Americans were interested in educational quality and the improvement of schools and enjoyed relatively widespread support. Nonetheless, the Holmes Group failed to enact most of its goals. Ten years after the publication of *Tomorrow's Teachers*, the teacher education curriculum in programs across the United States had changed little, few universities supported professional development schools or other close collaborations with K-12 schools, and the traditional teacher licensure system was intact. In a post-mortem of the Holmes Group's efforts nationally, Michael Fullan and his colleagues (1998)

wondered, "If one of the better efforts, and Holmes is certainly that, has a hard time making progress, what does that say about the size of the problem?" (pp. xvi-xvii). In this dissertation, I have tried to answer that question.

The Study

In this study, I investigate what can be learned from efforts associated with the Holmes Group's work at Michigan State University (MSU) about the problem of designing and implementing practice-focused teacher education. Although the members of the Holmes Group did not set out to redesign teacher education in ways identical to those promoted by some twenty-first century reformers, they did seek to focus squarely on teaching and learning and to work on practice in school settings. Their efforts thus permit analysis of the problems of both teacher education reform in general and practice-based reform in particular, and allow useful examination of what might be involved in current efforts to develop practice-based teacher education.

I elected to focus this study on the Holmes Group's work at Michigan State because this large, state university was better equipped than similar institutions to carry out teacher education reform and became a hotbed of work related to the consortium's efforts. Judith Lanier, the president and founder of the Holmes Group and the dean of the College of Education at Michigan State, used her own faculty and her own programs as the site for serious efforts to implement the consortium's agenda. Taking advantage of her position at the helm of a faculty that already had an unusually strong interest in teacher education, Lanier tried to make the College of Education at Michigan State into the embodiment of Holmes Group goals. She recruited an extraordinary group of scholars to the project, secured millions of dollars in grant funding, launched a major reorganization of the teacher education curriculum, and created a large number of the professional development schools that the Holmes Group argued were essential. She saw many successes, but by 1995, the project had largely disintegrated, many of its central goals unmet. Given how well poised Lanier was to make change, a good deal can be learned from studying her efforts.

Drawing on interviews with key members of the Holmes Group and with faculty members involved in the work at Michigan State University, and on analysis of documents from both the Holmes Group as a national entity and the reform at Michigan State, I have tried to answer two sets of questions: First, what factors influenced the implementation of Holmes Group reforms at Michigan State and the outcomes of the endeavor? What resources for the work existed on this campus, and what were the obstacles? Here, I have paid particular attention to the distance between the Holmes Group's aims and extant practice at Michigan State, and considered whether and how Lanier and her colleagues tried to help faculty members learn to design and carry out change. Second, to what extent did the work associated with the Holmes Group succeed in bringing teacher education at Michigan State closer to practice? What resources were introduced as part of the reform that might have generated new learning opportunities for students of teaching at Michigan State? Is teacher education different now than it was before the Holmes Group? To answer these questions, I have also explored broader problems in the fields of education policy and teacher education, including the central role of practitioners in the reform process, teacher educators' conceptions of pedagogy for practice, and the place of professional schools of education in the American university.

Based on my analysis, the central problem in teacher education reform is to identify key elements of the work of teaching and to design a curriculum—learning goals, instructional activities, and assessments—that will help novices learn those elements. In addition, other elements of teacher education often need improvement, including the capacity of teacher educators, the extant characteristics and abilities of the students who enter the field, and the environments and contexts in which teacher education takes place. For leaders of reform efforts, the work of reform is to help faculty members and other teacher educators learn to design and deliver this curriculum. Although it is rarely conceived of as such, this work, too, is instructional.

I explore this work, including the problems associated with it and the historical events, pressures, and inclinations that produced them, in six chapters. First, I investigate the history of the teacher education curriculum in the United States, from its origins in the nineteenth century

normal schools through the introduction of state certification laws in the 1930s and beyond, to the time of the Holmes Group. I examine how and why American teacher educators built this curriculum into its current form, with close attention to the ideas, hopes, and pressures that helped shape their work and that continue to influence the field today. My goal in this chapter is to explain the problem that the Holmes Group confronted, and to foreshadow the resources and constraints that the consortium would face. In Chapter Three, I develop the conceptual framework that I will use throughout the remainder of the dissertation to analyze the Holmes Group's effort to solve this problem at Michigan State. I focus on the capacity of teacher educators and the role of their work in reform. In the fourth chapter, I introduce the Holmes Group as a national entity and consider the tools on which the consortium relied and the implications of this strategy for the work on individual campuses. In Chapter Five, I delve into the work associated with the Holmes Group at Michigan State. I examine the special resources for the project that existed at this large state university prior to the reform movement, analyze how the dean and department chair used these resources and others to promote change, and consider how other factors, including the university context, influenced the work. This chapter focuses on the heyday of the Holmes Group era at Michigan State, from the beginning of the Holmes Group period through Judith Lanier's decision to leave the deanship. In Chapter Six, I explore the decline of intense efforts to implement the Holmes agenda at MSU, with close attention to the reasons that many faculty members found the project unsustainable. Finally, in Chapter Seven I use my findings to articulate and summarize the work of reform in teacher education and to suggest the implications for those who would improve this complex enterprise.

A Note about Human Subjects

Most of the 28 individuals whom I interviewed for this study requested that I conceal their identity in written reports, including this dissertation. A few either asked me to use their real names in quoting or writing about them or else agreed to be named in situations where I found it difficult to avoid identifying them. For this reason, I usually refer to human sources as "Anonymous" but occasionally use the real names of individuals whose identify would be difficult

to mask or whose key roles in the Holmes Group and MSU stories make it important for readers to understand their specific ideas and experiences. In a small number of instances, I refer to sources by name in part because they are not only subjects of my study but important scholars of teacher education reform in their own right.

Chapter Two

The Problem of Practice in Teacher Education

Members of the Holmes Group inherited a history of efforts to design and improve teacher education in the United States that was both rich with resources for their work and rife with tensions. In the periods both prior to and following the institution of state teacher certification laws in the 1930s, American teacher educators introduced and developed ideas about teaching and teacher education that were directly useful for work on crafting a practice-focused curriculum for learning to teach. They began to parse the work of teaching into learnable parts, to craft clinical activities and settings for teaching novices the work, and to identify the special kinds of content knowledge needed for teaching. At the same time, their work in both of these periods revealed deep-seated ambivalence among university faculty members and the public toward the work of teaching and teachers' need for professional education. Efforts to center teacher education on practice never came to fruition despite many decades of experimentation and advocacy. This history of starts and stops, of waxing and waning attention to practice, played an important role in the Holmes Group's project as it both defined the consortium's problem and contributed resources toward solving it.

Teacher education in the United States and efforts to improve it are bound up with both the progress of research on teaching and with the arrival of state teacher certification laws. As was the case in several other fields of professional practice, the advent of teacher education preceded the development of a robust knowledge base for practice and a corresponding protocol for practitioners. When the first agitators began to lobby for professional education for teachers, instructional practice in the United States tended toward the rote, with little concern granted to

pupils' interests and experiences. Few teachers or teacher educators had a clear sense of how to improve this reality, and little was known about the kinds of knowledge, understanding, or skill a more effective teacher would need. Most Americans believed that teaching required little in the way of special preparation or knowledge, and were reluctant to provide significant resources toward schooling or teacher training. Moreover, the social sciences were in their infancy, and there was no tradition of empirical inquiry on which scholars or practitioners interested in instruction might draw.

Because teacher educators saw professional education as a means to improve classroom instruction and build a profession of teaching, they began to develop relatively sophisticated pedagogies for preparing teachers in advance of a similarly sophisticated practice of teaching. Working primarily in single-purpose normal schools, they crafted novel methods of professional education—demonstration and modeling, rehearsal and practice with prescriptive coaching, and the intensive use of model and practice schools. They were encouraged to do so by an atmosphere that was largely free from both legal regulation and the pressures and status concerns that would later preoccupy faculty members in colleges and universities. Unlike those who would follow them, these early teacher educators worked in institutions that encouraged a singular focus on teaching and teacher education. While their efforts were in the service of preparing teachers to carry out instructional approaches that were often little more than fads, soon to be abandoned, they nonetheless produced important advances in professional education, with potential for further development.

These trends in the direction of practice-focused teacher education were powerfully reversed in the early twentieth century as population growth and the increasing industrialization of U.S. society led to burgeoning numbers of colleges and universities that eventually subsumed the normal schools and as states introduced certification laws for teachers. This shift brought both important opportunities for the growth of education science and serious deterrents to the extant work of teacher educators. On the one hand, departments of education and psychology, many in great universities, supported educational philosophers, psychologists, and sometimes

teacher educators who were making significant strides in educational theory and practice. On the other hand, expectations and mores in these new institutions encouraged faculty members to turn away from the concerns of professional practice toward more traditional social science and humanities research. Many professors of education were all too happy to cede responsibility for certifying teachers' readiness for practice to new state departments of education, where policy-makers were intent on standardizing public education. By 1930, virtually every state required intending teachers to obtain a state-issued license. With this change came the solidification of a state-sanctioned curriculum for teacher education—the now-familiar pattern of courses in educational psychology and foundations, instructional "methods," and student teaching.

Missing from this model were close attention to the work of teaching and systematic opportunities for students to learn to perform the core tasks of that work well. State certification standards did not specify expected competencies for new teachers, and the preservice curriculum was similarly vague. Few incentives encouraged faculty members to challenge or change this basic template, and it remained firmly in place when the Holmes Group formed in the mid-1980s. Just as educationists were beginning to explicate important features of teachers' work and to consider corresponding pedagogies for preparing instructors, the conditions for doing so deteriorated significantly. Although the remainder of the twentieth century saw several important developments in research on teaching and experiments in teacher education, none have successfully challenged the traditional teacher education curriculum.

This peculiar history meant that members of the Holmes Group faced an enormous task when they set out to redesign the curriculum for learning to teach and to re-envision classroom teaching and learning. Their predecessors had never fully articulated the practice of teaching, identified elements of the work most important for beginning practice, or designed instructional activities that would help novices learn to teach. They still had not identified what kinds of knowledge were most important for effective practice or constructed a preservice curriculum that would deliberately help students of teaching equip themselves with the understanding and skills necessary for their work. Still, several ideas with potential currency for the work of designing and

implementing practice-focused teacher education were ripe for further development in the 1980s. Members of the Holmes Group were not the first to seek more effective teacher education, and few of their ideas were entirely original. Below I investigate the Holmes Group's checkered inheritance and what it reveals about the challenges that the consortium faced and the resources available for the work of improving teacher education at the end of the twentieth century. I begin with a discussion of nineteenth century teacher education in the single-purpose normal schools, then consider the shifts in teacher education that occurred in conjunction with the growth of colleges and universities, and conclude with a review of efforts to improve teacher education since 1950.

Teacher Education in the Early Normal Schools (1830s-1850s)

Prior to the 1830s, teacher education in the United States was a haphazard business. A few teachers briefly attended programs in academies, female seminaries, short term institutes, or "dame" or "petty" schools, but most received no professional training at all. Many had completed only a year or two more schooling than had their own pupils. And when educators in Massachusetts founded the first normal school in 1839, their work marked the beginning not only of organized teacher education, but also of organized professional education more broadly. At the time, formal opportunities for professional training did not exist in any field: would-be lawyers and ministers "read" their subjects alone at home; those who wished to become doctors apprenticed themselves to experienced physicians without any prior theoretical or practical training. The normal schools represented the first opportunity in any field for novices to engage collectively in the theoretical study of professional work combined with opportunities to practice that work and receive feedback from the same instructors who taught the theory (Frazer, 2007).

Though teacher educators in the normal schools faced debilitating obstacles that prevented them from fully developing and implementing the curriculum for learning teaching that they envisioned, they laid the groundwork for essential developments in teacher education. Early normal school educators tried to craft professional education centered on the work of classroom teaching, demonstrating that more recent efforts in the direction of practice-focused teacher

education have their origins nearly two centuries ago. They analyzed the work of teaching and attempted to articulate what teachers need to know and be able to do; they developed rudimentary pedagogies of practice, including some that were implemented in model or practice schools; and made forays toward the identification of special kinds of content knowledge needed for teaching. Although teacher education remained a diffuse, incoherent enterprise through much of the first half of the nineteenth century, it is worth examining the ideas and experiences of these earliest of teacher educators because of their continuing relevance to the problems of teacher education. At the core of their work lie both a vision of practice-focused teacher education that American educators have yet to realize fully and a prophetic set of struggles. The ideas and experiences of the first teacher educators are part of the collective tradition of American teacher education, and a potential resource for their successors.

Origins: The Massachusetts Normal Schools

Calls for professional teacher training in the United States began with reformers associated with the common school movement in Massachusetts in the 1820s and 1830s (Borrowman, 1956; Herbst, 1989). These advocates—among whom were not only educators such as Horace Mann but politicians, journalists, and members of the clergy—viewed teacher education as a way to improve the power of the common schools to inculcate shared language, values, and standards of behavior. Without well-trained teachers, they argued, common schools would not serve the socializing function that their founders desired (see Borrowman, 1956 and Herbst, 1989 for discussions of the ways in which Massachusetts reformers were influenced and in some respects misguided by Prussian ideas about teacher training). Evident in the writings and speeches of these men was a conviction—unusual then and perhaps only somewhat more common now—that classroom teaching was complex and demanding work that required special knowledge and skill. These early champions of teacher education argued for opportunities for prospective teachers to practice specific elements of the work of teaching in actual schools under close and formal supervision, and to learn what would now be called content knowledge for teaching.

In 1825, three well-known education reformers, James G. Carter of Massachusetts, Thomas H. Gallaudet of Connecticut, and Walter R. Johnson of Pennsylvania, published essays calling for state-supported normal schools that would deliver what might have been called "practice-focused" teacher education. In an appeal to the Massachusetts legislature, for example, newspaperman James Carter anticipated work that would follow more than a century later by distinguishing between the possession of knowledge and the ability to communicate that knowledge to others. He argued that instructional resources such as money and books were worthless unless used by teachers who understood children's thinking and how best to communicate new ideas to their charges. He insisted that in order to develop this kind of understanding and skill, prospective teachers would require directive training offered in the context of practice teaching in a real school: "If the more inexperienced teacher should attempt to force upon the mind of a child an idea or a process of reasoning for which it was not in a proper state, he would be checked at once, and told of his fault" (in Norton, 1926, p. 238). Notably, Carter warned that the teacher educators who worked in the practice school associated with the training school for teachers would need to develop a science of teaching and a corresponding literature around which to build a program of teacher education.

A similar appreciation for the complexities of teaching and the challenges of preparing for the work was evident in the remarks made by Massachusetts Governor Edward Everett at the opening of the second normal school, at Barre on September 3, 1839. Outlining four "core" components of the normal school curriculum, Governor Everett argued that future teachers should acquire a high degree of content knowledge, particularly in the "common branches" taught in the common schools; that the "art of teaching" should occupy just as prominent a place in the curriculum; that prospective teachers should study "the government of the school, including how to deliver moral education and serve as a good influence in the community;" and finally, that students in the normal schools should observe and practice good teaching. He also declared that "besides the general art of teaching, there are peculiar methods applicable to each branch of knowledge, which should be unfolded in the instructions of a Normal School." Governor

Everett, like many of his colleagues, believed firmly that carefully supervised practice in a real school was crucial to the success of a normal school education (Frazer, 2007).

Historian Christine Ogren (2005) has observed that Governor Everett was either "insightful or prophetic, for he described the approach of state normal schools throughout the United States for decades to come" (p. 29). Written accounts of the Massachusetts normals reveal early efforts to identify key aspects of the work of teaching and to engage the normalites in practice of that work. Cyrus Peirce, principal of the first normal school at Lexington and an experienced classroom teacher, noted in his journals and letters that he considered the ability to express feelings and sentiments orally, to explain principles, and to illustrate positions to be crucial tasks of teachers. He also recorded his several efforts to help his students learn to perform those tasks. In an 1841 letter to Henry Barnard, Peirce explained that he offered instruction in the art of teaching through his own example, or "by giving every day, and continually, in my own manner of teaching, an exemplification of my theory," and by requiring his students to teach each other in his presence. He offered Barnard this summary of his methods:

I have four different methods of recitation. 1st, by question and answer; 2d, by conversation; 3d, by calling on one, two, three, more or less, to give an analysis of the whole subject contained in the lesson; and 4th, by requiring written analyses, in which the *ideas* of the author are stated in the *language* of the pupil...Much attention is paid to the *manner* in which the pupils set forth, or state their positions. I am ever mingling, or attempting to mingle, at these exercises, theory and example; frequently putting the inquiry to them, not only, "How do you understand such and such a statement?" but, "How would you express such and such a sentiment, or explain such a principle, or illustrate such a position to a class, which you may be teaching?" "Let me." I say to them, "hear your statements, or witness your modes of illustrating and explaining." In this connection, I frequently call them to the black-board for visible representation. They make the attempt; I remark upon their manner of doing it, and endeavor to show them in which respect it may be improved. Sometimes, instead of reciting the lesson directly to me, I ask them to imagine themselves, for the time, acting in the *capacity* of *teachers*, to a class of young pupils, and to adopt a style suitable for such a purpose (in Borrowman, 1965, pp. 60-61).

This description suggests that Peirce viewed teacher education as an opportunity for both a basic review of school subjects and practice of professional work. Apparently, his pedagogical methods included both traditional written assignments and more practice-oriented

modeling, demonstration, and rehearsal. If his comments to Barnard are accurate, Peirce used the normal school classroom as a site for practice teaching under conditions more controlled than those found in the practice school—an early effort in the direction of what might now be called "designed" settings for learning to teach (see Lampert, 2006) or "approximations" of practice (see Grossman et al., 2009). Peirce's comments also imply that the normal school principal did not hesitate to offer his students prescriptions for improvement, or avoid pressing them to demonstrate their ability to perform their work—an approach to teacher education which had fallen out of favor by the time the Holmes Group formed (see Ball & Forzani, 2009).

Cyrus Peirce brought an unusual degree of interest and commitment to his work, but there is evidence that teacher educators in many of the other normal schools also attended directly to practice in their programs—indeed, to do so was their primary purpose. In the normal school at Westfield, Massachusetts, for example, principal William H. Wells introduced the notion of "mutual instruction," whereby students taught and critiqued each other (Herbst, 1989). In the normal school that Henry Barnard opened in New Britain, Connecticut in 1850, practice teaching in an attached model school was required of even those students who attended for only one term. When a regular three-year curriculum was established in 1959, four terms of practice teaching were required—occupying roughly one third of a student's time (Harper, 1939).

Model or practice schools were the object of particular attention in the early and mid1800s. When the American Normal School Association held its first convention at Trenton, New
Jersey in 1859, the importance of the model or practice school in teacher education was a topic
of heated discussion. Educators present at the conference criticized the Massachusetts normals
for their reliance upon role-playing more than on practice teaching in real schools, and argued
that a functional model school was a necessity for any normal school (Harper, 1939). The
association's first president, William Franklin Phelps, used the occasion to declare that "there is
but one salvation for the Normal Schools, and that is, they must be truly professional schools for
training teachers" (Herbst, 1989). When Phelps opened his own normal school in Trenton, he
invested even more effort in designing the model school building than he did the normal school

building, later concluding, "The results of our school have settled the question for us, of the practicability and necessity of model or experimental schools in connection with instruction in the art of teaching. I look upon them as indispensable. I do not think a normal school is complete without them!" (Harper, 1939, p. 65). Harper (1939) noted that at Trenton, "there was insistence that the teacher be a good technician. The student teacher was prepared when she faced the class. Her work was planned, the subjectmatter [sic] fully mastered, and the difficulties anticipated" (p. 65). These comments express the respect early nineteenth century teacher educators had for the difficulty of practice and for the necessity of technique-oriented preparation for practitioners.

In addition to practice itself, attention to the special ways in which teachers needed to know their subject matter was at least minimally present in these early efforts to shape the teacher education curriculum around the work of teaching. Inherent in Cyrus Peirce's insistence that his students study the common branches from the point of view of their pupils was an approach to the teaching and learning of academic content that would later come to be termed the "professional treatment of subject-matter" (Randolph, 1924). At Lexington, Peirce offered instruction that intermingled study of academic subjects and of the art of teaching with practice teaching, emphasizing that the art of teaching was the paramount concern. Although not all of Peirce's colleagues adhered to this approach, there is evidence that consideration of the problem of what kinds of knowledge teachers needed was becoming more common in this era. For example, in an 1837 address to the College of Professional Teachers of Cincinnati and Columbus, Ohio, Calvin Stowe argued that the first part of a teacher education curriculum should consist not only of in-depth study of the subjects to be taught, but of a review of those aspects of subjects which, "though not always necessary in respect to their practical application to the actual business of life"... are "absolutely essential to that ready command over them which the teacher must have in order to put them into the minds of others" (Randolph, p. 50). Further, he argued that teacher educators should consider the best method of teaching "at every step" as they presented academic subject-matter (Borrowman, 1956). Similarly, in 1851, lawyer and journalist

Edward Deering Mansfield avowed that teachers must analyze their subjects in considerable depth in order to teach them to others:

Whoever teaches must analyze. He must not merely say that he has a machine, which will perform this and that thing, and that his pupil, by turning certain screws, will inevitably obtain certain results; but he must take that machine to pieces—must count every cog, and calculate the movement of every wheel (Mansfield, 1851, p. 66).

These comments anticipate arguments that researchers active much later—at the time of the Holmes Group and even more recently—have made about the particular ways in which teachers need to know their subject matter (e.g., Ball & Bass, 2003).

Although neither Peirce, Stowe, nor Mansfield ever fully developed these ideas, they laid the groundwork for many decades of work to probe the knowledge demands of teaching and to construct a corresponding curriculum for learning to teach. The more recent efforts to identify content knowledge for teaching that directly informed the Holmes Group's agenda have differed in important ways from these early meditations and experiments, but authors of the Holmes Group reports echoed their nineteenth-century predecessors when they wrote many decades later, suggesting how persistent attention to content knowledge for teaching has been throughout the history of teacher education in the United States.

Teacher Education in the Early Normals and the Infrastructure for Improvement

In their concern with content knowledge for teaching, their commitment to the value of model and practice schools, and their interest in special pedagogies for practice, nineteenth century teacher educators took clear steps in the direction of a practice-focused curriculum for learning to teach. The fruits of their experiments were rudimentary, however, and even as early as the earliest of the Massachusetts normals, teacher educators encountered obstacles that were still widespread when the Holmes Group took up its work.

A central problem was that despite many normal school educators' frequent references to "the art of teaching," neither an art nor a science of teaching existed at the beginning of the nineteenth century. This made for an immature curriculum for learning to teach—a problem that

has never been remediated and that has interfered with the construction of a practice-focused curriculum ever since. Nowhere in the published accounts of the curricula in the normal schools of the first half of the nineteenth century are there listings of the instructional activities that normalites would need to learn and to practice. There are few descriptions of the discrete tasks in which students would engage while practice-teaching. I have not found evidence of specific assignments that students were expected to complete while working in the model or practice schools or of formal assessments of students' ability to perform specific activities of teaching. The few textbooks on teaching in circulation at the time—David Page's *Theory and Practice of Teaching*, for example, and Samuel Hall's *Lectures on Schoolkeeping*—did not offer a comprehensive articulation of the work of teaching and were in any case concerned primarily with the moral and disciplinary aspects of school-keeping (Hollis, 1898; Ogren, 2005). This emphasis may have reflected a prevailing view of schooling as an enterprise that was moral and social at least as much as it was academic.

Teacher educators in the early nineteenth century were beginning to identify specific elements of instructional work for the purposes of teacher education, but not in a deliberate effort to build a professional practice of teaching. Cyrus Peirce, for example, might have named "giving explanations" and "illustrating key points and arguments" (see above) as fundamental tasks of teaching and described the curriculum of his normal school at Lexington in terms of them. That he did not speaks to the unformed nature of the fields of teaching and teacher education at the time.

To have developed a common language for studying and teaching practice, early teacher educators would have needed an infrastructure for the work that was stronger than what they had. By "infrastructure," I mean a system for building and sharing knowledge of practice, with a collective agenda and methods of developing and conducting experiments and disseminating the results. The U.S. agricultural extension service, which maintains officers around the country who assist farmers in testing mechanisms for improving crop or livestock production and then share the results, is an example of such an infrastructure (see Gawande, 2009). The lack of a similar

system in education has impeded instructional improvement, including the construction of practice-focused teacher education, throughout the history of U.S. schooling (Cohen, 2010).

Several persistent features of the U.S. education system would challenge attempts to develop infrastructure for improving teaching and teacher education in this country. Beginning at the time of Cyrus Peirce, the fragmented system of school governance in the United States and the absence of a common, K-12 curriculum have meant that scholars and practitioners of teaching have not been able to direct collective attention to a common set of instructional problems. Teachers always teach something, and many problems of practice derive from the work of trying to teach a particular idea, topic, or text. Because authority over educational matters is delegated to states and, to a considerable degree, to local communities, however, significant variation in content and method in individual classrooms is the norm in the United States. To this point, Cohen and Spillane (1992) have observed that American teachers' work "is guided more by inherited practices and individual decisions than by any clear and common view of what is to be covered, how it is to be covered, and why" (p. 23). Dan Lortie (1975) has made similar observations. These researchers might have come to the same conclusions as early as the beginning of the nineteenth century, when the lack of instructional guidance may have prohibited early teacher educators from probing questions about the teaching and learning of particular subjects, topics, and practices and led to a preoccupation with general rather than subjectspecific tasks and activities of teaching in the professional curriculum.

A similar problem of infrastructure with origins in the nineteenth century and symptoms that persisted through the time of the Holmes Group and beyond concerns opportunities for ongoing professional learning. Neither teachers nor teacher educators in the early 1800s had many opportunities to work together, sharing problems, ideas, or best practices—a pervasive problem even today. Early normal school educators worked largely in isolation from one another; when they came together, it was generally to lobby for resources and support for their institutions rather than to study or tackle problems of practice—another feature of work in education still pervasive today. They did not work inside any tradition of scholarship, and in the

earliest days of the normal schools, they had few formal resources for studying their work or developing and testing ideas in concert with colleagues.

By the mid-1850s, teacher educators were beginning to form professional networks focused on teacher education, but in most cases they did not use these networks as conduits for efforts to develop the practices of teaching and teacher education. They communicated, for example, through formal visits to each other's institutions, faculty migration, publications, and professional organizations (Ogren, 2005). Many principals published widely and were involved in professional organizations including state teachers associations, the American Normal School Association (founded in 1855), and the National Teachers' Association (founded in 1857), which later became the National Education Association. Numerous normal school graduates—including, most notably, 26 former students of Nicholas Tillinghast at Bridgewater—took jobs at other schools or founded their own institutions. In addition, new normal school principals typically visited their colleagues at other schools, sometimes even at the behest of state boards of education. Ogren (2005) has observed, however, that although information was exchanged through these mechanisms, it "tended to strengthen the 'spirit of consecration' more than the scholarly or scientific substance of teacher education" (p. 32).

Also evident in the undertakings of these early professional organizations is the beginning of a preoccupation with the structural and political aspects of teacher education that has continued to dominate discussions of teacher education. For example, when teacher educators convened their first national conference in Trenton in 1859, their deliberations focused in part on whether normal schools should prepare teachers only for the elementary grades or for the higher grades as well. Frustrated by the degree of remediation they needed to offer to the young women and men who entered the normals, they resolved to leave open the possibility that they would soon begin preparing more advanced students to work at higher levels (Herbst, 1939). Eleven years later, at the 1870 convention of the American Normal School Association, President William Phelps suggested the introduction of a graded system of normal schools that would prepare some teachers for the common schools and others for the high schools (Herbst,

1939). But there is no evidence that the delegates worked very much on actual problems of practice. Apparently, they did not talk in detail about what normalites might learn to do at either the elementary or secondary level or about other problems related to the practice of preparing teachers; they seemed preoccupied with discussion of whom they should prepare, and for what.

My point is not that these early teacher educators should necessarily have used their time together in other ways. Members of the 1859 convention were absorbed by the question of whether to make elementary teacher education the sole focus of the normal school precisely because they wanted to improve their practice: Concerned that the degree of academic remediation that they had to provide to most students prevented them from offering the level of genuinely professional training to which they aspired, they sought to protect their schools as single-purpose institutions. And when Phelps argued for graded normal schools, it was not because the idea of grades held inherent appeal for him but because he feared that his colleagues' attention was drifting from the crucial and challenging business of preparing instructors for the lower grades toward the higher status and comparatively easier work of training high school teachers. The lower schools, Phelps argued, "present altogether the most difficult problems in respect to methods of instruction and administration with which educators are obliged to deal" (in Herbst, 1989, p. 99). My point is that communities of practice that might permit collegial discussion of and work on common problems of practice were not developing in these early years of the teaching profession. Because they have never developed, teachers and teacher educators have continued to do without fundamental resources for practice—with important consequences for teaching and teacher education.

Early teacher educators had other problems that their successors have never fully resolved. One was the academic preparation of the students who enrolled in teacher education. Most of these early students of teaching had had little formal schooling themselves, and what they had was not always of high quality. Cyrus Peirce grumbled that most of his students had "come to learn the Common Branches rather than to learn to *teach* them" (in Frazer, 2007). Peirce and his colleagues found themselves spending more time building their students' basic

understanding of content than developing their ability to teach it. In some cases, normal school instructors offered no real objection to this state of affairs. At Bridgewater, for example, principal Nicholas Tillinghast prided himself on offering more strictly academic instruction in subject-matter and on attending to students' basic but thorough understanding of the common branches (Herbst, 1989). Though Tillinghast provided his students with occasional suggestions for how to teach material and took care to set an example of effective instructional technique, his essential position was that the most important preparation for teaching was deep study of content (Borrowman, 1956). This view reflected the conviction common at the time that teaching required no special preparation apart from a basic education in the school subjects.

Symptoms of this view could be found in chronic under-funding and under-staffing in the normal schools and in their affiliated practice schools. In many cases just one instructor—the principal—was responsible for both the normal school and the practice school. This individual rarely had time to supervise student teachers' instruction very closely, and because the practice schools themselves were often under-staffed, normalites were frequently forced to assume full instructional responsibility for classes with little oversight from experienced teachers. These conditions did not permit normal school instructors routinely to use the practice schools as a site through which to develop ideas about the art or science of teaching, or to work closely with their normal school students on the development of instructional skill. Peirce and many of his colleagues were forced to spend hours of their time battling local school boards and state legislatures to obtain even a bare minimum of funding for their schools. And then as now, the mass nature of the teaching profession and the considerable difficulties of the work of teaching itself and of the process of learning to do it created special challenges for teacher educators. Although the principals of the early normals would have preferred to have recruited even more students than they did, large numbers of students enrolled in these programs relative to the number of available instructors. As I have already noted, many were poorly prepared academically and nearly all would have required close coaching and supervision in order to learn to teach well—in addition to enough classrooms in the model schools to enable them to practice

their craft. It was difficult for the normal school staff to accommodate students' academic and professional needs sufficiently (Ogren, 2005).

Given all of these resource constraints, it is not surprising that the earliest teacher educators never realized their vision. Nineteenth century teachers were paid poorly and afforded little status, public budgets were limited, and normal schools were closely associated with the common schools rather than with the more exalted colleges and universities or even the growing numbers of high schools. Normal school educators had neither the time nor the tools to build up a formal study of teaching or to develop the practice of teacher education. Overworked at school and under pressure to justify their jobs to the public and to state legislatures, their intuitions about the challenges of elementary school teaching and their vision for what professional education for teachers might become remained for their later colleagues to explore and to try to realize.

Object Teaching and Herbartianism in the Established Normal Schools (1860s-1890s)

If teacher educators were stymied by their lack of intellectual and material resources in their first fifty years, they were rewarded in the latter half of the nineteenth century with growing interest in pedagogy as a field of study and corresponding improvements in infrastructure and funding for teacher education. Drawing on the ideas of European philosophers Johann Heinrich Pestalozzi, Johann Friedrich Herbart, and Friedrich Froebel, among others, American teacher educators in this period began to pursue two new approaches to classroom instruction, first "object teaching" and then the "five formal steps" of Herbartianism. Both methods were focused on incorporating children's interests and experiences into instruction—a significant departure from most extant practice—and were intended to enliven the classroom experience for both pupils and teachers. Although these methods were eventually dismissed as reductionist and even baseless, they were important both because they introduced attention to children's thinking to American classroom instruction and because they spurred teacher educators to develop increasingly sophisticated approaches to professional education. This interest in the ideas and questions that children brought to study in school is important because it signals the beginning of

a passionate, if sporadic, commitment to developing academically ambitious instruction that would help students achieve sophisticated understanding of school subjects. Behind many efforts to improve teacher education in the United States, including those of the Holmes Group, has been an interest in ensuring instruction that would attend carefully to the questions and insights of children.

As enthusiasm for these new forms of pedagogy spread across the United States and normal schools secured better funding for their work, teacher educators entered a distinctively productive period. Temporary consensus around the ideas of the Herbartians in particular enabled teacher educators to develop methods for preparing teachers that were squarely centered on training novices to perform professionally agreed upon instructional practices. Finally in possession of something that was purported to be a theory of instruction, along with an articulation of the work of teaching, teacher educators in the late 1800s were able to build and experiment with pedagogies for preparing novices for practice and to make the model or practice school a richer feature of the teacher education landscape. Several also continued to explore the content knowledge demands of teaching and to create the beginnings of a curriculum based in that knowledge. For a time, at least, they were comparatively undistracted by the concerns over status, structure, and jurisdiction that would eventually overwhelm their successors. While the substance of teacher education in this era proved relatively unimportant and had little staying power, several of the methods of preparing teachers that developed concurrently may have lasting currency.

Pestalozzianism, Object Teaching, and the Oswego Normal School

Elementary though it was, work to articulate a theory of teaching and to use it to identify specific methods of preparing teachers was a defining factor in the development of the teacher education curriculum in the latter half of the nineteenth century. In the United States, its origins can be traced to Edward Sheldon, a teacher and superintendent of schools in Oswego, New York. Determined to improve student achievement in Oswego through better instructional methods and materials, Sheldon imported Pestalozzian "object teaching" to his schools (Hollis, 1898). Teachers

adhering to this approach brought objects into the classroom—charts, books, balls, cards, samples of grain, pieces of pottery—and used them as the centerpiece of lessons on form, color, weight, animals, plants, the human body, and the like. After presenting an object to their pupils, object teachers would ask a series of basic but rapid-fire questions pertaining to the object, wait for an answer, and then make what they hoped would be an informative statement about the object. Though Sheldon and his teachers initially struggled to deliver the lessons to good effect, they were so enthusiastic about the prospect of a new "method" of teaching that they agreed to give up half of their salaries for one year in order to employ the services of Miss M.E.M. Jones, a teacher in London trained in Pestalozzian object teaching (Hollis, 1898). With the help of Miss Jones, Sheldon and his colleagues eventually developed a great appreciation of the method (see Dearborn, 1925 for a discussion of Pestalozzi's psychology, further description of object teaching, and transcripts of object lessons). By 1861, Sheldon was so encouraged by this work that he opened a "training school" in Owego to prepare large numbers of instructors in object teaching (Hollis, 1898).

Noteworthy about the Oswego Training School are not the methods of object teaching but the fact that the presence of a body of knowledge and skill in teaching—even one that would be debunked in relatively short order—led to a prescriptive and practice-based form of teacher education from which teacher educators might learn more than a century later. Convinced of the worth of object teaching and in possession of a detailed set of rules and examples illustrating the method, Sheldon built a program of teacher education through which novices were taught how to teach in precise detail. Students in the training school were presented with detailed lesson plans that specified what questions to ask in the classroom, what statements to make, and what to say or ask in the case of several different potential responses. They alternated observation in a model school with practice teaching, and were required to pass a performance examination at the end of one year in which they taught a lesson in a practice school (separate from the model school). Sheldon relied on "model teaching" to demonstrate every aspect of object teaching, and

assigned every training school student a "critic teacher" whom he charged with providing directive advice. Summarizing the role of the critic teacher at Oswego, Dearborn (1925) declared:

It is the business of the critic (a) to supervise and direct, (b) to give illustrative lessons when necessary, (c) to discover the commendable traits of the student-teacher and give him all possible encouragement, (d) later, and always prefaced by something commendable, to bring to the attention of the student-teacher his faults, one at a time in the order of their importance" (p. 41).

This description suggests an approach to teacher education in which instructors and students alike have a clear sense of the expectations for student learning. In Sheldon's model, supervising teachers were unapplogetically directive. Their confidence in their methods—both with pupils in the Oswego schools and with their protégés in the training school—recalled the conviction of the early normal school leaders that professional education for teachers was warranted and heralded the beginning of what Ogren (2005) has called the "heyday" of the normal school.

Herbartianism, the Five Formal Steps, and the State Normal Schools

Sheldon's work at Oswego drew a good deal of enthusiastic attention from other teacher educators and established a firm precedent for normal schools to have an associated training or practice school (Dearborn, 1925; Hollis, 1898). Before long, however, normal school leaders grew skeptical of object teaching—they criticized it for being overly mechanical and formulaic—and began to look elsewhere for a theory of teaching on which to build even stronger programs of teacher education (Ogren, 2005). Their search led them to Herbartianism.

This new approach had originated at the University of Göttingen, where the German pedagogue Friedrich Herbart had attracted a large following of European and American doctoral students (Borrowman, 1956). Herbart introduced the idea that children's "interest" should dictate the content and sequence of the school curriculum, and his students and followers used this idea to develop a new approach to classroom instruction. Like object teaching, Herbartianism consisted of a general rather than subject-specific approach to instruction; Herbartians intended their prescriptive methods to guide teachers anywhere, working in every subject-area and with any pupil curriculum. Even more so than object teaching, Herbartianism permitted American

teacher educators to develop detailed and novel methods of preparing teachers for practice, albeit for a practice that was untested and would eventually be rejected.

The American Herbartian movement found its seat at the Illinois State Normal University (ISNU), in Normal, Illinois. Even before it arrived, principal Richard Edwards was busy turning ISNU into what historian Charles Harper (1935) called "the largest, best known, and most influential normal school in America" (p. 59). Edwards' work represents another early attempt to develop a curriculum for learning to teach based on the knowledge and skill used by teachers in their daily work, this one more complex than what early leaders such as Cyrus Peirce or Edward Sheldon were able to accomplish. His efforts prepared the ground for the subsequent influence of the Herbartians, but they are also important in their own right. Though Edwards oversaw the development of relatively unsophisticated pedagogies of teacher education—he relied primarily on demonstration and practice teaching and did not initiate what might now be termed "approximations" of teaching or other scaffolded approaches to practice—his tenure at ISNU is noteworthy for several reasons, including the degree of prescriptiveness that he introduced to the teaching of practice, the intensive use he made of ISNU's model school, and his efforts to develop the concept of pedagogical treatment of subject-matter.

Although Edwards did not subscribe to any particular approach to classroom instruction, he developed important practices for instructing prospective teachers in the prevailing classroom methods of the day, including "illustrative lessons" and coached practice. Illustrative lessons were classroom sessions taught by master teachers working with actual pupils in the model school that was attached to the normal schools and closely observed by the normalites (Harper, 1935). After each illustrative lesson, either the master teacher or the head of the training department held court with the normalities, explaining the instructional methods that had been modeled, expounding on the subject-matter, and analyzing the instructional decisions. Harper described the typical cycle of illustrative lessons as follows:

The students note for two or three days the methods of the teacher as she directs the smallest in their first efforts in reading, number, spelling, and writing. On the third or fourth day, the observers are examined with reference to what

they have noted, and after such conversation with them as seems profitable, the teacher proceeds to dictate, explain, and discuss the matter and method of work in some branch, the students writing according to her minute directions (in Harper, 1935, pp. 141-142).

As principal of the normal school, Edwards often taught the illustrative lesson to the seniors himself, "and afterwards explained in the very best educational lingo of the day, just what his aims and teaching technique had been" (Harper, 1935, p. 142). By 1877, these "illustrative" or "critique" lessons were so popular that four hours each week were devoted to them, and each observer typically spent more than fifty weeks participating in the cycle of observation and discussion (Harper, 1935).

Practice teaching was also an important and equally directive part of the curriculum, and beginning in 1867, each student was required to complete four terms of it. Edwards and his colleagues supervised the practice teaching closely, noting "defects" in the normalites' work that they discussed with them during subsequent private interviews or whole group meetings. The whole group meetings of the normalities "were intended to correct erroneous notions in regard to grading, use of textbooks, the purpose of the recitation, assignment of lessons, use of motives, teaching of good moral habits, problems of discipline, etc." (Harper, 1935, p. 141). Occasionally, the instructor provided a model lesson to illustrate his or her advice for how the normalites might correct their mistakes. When President Edwards provided supervision, he scored his students' work every time he observed them and required them to maintain a certain average score in order to pass the course each term (Harper, 1935).

Both the illustrative lessons and the student teaching that took place at ISNU were characterized by a high degree of prescription on the part of the normal and model school instructors. The term "illustrative" implies that the normal school faculty members were confident that the instruction in the illustrative lessons was worthy of demonstration and that the methods on display were to serve as examples that the normalities should strive to emulate in their own teaching. That these lessons were sometimes termed "critique" and were followed by public and open deliberation by faculty and students alike suggests that no one was squeamish about

identifying problems in teaching and attempting to make improvements (Harper, 1935). Similarly, President Edwards and his fellow faculty members did not hesitate to find fault with the work of their pupil-teachers and to offer corrective advice. If the normalites' work was sometimes judged to be "erroneous" as Harper (1935) reported it was, then the normal school instructors were able to identify right and wrong in teaching, or at least to judge better from worse instruction. And they were confident in their ability and their right—perhaps responsibility—to "dictate, explain, and discuss" the methods of instruction that they modeled. On the other hand, it is worth pointing out that Edwards and his colleagues seemed to assume that demonstration followed by immediate practice would be sufficient for student teachers' learning. There are few references in the literature to episodes in which the normalities would have practiced teaching on each other, as they did in Cyrus Peirce's school, or to opportunities for laboratory work or other forms of controlled experimentation or practice.

To the extent that he accomplished something important at ISNU, Edwards owed a good deal to the strong position of the model or practice school. Like the earliest normals, ISNU had a model school from its inception, but the position of its model school was considerably more prominent than that of the model schools attached to the original Massachusetts normals. Clear written policies indicated that ISNU's model school was to exist for the sole benefit of the normal school, that its teachers must be experts, and that it would be better for the normal not to deploy its students for observation and practice to any school at all if the only one available was a regular, district school—the model school was regarded as essential (Harper, 1935). Initially, President Edwards supervised the normalites' work in the model school himself, but by 1874 he had hired a cadre of "training-teachers" to take over that responsibility (Harper, 1935). Though few records of the curriculum exist that provide thorough accounts of what student teachers learned to do at ISNU and how they learned to do it, historian Charles Harper (1935) has analyzed both the normal school's catalogues and the proceedings of the Board of Education of the State of Illinois to arrive at a summary of Edwards' efforts to lead his faculty in delivering what appears to have been relatively detailed and prescriptive teacher education.

Evidence of the growing respect that both the model school and teacher education more generally commanded even among members of the public in this period can be found in a resolution that the Board of Education in Normal adopted in 1886 urging even closer cooperation between the normal and model departments at ISNU (Harper, 1935). Among its recommendations were these four: First, that instructors in both departments should employ the same methods of teaching, and that these methods should be consistent from one department to the next; second, that the academic work of the normal school should be subordinate to the training work; third, that the instructors in each academic department should ensure that their students engaged in practice teaching and employed the same principles and methods that they were taught in the normal classroom; and fourth, that all of the instructors in the normal department and not merely special training teachers should provide supervision and training in the model school. Harper (1935) found that as a result of the resolution, most of the faculty members in the normal department were participating in the work of the model school, "both by teaching some primary classes themselves and by supervising the instruction given by the practice teachers" (p. 143).

Edwards made inroads at ISNU not only in the development of pedagogies for practice and in the use of the model school, but also in the study of subject-matter for teaching. Though only some of the students at ISNU ever reached Edwards' advanced course in content—many left the university after completing shorter programs—those who did took up questions such as these:

1. What are the essential and governing ideas in each subject? 2. What is the natural order of their development? 3. What phases of this organic arrangement correspond to the various phases in the development of the child; or what would be an ideal course of study in each grade so far as this subject is concerned? 4. What is the history of this study in school education, as to its introduction and development as a part of the curriculum, and as to the development of methods of teaching it? 5. What is the specific educational value of this subject in the discipline of the mind and in practical usefulness? 6. What is its relation to other subjects in the curriculum? (Harper, 1935, p. 128)

Judging from these questions, Edwards expanded the notion of professional treatment of subject matter developed by his predecessors to include not only how teachers might best present material to students, but why a particular approach would make sense and how the value of a subject might be made clear to pupils. In an 1865 address to the National Education Association, Edwards commented that, "In the ordinary school the youth reads his Cicero with the purpose of learning the structure, vocabulary, and power of the Latin language; the normal student pores over the same author that he may adjust in his mind a method by which he may successfully teach others these things" (Harper, 1935, p. 168). A former student of Nicholas Tillinghast, Edwards built on the tradition of attention to academic content that he had learned at the Bridgewater normal school. His work, however, implied a broadening conception of the content knowledge relevant for teaching—an intimation of the idea of pedagogical content knowledge that teacher educators would formalize more than a hundred years later. Edwards' good fortune to have among his own students several who had the resources not only to study the common branches but to pursue them to greater and more appropriate depth allowed him to continue to develop ideas about what kinds of content knowledge were necessary for teaching.

Even as Edwards was preoccupied with transforming ISNU into an energetic center of teacher education, several young members of his faculty were searching for a way to develop more concrete theories of teaching and learning that would provide a sounder basis for the work of the normal school. Instrumental in this pursuit were three graduates of ISNU who had completed doctorates in German pedagogical seminaries and then returned to teach at their alma mater: Charles De Garmo and brothers Charles McMurry and Frank McMurry. Together with colleagues both at ISNU and elsewhere who had also studied the ideas of Herbart, these men were chiefly responsible for developing and diffusing an American interpretation of Herbartian notions across U.S. normal schools and universities. Their ideas significantly influenced American teacher education at the end of the nineteenth century, and greatly increased the role of the practice school and of practice-based methods of training teachers.

As was the case with Pestalozzianism and object teaching, dissatisfaction with the prevailing tendencies of classroom instruction was a root motivation of the American embrace of Herbartianism. Discouraged by teachers' reliance on the textbook and on memorization and drill as their primary method of instruction, American normal school educators found hope in emerging European ideas about child psychology and pedagogy that highlighted children's interests and purported to make them the driving force of instruction (De Garmo, 1895; Harper, 1935; Harper, 1939). Herbartianism particularly excited Americans because it offered even more specific principles and guidelines for instruction than Pestalozzianism had, and indicated an instructional approach that seemed more robust than object teaching (De Garmo, 1895). In *The* Method of the Recitation (1897), the signature text of American Herbartianism, authors Charles and Frank McMurry wrote that the field of pedagogy was "in search of universal principles of method in learning, based not upon the subjective whim of the teacher, but upon the common law of mental action which is universal within children and students, in fact with all human beings" (p. 3). Too much freedom for teachers, they wrote, was "oppressive;" what was needed was a compass of some kind that would guide teachers in their work. In Herbartianism, U.S. teacher educators saw a way to develop a long-elusive general method of instruction that would not only lead to improved classroom instruction but justify the normal schools once and for all.

Two ideas were core to American Herbartianism: first, that "generalizations" in each subject-matter should be the goal of all instruction; and second, that human beings build new knowledge in relation to what they already know—an idea that the McMurrys and their colleagues termed "apperception." Apperception, the McMurrys argued, meant that teaching was inherently difficult work requiring a high degree of skill; teachers would need to know their students well and figure out how to connect their untutored thinking with the "central truths" of the subject under study. The Herbartians emphasized that students must arrive at general truths on their own—with help from the instructor—and that it was a waste of time for teachers to take generalizations as a starting point. To help students make these intellectual leaps, they recommended that teachers employ what they termed the "five formal steps" of instruction:

"preparation" (directing students' attention to past experiences); "synthesis" (presenting new subject-matter, possibly through a textbook but preferably through conversation and questioning); "comparison and abstraction" (the separation of essential ideas in the subject from non-essential ones); "definition" (the clear wording of the generalization by the teacher); and finally, "practical application." (See McMurry & McMurry, 1903 for original discussion of the five formal steps; Ogren, 2005, and Harper, 1939 for useful summaries of Herbartianism.)

For the McMurry brothers and their colleagues, the chief appeal of the five formal steps was the respite they appeared to offer from the dull, regimented instruction that was the norm in the public schools. In following the five steps, teachers would have to abandon their reliance on textbooks, pay close attention to pupils and call on them to ask questions and interpret ideas, and organize the presentation of material according to students' understanding. The McMurrys recognized that this mode of teaching would require more work and more preparation on the part of teachers, but they envisioned transformed working lives for teachers and argued that the five formal steps would make instruction less mechanical and more spirited and relaxed. They were among the first to point out that teachers would have more freedom in their work rather than less if they could find guidance in a set of rules and principles: "just as a young pianist gradually overcomes awkwardness and self-consciousness in following the directions dictated by the principles of music, so the teacher can expect to free himself gradually from the feeling of constraint, and in the easy use of these principles find a means of power" (McMurry & McMurry, 1903, p.318).

The Herbartians regarded the model school as an essential site for the elaboration of the five formal steps and other "principles" of instruction and for the training of intending teachers and were instrumental in marshaling increased support for it, not only at ISNU, but across the country. In an influential 1884 essay titled, "Place and Function of the Model School," Charles DeGarmo outlined four functions for the institution that he regarded as fundamental to teacher education: first, to house teachers whose instruction would serve as a "model for imitation" by novices; second, to serve as a training school where future teachers could practice their craft

under supervision (new teachers, DeGarmo insisted, "must learn to do by trying"); third, to allow experienced teachers to experiment with and test new ideas and methods; and fourth, to be a "determining school," or a demonstration of the minimal level of quality and efficiency that should be found in all of the common schools. In the essay, DeGarmo reported on work in the model school at ISNU, explaining that he and his colleagues believed that observation should be the first step in teacher education since untrained persons "can see far better than they can teach," and that extensive practice teaching should follow the observation. He emphasized that model schools should be primarily for observation, imitation, and practice, and only incidentally for the second and third of the four purposes that he described.

There is evidence that many normal schools embraced these ideas and others published by the Herbartians and used them to amplify the curriculum for learning to teach and to expand their use of model schools. Carter (1930), for example, found that the inauguration of Herbartian ideas played a decisive role in the elaboration and expansion of the training school and of the entire teacher education program at the Colorado State Teachers College at Greeley. He reported that practice work in the training school increased significantly under the leadership of director and Herbartian John W. Hall, and that discussion sessions were introduced to help students discuss the "finer points" of their practice teaching. Carter emphasized that the presence of clear directions and principles for effective teaching greatly inspired and eased teacher educators' work, concluding that the "work of teacher-training was given form and direction by the use of standards which made it definite, based on certain principles rather than on the mere inspiration of the teacher and the power of his personality" (p.182).

Ogren (2005) has also catalogued the efforts of normal schools beginning in the 1870s to offer intensive pedagogical preparation for their students, and highlighted the impact that Herbartian methods had. She found numerous programs that reported offering courses in the five formal steps and basing extensive student teaching experiences around them, and documented the increasingly structured nature of observation and student teaching. At Florence, Alabama, for example, each student teacher met after every lesson with his or her critic teacher;

the school's catalogue explained that at the meeting, "his work is criticized, and the particulars in which he succeeded and those in which he failed are pointed out" (p. 141). In Edinboro, Pennsylvania, the 1881 normal school catalogue reported that discussions of student teaching "were held twice weekly or oftener, at which the excellencies and defects are pointed out that all may profit thereby" (p. 141). At Oshkosh, New York, practice teachers, critic teachers, and model-school supervisors participated in a "general meeting" every Wednesday afternoon to discuss the student teaching experiences that had taken place each week. In a memoir about life at the New Britain Normal School, student teacher Adelaide Pender described the thoroughness with which her work was critiqued:

As I stumbled through that lesson, my classmates sat around the edges of the room taking notes fiendishly (I thought) and frantically. I felt like a small fly being drawn into a spider's web...criticism concerned my method, my preparation, manner, personal appearance, anything. EVERYTHING!...I gave a lesson for that superior teacher, Miss Page, one day, and she pulled me to pieces everywhere (in Ogren, 2005, pp. 140-141).

Although Herbartianism was not the sole influence on teacher education in the late 1800s, it appeared to be a significant force in the direction of practice-focused teacher education wherever it was present. Even in normal schools that were not centers of Herbartianism, there is evidence that teacher educators in this period were beginning to develop and use a more formal taxonomy of instruction. At the normal school at Troy, New York, for example, student teachers were evaluated according to their ability to perform several different tasks of teaching. An evaluation form used at the school listed these categories: "Power to control," "Power to interest," "Skill in preparation of lesson," "Skill in questioning," "Skill in illustrating and explaining," "Judgment in assigning lessons," "Voice," "Manner in classroom," and "Care of blackboard" (Ogren, 2005, p. 141). It is reasonable to suspect that students at Troy were instructed according to the same categories, and that methods courses and discussion sessions offered in conjunction with student teaching focused on the same tasks of teaching on which students were ultimately evaluated. Though it is unclear whether such a specific articulation of the work of teaching was a pervasive device in teacher education at the time, it is worth noting

that teachers in at least one normal school were evaluated using performance measures directly referenced to teaching tasks.

G. Stanley Hall, Francis W. Parker, and the Cook County Normal School

Although Friedrich Herbart introduced the idea that children's interests should guide instruction, the American psychologist G. Stanley Hall was the first to apply disciplined inquiry to the ideas and interests of children. Through an approach that he termed "child-study," Hall engaged teachers in studying children's physical and mental growth, with special attention to the relationship between children's thinking and the subject-matter of the school curriculum (Lagemann, 2000). Though Hall never engaged directly in either classroom teaching or teacher education, his work inspired innovations in school reform and teacher preparation and was foundational to the development of Progressive ideas about education in the twentieth century.

Francis W. Parker was one individual whose important contributions to thinking about classroom instruction and teacher education were influenced by Hall and the child-study movement. In the several elementary schools that he helped to found or direct, including several in Quincy, Massachusetts, the laboratory schools at the University of Chicago, the Francis W. Parker School in Chicago, and the practice school associated with his celebrated Cook County Normal School in Chicago, Parker developed and experimented with approaches to schooling that were very new at the time and that have continued to influence thinking about teaching in the United States. At the core of Parker's philosophy was a deep interest in children's ideas, an orientation for which Parker credited not only Hall and Herbart but Froebel, Comenius, and Pestalozzi (Parker, 1905/1975). Believing that the chief purposes of the school were to help children develop their own interests and personalities and to prepare future citizens, Parker organized his schools to promote and guide spontaneous, artistic activity and to encourage children to appreciate collective and socially useful work (Curti, 1959). The pupils in his school learned science through studying in the many acres of fields that surrounded the school, studied physics, chemistry, biology, and other subjects through work in a manual labor shop, and visited museums and read newspapers to study history (Parker, 1905/1975; Rice, 1893). Joseph Mayer

Rice was so impressed by the children's work when he visited at the turn of the century that he termed the school "almost an ideal" (Rice, 1893, p. 210). Although his ideas have never been widely or accurately implemented, Parker laid the foundation for several generations of educators who would try to design schools to support ambitious instruction that would attend closely to children's ideas and inclinations. His work heralded an important shift in American thinking about purpose and form in schooling.

Parker also made important if now forgotten contributions to the idea of practice-focused teacher education. Under Parker's direction, the Cook County and Chicago Normal School had emerged as a premier national teacher education program by the early 1880s, with an equally well-esteemed practice school (Curti, 1959; Frazer, 2007). Parker had built the normal school into a genuine professional school, with instructors and student teachers alike intently focused on improving the work of the practice school. Faculty members not only taught courses in the normal school but also served as department heads in the practice school and were responsible for identifying the subject-matter to be taught in each practice school class, making suggestions about what materials and illustrations the teachers might use, and recommending instructional methods. Classroom teachers in the practice school, who also served as "critic teachers" for the normal school students, then used these plans to craft and teach lesson plans. Student teachers studied every aspect of the process, and were able to observe the same ideas that they studied with their normal school instructors implemented in the practice school. They also assumed significant responsibility for teaching in the practice school, under the close supervision of critic teachers (Parker, 1905/1975). Criticism of their practice teaching was likely to be of a similar valence whether it came from a normal school instructor or a critic teacher in the training school.

To an unusual degree, Parker engaged his faculty members in the intellectual problems of teacher education. He acquired a printer for the school so that teachers could distribute copies of their syllabi to their colleagues, and the entire faculty met for two or three hours every week to discuss the questions and problems that arose in the course of their own teaching in the practice school and in their work to train the normalites. Parker encouraged every teacher to

explain his or her teaching and to justify instructional decisions publically, and to criticize others' instruction and plans. Each teacher had formal opportunities to teach other members of the faculty about the "intrinsic value" of the subject that he or she taught and to lead efforts to discover how knowledge of that subject might enhance others' work. Faculty members in the normal school participated closely in much of this work, and regularly gave lessons in the practice school "in order to keep close to the central problem" (Parker, 1905/1975, p. 13). In their absorption in the problems of teaching and preparing practitioners, faculty members at Cook County and Chicago Normal established an early prototype of a professional school of education-one that others have rarely attempted to replicate.

The Teacher Education Curriculum in the State Normals and the Infrastructure for Improvement

Teacher educators moved decidedly in the direction of practice in the latter half of the nineteenth century. The Herbartians and their offspring introduced the first body of professional knowledge for teaching and used it to develop pedagogies of teacher education directly attentive to the work of teaching as they conceived it. To have done so was to have made an essential contribution to the fields of teaching and teacher education—even if the ideas that were developed were overly formulaic and would ultimately be abandoned. Writing in the 1920s, William Heard Kilpatrick concluded about Herbartianism that, "in the end, the contribution wasn't a permanent deposit of educational thought, but to stimulate thought...Herbartianism brought attention to the possibility of educational theory" (in Kandel, 1924). Indeed, many of the ideas and aspirations of American educators from John Dewey to the Holmes Group to even more recent reformers can be traced directly to the work of late nineteenth century teachers and teacher educators. Edward Sheldon, Richard Edwards, Francis Parker, and other pioneering educators of the 1800s began to set a course for instructional scholarship and experimentation along which many twenty-first century education researchers and teacher educators still travel.

But nineteenth century efforts in teaching and teacher education fell quite short of the vision espoused by the founders of the original normal schools. As I have already argued, one weakness was in the way that teacher educators articulated the work of teaching. Herbartian and

related methods were not only reductionist but generic, with little attention to important variations in the demands of teaching different subject-areas and grade-levels. Student teachers worked on "asking questions," "designing lessons," and "illustrating and explaining," but there is little evidence that they studied and practiced ways of doing these things with reference to the specific subject being taught or to particular curriculum materials—a predictable phenomenon given the lack of a common curriculum for public school education in the United States. Another shortcoming was that the pedagogical approaches employed in the normal schools in this era remained rudimentary despite their novelty. Nineteenth century teacher educators relied on observation followed by immediate practice as the best method of helping their students learn to teach and did not offer opportunities for novices to practice discrete elements of the work or to engage in what Grossman and her colleagues (2009) would now call "approximations" of practice. This approach suggests that teacher educators in the state normal schools viewed teaching as an important but relatively straightforward practice, requiring basic and general rather than complex and specific training methods.

The self-assurance that teacher educators brought to their work in the late 1800s may have been one of the greatest shortcomings of the era. A product of their times, the McMurry brothers and their fellow Herbartians eschewed empirical investigation in favor of a brand of theorizing that seemed to border on evangelism; they presented their "five formal steps" with tremendous confidence and their cohorts accepted them on faith. There is no evidence that the Herbartians located themselves on a trajectory of study and learning about teaching and teacher education, or that they articulated an agenda for continuing inquiry into their ideas. This oversight is unsurprising given the intellectual milieu in which the Herbartians worked. The approach to "science" which predominated at the time was one in which knowledge was regarded as a body of principles to be arrived at through deductive thought rather than experimentation or testing (Borrowman, 1956). Moreover, even though a number of liberal arts colleges and universities had opened in the United States by the end of the 1800s and were beginning to make forays into the new social sciences—particularly psychology—few normal

school instructors had attended them. Consequently, normal school faculty members had little context for the kind of investigatory work that would have been required to formulate and test hypotheses about instructional practice or to gather records of teachers' work for close study.

Similarly, though teacher educators in the latter portion of the 1800s began to build an infrastructure for professional discussion of both teaching and teacher education, most were not inclined to use it for scholarly dialogue or the conduct of research. Many normal schools did house clubs through which faculty members met to discuss their work, and in some places— Colonel Parker's Chicago Normal School is an excellent example—some form of inquiry into teaching and teacher education was routine. Ogren (2005) found that normal school faculty members were also involved in a wide range of local and national professional associations, and that their involvement "reflected their mental engagement in teaching, as well as their emotional commitment to the field" (p. 124). It seems apparent, however, that discussion in these associations tended more towards celebration than toward genuine scholarly engagement—more evidence of the character of the times. The founder of the Pedagogical Society of the normal school at Ypsilanti, Michigan, for example, wrote that the Society's goal was "promoting professional enthusiasm in the faculty as a whole, and thereby conserving the professional welfare of the school at large" (Ogren, 2005, p. 125). To have used professional societies in any other way would have been very unusual in the late 1800s, if not impossible. Had teacher educators in this period been able to articulate an agenda for continued scholarly work in teaching and teacher education, they might have been better positioned both to develop the teacher education curriculum and to fend off the jurisdictional and substantive challenges that were soon to come from the universities. They were not equipped to do so.

The Transition to College- and University-Based Teacher Education (1900s-1930s)

By 1900, a convergence of events—growth in the size and prestige of colleges and particularly universities; increasing numbers of high schools, with a corresponding need for high school teachers who were more and better educated than most normal school graduates; and growing interest in disciplined university study across all fields—led to the absorption of teacher

education by the bachelors degree-granting institutions. These developments encouraged schools of education to hire increasingly large numbers of faculty members, some of whom did not know enough about teaching and teacher education to prepare students for practice. Many were eager to garner the same academic prestige that accrued to their colleagues in the disciplines, a pursuit which has distracted from systematic attention to practice ever since. By the time the Holmes Group formed at the end of the century, this lack of interest and understanding relative to practice would be pervasive—and a major challenge for those interested in reforming teacher education. The problems that began to develop in this period, some of which would not be recognized as problems until much later, eventually led to the formation of the Holmes Group and to the consortium's definition of its agenda. At the same time, they also contributed directly to what I will argue became a central dilemma of the Holmes project, which was the incongruence between members' goals and commitments for improving teacher education and their experience and capability relative to the work.

Historians have identified increasing enrollment in secondary education as a determining influence on the field of education and on teacher education in particular in this period. Mounting population density meant that more students attended high school, necessitating more teachers with post-secondary training. Most prospective high school teachers as well as most college and university attendees were men, and many of them demanded more advanced and higher status professional training that would distinguish them from elementary school teachers and normal school graduates (Powell, 1976). Faculty members in the normal schools saw an opportunity for growth, and began to require a high school diploma for admission. As the normal schools converted to or were subsumed by state colleges and universities, they eventually began awarding the bachelor's degree for a four-year course of study. When they did, they were forced to start hiring faculty members who possessed graduate degrees—typically the new Ed.D. Simultaneously, undergraduates seeking an inexpensive and undemanding B.A. began to enroll in teacher preparation programs, often with little intention to teach. Understanding that colleges and departments of education were no longer dependent on the growth of the teaching

profession for survival, and often with little background in educational practice themselves, many faculty members started to seek more prestigious pastures than teacher education—usually academic research and the development of graduate programs (Jencks & Reisman, 1968).

Rapidly increasing enrollment across all of the public schools in this period also had lasting effects on the organization of schools and the preparation of teachers. Teachers and administrators scrambled to process thousands of students through what had previously been a relatively intimate system. The corresponding demand for teachers forced teacher educators and program administrators to design professional training that would accommodate ever larger numbers of students at relatively low cost—the close coaching popular in the better normal schools, for example, would become less appealing as a method of professional education as enrollment in teacher preparation grew. From this point forward, both the U.S. school system and the teacher education enterprise have of necessity had to organize themselves as batch-processing operations, with significant effects on the nature of both classroom teaching and teacher education. These realities of scale have been omnipresent for teacher educators since, and would ultimately present a great challenge to members of the Holmes Group.

This set of transitions contributed to the birth of education as a field of university research and the beginning of an ambiguous period in the field's history. On the one hand, several of the new colleges and universities housed scholars who were beginning to incubate new ideas about teaching and to explore novel methods for studying instruction and schools. The work of G. Stanley Hall, John Dewey, Ella Flagg Young, Willard Waller, Margaret Haley, and their Progressive colleagues flourished during this period. The era witnessed blooming attention to the kinds of personal and social goals schools had the potential to serve, with many implications for teacher education. On the other hand, many college- and university-based teacher educators sought to distinguish themselves and their institutions from the normal schools by making teaching the subject of traditional, university study. Even educationists who maintained an intense interest in teacher education or in the study of schooling often reacted to the encroachment of laboratory psychology and to growing interest in scientific management or

"social efficiency" by increasing the attention they paid to the social ends of schooling and to designing corresponding teacher education—sometimes at the expense of more practice-focused approaches. These developments often meant shifting the focus of teacher education to "theoretical" study and away from the more clinical models offered by the normal schools. They heralded a turn away from practice-focused teacher education and education research that would last for more than fifty years and define the problems of the Holmes Group.

University Study of Education and the Problem of Instructional "Method"

By the late 1800s—and before most colleges and universities offered programs in teacher education—faculty members in the new colleges and universities had begun to adopt education as a subject of study. Although only some of these early education researchers viewed themselves as teacher educators or participated in teacher education, two aspects of their work influenced the tenor of conversation about teaching in their institutions and directly impacted the nature of professional education for teachers in the early twentieth century: First, the earliest university-based education researchers—John Gregory, William H. Payne, Burke A. Hinsdale, Josiah Royce, and William James, for example—repudiated their predecessors' absorption with the problem of technique or "method" in teaching and embraced the pursuit of abstract, general "laws" that they claimed guided instruction. Second, under the powerful influence of Edward Thorndike, university-based education researchers took up laboratory psychology as the best mechanism through which to develop knowledge that would inform teaching (Lagemann, 2000). In the process, they eschewed the kind of fine-grained inquiry that was at the heart of G. Stanley Hall's emergent child study movement and sidelined most investigations of teachers, teaching, and classrooms (Powell, 1976). In these ways, education researchers working in the new colleges and universities began to create the problem that the Holmes Group and several more recent reformers have tried to solve.

The first step faculty members working in the new universities took was to trouble the concept of instructional "method" that had been the focus of work in the normal schools. Men such as John Milton Gregory and William H. Payne, both lecturers in education at the University

of Michigan, conceived of "method" as "technique," or a set of detailed procedures to be followed exactly that would yield predictable instructional results (Mucher, 2003). The term connoted the formulaic approaches of object teaching and Herbartianism, and was regarded as strictly the province of the normal school. University educationists did not desert the term, but many redefined it to mean not a set of technical activities but an approach or attitude toward teaching. For Gregory, for example, "method" meant broad laws that would guide classroom instruction but would not prescribe it (Mucher, 2003). For William H. Payne—himself a schoolteacher and a devoted observer of teachers and teaching—"method" meant psychology, history and philosophy of education, and study of the context of schooling (Mucher, 2003).

In a widely-read 1886 essay, William Payne argued that education research should pursue abstractions or general principles and that the university was the only place in which the development of such an education science could occur. He defined "art" as knowledge of how to do something and distinguished the "art of teaching" from "science," or the attempt to understand how something works through its "general principles" (Payne, 1886). Developing a "science" of education was a task for university-based educationists, he argued, and clearly distinct from the work of the normal school. Payne lamented that progress to understand the art of teaching had been "instinctive, slow, and wasteful," and argued that the time was ripe for education researchers to discover the principles that underlay the process of education. A farmer "can do but can't explain," he contended; the chemist, on the other hand, can explain agriculture though he cannot do it. If teaching were ever to become a genuine profession, Payne argued, it would require university study of its "mechanisms."

Other influential university-based educational theorists expressed similar views. Burke A. Hinsdale, Payne's successor at Michigan, taught that what was most important for a teacher was not facility with instructional techniques but the ability to articulate instructional ends, and argued that prospective teachers could learn pedagogy simply by studying the disciplines that they intended to teach (Mucher, 2003). At Harvard, philosopher Josiah Royce warned that neither a science of education nor any of the existing disciplines would be able to provide instructional

guidance for teachers, and argued that sympathy for children and sensitivity to social and cultural values were at least as important as teaching technique (Borrowman, 1965). Royce's fellow faculty member William James made a similarly skeptical argument about psychology, even as he offered a series of "talks to teachers" (Powell, 1980). As I will try to show below, the preoccupations of Payne, Hinsdale, Royce, and their colleagues with general educational laws or mechanisms significantly influenced teacher education, contributing directly to the shift away from technique and to the marginalization of teacher education that the Holmes Group would confront almost a century later.

John Dewey and the Progressives

In this same period, several philosophers and sociologists introduced a line of educational inquiry focused on schools as agents of social change, deepening the conversation about the ends of schooling and raising questions about the relationship between schooling and education. This conversation has continued to influence educationists in the United States, and it was certainly on the minds of members of the Holmes Group, who directly invoked the ideas of some of these early twentieth century thinkers.

Promoters of organized education in the United States had always viewed schools as a means toward social ends, including the maintenance of democracy and improved community life, but early nineteenth century educators such as Horace Mann had to content themselves with the logistical demands of building the basic system of common schools. They had neither time nor resources for much experimentation or for skeptical inquiry into the nature of classroom life. By the early twentieth century, however, the well established public school system left educationists freer to exercise their imagination toward a disciplined re-envisioning of schools and of classroom instruction, and the changing political economy of the United States inspired several to do so. Albion Small, George Counts, John Dewey, and George Herbert Mead, among others associated with the "Chicago School" of social philosophy, argued that schools should help prepare citizens to deal with rapid urbanization as well as the United States' growing involvement in world affairs (Borrowman, 1956). Several began to imagine a larger role for schools than just

preparing students to read and write. In his 1915 text *The School and Society*, for example, John Dewey sketched a vision of schools as miniature communities in which children would learn to contribute to and participate in democratic social life (Dewey, 1915/2001). Dewey imagined a curriculum organized around the fundamental occupations of human life, including the production of food and clothing, through which children would come to appreciate and sympathize with all aspects of the larger society. In this way, he believed, schools would prepare graduates who would tame industrial capitalism, reducing what he saw as its insidious effects on family and social life.

For Dewey and several of his compatriots, stimulating children's natural interests and impulses as a means of directing them toward a growing understanding of modern life was a central aim of schooling. A card-carrying member of the National Herbart Society and a former student of G. Stanley Hall, Dewey demonstrated the continuing influence of earlier educationists with his energetic invocation of the doctrine of children's "interest." Like his predecessor Francis Parker, however, Dewey developed ideas about how teachers would captivate children's interests and bring excitement and experience into the classroom that were much more substantial than those touted by the nineteenth century Herbartians. Rather than following "five formal steps," teachers as Dewey imagined them would pursue more adventurous instruction, using children's ideas as a starting point and the curriculum as a guide toward ambitious learning (see Dewey, 1902/2001). Later, William Heard Kilpatrick's "project method" drew widespread interest from teachers across the country who hoped to engage children in schoolwork through the activitybased curriculum that Kilpatrick vigorously promoted (Lagemann, 2000). Although Kilpatrick's ideas were frequently criticized, their popularity shows the enthusiasm with which Americans in this period greeted proposals for ways to make learning more enjoyable by centering schooling on children's "interests."

The sociologist Willard Waller also deserves mention here for his distinctive contributions to early twentieth century thinking about the relationship between education and schooling.

Although he did not consider himself a Progressive, Waller, too, worried that schools were

bankrupt; he portrayed teachers as despotic, repressed, and manipulated and students as rebellious and justifiably bored. Like Dewey, Heard Kilpatrick, and their Progressive colleagues, he entertained the possibility that significant changes to curriculum, instruction, and teacher training might help reform schools such that teachers would be able to capture children's native interests and produce something in the way of genuine education. But Waller demonstrated a much greater ambivalence toward schooling than did most of his predecessors or contemporaries, at times giving up entirely on the idea that schools could help children learn and develop natural personalities and healthy social skills (Cohen, 1989). His suspicion that real education was not possible within the four walls of a schoolhouse kept alive a rich tradition of thought among American writers and is an important element of the intellectual inheritance of teachers, researchers, and teacher educators in the United States (Cohen, 1989).

The ideas of Dewey, Kilpatrick, Waller, and their Progressive colleagues had little direct influence on early twentieth century schools or the curriculum for learning to teach. They represented a significant departure from extant practice and would have required both fuller conceptualization and experimentation and more resources to realize in practice (Cohen, 1989; Cohen, 1998). They are important, however, both because they supported the move away from the technique-focused instruction of the normal schools toward a more liberal approach to teacher education, and because educators in the United States have continued to find them both compelling and elusive. David Cohen (1998) has observed that numerous recent school reformers have embraced Deweyan ideas, including William Julius Wilson, Leon Dash, Anthony Bryk, James Comer, Henry Levin, Ted Sizer, and Robert Slavin, among others. Teacher educators, too, have found inspiration in Dewey's work; at the time that the Holmes Group began its project in the early 1980s, teacher educators at Michigan State University had been experimenting with the implementation of Progressive ideas in teacher education for several years. And the description of the new Professional Development School in the Holmes Group's second report, *Tomorrow's Schools*, owes a noticeable debt to Dewey's work.

Laboratory Psychology and the Scientific Study of Education

By the early 1920s, laboratory psychology had pervaded the field of education research, displacing the kind of work undertaken by John Dewey and the Progressives. Edward Thorndike's behaviorist psychology introduced a lasting preoccupation with tests and measurements, and many education researchers turned their attention to school surveys and to the construction of intelligence and achievement tests (Lagemann, 2000). The place of teachers in the educational hierarchy was viewed as necessarily subordinate, and university faculty members gave little attention to scholarship aimed at improving teacher education.

One exception to this general trend was the 1929 Commonwealth Teacher Training Study. Led by education researchers W.W. Charters and Douglas Waples, the Commonwealth Study drew on the new "scientific" methods, including Frederick Winslow Taylor's conception of scientific management, to probe the traits and duties of effective teachers (Lagemann, 2000). The purpose was to identify the substance of a radically reorganized teacher education curriculum. A central objective was to produce a "clear picture" of teachers' work so that teacher educators could build training programs directly attentive to that work (Charters & Waples, 1929). Investigators surveyed more than 6,000 teachers to construct a list of more than 200,000 instructional activities, organized the list into seven main divisions (classroom instruction, school and class management, supervising pupils' extra-classroom activities, relationships with school staff, relations with members of the school community, professional and personal advancement, and school plant and supplies), and asked judges—including professors of education, teachers, administrators, and critic teachers--to evaluate each activity according to four criteria: the frequency with which teachers performed it, the difficulty student teachers were likely to encounter in mastering it, the activity's importance, and whether it was practical for a student teacher to learn to carry out the activity during initial teacher education. They recommended that teacher educators use the resulting condensed list as the basis of a reorganized set of teacher education courses. Their list was general and not subject- or grade-level specific, and the study's authors noted that work remained for their colleagues both to elaborate each activity for specific

fields of academic study and to design the activities and methods through which student teachers might learn to do the work.

Despite the large-scale nature of the Commonwealth Study, the significant financial support that the Commonwealth Fund provided to schools in association with the project, and the high hopes that study sponsors had for the impact of their work, the efforts of Charters and Waples seem to have had only a limited impact on contemporary teacher educators. In the early 1930s, the College of Education at Ohio State University reorganized their teacher education program around 51 topics identified by the study, but I have not been able to find a detailed description or evaluation of the reorganization in the literature (see Bennett, 1934). A 1939 dissertation study analyzed how much experience student teachers received with each activity on the Commonwealth list, finding that most student teaching experiences were inadequate (Nelson, 1939). This is, however, the only such reference I have found.

Although W.W. Charters was an active figure among educationists throughout the 1920s and 1930s, the work of the Commonwealth Study did not seem to produce lasting changes in teaching or teacher education. In addition to the work on testing and administration undertaken not only by Thorndike but by Ellwood Patterson Cubberley and Leonard P. Ayres, school curriculum reform preoccupied many education researchers in these early decades of the century (Lagemann, 2000). William Heard Kilpatrick's campaign to introduce the "project method" to schools both inspired controversy and drew adherents, but seems to have had little direct influence on teacher education (Borrowman, 1956). Similarly, I have found no evidence that the interest of many educationists of the period in vocational training or the introduction of electives to the high school curriculum had much effect on teacher education. In Denver, Colorado, Superintendent Jesse Newlon engaged his teachers in an in-depth process of curriculum design for the district as a form of continuing professional education, but this move was unusual and did not become widespread practice (Cuban, 1993).

Teacher Education in the Early Twentieth Century Colleges and Universities

The teacher education curriculum in the new colleges and universities reflected the developing field of education research. A case in point: In 1891, the University of Illinois appointed as its first professor of pedagogy Herbartian and former ISNU faculty member Charles De Garmo. After less than one year on the job, DeGarmo resigned, having found little support for the work of teacher education at his new post. University of Illinois historians Henry C. Johnson and Erwin V. Johanningmeier (1972) have observed that De Garmo was simply too late for the times: "Had he wished to expound and discuss Herbart, he would perhaps have been welcomed. His mistake was that he wished to prepare teachers" (p. 73). De Garmo's experience at the University of Illinois epitomizes the radical shift in approaches to pedagogical studies—including teacher education—that began to erode the foundation laid by the nineteenth century normal school educators by the beginning of the twentieth century. Changes in the teacher education curriculum in this period reflect the increasing preoccupation of faculty members with education as a new field of university study and with what many argued were the knowledge demands of teaching.

At the University of Michigan, for example, William H. Payne used his position as the first chair of pedagogy to develop a program dedicated almost exclusively to bolstering student teachers' content knowledge and to fostering an appreciation of the history of education. Arguing that the "fundamental idea of professional instruction is that the inexperienced are to be taught to do by knowing" ("in medicine, it is only the quack who professes the dogma that he should learn to do by doing"), he shunned the idea of practice schools in university teacher education and left his students to their own devices to convert the principles that he taught them to practice (Payne, 1886, p. 278). Burke Hinsdale after him maintained roughly the same model. And in 1920, though he had finally reintroduced some attention to practice at Michigan and obtained money from the state legislature to build a practice school, School of Education dean Allen Whitney failed to convince his colleagues to award any academic credit for practice teaching (Mucher, 2003).

Similar narratives attend the history of teacher education at other universities. At the University of Illinois, for example, "education" replaced "pedagogy" in the course catalogue by 1900; there followed several decades of largely failed attempts by members of the education faculty to secure a larger budget for teacher education and to open a practice school. Arts and science faculty members balked at every request to devote time and attention to teacher education, and the president of the College of Education rejected the suggestion that there were special methods involved in teaching subject-matter (Johnson & Johanningmeier, 1972). In New York City, Nicholas Murray Butler made an early attempt to establish a practice-focused program of teacher education in the form of the New York College for the Training of Teachers. The College consisted of both a training school for teachers and an adjacent model school for children, and the required curriculum included observation and practice in the model school. When Teachers College absorbed the Training College, however, the trustees of Columbia University rejected the idea of providing a home for a teacher training school and the entire institution sidled rapidly and permanently away from Butler's vision (Cremin, Shannon, & Townsend, 1954; Herbst, 1989).

Harvard's example is particularly instructive. In 1890, President Charles Eliot had chosen Paul Hanus to occupy Harvard's first professorship in the "history and art of teaching," and for a short time Hanus embraced instructional practice as the center of teacher education. He made observation and analysis in local schools a key part of Harvard's Normal Course, urged Eliot to open a laboratory school, and replaced textbooks on "methods" with school documents and reports—though his efforts often seemed more directed at school management than at teaching (Powell, 1980). By 1895, however, Harvard's faculty had begun to turn against Hanus and his interests in teacher preparation. Reacting to pressure for increased research specialization and to the university's commitment to producing professors and researchers rather than professionals, few faculty members in any department showed interest in expanding or improving methods courses for intending teachers or in school reform more broadly. By the end of the century, Hanus had given up on developing strong teacher education and turned his attention instead to

the preparation of school administrators, a shift that generated less resistance from faculty members (Powell 1980). The 1917 Smith Hughes Act, which required colleges and universities to offer vocational and agricultural education, strengthened that decision, and Hanus' move marked the beginning of several decades of preoccupation with administrative and vocational training at Harvard (Powell, 1980).

The story of Henry Holmes' tenure as the first dean of Harvard's Graduate School of Education is an important sequel to Hanus' story, demonstrating both the overwhelming pressure educationists in the early twentieth century felt to emulate their colleagues in other fields and their lack of capacity for designing and delivering practice-focused teacher education—problems that would, somewhat ironically, be no less salient by the time the eponymous Holmes Group began its work. A stalwart champion of university-based teacher education, Henry Holmes earned the respect of the education deans who would, many decades later, form his namesake the Holmes Group, by fighting to maintain teacher education in a place of central import at Harvard. First in his work to develop the new Graduate School of Education and then in his efforts on behalf of teacher education in particular, Holmes contended throughout the 1920s with terrible skepticism from Harvard President A. Lawrence Lowell, who was determined to maintain Harvard's focus on research and openly praised the university's business and law schools for their intellectual rigor (Powell, 1980). When Holmes attempted, for example, to appoint faculty members to the new Graduate School of Education with interest and experience in instructional methods, Lowell rejected every one of his nominations, suggesting that Holmes "sacrifice something in the way of technical knowledge for the sake of academic caliber" (Powell, 1980, p. 145). Only after Holmes adopted the "Business School ideal" and proposed to organize teacher education at Harvard into a two-year, full-time course of study, was he able to gain any support at all from President Lowell (Powell, 1980).

Once he had permission to implement the new program, Holmes resolved to reintroduce a strong focus on preparing classroom instructors at Harvard and to develop a new core curriculum for that purpose. But Holmes—here finally in accord with President Lowell—believed

that Harvard's distinctive mark on professional education for teachers would lie in preparing "educators" rather than "craftsmen" (Powell, 1980). Concerned that the growing field of "social efficiency" conflicted with his own ideals of social freedom, Holmes concentrated on designing educational experiences that would imbue prospective teachers with a strong sense of high aims and ideals for education practice. His goal was to create a curriculum that would emphasize professional judgment and prepare teachers to function effectively as members of school committees, as advisers to parents and colleagues on matters of education policy, and in general discussions of education matters. In a published agenda for the change, Holmes and his colleagues asserted that the trouble with the normal schools and with other schools of education was their emphasis on methods and mechanics, and complained about the normal schools' propensity to rely on "methods and on purely pedagogical understanding as a substitute for knowledge of subjects to be taught and of more general knowledge" (Holmes, Dearborn, & Spaulding, 1933, p. 21). Though Holmes created a new field apprenticeship—a program requirement that in practice was frequently waived—Powell (1980) observed that it served as evaluation more than it did training. Moreover, the general examination that Holmes advocated as the capstone of the program was to be a written test rather than a performance assessment.

In the end, however, even these plans failed as faculty members would not agree on the elements of the core curriculum or on the material that the general exam should cover. The conflicts that emerged between and among Holmes and his colleagues are emblematic of more recent struggles of university-based teacher educators. Faculty members could not reach consensus, for example, on what was fundamental about each of the disciplinary fields in which they worked, and many argued that a significant portion of their respective fields was important enough to be required of everyone. Moreover, no one could agree on exactly how the core curriculum was supposed to transform students into teachers or on what pedagogical approaches made sense. Though they briefly contemplated developing a case method approach, faculty members ultimately resorted to the familiar pattern of lectures and discussions. And although they were finally able to agree on a core curriculum in 1928, they voted to eliminate it after it

had been in operation for only one semester—most citing frustration with the comparatively small role their own fields played. The general examination was preserved, but Holmes oversaw bitter disputes over what it should cover, and the test became ever more broad and superficial. Many faculty members ultimately withdrew from teacher education responsibilities, retreating into departments and specializations, some establishing centers and extended research projects to insulate themselves from the irritations of involvement with professional training (Powell, 1976). Exasperated, President Lowell told the university's board of overseers that the Graduate School of Education was a "kitten that ought to be drowned" when he retired in 1933 (Powell, 1980, p. 176).

By 1950—several years after Henry Holmes had left the deanship—teacher education at Harvard had become even less focused on the work of teaching (Powell, 1980). President Lowell's successor James B. Conant finally agreed to tenure special methods instructors—a battle that Holmes had lost—but shifted most of the responsibilities for teacher education to disciplinary departments as the Graduate School of Education turned back to research as its central focus. In a revealing episode, Conant appointed a joint Education and English committee to study the problems of secondary teacher education only to watch the group dissolve as its members decided that they cared more about providing advanced training in literary analysis and lost all interest in teacher education. In 1946, the university approved a "Purple Memorandum" commissioned by Conant that declared "inquiry" rather than "job preparation" to be the School's primary focus and emphasized that courses in instruction would deal not with procedures "which an intelligent person can learn in practice," but with the study "of the transfer of the experiences and achievements of adult life into the area of childhood and youth" (in Powell, 1980, p. 229). The efforts of Francis Keppel on behalf of the M.A.T., which I discuss below, not withstanding, Harvard's attention to educational practice had seriously withered.

Not only at Harvard but across the United States, teacher education and writing about teacher education began, by the middle of the century, to reflect Americans' growing social consciousness. Echoing John Dewey—who continued to contribute to thinking about teaching

and teacher education throughout the 1930s and 1940s--teacher educators who had lived through two world wars and the Great Depression increasingly pursued professional education that would prepare teachers who were sensitive and responsive to social and economic concerns and would perpetuate democratic values through classroom work. To do this, they generally focused their attention on the development of courses in education foundations, frequently, if inadvertently, supporting a shift away from practice. W. Earl Armstrong, Goodwin Watson, and Allen D. Patterson, for example, all suggested that the purpose of student teaching should be less the development of technique and more the development of familiarity with the place of the school in the community and help novice teachers cultivate a greater sensitivity to pupils, a more developed personality, and skill in "democratic leadership" (Borrowman, 1956). A 1948 poll by the American Association of Teachers Colleges revealed widespread agreement with these principles (Borrowman, 1956), indicating that even committed teacher educators were moving away from the directive, practice-focused teacher education that had prevailed a half century earlier. This trend continued through the time of the Holmes Group and beyond; many teacher educators at the beginning of the twenty-first century still exhibit a preoccupation with the potential of teacher education to contribute to the pursuit of social justice—not through the development of professional technique, but through coursework and other experiences in multiculturalism and education foundations.

The Teacher Education Curriculum in the Early Twentieth Century and the Infrastructure for Improvement

Although published accounts of teacher education in the early twentieth century colleges and universities offer only limited description of the academic lives and activities of student teachers, they suggest that the curriculum in this era was aimed at helping students develop subject-matter knowledge and understand the social and political context of their work. Gone were the "critique lessons" and hours of closely supervised student teaching that dominated in the normal schools; student teachers in the colleges and universities pursued academic programs that closely resembled those of their peers studying the liberal arts and sciences. The focus was

on developing knowledge and understanding and not on acquiring instructional skill. Moreover, there is little evidence that academic coursework offered pedagogical treatment of subject-matter or afforded much consideration to the special kinds of knowledge that might inform teachers' work. And although practice teaching persisted in most programs, the literature reveals little in the way of innovation in pedagogical approaches to the teaching and learning of practice.

It is not surprising that teacher educators in the new colleges and universities insisted on this focus on knowledge. The institutional incentives that they faced to emulate their colleagues in the arts and sciences would have been a powerful motivator to do so. As Henry Holmes' experience at Harvard suggests, university administrators and faculty members in the first half of the twentieth century were deeply focused on building institutions that would help perpetuate growing faith in science and in scientifically-based research. The structure of incentives and rewards that they created in the new research universities encouraged academic research and commitment to graduate education over concern with professional education (Clifford & Guthrie, 1998). Educationists watched as their colleagues in the disciplines accrued respect and security through scholarly study, and sought the same for themselves (Clifford & Guthrie, 1988; Jencks & Reisman, 1968; Labaree, 2004). And unlike faculty members in the disciplines, educationists could not escape the status problems they inherited from their field's association with women and children; to many of them, advancement in the university seemed to require the repudiation of the practical concerns of elementary and secondary classrooms.

Moreover, faculty members in the new schools and colleges of education may have been driven by genuine concern that the normal schools had devoted too little attention to advanced subject-matter work or to study of the context or purposes of schooling. When William H. Payne remarked by way of explanation for his own focus on subject-matter at Michigan that in medicine, only "quacks" learn their profession on the job, he was pointing to a real problem; intending doctors even at the close of the nineteenth century often bypassed theoretical study of anatomy, physiology, and medicine itself in favor of immediate engagement in practice. The results for patients were often deadly. Payne's comments express a reasonable conviction that

professional education, including teacher preparation, should evidence a balance between academic study and opportunities to apply knowledge to practice. To the extent that Payne and his colleagues made a mistake, it was in allowing the pendulum between theoretical study and clinical practice to swing too far in the direction of the former, and not in merely making a place for the teaching and learning of propositional knowledge in the professional curriculum. At the end of the nineteenth century, they had no model of professional education that integrated attention to the knowledge demands of practice with clinical training, and the study of propositional knowledge seemed to be the way forward in the university. Further, fewer and fewer education faculty members had experience in classroom teaching or expertise in the study of instruction, which rendered them poorly equipped to design or deliver practice-focused teacher education.

Several efforts in this period to create alternative organizations for the study and dissemination of knowledge about teaching might, had they been more successful, have mitigated against the powerful leanings of men such as William Payne and contributed to the development of a more relevant and balanced teacher education curriculum. One important enterprise was concerned with empowering teachers at the local level to exercise more control over their professional and intellectual lives. In 1893, for example, Joseph Mayer Rice's account of the working lives of teachers and administrators in the Indianapolis public schools suggested the presence of practice-focused professional development. In that school system, the superintendant and his assistants viewed themselves as teacher educators; Rice observed that the whole system "represents a training-school of which the class-teachers are the students and the supervising officers the teachers (Rice, 1893, p. 110). Administrators in Indianapolis met routinely with each other and with their teaching corps to discuss educational problems, and assistant superintendents spent at least half of their time observing teachers and talking with them about their work. The teachers themselves met together and with their superintendants weekly to study instructional problems and to observe each other teach, and one assistant superintendent reportedly told Rice that these teachers' meetings were "the greatest instrument of making progress." Supervising principals served almost as critic teachers did in the normal schools, observing and critiquing lessons and sometimes giving model lessons that would be discussed afterward by all those present. Although I have found no evidence that this kind of professional development was widespread or that it extended to pre-service teacher education—indeed, Rice's full account of the U.S. public schools system suggests that it was not and did not—that it persisted in even one city at the turn of the century shows that there were teachers and administrators in this period who could have contributed to efforts to retain the emphasis on practice in initial teacher education.

One such individual was Ella Flagg Young. A student of John Dewey and superintendent of the Chicago Public Schools from 1909 until 1915, Flagg Young used her University of Chicago dissertation to propose a system of local teachers councils that would enable teachers to participate in school governance and encourage collective deliberation over educational questions (Counts, 1928; Flagg Young, 1901). She believed that such councils might reduce teachers' intellectual isolation and facilitate collaborative work on practice, such that, "education would be a continuous process, based on theory; not mere experimentation, based on personal preferences" (Flagg Young, 1901, p. 109). Flagg Young was able to convene the councils beginning in 1913, and her successor Peter Mortensen made them an even more integral part of Chicago school administration beginning in 1921. In practice, however, the work of the councils focused primarily on questions of school organization rather than on professional learning (Counts, 1928). The councils system was abolished by the Chicago Board of Education in 1922 and Flagg Young's work lost (Counts, 1928).

In a similar set of efforts in Chicago, labor unionists Margaret Haley and Catherine Goggin worked through the Chicago Teachers' Federation to increase teachers' professional control in the Chicago public schools. Haley and Goggin's goals were not only to protect teachers' financial interests and working conditions but to empower teachers to participate actively in all aspects of school governance (Rousmaniere, 2005). For a time, Haley also joined Ella Flagg Young in fighting for the construction of the network of teachers' councils that would govern the

Chicago schools; she believed that such councils would give teachers control over both entry to the profession and instructional decision-making (Reid, 1982). Had Young's or Haley and Goggins' visions been more fully realized, these teachers' councils in Chicago might have served as a conduit for the gathering and sharing of knowledge of teaching practice, and as a model for teachers and teacher educators in other cities. That they did not marks a great loss for practice-focused teacher education in this period.

Another foray into systematizing the study of teaching and linking it to teacher education that reached its zenith in this period was the laboratory school movement. By 1940, many of the leading research universities, including Chicago, Michigan, UCLA, the University of California at Berkeley, and Columbia University's Teachers College, maintained campus "laboratory schools" (Clifford & Guthrie, 1988). Following the vision that John Dewey laid out for the campus school that he founded at the University of Chicago, most of these schools espoused a commitment to practice-focused education research that would be carried out jointly by university-based researchers and school practitioners; teacher education was in most cases to be an important but secondary function (Schwartz, 2008). Had the laboratory schools housed and supported the work for which their founders hoped, they could have developed into an infrastructure for the study and improvement of teaching that might ultimately have contributed to the alignment of the teacher education curriculum with practice. Indeed, teachers and leaders in at least a few of the laboratory schools—notably the Lincoln School at Teachers College and Dewey's school at Chicago—published widely, made numerous presentations at professional organizations, and advised school systems across the country (Schwartz, 2008). Few laboratory school instructors or their university-based colleagues ever found ways to influence the practice of teaching, however, and most of the schools had closed by 1970 (Hendrick, 1980). Historians have pointed to several reasons for the failure of the movement, including the reality that the lab schools tended to attract the privileged children of faculty members rather than a cross-section of the population of American schoolchildren, the desire of laboratory school leadership to satisfy the wishes of the affluent and assertive parents who sent their children to the schools, and, importantly, the fact

that the interests of "education" researchers in the early twentieth century tended toward psychology and human development rather than instruction (Clifford & Guthrie, 1988; Schwartz, 2008).

Despite this inattention to instruction among university faculty members, interest in the work of teaching and in life in classrooms was growing in this period among both classroom teachers and members of the public. A number of published accounts of schools and classrooms attracted attention and even fascination, notable among them Joseph Mayer Rice's 1893 exposé *The Public School System of the United States*. There were teachers at work across the country who wielded considerable instructional skill (both William C. Bagley and Joseph Mayer Rice referred to many) and might have partnered with researchers and with teacher education programs. Few of them were organized to contribute to a scholarship of teaching or to systemic attempts to improve instruction or teacher education, however, and in 1911, Bagley's voice fell on deaf ears when the teacher educator called for a "literary artist to portray elementary school teaching in all its struggle and detail to the lay public...someone who will idealize the technique of teaching as Kipling idealized the technique of the marine engineer." Though the United States was rich with energy for work on teaching in this era, educationists in the new schools and departments of education failed to capitalize on it as they pursued a very different agenda.

As I mentioned earlier, an important outcome of both developments in the colleges and universities in the early twentieth century and shifts in the economic and political realities in the United States was the solidification of state-controlled systems of certifying teachers. State officials in the nineteenth century had paid little attention to the qualifications of school keepers and most teachers in this period were licensed by local officials through a short exam (Angus, 2001). By the early twentieth century, however, policy-makers began to standardize and systematize U.S. schooling in an effort to ensure that it would prepare young Americans to make the shift from an agricultural to an industrial economy. State departments of education sought control of teacher education and they encountered little resistance from faculty members in the new schools and colleges of education who were generally eager to distance themselves from the

lowly business of preparing teachers. Once they had ceded responsibility for setting the curriculum for learning to teach to the state, education faculty members had little incentive to propose or experiment with changes.

There were, however, a few agitators in this period, several of whom raised concerns that have been directly echoed by reformers at the beginning of the twenty-first century. At first the University of Illinois and then Teachers College, William C. Bagley, for example, quietly pushed for more practice-focused teacher education. Though his efforts failed, his publications left a record of ideas that called into question the direction in which his colleagues were taking teacher education. In a 1911 paean to the notion of technique in teaching, Bagley described teaching as a form of artistry but was quick to assert that artistry carries with it an appreciation of technique (Bagley, 1911). He worried that teachers had been encouraged to believe that the mechanics of their work were not only unimportant but stultifying, and that teaching ability was a function of personality rather than a product of technique that could only be acquired through the "strenuous discipline of experience" (p. 6). He declared that the most highly skillful teachers he had observed in his career had displayed not genius but mastery of technique, and recommended that teacher education help student teachers learn the rudiments of technique through practice teaching and observation of master teachers.

Rather than subscribe to William H. Payne's and Burke A. Hinsdale's view of technique as mechanical routine, Bagley advised teachers that as they developed skill, "ever and ever the fascination of its technique will take a stronger and stronger hold upon you" (p. 5). Eulogizing his colleague in 1946, Isaac Kandel made a point of Bagley's intimacy with the work of teaching and commitment to preparing instructors, calling him "essentially a schoolman always inspired by the problems that the teacher has to meet in the classroom" and adding that to "the degree that he elaborated a theory of education it was always in terms of its immediate practical implications" (Kandel, 1946). Kandel's remarks notwithstanding, however, there is little evidence that Bagley's views penetrated the teacher education establishment very deeply.

Bagley was not entirely alone. He was among several authors of a 1920 report published by the Carnegie Foundation that sounded the first alarm about the direction in which teacher education was moving. Bulletin #14, The Professional Preparation of Teachers for American Public Schools, known as the Learned Report after its first author, William S. Learned, warned that teacher education was losing its focus on preparing skilled practitioners and strongly recommended that all teacher education take place in state-established institutions that would make the enterprise their sole concern (Learned, Bagley, McMurry, Strayer, Dearborn, Kandel, & Josselyn, 1920). Worried by the extent to which the teacher education curriculum was increasingly growing to resemble non-professional programs, the report's authors pointed to the same problems that would trouble members of the Holmes Group more than half a century later: They charged that teacher educators lacked relevant classroom experience and expertise; that disciplinary education for prospective teachers failed to give "professional treatment" to subjectmatter and instead imitated traditional collegiate training; and that teacher education failed utterly to provide sufficient clinical preparation. They argued that the work of the late nineteenth century normal schools needed to be aggressively systematized and supported such that the teacher education curriculum would be distinctly professional. In particular, they recommended the construction of additional training schools that would be firmly controlled by teacher education programs, more support for pedagogical excellence among teacher educators, and the pedagogical treatment of subject-matter, including courses in methods of teaching specific subjects. Most notably, they called for the teacher education curriculum to focus on the development of instructional skill and professional insight -- even more than it had in the nineteenth century normal schools.

In their recommendations for how the teacher education curriculum might be strengthened, the authors of the Learned Report offered a stern rebuke to the collegiate teacher educators. Few of their recommendations had to do with theoretical study or work in education foundations; their concern was with the extent to which professional education would enable teachers to acquire instructional skill. Their list of the tasks and activities that should be "made"

the objects of students' conscious attention" included not only establishing routines, speaking distinctly, and writing clearly, but making illustrations, giving clear explanations and expositions, attending to misunderstandings and misinterpretations, devising problems and framing questions, and adapting to rapidly changing situations. They contended that student teachers needed to learn to study instruction professionally: to note the purpose of asking questions, to analyze why a certain illustration was used, why a given suggestion was not followed, and why a particular topic was chosen over another. They were critical of the normal schools, which they charged with an excessive focus on summer courses for practicing teachers and too-short programs for novices. They also worried about the separation in the normal schools between the academic and professional faculty, and observed that the training schools associated with the normal schools were in many cases under supported and poorly utilized.

Ironically, given that the Learned Report was based on a study of teacher education in Missouri, in 1919, Missouri become the first state to pass legislation supporting the conversion of normal schools not into the single purpose teacher education institutions that the report had recommended but into comprehensive colleges and universities (Imig & Imig, 2005). In the twenty years that followed, at least 18 other states followed suit. By 1940, virtually every normal school had become a state college or university, and by 1965, there was not a single institution that made teacher education its primary mission (Frazer, 2007).

This period in the history of teacher education is striking both for its decisive turn away from the practice-focused teacher education that was beginning to develop in the normal schools and for the rapid growth in the scale of the public school system. From this moment forward, educators would have to find ways to accommodate thousands and eventually millions of children in the schools, and to train and support a correspondingly large number of teachers. At the same time, education faculty members began to battle professional tensions that would persist throughout the remainder of the century as they struggled to make education the subject of university study—tensions that would present a significant challenge to Holmes Group members. But educators in this period also produced resources for the study and conduct of classroom

teaching and of teacher education on which twenty-first century educators still draw. Members of the Holmes Group and many of their colleagues and successors have continued to look to John Dewey for ideas and inspiration, and several teacher educators have begun to conduct analyses of classroom instruction for the purposes of reconstructing teacher education that resembles the work carried out by the Commonwealth Fund. Moreover, the authors of the Learned Report launched critiques of teacher education that are still relevant today—indeed, in 2005, the Carnegie Foundation's David Imig and Scott Imig called for their colleagues to take up the report's recommendations and transform teacher education into a genuinely professional enterprise—demonstrating the continued relevance of the quiet agenda for change sketched by early twentieth century teacher educators (Imig & Imig, 2005).

Teacher Education and Research on Teaching Since World War II

Historian David Angus (2001) has observed that the basic components of the teacher education curriculum that were established in the early twentieth century--courses in methods and foundations combined with practice teaching—have shown enormous staying power since "no school that trained teachers could afford to ignore these requirements or fail to provide the faculty resources to meet them" (p. 18). Indeed, at the beginning of the twenty-first century, they remain in place in nearly every state. With the conclusion of World War II and the advent of the Cold War, however, concern over the quality of U.S. schooling drove researchers, teacher educators, and philanthropists to renew their efforts to develop both a science of pedagogy and an improved system for educating teachers. The federal government finally began to provide support for a research infrastructure in education that included centers, laboratories, a research dissemination center, and the National Assessment of Educational Progress (NAEP) (Lagemann, 2000). Several experiments in the teacher education curriculum resulted, including the Master's of Arts in Teaching (M.A.T.) programs; the Competency-Based Teacher Education movement; and the introduction of case methods, hypermedia, and teacher portfolios. These innovations did not fundamentally alter the nature or content of the teacher education curriculum, but they did contribute important knowledge to the enterprise and encourage small shifts in the national

conversation about teaching and teacher education. They directly informed the context in which the Holmes Group developed and yielded resources on which the consortium drew.

On the other hand, the period after World War II saw serious cracks in the foundation university educationists had laid at the beginning of the century for education research—a foundation that was, as I tried to show earlier, shaky from the beginning. At least one prominent school of education closed its doors and others suffered from significant retrenchment. These setbacks adversely affected the resources available for research and design in teacher education and did little to foster immediate progress in the direction of practice-focused professional preparation.

The Ford Foundation and the Rise and Fall of the M.A.T. (1950s-1960s)

If the first half of the twentieth century saw confusion over the purposes of schooling and some indifference to the role of teacher education, the 1950s brought unequivocal concern over the quality of instruction in U.S. schools and a clear call for improvement in the way teachers were prepared. Disturbed by the implications of the Russian launch of Sputnik, the decline of serious academic work in some parts of many high schools, and the degree to which vocational training had taken hold in high schools, several critics published strong warnings of decline in American education and identified teachers as one source of the problem (e.g., Bestor, 1953; Conant, 1963; Koerner, 1963). At the same time, growth in the number of applicants to colleges and universities following World War II led many institutions of higher education to raise their admissions standards and to demand better high school preparation in academic subjects. The call of the day was clearly for more rigorous academic preparation for U.S. students and teachers—an orientation which would prove to be a resource for education reformers throughout the remainder of the century.

Teacher educators responded to the mounting criticism primarily by reorganizing their professional education programs into Master of Arts in Teaching (M.A.T.) programs or five-year undergraduate programs. Many did this with help from the Ford Foundation, which was a major player in teacher education reform in the 1950s and 1960s. Convinced that the charges against

teacher education were sound and that changes were necessary, Ford Foundation president Clarence Faust and vice president Alvin C. Eurich launched a major initiative to support experiments and improvements in teacher education (Woodring, 1970). Through their Fund for the Advancement of Education, they spent \$57 million in an effort to improve public schools, most of it on teacher education (Frazer, 2007). Staffers had five goals for the work of the Fund, virtually all of which would later be echoed not only by members of the Holmes Group but by other reformers active in the last decades of the century:

- To find ways of attracting more and better students into the teaching profession.
- 2. To resolve the conflicts between professors of education and academic scholars by finding ways of reconciling the views of the two groups.
- 3. To determine what professional preparation is essential for teachers and to find new ways of providing such preparation without emasculating the program of liberal education.
- 4. To make teacher education a responsibility of the entire faculty.
- 5. To achieve better integration of liberal and professional courses with classroom practice (Woodring, 1970, pp. 134-135).

Most of the programs that the Ford Foundation supported were fifth-year and M.A.T. programs that emphasized comprehensive, traditional preparation in the liberal arts and the recruitment of academically strong students to teaching (Woodring, 1957). Flagship projects included a five-year program at the University of Arkansas; four-year programs that combined professional with liberal education at Swarthmore, Carleton, Wilson, and Barnard Colleges, among others; and M.A.T. programs at Harvard, Yale, and Vanderbilt. Most were jointly planned and administered by faculties of education and of arts and sciences, and several featured recruitment initiatives and attempts to reduce and concentrate the number of "professional" courses. At the University of Arkansas, for example, distinguishing features of the Fund-supported fifth-year program included increased supervision for full time student teachers and seminars that focused on the problems that students met in their first year of teaching; at Harvard's internship program, admissions standards were raised, students received special scholarships, and both the school systems and the university shared responsibility for the program (Woodring, 1957).

Ford Foundation Vice-president Alvin Eurich would not be the first to assume that teacher education could occur rapidly given the long tenure in classrooms already served by intending teachers:

The underlying assumption was that bright candidates, after spending sixteen years in elementary, secondary, and college classrooms, have inevitably absorbed a good deal of knowledge about classroom management and techniques of teaching, and that with this backlog of experience a high level of professional skill could be rapidly reached through special courses, seminars, classroom experience, and discussions (Eurich, 1969).

Despite this conviction, staff members at the Ford Foundation also believed that the professional aspects of teacher education could be improved if they were more closely connected to practice, and many of the programs they supported introduced improved clinical experiences—marking the first attempts to restore practice to a place of central important since the demise of the single purpose normal schools a half century earlier. Some programs, for example, expanded clinical work in schools so that it occurred earlier in the student's program and for longer periods, and several tried to improve the supervision of student teachers (Stone, 1970). Stanford University's Breakthrough Program began with a summer experience in the university's Micro-Teaching Clinic (see my discussion of microteaching below) and subsequently engaged students in audio- and video-recording their student teaching and in documenting their work with 35-milimeter time-lapse photography. These methods, novel at the time, were designed to encourage reflective practice and to improve trainee-supervisor conferences (Stone, 1970). Though not all programs used them, they were an important advance in methods of teacher education as they enabled closer attention to the work of teaching.

These useful experiments in format and in pedagogy notwithstanding, the Ford Foundation programs were only a mixed success. Evaluations found that although they often succeeded in attracting excellent students to teaching, they did less well in relation to other goals (Coley & Thorpe, 1985). A history of the M.A.T. program at Harvard published internally at the end of the 1950s, for example, reported that Harvard's curriculum had changed little from the model that Henry Holmes had installed in the 1920s (see Powell, 1980). Many programs were

unable to achieve effective relationships with schools and school districts, which adversely affected the quality of clinical experiences they were able to offer. Students were often dissatisfied with the supervision they received during internship experiences. Larger numbers of liberal arts faculty became involved in teacher education only in some instances; in many others, disciplinary faculty remained aloof (Clifford & Guthrie, 1988; Coley & Thorpe, 1985). Institutional politics and inflexibility fatally crippled several efforts to get M.A.T. programs off the ground even after the allocation of substantial funding. At Miami University, for example, indifference on the part of university administrators, failure of leadership to elicit faculty buy-in, and competition among faculty members in the School of Education derailed a fledgling program that had already drawn enthusiasm from students (Stone, 1970). The experiences of many programs that experimented with the M.A.T. model foreshadowed the difficulties teacher educators would encounter throughout the rest of the twentieth century and into the twenty first as they attempted to introduce innovation and change to university-based teacher education.

By the 1970s, growing attention to the needs of inner city minorities and urban schools along with a sharp drop-off in enrollments in suburban schools led to the demise of most M.A.T. programs (Keppel, 1986). Despite their short existence, the M.A.T. and other Ford Foundation-sponsored programs contributed several important ideas to discussions about teacher education and to the history of the field. In a significant departure from early twentieth century teacher education, they drew attention to teachers' need for strong disciplinary preparation and encouraged highly educated individuals to consider teaching. Though I am not aware of programs that acted on it, at least some individuals associated with the Ford Foundation reopened the conversation about the special kinds of content knowledge needed for teaching that the earliest teacher educators had begun a century earlier. At a conference sponsored by the Fund for the Advancement of Education in 1960, for example, attendees argued that teachers required specialized knowledge of the subject being taught, with "systematic inquiry into the problems which relate to the selection and application of content in the development of appropriate instruction for secondary grades" (Smith, 1962, p. 53). At the same conference,

others lamented "the isolation of teachers from critical appraisal of their work by other adults of equal or greater capacity" and advocated a focus on practice in teacher education, for "the dual purpose of training and *the elimination of the unfit* [emphasis in the original]" (Shaplin, 1962, p. 85). These were not original ideas, but they were very unfamiliar in this period and represented the beginning of a slow turn back in the direction of practice in teacher education.

In the end, however, the experiments associated with the Ford Foundation had little immediate impact on the content of the curriculum for learning to teach. A book-length interim report on the work of the Fund contains detailed summaries of 26 funded projects but says little about the content of the curriculum—the focus is on the restructuring of programs and the addition or improvement of field experiences (Woodring, 1956). There is no evidence in the report or in other histories of the Ford Foundation's work that faculty members who participated in this generation of reform efforts were centrally interested in studying the skill or knowledge on which instructional practice depends and in building corresponding professional education. In an autopsy of the M.A.T. program at Yale, for example, Sarason (1996) concluded that the faculty members and administrators involved concerned themselves almost exclusively with organizational issues, and noted that, "very little new was going to be taught or changed because the existing courses were considered to be precisely what prospective teachers needed" (p. 62). By the end of the 1960s, the teacher education curriculum was no more focused on the work of teaching than it had been two decades earlier, save for a few programs with extended field experiences.

Teacher Effectiveness Research and Competency-Based Teacher Education (1960s-1970s)

Even as the M.A.T. programs drew national attention to the importance of teaching and to the role of liberal arts in teacher education, several researchers turned their attention to the study of teaching as a clinical practice. With support from the American Educational Research Association (AERA), the federal government's Cooperative Research Program, and Richard Nixon's National Institute of Education (NIE), educationists began to pursue understanding of the factors affecting student learning and equality of educational opportunity (Lagemann, 2000). For

the first time, these researchers developed and used formal observation instruments for collecting data about teacher and pupil behavior. Often referred to as "process-product" research, their investigations probed the effects of a variety of variables, including teachers' personal and professional backgrounds and characteristics; classroom contexts such as size, noise, and carpeting; and classroom activities and interactions (Dunkin & Biddle, 1974; Gage, 1978). Slightly later studies in a similar vein explored the effects of specific instructional schemes such as DISTAR and other reading programs on student performance (Rosenshine, 1983). While much of this research was eventually criticized for taking an overly behaviorally oriented approach and for failing to incorporate meaning and context sufficiently, it was the beginning of a long project to understand the components of good teaching that would employ increasingly sophisticated conceptual frameworks in later decades (Floden, 2001).

Improving teacher education and professional development was a primary impetus for teacher effectiveness research, and the work informed the development of several resources and pedagogies for teacher education (Gage, 1978). As part of a large-scale study of teacher effectiveness, researchers at Stanford University began in the early 1960s to develop a taxonomy of teaching behavior designed to support the needs of both researchers seeking to identify and measure teaching behaviors in the classroom and teacher educators hoping to organize teacher education around discrete skills and then to measure the performance of their students accordingly (Baral, Snow, & Allen, 1968; Bush, 1968). With funding from the federal government, researchers at Stanford and then at the Far West Laboratory for Educational Development in Berkeley, California went on to develop hundreds of products—some of them based on the taxonomy—for teacher educators and professional developers, including numerous films of classroom practice (Gage, 1978). And Stanford was not the only site of research and development in the curriculum and pedagogy of teacher education; several researchers at other locations were experimenting with the development of taxonomies of teaching behavior and with the construction of related resources (McDonald, 1972).

Many of these resources were used in the design and implementation of new pedagogies for teacher education, including microteaching and competency-based teacher education. Developed by researchers at Stanford University in the early 1960s, microteaching was an example of what Grossman and her colleagues (2009) might call an "approximation" of practice, and the first innovation in practice-based teacher education since the "critique lessons" of the Herbartian era. It engaged students in practicing a single skill in a "scaled-down" teaching situation, usually in special laboratory classrooms with small groups of pupils (MacLeod, 1987). The typical experience involved at least four phases: During the first, a discrete teaching skill or small set of skills was introduced to students by way of videotaped model lessons. Students often read about the skills and the underlying concepts and rationale concurrently (Edwards, 1975), and were in some cases asked to identify the target skills while watching the demonstration video (Peterson, 1973). In the second phase, students prepared a short lesson that incorporated the target skills and practiced it with small groups of pupils (either "real" students or their own peers) while being videotaped. In the third phase, students watched the videotape and engaged in selfcritique; sometimes they also received feedback on their performance from a supervisor. Finally, students re-planned and re-taught their lesson.

A key feature of microteaching was the extent to which it was referenced to specific tasks of teaching—another way in which it recalled the work of late nineteenth century teacher educators and began to situate teacher education in practice. An episode might focus, for example, on the conduct of a discussion with students, and incorporate attention to the specific skills involved in leading a discussion: asking questions, dealing with incorrect answers in a non-punitive manner, calling on both volunteers and non-volunteers, and directing the same question to several students (Peterson, 1973). Another might zero in even more narrowly on techniques of questioning, including higher order questions, "divergent" or "probing" questions, and the use of "wait-time" (Edwards, 1973).

Microteaching was the subject of a good deal of research throughout the 1960s and 1970s, and many researchers and teacher educators believed it to be effective in helping student

teachers demonstrate the targeted behaviors (Gage, 1978). Its use was relatively widespread: A 1970 survey revealed that of 442 NCATE-accredited institutions in the United States, 176 reported using the strategy (Ward, 1970). A follow-up survey in 1979 showed that the number of secondary teacher education programs using microteaching had increased from 141 in 1969 to 237 in 1978, and that most of the institutions reporting its use had had at least seven years of experience with it (Jones, 1979).

Microteaching informed and was employed by a more comprehensive movement in teacher education afoot in the early 1970s referred to as competency-based teacher education (CBTE). Another outgrowth of process-product research and the teacher effectiveness studies, adherents of CBTE aspired to structure all of teacher education around a set of precise learning objectives, defined in behavioral and assessable terms (Houston & Howsam, 1972). These objectives spanned all aspects of professional education, from the acquisition of propositional knowledge to the development of instructional skill. They included "cognitive" objectives that focused on knowledge and intellectual abilities; "performance" objectives that focused on skills such as asking higher order thinking questions; "consequence" objectives that specified desired instructional outcomes such as improving student achievement in reading; "affective" objectives that dealt with attitudes, values, beliefs, and relationships; and "exploratory" objectives, which specified experiences that were thought to be beneficial to students of teaching and that instructors thought should be undertaken as part of the pre-service program (Howsam & Houston, 1972). In competency-based teacher education, students were required to demonstrate mastery of pre-specified objectives in each of these categories.

In addition to this explicit articulation of learning objectives, CBTE programs differed from traditional teacher education in structure and format. They typically delivered their curriculum not through traditional content and "methods" courses, but in self-contained "instructional modules" dedicated to specific learning objectives. Students participated in a range of pedagogical activities in each module, including independent work in a learning carrel, seminars, work in actual schools, and microteaching and other simulated teaching experiences.

Programs were self-paced, and students were typically required to demonstrate competence at each of a large set of target skills before they were permitted to move to the next module or graduate from a program. Students did not receive grades associated with particular course numbers; instead, they completed a portfolio that listed each competency they had achieved along with a comparison of those with the competencies expected for graduation.

Although CBTE generated a good deal of interest throughout the late 1960s and early 1970s, few institutions fully implemented the competency-based approach. A 1971 conference on CBTE in Houston, Texas funded by the U.S. Office of Education drew hundreds of attendees from many different institutions, all of which were experimenting to different degrees with the strategy (Houston & Howsam, 1972). Most programs, however, offered only experimental courses or pilot programs in CBTE; few, if any, embraced competency-based teacher education across their entire teacher education program.

But the competency-based teacher education movement saw several advances over earlier attempts at practice-focused teacher education, and it is important for the image of practice-focused teacher education that it provides. To begin, the taxonomies and lists of teaching behaviors that were developed and used under the auspices of the strategy were more detailed and comprehensive than those from earlier periods, and were based on multiple observations of work by teachers in classrooms. Although researchers in the 1960s did not appear to draw directly on the work of Charters and Waples fifty years earlier, most followed their lead in using extant practice as the starting point in the development of taxonomies of instructional moves. Whereas the Herbartians had reduced the work of instruction to five steps—their claim that practicing teachers already employed those steps was dubious—and provided little elaboration, devotees of CBTE created detailed lists of discrete teaching tasks, sometimes organized around larger grain-sized instructional activities such as leading a discussion. Even more important, CBTE used the resulting lists and taxonomies to structure the teacher education curriculum: Attention to each target instructional move was not embedded inside "methods" or foundations courses—students' opportunities to study and practice the activity left essentially to

the whim or judgment of the instructor—but made the explicit and organizing focus of the entire curriculum. Students were not permitted to move from one part of a program to the next or to graduate without demonstrating competency at each of a set of practices. A defining feature of CBTE was that all instructors and students knew explicitly what the learning objectives were.

This era also witnessed the development of some of the first genuine pedagogies of teacher education. Though the researchers who designed and studied microteaching have been repeatedly criticized for their lack of explanatory theory, the strategy represents one of the first attempts to engage novice teachers systematically in an intermediate activity between observing teaching and practicing it in a full classroom of real students. It is based on the assumption that students are unlikely to acquire proficiency at a teaching activity merely by watching it, writing about it, talking about it, and then immediately practicing it in a real classroom, but will learn best when they have opportunities to engage in scaled-down versions of the activity first.

Teacher educators used microteaching and similar laboratory strategies to hold constant some aspects of the work of teaching in order to allow student teachers to focus on other aspects, thus "scaffolding" novices' acquisition of the ability to assume full responsibility for a classroom of pupils. This was an important step forward in the pedagogy of teacher education; until the advent of microteaching, teacher educators had not offered their students this kind of close practice of particular elements of instructional work under carefully controlled conditions.

By the early 1970s, Bunnie Smith, an education researcher at the University of Illinois who had been active in the competency-based teacher education movement, was convinced that progress to develop a comprehensive description of the work of teaching and to identify the knowledge that informed and enabled that work was sufficient to suggest a radical reorganization of teacher education. Alone and with colleagues, he published several close studies of the work of teaching, most of them on contract from the federal government, and at least one proposal for the redesign of teacher education programs (e.g., Smith, 1980; Smith, Meux, Coombs, Nuthall, & Precians, 1967; Smith & Meux, 1970). His ideas merit attention here both for the implicit encouragement they offered the Holmes Group and because they highlight how much work it

would have taken to realize practice-based teacher education even at the end of the twentieth century.

In *Design for a School of Pedagogy*, a federal report issued in 1980, Smith invoked the ideals of the Learned Report as he advised schools and colleges of education to "get their house in order," abandon the use of the term "education" in favor of "pedagogy," and embrace the notion of "training" as the heart of professional education for teachers. Blaming deficiencies in institutional arrangements for the problems he saw in teacher education, he recommended the construction of schools of pedagogy that would house at their center a "clinical complex" of both K-12 schools and faculties of pedagogy, staffed by both "clinical teachers" and faculty members skilled in training practitioners for the work of teaching. Above all, he urged that "the program of training must have first claim on the time, energy, and the resources of the institution" (Smith, 1990, p. 86). Smith's detailed design showed that it was possible to conceive of practice-focused teacher education even in the absence of well-developed models or examples.

Although Smith advocated traditional academic preparation as an important element of teacher education, he strongly suggested that professional education for teachers make training for practice its chief concern, and do so by situating student teachers' learning in practice. He argued, for example, that students preparing to become teachers should study an academic curriculum that would parallel the public school curriculum for which they would soon be responsible. He insisted that students should study not theories of curriculum development, but "the actual curriculum of the school" (p. 42), as well as how the curriculum was sequenced and how content was selected. Further, he outlined a program of professional education that would include at least two years of full-time work in a "training laboratory," during which student teachers would engage in increasingly complex activities with students. He suggested, for example, that they should practice working with small groups of children, diagnosing learning difficulties in individual or pairs of children, and tutoring individual students with learning difficulties, and eventually assume responsibility for larger groups of children and for longer periods of time. He also recommended that teacher educators make use of the films and

videotapes exemplifying competent practice that were increasingly available. Recalling his experience with CBTE, he asserted that students should not pass from one level of training to the next without demonstrating satisfactory performance on a pre-determined set of skills.

A distinguishing feature of Smith's proposal was his view of the activities of teacher education as opportunities for explicit training:

When we speak of "training," we refer to the practice of working with students in situations where they understand what they are to learn to do, why they are learning to do it, what the outcomes are expected to be, and the conceptual explanation of the performance being acquired. Students who have thus been trained are fully capable of monitoring their behavior, correcting subsequent behavior in terms of the preceding performance and the intended outcome. Students who act in this fashion are performing intelligently and professionally. We prefer "training" to "education" for the simple reason that it designates the kind of education required for professional competence (Smith, 1980, p. 6).

This notion of "training" carries with it the assumption that there exists a robust conception of good teaching practice, and that teacher educators can and should offer novices explicit coaching toward that ideal. Throughout his proposal, Smith made clear that he believed that sufficient knowledge existed to inform practice-based teacher education and that teacher educators should use it to offer prescriptive training. Although other competency-based teacher educators sometimes used the term "training" to describe their work, Smith's embrace of the term was the strongest since the late nineteenth century and signaled the shift toward more directive approaches to teacher education.

Though the ideas were never realized, *Design for a School of Pedagogy* suggests how far ideas about teacher education had come even since the days of Henry Holmes. Smith offered an imperfect but inspiring blueprint for how teacher educators might situate students' learning in and for practice, drawing on lessons from previous attempts to reform teacher education and highlighting how much had been learned about the knowledge and skill underlying effective instruction. His design itself constituted a substantive resource for those who would improve teacher education late in the twentieth century, just as it demonstrated that enough was understood about practice-focused education by this point to permit a detailed imagining of a

radical reorganization of professional education for teachers. Members of the Holmes Group might have read this detailed report and found reassurance in it that they, too, could develop a specific plan for the redesign of teacher education, with clear goals for how each element of teacher education would need to change—even without being able to point to existing examples.

On the other hand, members of the Holmes Group might have shuddered to realize how much work it would take to realize Smith's vision or a similarly ambitious plan for reform. To make teacher education the center of faculty members' lives--as both Smith and the Holmes Group advocated--would require commitment, interest, and resources on the part of administrators and instructors that were rarely forthcoming in the twentieth century. To redesign the organization and instructional activities of teacher education around practice would require not only commitment, interest, and resources, but knowledge--perhaps more knowledge than even Smith realized. Underlying his optimism about how far understanding of teaching had come was some evidence that Smith's conception of the work involved in learning to teach was surprisingly uninformed. He expressed conviction, for example, that when films and videotapes were used to exemplify a pedagogical concept or strategy to novice teachers, "the amount of practice necessary to acquire the skill once the trainee can identify it behaviorally is reduced almost to zero" (p. 86). This idea is redolent of the sometimes naïve faith in the "five formal steps" of the Herbartians, though even the Herbartians believed that student teachers would need to practice the steps and not just observe them. It suggests how undeveloped, if forwardthinking, Smith's ideas were, and how much remained for members of the Holmes Group and their colleagues to learn and to design.

Indeed, competency-based teacher education and the pedagogies used as part of it have been repeatedly criticized as decontextualized and reductionist (Shulman, 1986a). Microteaching and similar strategies were typically carried out with little attention to the particular content being taught, for example, and did not deliberately integrate subject-matter knowledge for teaching. They were sometimes so narrowly focused on minute details of teaching tasks as to be unrealistic, and offered students few opportunities to respond to and use the instructional

context and to develop the capacity for discretionary adaptation and judgment with discrete behaviors and actions. The cognitive demands of teaching, the interactional and often improvisational nature of the work, and the constant need teachers face to coordinate between instructional goals and students' needs seemed to have been laid to the side during this period. Though these innovations in teacher education recognized instruction as a practical craft and represented a significant advance toward practice-focused professional education for teachers, they left a good deal out of the equation. Teacher educators in this period were only at the beginning of a slow redirection of their attention toward practice; at this juncture, their efforts to conceptualize instructional work and design corresponding programs of professional education remained underdeveloped.

The Cognitive Shift: Case Methods, Hypermedia, and Teacher Portfolios (1980s-1990s)

Recognizing the deficits of earlier studies, by the late 1970s, researchers began to incorporate attention to teachers' thought processes into research on teaching. Many of these individuals were directly involved in the Holmes Group, and their ideas significantly influenced the work of the consortium as well as other efforts to improve teacher education.

One source of this shift was research suggesting that pupil cognition was a more complex process than originally believed—an idea that had important implications for teachers' work. Piaget's analyses of the developmental process in children spawned multiple studies of students' conceptions and misconceptions, particularly in math and science (Confrey, 1990). Many of these studies found that students enter formal instruction with preconceptions that are not easily replaced through instruction (e.g., Anderson, 1984; Gilbert, Osborne, & Fensham, 1982). Several researchers applied these findings to studies of instruction itself, particularly of conceptual change in science classrooms, demonstrating the cognitive challenges teachers encountered in trying to help students learn (e.g., Bamberger & Duckworth, 1982; Anderson & Roth, 1989; Smith & Anderson, 1986). In an unrelated but similar line of work, Bruner, Olver, and Greenfield (1966) had also suggested that perception and thought were complex processes enabled by judgment and active engagement rather than impressed upon the student, as

Thorndike had argued they were, by external reality. Bruner applied these ideas to curriculum design, arguing that even young students could grasp basic concepts in science and the humanities if they were suitably presented. He advocated a "spiral curriculum" that would engage students in constantly reexamining subjects at increasing levels of sophistication (Bruner, 1960). These ideas had important implications for teaching and teacher education as they implied that teachers' work must be at least as complicated as students'.

Another source of influence on research on teaching in this period was an NIE-sponsored research group which, in 1975, argued that what teachers do is influenced by what they think (Gage, 1975). Members of the group portrayed teaching as challenging, cognitively demanding work, prompting a new generation of research on the mental lives of teachers (Clark & Peterson, 1986). One broad area of inquiry focused on teachers' planning, thinking, and decision-making. Researchers probed, for example, the effects of structured planning on teachers' classroom behavior, how the specification of objectives affected planning, when judgment is most important in teaching, when and how teachers decide to modify plans during instruction, and what conceptions teachers have of good teaching (Clark & Yinger, 1977). Later, scholar-practitioners portrayed teaching as "dilemma"-laden, and explored how teachers managed the social and intellectual tensions of classroom instruction (Ball, 1993; Lampert, 1985). Donald Schön's (1983) work on reflective practice also portrayed teaching as complex work requiring on-the-spot judgment and decision-making and the deliberate framing of problems for reflection and action.

In a related area of work, researchers examined the knowledge demands of teaching. Building on earlier conclusions about both teacher behavior and teacher thinking, researchers inquired into the kind of knowledge and understanding that enable instruction, often for the purposes of improving teacher education. Shulman's (1986b) proposal that teachers rely on "pedagogical content knowledge" preceded several studies of the special kinds of content knowledge that inform instructional work in particular subject areas (e.g., Grossman, Wilson, & Shulman, 1989; Wilson, 1988; Wilson, Shulman, & Richert, 1987). Many researchers affiliated with the National Center for Research on Teacher Learning (NCRTL) at Michigan State University,

several of whom were simultaneously working on the Holmes Group agenda, investigated the implications of these emerging constructs for teacher education (e.g., Ball, 1988; Wilson, 1989).

Several new pedagogies for teacher education derived from this growing conception of teaching as a knowledge-based practice. Case studies, hypermedia, and portfolios were designed to encourage novices to reflect on teachers' work, both others' and their own. Most common were written case studies, each describing a particular instructional quandary or episode of classroom practice and designed to help students learn to "think pedagogically," to reason through classroom dilemmas, and to explore possible actions (Grossman, 2005). Shulman (1986b) originally suggested three types of cases, one that would exemplify theoretical principles of teaching, another that would capture and communicate about principles of practice, and a third that would serve as "parables," conveying professional norms and values. Although teacher educators who wrote about their own use of cases did not always label them according to these categories, most described using cases to help their students reason about and reflect on practice (Kleinfeld, 1992; LaBoskey, 1992; Richert, 1992; Wade, 1992). Merseth and Lacey (1993) also touted case methods as a means of representing complex instructional situations, encouraging prospective students to bring prior knowledge to bear on teaching problems, and developing professional identity among novices. Others used cases to exemplify racial and other forms of injustice in schools and classrooms and to challenge students to identify teachers' unstated assumptions and norms (e.g., Finley, 1988). While it is not clear how widespread the use of written cases was (or is), several books offering pre-written cases and accompanying instructional activities remain on the market (e.g. Hinely, Ford, & Leavell, 2000; Silverman, Welty, & Lyon, 1992). Though no catalogue of their efforts exists, many teacher educators have also written their own cases primarily for use with their own students.

A variation on the written case study, hypermedia was a less common but important resource for instructional activities in teacher education in this period. The understanding that video technology could be a useful tool in teacher education was one enduring contribution of microteaching, and beginning in the 1980s, teacher educators began to expand their use of video

to include hypermedia, or video linked to text (Grossman, 2005). Hypermedia allowed teacher educators and student teachers to retrieve specific video and audio recordings of teachers at work, and to access accompanying photographs and written records of teachers' plans and students' work at the same time (Merseth & Lacey, 1993). Teacher educators could present these materials to their students as a form of case study, or allow students to explore them in pursuit of answers to their own questions; a primary benefit in either case was the opportunity to investigate the same episode of classroom practice from multiple points of view. Teacher educators typically used the materials to impart knowledge of instructional strategies and to encourage novices to adopt certain beliefs about teaching (Grossman, 2005).

In one of the most developed projects using hypermedia, Lampert and Ball (1998) videotaped an entire year of math instruction in third and fifth grade classrooms and then linked the captured video to records of pupil work, the teachers' daily lesson plans and journals, and examples of curriculum resources. These materials served at least two broad purposes, both of which mattered to the story of teacher education in general and to the Holmes Group's project in particular. First, they facilitated scholarship of teaching by allowing researchers to analyze multiple elements of practice from several different perspectives and to examine records of the same instance of practice repeatedly. The images that these scholar-practitioners collected provided, for the first time, permanent, researchable evidence of what ambitious instructional practice looked like. Second, they served as common "texts" for students of teaching. Lampert and Ball used them to surface the ideas that prospective teachers brought to the experience of learning to teach, including their assumptions about instruction and about children and their own struggles and capacities with subject-matter; to help challenge prospective teachers' ways of seeing the classroom, and to illustrate the complexity of instruction (Ball, Lampert, & Rosenberg, 1991; Lampert & Ball, 1998). Though most of the instructional activities that Lampert and Ball created using hypermedia were "cognitive" in the sense that they engaged prospective teachers in analyzing practice rather than enacting it, they were designed with an eye toward preparing novices for engagement in a practice that Lampert and Ball viewed as messy and challenging.

Because Lampert and Ball carried out their hypermedia project at Michigan State

University during the time that the Holmes Group was active, their work is particularly meaningful here. The comprehensive, multi-media case study that they created, and their efforts to develop teacher education activities using it, provided their colleagues with images of what practice-focused teacher education could be. Further, their work, and the related work of teacher educators who followed in their footsteps, provided examples of the kind of instructional performance toward which teacher education could aim—a new and important development for the fields of research on teaching and teacher education.

At the same time that they began to develop and use hypermedia and written case studies, teacher educators also began to experiment with teacher portfolios as a means of developing novice teachers' cognitive skills. Still common in teacher education programs today, portfolios can take various forms (including written and increasingly electronic) but typically include narrative statements about teaching goals and philosophies, lesson and unit plans, pupil work samples, observation notes and evaluations from supervisors, and taped teaching samples (Zeichner & Wray, 2000). Though they were developed in large part for assessment purposes—they are the capstone project in many teacher education programs—they are often also intended to document students' growth and to serve as learning tools inside of teacher education (Grossman, 2005; Zeichner & Wray, 2000). Surveys have shown that teacher educators employ them to stimulate reflection and analysis and to encourage student teachers to keep close track of the achievement of their pupils and to become more conscious of the theories and assumptions that guide their practice. Zeichner and Wray (2000) have found that teacher portfolios are in widespread use and are often integral to the process of achieving state certification.

The introduction of case studies, hypermedia, and portfolios to teacher education was important because it signaled a reemerging conception of teaching as complicated, demanding work and provided examples of the kind of practice toward which students of teaching could aspire. Further, these materials allowed researchers to probe the work of teaching in ways that

had not been possible in the field's earlier years. In contrast to the decades immediately prior, teacher educators in the 1980s and 1990s sought not to reduce the work of teaching to a set of discrete behaviors but to persuade their students of the complexity and nuance of instructional practice. And whereas the embrace by practitioners of CBTE of self-paced learning modules was underscored by a belief that prospective teachers could learn most of what they needed to know on their own or after a short period of repetitive practice, the use of case study methods in these later decades demonstrated teacher educators' desire to dwell in pedagogically meaningful ways on the complexities of practice alongside their students. These developments did not significantly alter the nature of teacher education by the end of the twentieth century, but they opened up avenues of research and development that teacher educators continue to work on in the twenty first century.

Jurisdictional Challenges

If the second half of the twentieth century was a productive time for many teacher educators, it was also a frightening one. Facing severe criticism of the quality of their scholarship and educational programs, several schools of education either closed or dramatically curtailed their offerings. Yale University closed its department of education and Johns Hopkins University its school of education in the 1950s, Duke University followed suit in the 1980s, and the University of Chicago in the 1990s (Labaree, 2004). The University of California at Berkeley almost abolished its school of education in the 1980s, stripping it of many of its faculty members and programs (Clifford & Guthrie, 1988). The University of Michigan nearly shuttered its school of education at the same time, eliminating many of its degree programs and reducing the size of its faculty. These cutbacks suggested condemnations of much more than teacher education programs, but they did not help the enterprise of preparing teachers. And whereas teacher education had been all but ignored in the first half of the century, it was now often the subject of direct censure.

Building on the critiques of the 1950s, several published accounts of schools of education in the last decades of the twentieth century disparaged teacher educators (e.g., Kramer, 1991;

Sowell, 1993; Hirsch, 1999). Harry Judge's (1982) report to the Ford Foundation on American graduate schools of education faulted research universities for relegating teacher education to the sidelines, and the teacher educators inside of education schools for failing to take their job seriously. A 1986 report published by the Carnegie Corporation of New York charged that "colleges and universities have failed to provide the education that school teachers need," and called for the complete restructuring of university-based teacher education (p. 75). Some critics—even self-critics—suggested that schools of education should get out of the business of preparing teachers all together. In their third and final report, published in 1995, members of the Holmes Group declared that faculty members in teacher education should either reform their programs or "surrender their franchise" (The Holmes Partnership & Lanier, 2007, p. 202). By the mid-1990s, "alternative routes" to teacher certification were becoming common, often supported by public policies designed to reduce the monopoly university-based teacher education had long held over the field.

Although these developments had no immediate impact on the curriculum for learning to teach, they distracted teacher educators and weakened the position of schools of education. This distraction may prove beneficial; it has provoked several efforts to reform teacher education, including those of the Holmes Group. Whether it ultimately harms or helps the project remains to be seen; certain is that the lowly status of education schools and the faculty members who work in them has been a crucial feature of the landscape of teacher education in the United States throughout the twentieth century. The reluctance of disciplinary faculty members to involve themselves with the M.A.T. programs, for example, was just one of its deleterious effects.

Teacher Education at the End of the Twentieth Century and the Infrastructure for Improvement

Teacher education endured yet another ambiguous phase in the period after World War II. On the one hand, two serious efforts to reform the curriculum—the M.A.T. programs and CBTE—failed to produce lasting changes. By the end of the century, university-based teacher education was under attack, from both within and without. On the other hand, teacher educators in this period took advantage of and contributed to improved infrastructure for research and

design; they developed several potentially generative ideas and produced innovations in curriculum and pedagogy.

The brief life of CBTE and the introduction of case methods and portfolios notwithstanding, the teacher education curriculum changed little in the closing years of the twentieth century. Prospective teachers continued to follow the well-established progression of methods and foundations courses proceeded by student teaching; the use of case studies and even hypermedia merely served to augment students' opportunities to learn the traditional objectives of the teacher education curriculum. Although progress to identify content knowledge for teaching was significant in this period, there is no evidence that teacher educators designed systematic opportunities for student teachers to acquire and practice using pedagogical content knowledge or other kinds of special content knowledge for teaching. Anecdotal evidence suggests that some teacher educators have begun to carve out space for such work inside of existing content or methods courses, but such efforts were neither widespread nor required by state licensing programs.

One reason that teacher educators did not accomplish more change in this period was their own insufficient knowledge. Despite the progress made, projects to capture and represent the intricacy of instructional practice and to develop methods of helping prospective teachers acquire competence in such a complex domain were only in their infancy in the latter decades of the twentieth century. Similarly, research to identify content knowledge for teaching was in its embryonic stage even by the 1990s. Teacher educators would not have had a definitive basis for arguments for substantial changes to the teacher education curriculum, and many would probably have responded with uncertainty had they been asked to teach courses, for example, focused on content knowledge for teaching. Although they made important strides in this period, they only accomplished a modicum of what needed to be done.

Teacher educators in the latter half of the twentieth century were able to accomplish what they did thanks in part to better funding for their work. Beginning with the NIE-sponsored research groups that I discussed above, the federal government invested much more significantly

in education research, and particularly in research on teaching, than it had prior to World War II.

Federal funding for the Institute for Research on Teaching (IRT) and the National Center for

Research on Teacher Learning (NCRTL), for example, helped to stimulate the development of an agenda that education researchers have continued to pursue into the twentieth century.

Increased funding and interest in teaching and teacher education permitted teacher educators in this period to develop some elements of an infrastructure for research on teaching and teacher education. Although they were still stymied by the lack of a common curriculum and the absence of strong mechanisms for collecting, disseminating, and analyzing knowledge of practice, researchers in this period were often able, for example, to recruit teachers into the research process. IRT co-directors Lee Shulman and Judy Lanier appointed several practicing K-12 teachers as formal members of the Institute's staff every year for more than nine years; most worked half of each day in their classrooms and then joined colleagues at the Institute in activities ranging from planning and designing studies to collecting and analyzing data (Inzunza, 2002). This was the first time that practicing teachers had been deliberately and formally engaged in the research process, and it introduced the perspective of practitioners in the Institute's work (Koppich & Knapp, 1998).

In a separate but related development, a number of teacher educators active in this era launched professional development schools (PDSs), public, K-12 schools that were intended to support close collaborations between teachers and university faculty members for the explicit purposes of teacher education and research. Though they had a number of different instantiations, PDSs were often set up to allow faculty members both some measure of control over the classrooms in which they conducted research as well as opportunities to build the capacities of the teachers with whom they worked. These efforts did not erase the realities of pervasively weak instructional guidance and school organization or lead suddenly to a cadre of highly skilled teachers who functioned simultaneously as researchers, but they were overtures toward the development of effective collaborations between teachers and researchers. They

helped teacher educators and researchers in the 1980s and 1990s make small improvements in the knowledge base for teaching and to design important experiments in teacher education.

Discussion: Teacher Education Reform in the Late Twentieth Century

After the publication of *A Nation at Risk*, teacher educators initiated another wave of reform in the 1980s. The most extensive projects—John Goodlad's National Network for Educational Renewal (NNER) and the Holmes Group—focused on the simultaneous reconstruction of the teaching profession and teacher education. The assumption behind both efforts was that teacher education could not be significantly improved without concurrent improvements in schools and in working conditions for teachers, and that schools would not change without better-prepared teachers. Both undertakings were comprehensive and systemic, taking aim at all parts of the enterprise of preparing teachers, including the curriculum. Of the two, John Goodlad's work was the least oriented around making practice the centerpiece of teacher education.

In partnership with colleagues at the University of Washington, Goodlad launched the National Network for Educational Renewal in 1985 (Frazer, 2007). Still functioning at the beginning of the twenty first century, it consists of more than twenty school-university partnerships involving forty-two universities in the United States and Canada. Participants in each partnership agree to work toward each of twenty "postulates" that stipulate the conditions Goodlad argues are necessary for effective teacher education. Several of the postulates pertain to the content of the curriculum for learning to teach, but these are concerned primarily with ensuring sufficient attention to the aims of education, to moral and ethical issues in teaching, and to strategies for effecting change in schools. One postulate calls for attention to the pedagogy of specific subject-areas and another for programs to provide a "wide array of laboratory settings for simulation, observation, hands-on experiences, and exemplary schools for internships and residencies," but none suggests specific learning goals for students (National Network for Educational Renewal, 2011). Moreover, the Network has not initiated significant efforts to identify either content knowledge for teaching or the core practices essential for competent beginning

practice. I have not been able to find any evidence of broad influence by the Network on the content of the teacher education curriculum in the United States.

Initiated just a few years after the NNER, the work associated with the Holmes Group was a substantially larger endeavor with an ambitious agenda for the reconstruction of the professional curriculum for teachers. The principal goal of the group, a consortium of more than a hundred universities with schools and colleges of education, was to make teacher education a central priority of research universities by more closely connecting it to the liberal arts, to research on teaching and learning, and to practice in the public schools (The Holmes Partnership & Lanier, 2007). Redesigning the curriculum was a particularly important goal. In three booklength reports, members of the consortium argued for both strengthening and making more relevant prospective teachers' liberal arts training and for improving training in pedagogy. While they did not argue for a re-centering of the curriculum on practice with the strength and specificity of more recent calls for reform in teacher education, they did urge a greater focus on the pedagogy of specific subjects and on the development and assessment of teachers' professional performance. They sought teacher education that would significantly influence graduates' ability to do the work involved in helping pupils learn.

The Holmes Group proposals drew on ideas that had grown out of many years of thinking and experimentation in education in the United States. Their vision of schools as academic learning communities invoked the work of Francis W. Parker, John Dewey, Willard Waller and other early twentieth century educationists. The professional development schools that were to be essential parts of the reform recalled the model, practice, and laboratory schools with which the Holmes Group's predecessors had been experimenting since the nineteenth century. Their plans for incorporating improved subject-matter preparation and pedagogical studies into teacher training built on the explosion of research on teaching and teacher knowledge of the 1970s and 1980s. Many of the individuals involved in the Holmes Group were active contributors to research on teaching, and several had long histories of leadership in the field of education. Some had participated in the development of M.A.T. programs and in

competency-based teacher education and were familiar with the accomplishments and roadblocks of those efforts. The Holmes Group had many resources for their project at their disposal.

But the consortium also addressed a set of problems that had been a century in the making, and my discussion of the history of efforts to improve teacher education in the United States should suggest the difficulty of their project. By the 1980s, the curriculum for learning to teach in the United States was far from practice-based; it consisted primarily of traditional academic coursework in which learning goals for students were referenced to knowledge acquisition in the liberal arts rather than to classroom performance. Moreover, the knowledge that might inform the construction of a more practice-oriented curriculum was underdeveloped. Still without a common language for studying teaching practice, teacher educators had never been able to articulate the elements of the work of teaching necessary for competent beginning practice or to design a corresponding program of professional education. Researchers were just beginning to study the knowledge demands of practice, and teacher educators could not say with certainty what kinds of subject-area or other knowledge beginning teachers needed to know.

Even several decades after the formation of the Holmes Group, understanding of the kinds of skills, dispositions, and knowledge that might enable teachers to engage in effective instructional practice remains thin, although it is more developed in some subject-areas than in others (Ball, Hill, & Bass, 2005; Cohen, 2007; Rand, 2002; U.S. Department of Education, 2008). Despite both agreement that teachers' subject-matter preparation is important to instruction and progress in the study of knowledge for teaching in some subjects areas, not enough is known about how much and what kind of subject-matter knowledge would positively influence teachers' performance in the classroom, or about what kinds of coursework would ensure that prospective teachers acquire essential subject-matter knowledge (Cohen, 2007; U.S. Department of Education, 2008; Wilson, Floden, and Ferrini-Mundy, 2001). And though many agree that preparation in teaching methods and in "foundational" knowledge for education is important, there is no research that directly measures the relationship between what teachers learn in these aspects of professional preparation and their impact in the classroom, or that assesses which

instructional methods are most effective for teacher education (Grossman & McDonald, 2008; Wilson, Floden, and Ferrini-Mundy, 2001). Although some teacher educators had, by the mid-1980s, been experimenting with new pedagogies for preparing novices for practice, their efforts were inconsistent, unsystematic, and far from comprehensive (for a recent summary of what is known about the knowledge needed for the teaching of reading comprehension, for example, see Rand, 2002; for a similar discussion of the knowledge base for mathematics instruction, see U.S. Department of Education, 2008). Research on clinical training for teachers is similarly scant; few studies have considered the relative impact of different kinds of clinical experiences or the effects of varying lengths of fieldwork. Little is known about the specific practices or structures in clinical experiences that encourage and enable student learning, or about the relationship between coursework and fieldwork (Wilson, Floden, and Ferrini-Mundy, 2001).

A recent meta-analysis conducted by the American Educational Research Association documented similar knowledge gaps (Cochran-Smith and Zeichner, 2005). The report emphasized the paucity of conclusive knowledge about what works in teacher education: research is "small and inconclusive;" studies are "few;" knowledge is "limited;" findings are "slim" or "mixed;" evidence is "extremely thin." Research on pedagogical approaches in teacher education and their eventual impact on pupil achievement is particularly lacking, as is large-scale study of methods courses and field experiences and their relationship to teachers' practice. The report strongly recommended that rigorous research be undertaken across a wide variety of topics related to teacher education if empirical evidence is to inform decisions about policy and teacher education practice.

A related area of ambiguity concerned the process of schooling and the impact of different kinds of resources on students' learning. Cohen (2007) has observed that research has not been able to differentiate sufficiently among the effects of professional knowledge, dispositions, and skills; curricula, class size, or money, to name a few of the inputs into the schooling process, on what students learn in school. Researchers also do not understand how different kinds of resources matter to pupils of different backgrounds. Without knowledge of

these matters and a common language for talking about and studying them, members of the Holmes Group faced serious challenges in their effort to determine what the content of the teacher education curriculum should be.

These challenges derived from the same infrastructure problems that had silently plagued teacher educators from the beginning—all of which members of the Holmes Group could expect would continue to make their improvement efforts difficult. Although research centers such as the NCRTL and electronic databases like the Education Resources Information Center (ERIC) were, by the time of the Holmes Group, beginning to collect and disseminate information about teaching and teacher education, there still had not developed a genuine community or communities of practice in the United States through which teachers and teacher educators worked together on a common, coherent agenda, identifying problems, developing solutions, and disseminating the results of design experiments.

Hiebert, Gallimore, and Stigler (2002) have suggested that one way to build a knowledge base for the teaching profession would be to assemble a database of the results of teachers' experiments with particular forms of instructional practice, and to analyze systematically the content of that database—much the way the U.S. agricultural extension system has reviewed and indexed the results of experiments in corn farming. Several other researchers, all of whom were involved with the Holmes Group, have proposed that teacher educators could draw on extensive records of teachers' work to help novices explore the complexity of children's understanding of subject-matter, analyze different approaches to teaching the same topic, and learn to identify and replicate aspects of instruction that might otherwise escape notice (Ball & Cohen, 1999; Lampert & Ball, 1998). To facilitate the collection of records of practice, however, and to engage student teachers and their more experienced colleagues in the collective analysis of the work of teaching, would require that teachers become more comfortable with making their work public than they typically have been. It would also likely depend on at least partially formalized structures for professional conversation—such as the Japanese model of "lesson study." Ella Flagg Young once lobbied for the construction of teachers councils in Chicago that

might have provided a forum for this kind of professional conversation and learning, but her ideas were never brought to fruition and few such structures had been developed or engaged in the United States at the time the Holmes Group began its work. One result is that practitioner knowledge remained un-codified and teacher educators without a reliable source of records of practice.

A similar point could be made about teacher educators' work: Recent attempts to document and describe specific teacher education practices and share them across the field are among the first of their kind. Both the Carnegie Foundation's QUEST project and the Annenberg Foundation's Annenberg Media project are examples of fledgling efforts to disseminate best practices in teacher education and to provide visual records of teachers' work packaged for use by teacher educators. These are promising initiatives, but they did not exist in the 1980s and there is in any case no evidence that use of these resources is or will become widespread. For all of the reasons that I have described here, when the Holmes group launched its project, there was no centripetal force directing the attention of teachers and teacher educators toward a coherent agenda for the improvement of practice.

Earlier efforts to improve teacher education have demonstrated other obstacles that the Holmes Group could expect to encounter, many pertaining to the consortium's location inside institutions of higher education. Marshaling genuine commitment to a reform project among faculty members and fostering collaborative work toward a set of collective goals has never been easy in schools of education. The experiences of Paul Hanus, Henry Holmes, the champions of the M.A.T., and the faculty members involved in competency-based teacher education have all revealed reluctance to invest in teacher education reform among both education and disciplinary faculty members. Even where there is a will, the structure and organization of higher education have made change difficult—as the efforts associated with CBTE showed. Although members of the Holmes Group had many resources on which to draw, they faced tall odds. In the next chapter, I explore in greater detail the problems in teacher education that the Holmes Group inherited and the problems involved in solving them.

Chapter Three

The Problems of Teacher Education and the Problems of Reform

When members of the Holmes Group began their work in the early 1980s, they proposed to reform teacher education by solving many of the problems that had developed over the course of the field's relatively long history. Their comprehensive agenda targeted the lack of focus on practice in the teacher education curriculum, the alienation of both disciplinary and education faculty members from professional education, and weak knowledge of teaching and teacher education, among other difficulties. At the conclusion of their work, however, the only major evaluation of their efforts reported marginal progress nationally and weak implementation at the local level (Fullan, Galluzzo, Morris, & Watson, 1998). In the remainder of this study, I probe the problem of designing and implementing practice-based teacher education by investigating what Holmes Group members working at Michigan State University tried to do to reform teacher education, and how their plans were implemented. In this chapter, I set out the ideas I will use to frame this investigation.

To identify factors that are likely to influence reform in teacher education, I drew from the literatures on similar kinds of change efforts, including program implementation in K-12 education and organizational leadership during periods of corporate change. These literatures have yielded two ideas which have undergirded my investigation of the work of the Holmes Group at Michigan State University: The first is a model of implementation as an interactive process in which program design, practitioners, and features of the environment bear on each other and influence outcomes. This process produces what analysts have argued is a key dilemma of reform, which is that policy makers depend on practitioners for success—the same

practitioners who have inadvertently had a hand in creating the problems targeted by reform.

The second key idea is that the leaders of change efforts can attempt to manage this dilemma by conceiving of their work as instructional leadership and trying to help practitioners understand the nature of the improvements desired and bolstering their ability to make those changes. I explore these ideas below and consider their implications for teacher education reform.

The Dilemma: Teacher Educators and the Work of Reform

I adopt a model of reform implementation as an interactive process in which program design, practitioners, and features of the environment bear on each other and influence outcomes. In this conception of implementation, interveners and their goals and plans have important but limited consequences for implementation. Although they can provide direction and resources toward change, their effects are mediated by the inclinations and capability of practitioners and by the resources or impediments that are present in the environment in which the intervention takes place. In their landmark *Rand Change Agent Study*, for example, Berman and McLaughlin (1974) found that the chief determinant of policy success was the characteristics of the implementing institution, including, principally, teachers' capacity and motivation to participate in reform. They allowed that initial project characteristics such as planning, specificity of goals and means, flexibility, resource allocation, and staff development could affect change, but concluded that reform programs are not self-executing. A number of more recent investigations have supported this view (e.g., Cohen & Hill, 2001; Dow, 1991; Lin, 2000; Lipsky, 1980; Majone & Wildavsky, 1979; Sarason, 1996).

A central conclusion across these studies is that policy and program outcomes depend substantially on the capacity of the on-the-ground practitioners who implement them. Sarason (1996), for example, found that even ambitiously designed curriculum reforms such as those associated with the "New Math" have little impact if practitioners lack the knowledge and skill necessary to implement them effectively. Similarly, Cohen and Hill (2001) observed that many teachers who participated in California's attempt to improve math instruction in its elementary schools during the 1990s often adapted new practices introduced by the reform to their regular

instruction to such an extent that their teaching changed little. Teachers who had substantial opportunities to study the reform curriculum that they would teach, on the other hand, often changed their practice significantly, and many improved their students' math scores. In his study of "street-level bureaucrats," Lipsky (1980) concluded that teachers, social workers, public interest lawyers, and police officers significantly influence the implementation of public policy. He argued that this influence is so great that these workers, rather than legislatures or high-ranking administrators, actually make policy. Lin (2000) reached similar conclusions in her study of the implementation of rehabilitation programs in prison; she found that prison programs do not act on their own to change the behavior of inmates but are effective only when prison staff members know how to use them well.

Cohen and Moffitt (2009) have referred to this dependence of policy on practice as a "dilemma:" Policies aim to solve problems, they pointed out, but the key problem solvers are the "offending, needy, or damaged organizations and people" (p. 520). Conversely, they argued, practitioners rely on policy-makers to develop ideas and resources that will help them solve their problems. How, they asked, can policy help the very people and organizations that have for so long been the source—or at least a part of the source—of the problem solve that same problem?

I hypothesized that this dilemma is likely to be no less salient in teacher education than in other fields of policy-making. The teacher educators on whom members of the Holmes Group, for example, relied to carry out their agenda were the same individuals who had designed and were teaching the curriculum that the national consortium found insufficient. As I tried to show in Chapter Two, the capability of university-based teacher educators to design and implement more practice-oriented teacher education was constrained by the way their field had developed in the twentieth century. Many faculty members lacked in-depth understanding of the practice of teaching—the object of professional training—and few had substantial experience working in K-12 schools (Levine, 2006). Their alleged combination of comparatively poor academic credentials and disinterest in the work of educating student teachers is well chronicled (see, for example, Conant, 1963; Koerner, 1963; Clifford & Guthrie, 1986; Lanier & Little, 1986; Labaree, 2004;

Levine, 2006). While not all teacher educators conform to this portrait, I conceive of teacher education reform as a process in which the interests and capabilities of faculty members and other instructors are likely to be both critical and, at least at first, constrained.

By "constrained," I mean that many faculty members' immediate ability to analyze the work of teaching, design new pedagogies for professional education trained on that work, and manage a long-term effort to study and refine those pedagogies had been limited by their individual and collective histories. Individually, faculty members with interests and training in the social sciences and little experience designing instruction or instructional interventions were not well prepared for teacher education reform. Collectively, teacher educators in the late twentieth century lacked knowledge and understanding that would inform an organized attempt to innovate in teacher education. The state of knowledge in the field left them uncertain about what kind of academic or professional preparation new teachers needed. Because of the emphasis on traditional social science research in schools and colleges of education and on problems peripheral to teaching and learning, many education researchers were not well equipped to carry out the kind of design research that would remedy these gaps. When the Holmes Group began its work, these features of the field of education research constrained faculty members' capability relative to the work of reform.

Capability, however, is not fixed. Although it would be difficult, teacher educators and education researchers could improve their ability to engage in reform. The second key idea on which I draw in this study is that the leaders of change efforts can manage the dilemma posed by their reliance on practice by choosing instruments of reform that convey knowledge and build commitment and capability.

Teacher Education Reform as an Instructional Enterprise

In an extended line of work focused primarily on school reform, David Cohen, Deborah Ball, and their colleagues have conceived of intervention as an "instructional" enterprise—one in which knowledge development serves as a primary instrument. At the center of this framework is a view of instruction as a series of interactions among teacher, student, and content, in the

environment of schools (Cohen, Raudenbush, & Ball, 2003). The extant characteristics and resources of each element of this "instructional triangle" matter to what is possible in instruction. Teachers interpret and represent subject matter to students; what they know, understand, and can do is a crucial factor in instructional success. Similarly, students interpret their teachers, the content, and their classmates, and respond and act; their backgrounds, preferences, and capacities are centrally important. Depending on how students and teachers use it, the curriculum itself is a pivotal resource. Finally, features of the environment in which these interactions occur can significantly influence the instructional relationship. Signals from the principal, district, or broader policy environment; teachers' working conditions and incentives; and parental support or lack thereof, among other factors, can each affect the way in which teachers and students work together and with the curriculum.

Instruction, or the work of teaching specific learners, takes place as all of these elements interact with one another, and each element bears significantly on the others. This notion of instruction as a series of interactions in which the teacher plays a pivotal role is central to the way in which I conceive of instructional reform in general and of teacher education reform specifically in this study. Below, I examine the problems that arise as teachers and students work together across these relationships and consider their implications for the problem of instructional reform.

The Problems of Instruction—and the Problems of Instructional Reform

Cohen, Raudenbush, and Ball (2003) have identified four problems that teachers and students must manage across the interactions that I named above: First, they must determine how to use resources that are available; curriculum materials and other tools will have little effect on learning if not used and used well. Second, they have to coordinate instruction, contending with students' differential preparation for schoolwork and with sometimes conflicting signals about what is important from parents, the school district, and other entities. Third, they must mobilize incentives for performance, finding ways to encourage themselves and each other to do ambitious work. Finally, they must manage external influences on their work, including those

from other teachers and students, school leaders, and parents and caregivers. Teachers occupy a uniquely important position in the dynamic triangle across which work on these problems takes place; they are responsible for launching and maintaining instruction and have considerable influence over what takes place in a classroom.

Cohen and Ball (1999) have applied this framework to the study of interventions on schools. They have argued that interveners might treat the work of implementation as a teaching task, one in which a key part of their job is to help teachers learn about the program and about how to deliver it effectively. In particular, they have suggested that reformers can "specify" and "develop" a program so as to increase practitioners' capacity on the ground (Cohen & Ball, 1999). "Specification" refers to the "explicitness with which an intervention is articulated and mapped—to the plans for action, including what the intervener chooses to treat explicitly and how...the plans or educational blueprints for intervention, including plans for a curriculum for enactors' learning, plans to collect and use evidence on enactment, and much more" (p. 19). More fully specified designs offer implementers clearer guidance and are likely to influence significantly the change process. "Development" refers to the "action repertoire of interventions, including materials for enactors; social processes such as professional development; working models or examples of adoption processes, or video materials that depict teachers' knowledge, norms, and skills in ways that would be educative for other teachers; and social processes for involving and educating parents" (p. 19).

One implication of this framework is that the more fully reformers design, specify, and develop a reform program, the more likely that they will achieve success. If they communicate goals clearly, describe what change would look like, and provide multiple opportunities for practitioners to learn about practice and work together to improve their work—in other words, if they *teach* the reform to practitioners—they stand a greater chance of helping them make change. As it does for classroom teachers working with children, this instructional work involves paying close attention to the extant capacity and assumptions of learners and designing instruction accordingly. The leaders of reform efforts who specify and develop their ideas for

change are, in essence, designing and delivering a curriculum for practitioners' learning. To do so is a key part of the work of leading instructional reform according to the framework that I employ here.

A second implication of this framework is that more comprehensive interventions are more likely to succeed. Cohen and Ball (1999) have argued that since instruction consists of interactions among teachers, students, content, and environment, interveners amplify their chances of making significant change when they target more than one corner of this "instructional triangle" for improvement. A reform that focuses only on curriculum, for example, is unlikely to succeed if instructors are not also prepared to use that curriculum as part of the intervention. And if interveners do not manage environmental influences on teachers' and students' work with the curriculum, they may achieve less. Conversely, interventions that take aim at more than one element of instruction increase what teachers and students can do with one another and with curriculum materials.

I use this framework to conceive of teacher education and interventions on teacher education in similar terms. Here, teachers are teacher educators, students are prospective teachers, the content is the curriculum of teacher education (which consists of opportunities to learn to do the work of teaching, as represented by the original "instructional triangle"), and the environment is that of the school or college of education that houses the teacher education program, the K-12 schools in which students of teaching observe and practice, the organizational and institutional structures and mores that bear on the program, and the broader state or national policy climate. Teacher education happens not only as teacher educators explain, model, and represent ideas and skills, but as students of teaching encounter and experiment with new information and as both students and teacher educators interpret and respond to signals about what is important from the multiple environments in which all of this takes place.

This framework suggests that the work of reform in teacher education, like the work of reform in other fields, has two levels: At the core of the undertaking is the design of solutions to weaknesses in each element of the instructional triangle: teacher educators, student teachers,

curriculum, and the context of instruction. Just as important is the second-level work that the leaders of reform do to enable the first-level design work. This second-level work includes efforts to "specify" and "develop" the goals for reform, or to help enactors learn about the changes that are sought in the instructional triangle and how to implement them. Below I elaborate the first-level work and identify related questions for analysts of change efforts; in the following subsection, I consider what is involved in the second-level work and its implications for studies of change.

The Problems in Teacher Education—and the Problems of Teacher Education Reform

Solving problems in the delivery of teacher education is the central goal of reform in teacher education. In Chapter Two, I contended that redesigning the curriculum is fundamental to reform; given the interactive work of instruction, also important are improvements in teacher educators, students of teaching, and the environmental influences that affect the endeavor. Both the history of the field and recent empirical studies suggest that making changes in these areas would be challenging work. I have already argued that the collective capability of teacher educators is weaker than it might be and that the curriculum of teacher education is underdeveloped; there is also evidence that many student teachers enter professional education poorly qualified and that admissions standards are generally low (Lanier & Little, 1986; Levine, 2006).

The realities of scale also challenge reformers. Students of teaching comprise one of the largest groups of pre-professional students in the United States (Lanier & Little, 1986) and the demand for teachers outstrips supply in many parts of the country. The sheer number of teachers needed by U.S. public schools suggests that the recruitment of large numbers of academically elite students to teaching may be an unrealistic goal and implies that teacher education programs need to find ways to accommodate not only a large number of students but many who are likely to need close help as they learn the demanding work of teaching. As I argued in Chapter Two, both teaching and teacher education have been organized, both fiscally and substantively, to process relatively large numbers of students at a relatively low cost.

Designing for these realities is imperative for reformers who wish to see practice-focused teacher education implemented at scale.

Further, the environment in which teacher education takes place appears to present challenges for students of teaching and for teacher educators alike. Analysts have found that universities nearly always hold their programs of professional preparation for teachers at arm's length; they seem unconvinced of their intellectual worth and reluctant to provide them with moral or financial support (Judge, 1982; Clifford and Guthrie, 1986; Lanier and Little, 1986; Labaree, 2004). Students pay a larger share of the costs of their education when they are preparing to teach than they do when enrolled in other units of the university, arts and science departments are organized with little thought to the intellectual and professional needs of students of teaching, and universities reward quality in undergraduate teaching infrequently (Lanier and Little, 1986). It is often difficult to locate the administrative unit that will claim direct responsibility for a program of teacher education, and state accreditation and approval processes do little more than eliminate the worst programs (Lanier and Little, 1986). The environments of the K-12 schools in which student teachers complete field experiences and then are hired as professional educators are no better; career stages that might support new teachers' continued learning are non-existent and few formal arrangements provide colleagueship or other opportunities for professional development.

This conception of reform implies that analysts of specific change efforts should look for improvements in each element of the instructional triangle. Did reformers try to create more effective curricula for learning teaching? In particular, did they re-center learning goals for student teachers on the practice of teaching? Did they try to ensure adequate content knowledge for teaching, and knowledge of the social and political context of schooling relevant to practice? Did they strengthen their conception of what it means to be an effective teacher educator, and develop appropriate methods of preparing and supporting instructors? Did they develop better strategies for recruiting and preparing teacher educators and for recruiting and selecting student teachers? Finally, did they find ways to manage the environments that bear on the process of

preparing teachers? Because teacher educators have little direct influence on the environment in which teacher education takes place, managing the instructional context is likely to be especially difficult work. Faculty members working in schools and colleges of education could, in theory, do a good deal on their own to improve curriculum, to prepare colleagues to deliver better instruction, and to attract better students to teaching; they could do much less to act on problems that derive from university administration, longstanding skepticism of the field of education, or the nature of K-12 schools as organizations. Yet these challenges are vital aspects of the broader problem, and reformers seem unlikely to realize significant gains if they cannot find ways to ameliorate their effects.

The dynamic nature of the instructional "triangle" that constitutes teacher education suggests that reformers would be more likely to succeed were they to implement improvements in each of these entities—not just one of them—and do so more or less simultaneously.

Designing a more relevant curriculum for learning teaching without concurrently improving the quality of applicants to teacher education and building the capability of teacher educators, for example, seems less likely to result in significant change. Just as is the case in K-12 education, a better curriculum would be of less value if teachers do not know how to use it or if students do not have sufficient or appropriate academic and personal resources for learning the material. Similarly, a reform effort that focuses solely on recruiting stronger applicants to teaching may have little impact on the overall quality of professional education for teachers since even the most capable students will not necessarily learn to teach without a pertinent curriculum and teachers who can help them learn from it. The targets of reform in teacher education are thus many, and according to the framework that I use here, comprehensiveness is likely to strengthen any attempt at change.

For each of the several intervention points in teacher education, the work involved in reform would be substantial. As I tried to show in Chapter Two, knowledge of and for teacher education is incomplete and uncertainty attends nearly every aspect of the enterprise. Although reformers could make informed conjectures about the kinds of changes that would help make

teacher education more effective, in most cases they would not know that any particular idea would yield a solution to a given problem. Instead, they would have to rely on trial and error to help them understand more about the problems that they confronted and to search among alternative ideas for adequate solutions. This process of experimentation would require sustained and deliberate work over the course of at least several years.

For analysts of change efforts, this uncertainty indicates attention to whether reformers approached their work as a research and development enterprise. Did they view reform as a design problem, and did they follow up their design work with systematic study and redesign? It seems more likely that reformers would succeed were they to begin with a set of informed questions for design, study, and redesign. If so, they might have tried to investigate what instructional practices are effective in K-12 teaching and what kinds of knowledge, skill, and orientations enable those practices. Similarly, they could have asked about what kinds of teacher education practices might help prospective teachers learn that knowledge and skill. To develop these questions, reformers would need to consider each element of the dynamic triangle that constitutes teacher education, and attend deliberately to the ways in which those elements might interact. Given a set of hypotheses, they would then need to specify and develop the relevant instructional practices, curricula, materials, settings, and other program features, and begin to implement and study them. Their analysis would probably need to entail examination of both the influence of K-12 teaching practice on pupils' learning and the influence of teacher education practice on student teachers' learning. A key challenge for designers would be to distinguish between the effects of instructional practice and teacher education, and then among the individual effects of the multiple components of practice at each level.

Given this lens, it might make sense for teacher education reformers to view the study of K-12 instruction and the redesign of teacher education as mutually informative endeavors. As reformers taking aim at teacher education tried to develop improved designs for preparing teachers, they would learn about the problems of K-12 teaching and the effects of different instructional practices; as scholars of classroom practice continue to study teaching, their findings

will inform experiments in teacher education. The investigation of several questions related to K-12 schooling in fact depends on design work in teacher education. Rigorous exploration of teaching quality, for example, might require preparing at least some teachers with the knowledge and skill that researchers hypothesize would influence student learning. And to study how field experiences help student teachers learn, researchers might need to experiment with supplying schools with cooperating teachers that they have prepared in special ways. These examples name just a few of the many points not only in teacher education but in the K-12 school system at which a comprehensive effort to redesign teacher education might need to intervene. And it is likely that reformers would need to act on each of these leverage points not once but in multiple rounds, making adjustments in each instance. The work would be complex.

Following this line of reasoning, another problem is how reformers would document and keep track of the work of the multiple investigators who would comprise the research and design team, and how they would maintain the coherence of the work over the long period of time that thorough research and development would require. As reformers experimented with alternative designs for K-12 instruction and for teacher learning, they would gain understanding of the problems of teaching and learning in both K-12 and higher education classrooms that could inform subsequent design attempts; an organized design effort could include strategies for keeping track of, disseminating, and using the information gathered. The complexity of teacher education itself and the multiple parties involved in the work of reform would magnify the challenge.

This conception of the work of reform in teacher education suggests that those who take on the tasks of design and analysis necessary to improving teacher education face time consuming and resource intensive work, and more so the more comprehensively they pursue change. To summarize, evidence from reform in other fields suggests that the search for more effective curricula, materials, and pedagogies, for example, might require that courses and other learning experiences for teachers be redesigned and reenacted in multiple iterations. The creation of effective "field experiences" for student teachers, to name another example, might

depend on labor intensive efforts to build relationships with schools and practicing teachers; to train teacher educators, including faculty members, doctoral students, and practicing teachers; to participate in a design experiment; and even to create alternative environments for the delivery of teacher education. It could require experimentation with several different ways of structuring and sequencing student teachers' participation in K-12 classrooms. In these areas of the work and in each of the others, designers would need to document and study each trial. They would also need to attempt to sort through the impact of different elements of a particular intervention, and attend in particular to how different elements of teacher education interacted with each other in influencing outcomes of interest; increased comprehensiveness of an intervention would increase the complexity of this work just as it made it more productive. Care would need to be taken to maintain the coherence and continuity of the work associated with an intervention over several years. The process would be expensive and would demand sustained organization, commitment, and interest by multiple parties.

Thus, in my investigation I considered what role the Holmes Group assigned to design, development, research, and redevelopment. I have asked whether the consortium attempted to craft solutions to the core problems of teaching and learning, how comprehensive they were in aim, and to what extent they planned for the continuous study and redesign of any innovations developed in the course of the reform effort. I have also looked for evidence that teaching and learning at Michigan State changed significantly. This is a central preoccupation of my analysis, for as my history of the teacher education curriculum in Chapter Two demonstrates, the curriculum for learning to teach in this country has been impoverished for more than a century. There is unlikely to be any strengthening in teacher education as an intervention without fundamental changes in learning opportunities for those who wish to teach.

Considered in light of the dilemma with which I opened this chapter, however, reform in teacher education, particularly in the curriculum, seems almost impossible. How could teacher educators and education researchers, many with limited experience in classroom instruction and even less in coaching novice teachers, solve problems that were built into the very structure and

organization of their institutions and invent better strategies for preparing teachers? Given the social science orientation that so many learned from their own mentors, how could they launch an extensive research and development agenda of the sort that would be required to sustain serious reform in teacher education? And how could university faculty members exercise significant influence over the K-12 schools in which students of teaching are prepared, particularly at the scale that would be required? My analysis suggests that in order to be successful, teacher education reform needs to be ambitious, and yet the more ambitious the aims of reform, the more challenging implementation would be for practitioners who are already, through no fault of their own, a part of the problem.

To have any hope of managing this dilemma, those who lead change in teacher education would need to help problem solving agents on individual campuses do the necessary design work and learn to implement vastly new approaches to teacher education. Below I consider this second-level aspect of the work of reform.

Managing the Dilemma: Instruments of Change in Teacher Education Reform

Given the complexity of the work described above and the centrality of design in the reform process, leadership is a crucial factor in teacher education reform—just as it is in teaching more generally. The field of teacher education offers few ready made solutions; improvements need to be crafted, studied, and redesigned, and policy makers and other leaders cannot do all or even most of this work on their own—they depend on practitioners not just for implementation, but for design. In the instructional framework that I use here, the primary challenge for the leaders of instructional reform efforts—those in the role of "teacher"—is to induce the participation of practitioners in the project and to build their capacity for designing improvements in each of the other three elements of the instructional triangle—curriculum, student teachers, and the environments of practice. In this sense, part of the work of reform is to design interventions on the problem solvers and their environments—not only to help them *deliver* better teacher education, but to help them *design* better teacher education. This seems even more likely to be true in teacher education reform than it is in other kinds of education reform

because the leaders of virtually all improvement efforts in teacher education have delegated the work of designing new programs to teacher educators themselves. I will show below that this was the case with the Holmes Group, as it was for the M.A.T. programs, competency-based teacher education, and for several more recent programs, including the Carnegie Foundation's *Teachers for a New Era* project. For leaders of the Holmes Group, building the capacity of the instructor-reformers in whom they placed their hopes would seem to be a prerequisite for success.

In the same way that Cohen and Ball (1999) have argued that those who attempt to intervene on K-12 instruction can develop a curriculum for teachers' learning about how to improve their teaching, those with plans for change in teacher education might design ways for rank-and-file teacher educators to learn about the goals of a change effort and to improve their practice accordingly. The work of doing this would closely resemble the kind of instructional work that can take place across many settings, not just classrooms (Ball & Forzani, 2007). Leaders could clearly articulate their goals and offer enactors multiple opportunities to discuss, question, and elaborate those goals. They could supply examples, where possible, of the kind of professional education to which they aspire, perhaps drawing on the more practice-based professional education common in medical and nursing schools and across the trades. They could provide opportunities for enactors to practice new ways of working, encouraging experimentation and sustained efforts at improvement through coaching and teamwork. If some members of the faculty brought greater commitment or capability to the project than others, leaders could find ways to pair them with those less experienced or willing or otherwise to distribute expertise broadly and strategically. Because the kind of design work that I described above might be novel to some teacher educators, leaders might also provide opportunities for members of a faculty to learn from colleagues in other fields about applied research.

My hypothesis that teacher educators might be able to achieve change by building the commitment and capability of practitioners is driven by studies not only of instructional reform but of other kinds of organizational change efforts, many of which imply that teaching and

learning are central to revitalization. Gioia and Chittipeddi (1991), for example, found that university presidents who successfully initiate strategic change do so in part through "sensegiving," or helping stakeholders understand and act on their new vision. Beer, Eisenstat, and Spector (1990) argued that general managers at the business or plant level can achieve change through several tasks that closely resemble the work of instruction: mobilizing commitment to change; developing a shared vision; fostering consensus around that vision and building the competence to enact it and the cohesion to move it along; and encouraging subunits and teams to experiment with ways to adopt the new vision. Similarly, Kotter (1995) identified eight steps to organizational transformation that recall the work of teaching, including establishing a sense of urgency; forming a powerful guiding coalition; creating a vision; communicating the vision (including "teaching new behaviors," p. 61); empowering others to act on the vision (including "encouraging risk taking and nontraditional ideas, activities, and actions," p. 61); and planning for and creating short-term wins. Although it might not be politic for them to label their work as "instructional," corporate managers who engage in these activities are in fact "teaching" their colleagues and subordinates. Indeed, classroom instructors and university administrators might suspect that mobilizing commitment to change and developing consensus around a new vision are even more important aspects of teaching in traditional educational settings than they are in business settings, given that "students" -- whether they are minor children or adult faculty members--may have fewer incentives to do what someone else requests than well paid corporate employees.¹

There are differences, however, between teaching individual pupils for the sake of individual learning and teaching the individuals who together form an organization such as a corporation or university department for the purposes of improving the work of that entire organization. Organizational scholars have distinguished between "learning-in organizations" and "learning-by organizations;" in the former, individuals learn in an organizational context; in the

¹ Evidence of growing support for the idea that effective instruction resembles leadership more generally can be found in the recent publication of a textbook for new teachers titled, "Teaching as Leadership" (see Farr, 2010).

latter, the entire organization "learns," as evidenced by organization-level output, such as changes in norms, procedures, and structures (Lipshitz & Popper, 1998; Popper & Lipshitz, 2000). Because improvement in teacher education depends not only on the learning of individual teacher educators but on lasting changes in the way in which an entire organization delivers teacher education, I conjecture that teacher education reform is likely to be a problem not only of individual learning but of *organizational* teaching and learning. Several studies have found that "organizational learning mechanisms" (OLMs)—"observable organizational subsystems in which organization members interact for the purpose of learning"—promote organizational learning, and that leaders have a significant role to play in implementing OLMs and encouraging a culture of organization-level learning (Lipshitz & Popper, 2000; Lipshitz, Popper, & Friedman, 2002). Consequently, I have incorporated attention to whether and how leaders of the Holmes Group effort seemed to take organizational teaching and learning into account in the work of improving teacher education, and to the impact of their efforts or lack thereof.

Because the context in which teacher education takes place is distinct in important ways from both corporate organizations and K-12 schools, I have also paid close attention to its role in the work of teacher education reform, including its influence on organization-level teaching and learning. As with other kinds of instruction, part of the work for leaders of teacher education reform is to manage the influence of the instructional context and of other environmental factors not only on enactors, but on their own work. Here, the "environment" includes not only the direct influences on the enterprise of teacher education that I named above, but the features of colleges, universities, and schools or departments of education that bear on faculty members' work more generally. The literature on higher education suggests two features of life in these institutions that I surmise are likely to bear on teacher educators and their leaders, including decentralized governance and authority and traditionally narrow conceptions of faculty members' work.

First, analyses of the structure and governance of colleges and universities indicate that these institutions maintain strong traditions of decentralized leadership, with authority in

important areas such as curriculum accruing primarily to deans, department chairs, and even individual faculty members rather than to central administrators (Jencks & Reisman, 1968). Clark (1971) found that the major form of organization and authority in most universities is "professional" in the sense that power is concentrated in the hands of faculty members, many of whom assume allegiance to a broader community of disciplinary scholars rather than to their local campus (Gouldner, 1957). Several analysts of academic governance in higher education have reported that faculty members increasingly assert their individual expertise as a requirement for making decisions about teaching, curriculum, research topics and methods, tenure and promotion decisions, and the amount and type of service they will perform (Clark, 1971; Birnbaum, 1988; Kerr, 1995). If these assessments are accurate, they suggest that wouldbe reformers in teacher education, whether they are administrators or regular faculty members, might encounter difficulty not only in engaging their colleagues in a collective agenda of research and design work, but in making the changes in curriculum and in procedures for hiring and promoting faculty members that reform in teacher education requires. Slaughter (2002), for example, found that the trend toward academic professionalism may impede collective efforts to redesign curriculum:

The success of the professional movement installed the individual expert as the primary judge of what should enter and what should not enter the curriculum. It is the success of the ideology of professionalism that encourages inattention to the larger contexts of professional work. It obscures the extent to which professional judgments take place in a context shaped by many forces other than the idea-driven progress of knowledge (p. 268).

Other studies have suggested that research universities deliberately promote and reward intense specialization and the individual pursuit of knowledge and innovation—rather than collective or applied work. Clark (1971) has observed that many faculty members in a given university or even university department do not know each other at all; they hardly have reason to interact. Trans-institutional professional organizations rather than local administrators often confer prestige on faculty members, who can use the influence they garner from that prestige to create professional galaxies over which they alone preside. Birmbaum (1988) concluded that

universities often become mere "academic holding companies" that house "a federation of quasiautonomous subunits" (p. 17). Weick (1976) has referred to educational organizations as "loosely
coupled systems," pointing to the seeming irrationality of their organization and the fact that
activities and structures within them often seem partially disconnected, with independent
identities. He suggests that loose coupling "carries connotations of impermanence, dissolvability,
and tacitness" (p. 3), a description which recalls the barely connected constellation of
committees, courses, programs, and research groups that structure life in university
departments. To the extent that these characterizations are true, they suggest challenges for
institutional leaders who seek to direct collective reform in university-based teacher education.

A second element of the higher education context that I hypothesize might influence teacher education reform is expectations for faculty work. Researchers have found that conceptions of appropriate work for faculty members have tended to be narrow. Boyer (1990) contended that basic research is commonly regarded as the most important form of scholarly activity, and that teaching and the application of academic knowledge to practical problems are viewed as secondary functions for university professors. Braxton, Luckey, and Helland (2002) concurred in a meta-analysis of the literature on American faculty scholarship; they found that faculty members publish more "discovery-oriented" scholarship, or basic research, than they do work of other kinds, and that attention to teaching and in particular to applied and "integrative" scholarship is significantly less well institutionalized.

There is evidence that these characterizations persist even in professional schools.

Bennis and O'Toole (2005), for example, observed that business school professors have adopted a "scientific model" in their work according to which they conceive of business as an academic discipline rather than as a profession. The culture in business schools, they argued, requires little attention to applied scholarship or practitioner training. Jencks and Reisman (1968) concluded that professional schools' affiliation with universities has made them "more aware of one another and less concerned about the professions to which they are linked" (p. 252). Simon (1996) noted that in their post World War II quest for academic respectability, many professional schools have

all but abandoned design work. He added that though design is the "core of all professional training," study in the natural sciences has largely replaced study of the science of design in the professional school curricula—a crucial point for reasons I discuss below.

This portrayal of faculty tendencies and aspirations suggests another potential stumbling block to teacher education reform. The goals of the Holmes Group implied not only a substantial amount of applied research but sustained and time consuming work to reinvent courses and other elements of the curriculum, to restructure and intensify relationships with disciplinary departments and K-12 schools, and to study and improve instruction in the teacher education program. Researchers have concluded that energy devoted to such activities is not typically rewarded. Boyer (1990) found that tenure and promotion for faculty members depends heavily on publication of basic research and much less on teaching and service. Braxton and his colleagues (2002) identified a "traditional assessment template" in widespread use that includes articles in refereed journals, book chapters, scholarly books, and monographs; they found in addition that there are comparatively fewer outlets for publication of applied scholarship than for more traditional work. They concluded that "the scholarship of discovery and publications provide the primary basis for the allocation of rewards in the academic profession" (p. 77). Jencks and Reisman (1968) reached similar conclusions, as did Bryk (2007), who expressed pessimism that universities will ever value practical problem-solving over theory development, particularly in the area of education research:

Faculty members are rewarded for their individual scholarly contributions with the singly authored paper in a refereed journal considered the prize accomplishment. Not withstanding a renewed rhetoric in research universities around multi-disciplinary studies, their institutional culture and incentive structure is not conducive to the long term collaborative work required to produce practical educational innovations useful to schools (pp. 2-3).

Studies have found that altering the traditional incentive and reward structure such that it promotes a broader conception of the work of university faculty members and leads to the institutionalization of scholarly activities other than basic research is possible but likely to be difficult. Diamond (1993) asserted that it would require leadership and commitment not only

from school- and department- level leaders and faculty members, but from a university's president and chief academic officer. Cohen (1998) noted that no standards exist for judging good teaching, and that faculty members in colleges and universities often lack the requisite knowledge for making sound judgments about good versus poor instruction.

Developing this kind of commitment and knowledge for the particular purpose of supporting change in the kind of work carried out in schools and colleges of education is likely to be especially challenging because of the low regard in which universities have traditionally held teacher education. It is possible, however, that still other features of the environment could influence the work of teacher education reformers, perhaps even in the direction of change. Increases in public commitment to improving educational outcomes, for example, could encourage university faculty members to make changes conducive to the improvement of teacher education. State and federal policy and even leadership from professional associations could do the same. In this study, I have conceived of the environment in which the Holmes Group worked as a central element of the consortium's experience, and looked for evidence of the ways in which it may have borne on the project of reform.

These features of the environment in which education faculty members work, however, are related not only to the context of reform but to the basic dilemma of social policy-making that I have raised throughout this chapter. Most education researchers and teacher educators at work in schools and colleges of education received their own training in similar institutions, where they typically did not receive training in the scholarship of design. Few have experience crafting, studying, and refining instructional approaches beyond what they do—sometimes casually—for their own courses. To do the work necessary to develop, test, and implement improvements in teacher training, many would need to adopt a new conception of research—one in which design and field-testing figures centrally—and learn to implement it. This would require "instructional" instruments trained on building the capability of teacher educators to work in new ways. Simply encouraging education faculty members to work differently through shifts in the organizational structure of departments or alterations in the university's traditional incentive and reward system

would be insufficient, as it is not realistic to expect large numbers of faculty members to do so much learning on their own, without assistance.

Conclusion

This analysis of the problems of reform suggests a particularly difficult dilemma for those who would improve teacher education. Social policy-makers almost always depend on the same practitioners who have contributed to problems to implement solutions, but this challenge is especially severe in teacher education. In many fields, change-agents understand what practitioners need to do better and can point to examples of more effective practice. In these cases, the problem for leaders of reform is to help practitioners learn to implement solutions. In teacher education, on the other hand, knowledge that could inform practice is limited and examples few or non-existent. Improvement depends on the invention of effective practice, including the identification of relevant knowledge and skill (Cohen, Moffitt, and Goldin, 2007). Invention implies design, development, and research of the sort that would need to be carried out in teacher education programs, by teacher educators and researchers who may not understand or be inclined toward such work. In teacher education, the dilemma of policy and practice is thus two-fold: Policy-makers depend on practitioners whose capability for both design and implementation is comparatively weak.

Given this compounded dilemma, I have used the idea that more successful interventions are both comprehensive in aim and crafted with an eye towards enactors' learning to frame my investigation of the Holmes Group. Throughout the dissertation, I have conceived of intervening on teacher education as an "instructional" enterprise on two levels: First, and following the work of several other researchers, I view teacher education as a form of instruction in which each element matters and must be improved. The primary work of reform is to design comprehensive improvements in teacher educators, students of teaching, the curriculum for learning to teach, and the environment that bears on the relationships among these elements. Second, I conjecture that teacher educators and researchers will not be able to design and implement solutions to weaknesses in the instructional relationship at the core of professional education unless they

have opportunities to learn about the problems, to explore potential solutions, and to improve their own capability for both design and implementation. For the leaders of change efforts, this implies a second instructional relationship, one in which they must "teach" the problem solvers through a curriculum of intervention. In this view, reform leaders must secure the commitment of implementers and build their capability for making the changes envisioned, while continually drawing on the resources that participants bring to the work and that are available in the environment, and managing constraints (e.g., Cohen and Ball, 2007). Change occurs as leaders and participants encounter and interact with new ideas and with each other, as everyone involved mines the environment for new resources, and as leaders buffer themselves and participants from potentially dangerous or distracting environmental influences.

Given this lens, I have focused my analysis on the intellectual and social resources that were available at Michigan State and in the broader environment prior to the period of reform and on the extent to which those who led the redesign effort associated with the Holmes Group tried and were able to direct those resources toward the intervention and to help faculty members develop even greater interest in and capability for the work of teacher education. I have examined the strategies for promoting learning and change employed by the dean, department chair, and other leaders; the ways that faculty members approached the ideas that were offered and whether they took them up, changed, or ignored them; and the ways that features of the environment such as academic governance structures, conceptions of scholarly work, and the university's system of incentives and rewards bore on the work. I have also considered how signals from and interactions with professional bodies external to the university may have been a factor in the reform, as well as how the policy climate encouraged or discouraged learning and change. Finally, I have examined the extent to which the problem-solving agents at Michigan State University enacted a comprehensive reform of teacher education.

Before delving into the work at Michigan State, I investigate the Holmes Group as a national entity in relation to the dilemma I presented above. In the next chapter, I introduce the

consortium's aims and the strategy leaders of the Holmes Group employed for promoting change, while highlighting the impact of this strategy on the dilemma faced by leaders of the work on local campuses.

Chapter Four

The Holmes Group and the Work of Reform

If social policy-makers are consistently challenged by their dependence on practice and practitioners, leaders of the Holmes Group faced an especially difficult version of the dilemma. When, in 1986, they published their overarching agenda for reform, they called not for minor adjustments but for an exhaustive overhaul of education in the United States. Further, consortium leaders, all faculty members at major research universities, claimed responsibility for a large share of the problems that had beset American education. Their plans directly targeted their colleagues and the education schools and departments in which they worked. This was the first time that education school insiders in the United States had taken such a hard look at their own shortcomings and summoned the energy to embark on significant reform. The Holmes Group's vision for a vastly improved education system was bold and their approach courageous.

But this ambitious set of aims necessarily produced serious implementation challenges, as the distance between the Holmes Group's hopes and extant practice was great. Consortium leaders sought such dramatic improvements that they could point to few examples anywhere in practice, and they relied for implementation on practitioners whose capability for the work was uncertain. As a matter of public speech, the Holmes Group reports were a great intervention on American thought. Policy-makers and teacher educators continue to refer to the consortium and its ideas nearly three decades after its formation (e.g., Duncan, 2009), and the three reports remain a relevant and comprehensive discussion of the problems in teacher education. But as a matter of public policy, the reports, like many other public manifestoes and policy statements, were inherently weak and incomplete. They were intended to guide the work of many individuals

and institutions, but the guidance they offered was necessarily vague and subject to considerable interpretation. Even those individuals who wrote the reports were operating in the territory of the imagination and were unable to provide the kind of elaboration that analysts of public policy and programming have argued are crucial to successful implementation. Given the challenges I discussed in Chapter Three, the best the authors of the reports could do was to try to inspire their colleagues and suggest directions for their work. As the authors of *Tomorrow's Teachers* would themselves write, their ambitious vision precluded a detailed blueprint for change. In this chapter, I examine this situation and its implications for the consortium's efforts on university campuses.

I begin by studying the Holmes Group agenda, with attention to what the consortium's vision implied for how teaching, teacher education, and education research would need to change and to what resources would be required for such change. I then investigate the strategy the Holmes Group employed for reaching these goals, including how the political and intellectual context in which the consortium worked may have influenced their approach. I consider the resources for and obstacles to education reform in the United States in the 1980s and the ways in which the consortium chose to respond to this context. Finally, I investigate the instruments of change that the consortium used at the national level and discuss the affordances and drawbacks of relying on these kinds of tools. I conclude with a discussion of the assumptions entailed by this strategy and of the implications for faculty members on individual campuses.

The Holmes Group Vision and the Problem of Practice

Shortly after members of the Holmes Group introduced their agenda in their first report, *Tomorrow's Teachers*, Jonas Soltis editorialized in a special issue of *Teachers College Record* devoted to the Holmes proposals that the education community stood "together on the threshold of a potentially historic redeclaration of our collective democratic belief in the importance of education and in our respect for those who deliver it" (Soltis, 1987, p. 313). His comments, and the fact that the journal devoted an entire issue to the report, reflect the attention the Holmes Group proposals drew from education researchers, teacher educators, and policy-makers across

the country. Although few of the ideas in *Tomorrow's Teachers* were new, the report was, in its broad scope and aggressive approach, a call for dramatic change. It garnered a significant amount of attention as soon as it was published, and it has been repeatedly invoked by educators and policy makers concerned with teacher education in the more than twenty years that have passed since its initial publication. It was a landmark document in the history of American education, and particularly in teacher education.

For the faculty members on Holmes Group campuses, however, the ideas in *Tomorrow's Teachers* and then in each of the subsequent reports presented a serious challenge. The trilogy was not a design but an agenda, or a set of suggestions for what consortium members would need to work on, and the problems they would need to solve, over a long period of time.

Although few social programs or pieces of public policy can fully specify how enactors should implement plans for change, the Holmes Group agenda left almost every question unanswered. The point of the report was not to provide solutions to the problems of curriculum, instructors, students, and environments that I raised in Chapter Three, but to highlight these problems and urge problem solving. Given the complexity of the teacher education enterprise, the enormity of the tasks of reform, and the limited experience of many teacher educators, including those who authored the reports, with the goals of the reform, the consortium could not have offered much more.

Tomorrow's Teachers and the Holmes Group's Overarching Agenda

Tomorrow's Teachers, the first and most comprehensive report, was the education establishment's introduction to the Holmes Group and the first opportunity members of the consortium had formally to present their core ideas. Its central premise was that teaching and teacher education suffer from "mutual impairment," and that one must be fixed for the other to improve. Authors of the report recommended improvements in teacher education, in the structure of the teaching profession, and in classroom instruction, as well as enhanced connections among all three. They set out five goals intended to guide the consortium's work:

- 1. To make the education of teachers intellectually more solid;
- 2. To recognize differences in teachers' knowledge, skill, and commitment, in their education, certification, and work;
- 3. To create standards of entry to the profession examinations and educational requirements that are professionally relevant and intellectually defensible;
- 4. To connect our own institutions to the schools;
- 5. To make schools better places for teachers to work, and to learn (The Holmes Partnership & Lanier, 2007, p. 10).

To reach these goals, members of the consortium advocated for a five-year program of collective work that would target teacher licensing, the curriculum of teacher education, and the K-12 schools in which teachers were trained. They outlined a new, three tier system of teacher licensing that would differentiate among entry-level "instructors," fully qualified "professional teachers," and those with outstanding performance, "career professionals." They recommended an overhaul of teacher education, including the abolishment of the education major for prospective teachers and the reorganization of the undergraduate curriculum, with opportunities for students to study the subjects they would teach in depth and with faculty members who modeled effective instruction. They advised significant revisions in the program of professional or "pedagogical" studies, including the introduction of a focus on the pedagogy of specific school subjects and of assessments of professional performance. Finally, they sketched a new kind of K-12 school—the professional development school (PDS)—that would serve simultaneously as a site for education research, for professional development, and for clinical education for prospective teachers.

Viewed against the history of teacher education in the United States, these plans suggested very new directions for teacher education and for the profession of teaching.

Significant changes to the teacher licensure system had not been made since the 1930s, and a system redesigned around teachers' performance implied a considerable reorientation of a profession that had always had a flat organizational structure. Similarly, the Holmes Group's plans for improving the professional education curriculum reflected new thinking about the work of teaching. The consortium reintroduced attention to teachers' knowledge of the content they would teach, and to the teaching and learning of specific school subjects, that had been absent

for decades, even in the more practice-oriented efforts associated with competency-based teacher education. Finally, the proposal for the professional development schools highlighted the Holmes Group's commitment to a focus on practice in professional education and in research and suggested substantial shifts in how education faculty members should spend their time. Whereas many education faculty members throughout much of the twentieth century had looked away from classroom practice, members of the Holmes Group called for their colleagues to focus their time and energy squarely on problems of teaching and learning.

Many of these ambitious aims drew praise and enthusiasm from the education community, but they heightened the consortium's implementation dilemmas. Constructing a radically new licensure system and overhauling pre-service education would be grand aspirations for practitioners in any field of professional practice; that Holmes Group members were working in a relatively weak and underdeveloped field that lacked professional control over entry standards and relied on emaciated knowledge of and for practice made them even more so. Members of the consortium were proposing to design and deliver teacher education that would differ from the teacher education with which many were familiar; in addition, they aimed to improve K-12 schools, institutions over which they had no jurisdiction and little influence. They sought to do this in the face of what I have argued was limited knowledge of teaching and learning and of professional education. As a result, the authors of *Tomorrow's Teachers* as well as those who led the consortium's efforts on individual campuses were unable to specify or develop their plans in any depth. The best they could do was to suggest a general agenda for design work; no more was possible given their hopes for dramatic change, their comprehensive assault on the problems of teacher education, and their own limited knowledge and experience.

Evidence of the Holmes Group's inherent dilemma can be found throughout *Tomorrow's Teachers*, as the authors of the report frequently named changes that they could not explain in detail. In fact, the report's authors emphasized repeatedly that they were outlining an agenda for many years of collective work, and did not claim to be in command of a detailed design for change. They noted that their discussion of a new teacher licensing system was only a "sketch,"

and that "much remains to be done before such certification standards could be put into effect" (p. 17). About their hopes for redesigned pedagogical studies, they pointed out that they had "no blueprint" for what those studies would look like, adding that answering that question "is a large part of our work in the next five years" (p. 20). They warned that, "many faculty members and administrators would have to work hard for years to devise and implement major revisions in university curriculum and instruction" (p. 20). Indeed, they argued in this first report that "the work that we propose is therefore distinctively the province of the university: study, research, and teaching" (p. 22).

In an internal report published one year after *Tomorrow's Teachers*, authors argued even more emphatically that the Holmesian agenda would require considerable design work and research. They identified two "imperatives" for the consortium's work: "to create the intellectual basis for the preparation of teachers and to embody such creation in supportive institutional forms" (Work in Progress, p. ii). They claimed that "theoretical and empirical knowledge exists to usefully inform practice and to form a program of professional studies," but emphasized that they recognized "that such knowledge is incomplete, that a research university must continuously create new knowledge, and that a professional school must progressively incorporate new knowledge in the course of study" (Work in Progress, p. i). They went on to argue that faculty members in Holmes institutions would need to create new partnerships that would "span wellestablished boundaries, challenge deeply held beliefs and traditions, disrupt operating routines and procedures, and violate conceptions of self-interest" (Work in Progress, p. i). These comments highlight how little members of the Holmes Group could prescribe and how much original work their goals would require on individual campuses. In this way, Tomorrow's Teachers was entirely consonant with the analysis I presented in Chapter Three of the problems in teacher education and the work of reform.

Of course, as faculty members at home in institutions whose credibility was under attack, it is no surprise that Holmes Group members were eager to assert the necessity of their own work. And their argument was not wrong: Given the state of knowledge of teaching and teacher

education in the 1980s, to reach the goals articulated in *Tomorrow's Teachers* would have required a long-term program of research and development of the sort that universities are uniquely equipped to undertake. This reality would likely have been a comfortable one for researchers used to investigating unknowns. Considering the evidence I presented in Chapter Three indicating that reforms may be more likely to succeed if they are carefully specified and developed, however, it would likely have been a daunting one for would-be leaders of the Holmes Group's efforts on local campuses. The deans and department chairs who signed on to the consortium's agenda would have found themselves trying to help colleagues make changes which they could not describe in any detail. This absence of a design for change would only have exacerbated the problem that the Holmes Group relied on practitioners whose ability to make significant changes in their work was constrained by the limits of their experience and training. It meant that the national consortium left not only the second-level work that I discussed in Chapter Three undone, but also the first-level work.

One consequence of the inescapable ambiguity of the ideas offered in this first report is that it is difficult to discern the extent of the changes that the consortium envisioned in the teacher education curriculum—an element of professional education that I have argued was sorely in need of reconstruction. Despite their professed commitment to influencing the practice of teachers and teacher educators, there is no evidence that Holmes Group leaders had in mind a curriculum that would include an articulation of essential instructional practices and provide deliberate opportunities for novices to learn those practices. In their most detailed discussion of the new program of professional studies that they hoped their colleagues would build, authors of the report left room for close work on practice, but did not call for it explicitly. Instead, they identified five general components of the new curriculum: the study of teaching and schooling; knowledge of the pedagogy of subject matter; the skills and understandings implicit in classroom teaching; the dispositions, values, and ethical responsibilities that distinguish teaching from the other professions; and clinical experience (p. 43). In the several paragraphs of discussion that follows this list, the authors focused primarily on the importance of content knowledge and

argued that prospective teachers needed to learn the skills required for creating and sustaining a classroom learning community. Importantly, they appeared to have assumed that a clear delineation of these skills and others was already in existence. Although it is clear that Holmes Group leaders believed that an overhaul of the professional curriculum was essential, it is unclear from the text of the report precisely what work consortium members anticipated this overhaul would involve. This, too, implies that consortium leaders did not know what the new curriculum would look like, only that extant practice needed to improve.

Moreover, there is evidence in internal documents that the Holmes Group's objectives for the redesign of professional studies may have been at least as political as they were substantive. In the initial years of their work, members of the Holmes Group showed themselves to be particularly interested in improving the status of the teaching profession, be it through the reconstruction of the licensure system or through less direct measures. At times, they seemed to view other elements of their agenda—investing in research into the knowledge needed for teaching, namely, and redesigning the professional curriculum accordingly—primarily as tools for accomplishing the objective of professionalization. In a progress report circulated privately among consortium members one year into their project, for example, Holmes Group leaders cast their agenda for curriculum reform in a strikingly political light:

The current political climate emphasizes liberal arts rigor and better supervised and supported clinical experiences and induction, but not professional education studies. Thus, Holmesian program development must identify and organize a body of knowledge about learning and teaching substantial enough to occupy more than a semester or so of college coursework. Teaching's claim to professionalism and the education school's claim to a central role in teacher preparation requires such a demonstration (*Work in Progress*, p. 5).

The argument made here that consortium members should assemble knowledge relevant to teacher education in order to secure the university's franchise on teacher education and garner respect for teaching as a profession is a revealing one. It is not surprising that the Holmes Group saw its work at least in part as a means toward these political ends, but the consortium could have made a much more substantive argument in favor of curriculum redesign. A logical

alternative would have been to suggest that leaders on individual campuses take the work of teaching as a starting point in redesigning the professional curriculum so that pre-service teacher education would stand a greater chance of helping novices learn to do the tasks required in the field—not only because doing so would protect the status of teachers and of university-based teacher education, but because it would fulfill teacher educators' professional obligations to their own students and to the pupils of their graduates. The vague instruction to "identify and organize a body of knowledge" that would fill up at least several semesters of course work implies that the origins and relevance of this knowledge were less important to consortium leaders than its instrumentality. It also opens up many possibilities for the kind of knowledge around which campus leaders might build a new curriculum.

More evidence of the Holmes Group's preoccupation with professionalism can be found in several other documents published around the same time as *Tomorrow's Teachers*. The first volume of the Holmes Group *Forum*, for example, contained a section titled, "The Good and Bad Consequences of Professionalism," in the preface to which editors commented that the "creation of a 'genuine profession of teaching' is the Holmes Group's ultimate objective" (*The Holmes Group Forum*, Vol. I, No. 1, p. 10). In an essay in that section, Gary Sykes warned that unless the university demonstrated that it was essential to the growth of the knowledge base for teaching, then "apprenticeship will be enough;" he characterized the Holmes Group as "an effort to establish a clear identity for the professional school for teaching" (*The Holmes Group Forum*, Vol. I, No. 1, p. 10). Later, Holmes Group president Judy Lanier argued that "the productivity and status of teaching depends on gaining more knowledge about teaching as work and about schools as work settings, so a means of improving the occupation must be...investment in research and development" (*The Holmes Group Forum*, Vol. II, No. 3, p. 3). The editors of the Holmes Group *Forum* made similar observations:

The movement to professionalize teaching also has contributed to the focus on instructional content and the knowledge teachers need to promote subject matter learning. Articulating and elaborating this critical knowledge is considered pivotal to the course of professionalization for several reasons. It will counter simplistic notions about the tasks of teaching; it will serve to ground the

curriculum of teacher education; and it will provide a frame for assessing professional capacities. Over all, the ability to articulate the knowledge, skills, and dispositions encompassed in teaching will signal the maturing of the field. (*The Holmes Group Forum*, Vol. II, No. 3, p. 23)

Comments like these indicate that at least part of the Holmes Group's motivation may have been self-protection, including protection for education researchers working in schools of education and protection for the teaching profession. This orientation is not incompatible with other kinds of goals, including those directed at improving teacher education and education research for the sake of the public good, but evidence of the Holmes Group's sustained interest in professionalism highlights the complexity and ambitiousness of the consortium's agenda. I mention it here to emphasize that the Holmes Group sought nothing less than the radical transformation of every aspect of the enterprise of preparing teachers and staffing schools, from education scholarship to the licensure system, as well as a corresponding elevation of the status of teachers' work.

Tomorrow's Schools and the Holmes Group's Agenda for Elementary and Secondary Schools

The Holmes Group's plans for the construction of a network of special secondary schools were no less ambitious. In their second report, *Tomorrow's Schools*, consortium leaders argued at length for the creation of the professional development school (PDS), a new institution that was to be the primary mechanism through which schools of education would transform classroom teaching, teacher education, and the nature of education research. The PDS was intended to support genuine innovation and problem solving while simultaneously offering a hospitable setting in which prospective teachers could practice their craft. It would lead the way in turning schools into stimulating and playful environments where children would learn in and for a democratic community—perhaps helping late twentieth century teachers realize the visions of Francis Parker, John Dewey, and other Progressive educators. Importantly, the PDS would also support inquiry into practice on the part of researchers, teachers, and administrators, all of whom would work together, deliberately extracting insights from one another. It would, in short, do a great deal toward solving the problems of practice that I identified in Chapter Two.

The authors of the report offered six principles for the design of the PDS:

- 1. Teaching and learning for understanding;
- 2. Creating a learning community;
- 3. Teaching and learning for understanding for everybody's children;
- 4. Continuing learning by teachers, teacher educators, and administrators;
- 5. Thoughtful, long-term inquiry into teaching and learning;
- 6. Inventing a new institution (The Holmes Partnership & Lanier, p.98).

The authors discussed each principle in some depth, emphasizing that creating the PDS would mean no less than inventing a new organization, one in which work roles and expectations would need to shift significantly for both classroom teachers and university faculty members. They acknowledged that professional development schools would, for example, require extra resources for both start-up and operating costs. If teachers were going to revise the curriculum; reflect on, experiment with, and improve their own teaching and other aspects of school management; participate in research, and closely supervise student teachers, for example, they would need release time and special resources. And if university faculty members were to work collaboratively with their colleagues in the schools on teaching and research projects, they, too, would need time to do so. Moreover, the authors of the report argued, new systems of evaluation and rewards aimed at promoting collaborative work would need to be designed for each group. The Holmes Group intended to convert only some K-12 schools into professional development schools—the goal was for each school or college of education to work with a small network of schools—but those they did would support cutting-edge instruction through a radically revised set of expectations for teachers' and university-based faculty members' work.

There is also evidence in *Tomorrow's Schools* that members of the Holmes Group had high hopes that the PDS would foment significant changes not only in teaching practice and in teacher education, but in education research. In the report, they invoked the history that I reviewed in Chapter Two to argue that scholarship in education had for too long neglected to take problems of teaching and schools seriously. They emphasized their hopes that the organizational and intellectual culture of the PDS would encourage teachers, administrators, and university researchers to work side-by-side, grounding the work of faculty members—including,

importantly, that of both arts and sciences professors and education professors—in the realities of schooling. They hoped that this collaboration would lead to an organized agenda of inquiry and experimentation in instruction and school management and ultimately yield new knowledge that would inform teaching and teacher education. In short, they made clear that they intended the PDS to be the site of serious R&D efforts in teaching, where skilled scholars and practitioners would develop and demonstrate practices that would later be broadly disseminated.

Given the history of educationists' relationship with practice, including the checkered past of school-university partnerships, the ideas in Tomorrow's Schools were more evidence of the Holmes Group members' courage and their visionary approach to reform. There would have been many indications that the formation of professional development schools would not be easy, and yet the Holmes Group insisted that education researchers and teacher educators needed their own version of the teaching hospital. Without a laboratory site in which education researchers and professional educators could work very closely, for a long period of time, with school colleagues, they argued, they would be unable to develop, study, and teach best practices. It would not be enough, they contended, for universities to manage the kind of boutique laboratory schools that they had in earlier decades of the twentieth century or merely to maintain close relationships with schools that would provide field experiences for their student teachers. Instead, an entirely new kind of learning community was needed that would serve a diverse population of schoolchildren and support sustained inquiry into pressing instructional problems. Plans for the PDS represented the Holmes Group's refusal to make the kinds of compromises that had driven their predecessors further and further from the world of classrooms. Rather than trying to find ways to circumvent the work of schools or to justify their own existence without reference to classroom teaching, Holmes Group leaders insisted that their colleagues make K-12 schools and their problems their raison d'être. Their plans for the PDS were a definitive statement of this commitment.

In addition, the Holmes Group's proposal for the professional development school as it was represented in *Tomorrow's Schools* denoted a marked advance in the already distinguished

American tradition of arguing for idealized visions of schooling. Whereas thinkers and educators like John Dewey—himself a significant influence on the authors of this second report in the trilogy—had limited themselves to portraiture, leaving much of the work of operationalizing their vision to others, the Holmes Group went a step further. In *Tomorrow's Schools*, they not only crafted a description—general though it was—of what a democratic, school-based learning community would be like, but began to think through what it would take to make their ideas a reality. I will argue below that they did not do this in any detail—their vision was so ambitious that they could provide little elaboration—but they did enough of it to make clear that they intended to implement their plans. *Tomorrow's Schools* was not just a work of philosophy but a call, and a guide, to action.

The Holmes Group's bold proposals for the PDS, however, had the same inherent limits that the consortium's plans for other kinds of reforms did. As the report's authors described it, the development of the PDS would require significant financial and personnel investments and a good deal of will and capacity on the part not only of university faculty members but schoolbased teachers and administrators. And the PDS involved a jurisdiction—the public schools—over which universities had no direct control. As they acknowledged in the report, a large part of the work for faculty members involved in the PDS effort would be to develop productive relationships and ways of working with their colleagues in the schools. An even bigger problem was that even the leaders of the consortium were once again unable to specify their ideas to a degree that would facilitate implementation. Like the ideas in *Tomorrow's Teachers*, the principles put forth in Tomorrow's Schools were offered to stimulate and guide subsequent design work—they remained necessarily vague. The authors emphasized that the PDS "will be based on new, ambitious conceptions of teaching and learning that are not yet fully understood" (p. 166), and advised in the report's introduction that they intended to "advance our vision as the beginning of a process—conversations/actions/conversations/revisions—that will take a long time" (p. 87). They concluded the report with a direct address to those who would take on their agenda:

How can we design Professional Development Schools if we've never seen one? You can translate the six principles into shared ideas about what you want in your place and then assess what (and whom) you've got to work with. We have set forth six principles not as a blueprint but as stimuli for local thought, dialogue, negotiation, and actions (The Holmes Partnership & Lanier, p. 159).

The ideas in this second report seemed to be viewed as seeds, the growth of which Holmes Group leaders could hope for but not predict or control. Writing in the prologue to the reissued Holmes Group Trilogy, for example, Judy Lanier (2007) observed that *Tomorrow's Schools* referred to "principles for the design of professional development schools" because not enough was known to craft actual 'design principles'—required first were collaborative experimentation, study, and dialogue" (The Holmes Partnership & Lanier, p. xxii). Here, Lanier acknowledged how little she and her colleagues at the national level could offer in the way of detail; they could help their readers understand their vision on a grand level, but had to leave a great deal of the more fine grained design work up to faculty members on individual campuses across the country. The inability of Lanier and her colleagues to specify and develop their ideas in the ways that implementation analysts have suggested are essential would present serious challenges for those who embraced the Holmes Group's agenda. The vagueness of their plans was inevitable, however, as Lanier wished for changes that were so great that she could not explain in detail what it would take to realize them. The most she could do was to try to inspire her colleagues with her vision and persuade them of the necessity of change.

Tomorrow's Schools of Education and the Holmes Group's Agenda for Self-Improvement

While the Holmes Group's plans for reforming the teaching profession and the public schools were bold and ambitious, their proposals for the reconstruction of schools of education were in some ways even more courageous. In the earlier reports, the consortium had taken aim at many parts of the education system, somewhat diffusing their criticism; in *Tomorrow's Schools of Education*, they "donned the hair shirt of self-criticism," as they put it, and declared that education schools should either realign their work so that it would contribute directly to improving practice or "surrender their franchise" (The Holmes Partnership & Lanier, 2007, pp.

201-202). They argued that schools of education needed to revise their mission fundamentally, away from the production of more liberal arts oriented scholarship that had become the goal at the beginning of the twentieth century and toward the development of useable knowledge and the provision of professional education. This was an important break from the past.

For those who would take up the call, the authors of *Tomorrow's Teachers* laid out seven specific goals:

- To make education schools accountable to the profession and to the public for the trustworthy performance of their graduates at beginning and advanced levels of practice;
- 2. To make research, development, and demonstration of quality learning in real schools and communities a primary mission of education schools:
- 3. To connect professional schools of education with professionals directly responsible for elementary and secondary education at local, state, regional, and national levels to coalesce around higher standards;
- 4. To recognize interdependence and commonality of purpose in preparing educators for various roles in schools, roles that call for teamwork and common understanding of learner-centered education in the twenty-first century;
- 5. To provide leadership in making education schools better places for professional study and learning;
- 6. To center our work on professional knowledge and skill for educators who serve children and youth;
- 7. To contribute to the development of state and local policies that give all youngsters the opportunity to learn from highly qualified educators (The Holmes Partnership & Lanier, 2007).

At the core of this set of goals lay a vision of a genuine professional school—one that differed in important ways from the traditional conception of a school or college of education in a research university. As the Holmes Group saw it, every function of the school of education would be aimed at improving education practice, from research to teaching to outreach. Faculty members in the school of education would not merely offer preparation programs for intending professionals, but would hold themselves accountable to the public for the quality of those programs; they would "center" their research activities on professional knowledge and skill and make the development of knowledge that would be useful to "real schools and communities" a "primary mission" of the school. They would not just provide analysis and critique of public policy but contribute to the development of better policies and programs. And the report's authors stipulated that members of the Holmes Group would "provide leadership" in making this vision a

reality. Whereas schools and colleges of education had, for decades, dealt with professional education and with problems of practice only incidentally, the Holmes Group's plans placed practice at the center of attention. The authors of this last report in the series warned that, "faculty members in a professional school must remember always that their profession exists because it produces a service for someone. Without its clients or patients, the profession loses its raison d'etre, and study of the disciplines in arts and sciences suffices" (The Holmes Partnership & Lanier, 2007, p. 215).

In their declaration that professional education should be a central preoccupation of the school of education, the authors of *Tomorrow's Schools of Education* recalled both the Learned Report and Bunnie Smith's plans in *Design for a School of Pedagogy*. More so than the authors of either of these earlier reports had, however, the Holmes Group maintained a commitment to research as a vital aspect of the mission of the school of education. William Learned, Bunnie Smith, and their colleagues had all granted the conduct of formal inquiry some place in their designs for the reformation of teacher training institutions, but the Holmes Group embraced knowledge production as "an essential and defining feature" of "tomorrow's" school of education (The Holmes Partnership & Lanier, 2007, p. 215). They argued that the "creation and sharing of knowledge, after all, lies at the very core of the university's existence" (The Holmes Partnership & Lanier, 2007, p. 223). The consortium's quarrel was with the kind of research carried out in schools of education, and not with the fact that educationists pursued scholarly activities unabashedly. They charged that faculty members in education schools had lost sight of their responsibility to produce useable knowledge, and argued that they should abandon their habit of criticizing and describing the troubles of the school system and instead apply themselves to the development of the special kinds of knowledge needed by educators and policy makers. In particular, they identified four areas of educational knowledge that they argued would make up the distinctive contributions of a genuine professional school of education, including special knowledge about children and their learning; special knowledge about the knowledge needs of

each next generation; special knowledge about education systems; and special knowledge about culture and young people's learning.

Like Bunnie Smith, however, the authors of *Tomorrow's Schools of Education* also seemed optimistic that sufficient knowledge already existed to permit the dramatic improvement of teacher education. Somewhat ironically, in the short concluding section addressed to what the curriculum of professional preparation should be in a school of education, authors of *Tomorrow's Schools of Education* contended that "considerable consensus" already existed about the core knowledge needed by education professionals (p. 264). They urged their member institutions to take advantage of the syntheses of research and practice already available from the American Association of Colleges for Teacher Education, the Association of Teacher Educators, and the American Educational Research Association, among others, and reorganize their educator preparation programs around this allegedly codified knowledge. Although they advocated continuing experimentation in program organization, structure, and focus, they clearly assumed that appropriate content for the teacher education curriculum was largely available and ready for use.

As earlier advocates for reform had, the authors of *Tomorrow's Schools of Education* anticipated that significant changes in the norms and expectations for faculty work would be required in order to bring about the changes they sketched. They envisioned a "new breed of professor" who would need to "learn to walk the new walk, keeping one foot in the traditional scholarly community of the campus, where one must satisfy rigorous canons and norms, and keeping the other foot in the public school" (The Holmes Partnership and Lanier, p. 257). In this vision, university-based faculty members would divide their time between university and PDS, sometimes co-teaching children, often mentoring both practicing and student teachers, and frequently testing hypotheses through PDS-based research projects. There would be greater numbers of clinical professors, who would be treated with respect within the university even while most of their work took place in the schools. To accomplish and support these new kinds of educationists, the authors urged the creation of new criteria for judging faculty work, including

revisions to tenure, promotion, and merit pay policies such that those policies would reward commitment to work with student teachers and in schools.

Inevitably, however, the Holmes Group's suggestions for how faculty members on individual campuses would make these changes were vague. The authors could say nothing, for example, about how deans and department chairs might convince provosts and presidents to adopt new policies or how they would induce faculty members to shift their attention to new topics. Indeed, authors of the report sounded apprehensive as they contemplated how they would manage larger numbers of clinical faculty:

This report does not provide the proper forum for thrashing out the details of the many policies that will affect field-based faculty; we attempt only to suggest a few of the issues that will have to be tackled. These include hiring criteria, titles, compensation, training, and relationships to the university and school districts (pp. 260-261).

These comments do not resemble the kind of specification and development that policy analysts have suggested promote effective program implementation. Not only do the authors of this third and final report not detail solutions to the problems they identify, but they are unable even to identify all of the issues that they anticipate will need solving. Instead, they, like their colleagues who authored both of the earlier reports, self-consciously avoided the work of designing the reforms they sought, leaving a great deal for their members on individual campuses to accomplish.

Further, the authors of *Tomorrow's Schools of Education* neglected to discuss whether the average faculty member in a school of education even had the expertise he or she would need to take up practice-oriented research, to work helpfully with K-12 based teachers and administrators, or to supervise student teachers or graduate students working in the field. It is not clear from the report whether the authors did not think capability was a significant problem or whether they did not think about capability at all, but *Tomorrow's Schools of Education* offers no advice about how faculty members would learn to do the kind of work that leaders of the Holmes Group thought was necessary to the kind of professional school that they sought. Nearly everything except for the grand vision was left to members on local campuses to figure out for

themselves. Given how much their vision departed from extant practice, it is unlikely that leaders of the Holmes Group could have written the report in any other way; the omissions and limitations of *Tomorrow's Schools of Education* were inherent in the consortium's ambitious approach to change. Like the leaders of other radical change efforts, they could not know very much about how to get where they wanted to go.

Indeed, these unavoidable limitations are not the most striking feature of *Tomorrow's* Schools of Education; instead, the courageously frank look the report's authors took at the problems of schools of education in research universities make the report significant. This was not the first time that education school insiders had published searching examinations of these problems—Geraldine Clifford and James Guthrie (1988) had done it several years earlier in Ed School—but the Holmes Group brought a new level of insistence to the developing argument that education schools needed to embrace attention to the exigencies of practice. Rather than defend themselves or even look back at the reasons why they found themselves where they did, Holmes Group leaders looked forward, to what needed to be done. And to a degree that no one else had, the authors of Tomorrow's Schools of Education acknowledged the kinds of changes that would need to be made to the structure of faculty members' work, including the system of incentives and rewards that influenced the choices that faculty members made about how to spend their time. By the time the Holmes Group published this last report in their trilogy, members of the consortium sounded wearier than they had in their earlier treatises, but they still spoke bravely and in the face of many obstacles. The vagueness with which they sketched their plans and forecasted the obstacles was not a failing but an inescapable symptom of their ambition.

The Dilemma

The Holmes Group's trilogy of reports demonstrates the consortium's embrace of systemic change on a large scale as its primary goal. The Holmes Group sought nothing less than the reinvention of teaching and teacher education, of the profession of teaching, and of the identity of faculty members in schools of education. Rather than focus on just one element of the

problem or one institution or state, they tackled the entire enterprise, across the entire country. That members of the Holmes Group constructed their agenda this broadly and pursued change on as wide of a scale as they did was a deliberate decision even though it presented obvious problems.

The consortium's comprehensive agenda was responsive both to the nature of the education problems it addressed and to the political situation in which members of the organization worked. The problems in teacher education had several sources other than education schools, and were so closely connected to problems in the schools and in education research that to have addressed only one piece of the puzzle might have been fruitless. In an internal progress report circulated in January, 1989, Holmes Group leaders defended the broad scope of their agenda, arguing that "to pursue piecemeal reform denies the systemic, interconnected nature of the problems facing teacher education and substitutes parts for the whole" (Work in Progress, p. ii). Moreover, consortium leaders may have been eager to point out that the fault for problems to which their critics were pointing did not rest entirely with schools of education. By the mid-1980s, criticism of both public schools and of teacher education institutions in the United States was mounting, and members of the Holmes Group worked in an environment full of skepticism. By outlining an agenda for reform that called for such significant changes not only in schools of education but in arts and science departments, in the system for licensing teachers, and in the administration and organization of schools, consortium leaders were distributing the onus for making change as broadly as they could—a move that was both politically strategic and directly responsive to the problems that they saw.

But these ambitious aims also made it more difficult for leaders of the Holmes Group to begin making changes on individual campuses. The authors of the three reports could not describe the changes they had in mind in depth, and they pointed out that a great deal of research and development were required before substantial reform could be achieved. None of the three published reports offered a true design for change, with specific goals, examples of what improved practice would look like, and clear, detailed plans for how to get there—a design

would have been impossible in the face of uncertain knowledge and understanding. Instead, these three manifestoes might be thought of as designs for designing—ideas for how individual institutional members of the national consortium might go about creating—over a long period of time—a new design for teacher education and classroom schooling, with many questions that faculty members on member campuses would need to answer on their own. From such a visionary effort to improve a complicated set of problems, little else would have been possible.

But given the consortium's necessarily weakly specified plans for improvement, the unfamiliarity of the average faculty member with ideas central to the Holmes agenda, and the challenging environments in which the work would have to take place, the project would be difficult. Holmes Group leaders acknowledged as much; in fact, they argued that difficult work was necessary to solving the very difficult problems at hand. A key question for those at the helm of the consortium would be how to lead their colleagues in taking on these challenges. Below I investigate the strategy and the tools that they used to try to provoke change, with attention to how salient these instruments were to the consortium's goals and to the challenges of teacher education reform in the 1980s.

The National Consortium in National Context

Several years before they published *Tomorrow's Teachers*, the leaders of what had begun as a small working group decided to recruit large numbers of institutional members and work together toward change as a national consortium. This was a critical strategic decision, and not the only alternative. Although it was in many ways responsive both to the goals associated with the Holmes agenda and to the environment in which the consortium worked, it was only weakly directed at some of the most serious problems the consortium faced. In this section, I consider the reasons the Holmes Group adopted this strategy and what it meant for the work. *The National Consortium as Deliberate Strategy*

When Judy Lanier, John Palmer, and Bob Koff began working together in the early 1980s, they made a purposeful decision to form a national consortium and to embrace comprehensive, large-scale reform. To do so was not the only option. Another possibility would

have been to begin in a more focused manner, perhaps by building a small number of prototype models for stronger teacher education and classroom teaching on a few campuses, and then scaling up. For example, Holmes Group leaders could have formed a small research and design team in a single location and charged it with recreating the professional curriculum for prospective teachers—with drafting the "blueprint" that they warned they lacked in the introduction to *Tomorrow's Teachers*. This team could then have worked with faculty members on a select set of campuses to implement the design, combining implementation with deliberate study and redesign. Or they could have begun by creating a small number of professional development schools, building those schools into strong, sustainable organizations and studying their strengths and weaknesses, and then demonstrated them to others as models to emulate. Instead, consortium leaders decided to enlist one hundred separate universities in working on their agenda simultaneously, and they assigned the design work that was their first order of business to faculty members in each institution that joined the consortium.

Several individuals who were associated with the Holmes Group from its early days recall that Judy Lanier and her colleagues considered other approaches. In fact, some remember discussion of whether to build a consortium at all. They report discussions between Lanier and David Cohen, a faculty member at Michigan State who served as an informal advisor to the Holmes Group and contributed to the writing of *Tomorrow's Teachers*, in which Cohen suggested that Lanier devote her attention entirely to work at Michigan State University. Cohen apparently invoked the strategy that Johns Hopkins University had adopted in the early 1900s, when it set out to create a medical school that would combine research, teaching, and patient care in a comprehensive university. Leaders at Johns Hopkins intended their model, the first of its kind, to provoke widespread changes in medical education, which it did (Starr, 1949). According to those who remember these early conversations, Cohen recommended that Lanier pursue a similar strategy by attempting to build the College of Education at MSU—where Lanier was dean—into a single exemplar of a professional school in a research university. Cohen purportedly warned Lanier that the time, energy, and attention that a national organization would require would

distract her from the work of reform on her own campus—work that would be all-consuming on its own. As her colleagues remember, however, Lanier embraced the idea of developing MSU into a prototype but decided that she also needed a powerful national organization in order to fight and win the internal battles at Michigan State that were sure to present obstacles to her efforts on that campus (Anonymous 17, interview, May 8, 2009, transcript in my possession [i.m.p.]). If these recollections are accurate, they suggest that Lanier founded the Holmes Group in part as a strategy for achieving local change, rather than the other way around.

Other key players—including some who worked closely with Judy Lanier—report that they always planned to form a consortium, but originally intended it to remain relatively small, largely because they did not think very many institutions had the research capacity or the requisite orientations and commitments to undertake serious reform in the direction of Holmes goals. One dean who participated in discussions of this issue recalls that he and some of his colleagues thought the group should be no larger than 30 or 35 institutions (Anonymous 11, interview, June 4, 2010, transcript i.m.p.). According to this individual, the consortium expanded only because of significant pressure from a large number of universities that wanted to join the group, and because Judy Lanier wanted to invite institutions with significant minority student populations to participate. Because the Holmes Group was immediately perceived as an elite organization that would lend status and cachet to members, numerous institutions that educated teachers clamored to join, including many of undistinguished reputation. One view holds that the eventual demise of the Holmes Group was a direct result of the early decision to expand beyond the original members:

What happened was we went from a small group of deans who knew each other well, had a commitment to the Holmes Group and understood its mission, to maybe 110 or more. That effectively made it very difficult for the Holmes Group to accomplish its mission – there were too many people who didn't know each other, too many people who were happy to see it die because if the ideas were implemented it would mean major changes and doing away with teacher education as it was being practiced at that time. And the ideas that were being advanced were very scary for some people. We argued that students should graduate with a major in the field in which they would teach, and they could go on to get an M.A.T. or master's degree. A smaller group probably could have accomplished this (Anonymous 11, interview, June 4, 2010, transcript i.m.p.).

Though it is impossible to know whether a smaller group could have accomplished the Holmes agenda, their large, broad membership complicated the task for the consortium's leaders.

There is other evidence that leaders of the consortium designed the Holmes Group explicitly to be a large, broad organization that would be an influential contributor to the national discourse around education—to provoke change on individual campuses was important, but not the only goal. By operating collectively and on a large scale, the Holmes Group was able to raise a stronger voice in the national conversation—a conversation that, by the early 1980s, evidenced increasing skepticism toward schools of education. In 1982, a report commissioned by the Ford Foundation had charged schools of education in research universities with utter neglect of teacher education, including of pertinent research (see Judge, 1982). The 1984 publication of A Nation at Risk had focused public attention on the failings of schools and placed some of the blame on teacher education. A taskforce convened by the Carnegie Forum on Education and the Economy in the mid-1980s called for the complete restructuring of traditional, university-based teacher education (see Carnegie Forum on Education and the Economy, 1986). Stakeholders were beginning to raise questions about the value of research produced by education schools and about the advisability of educating teachers in institutions that appeared so impotent. There is evidence that the education deans who formed the Holmes Group did so in part to protect themselves from this hostility.

Francis Keppel, former dean of the Graduate School of Education at Harvard, evoked the defensiveness felt by Holmes Group members as he noted the contrast between the Carnegie and Holmes Group reports in a *Phi Delta Kappan* article in 1986:

The Carnegie group hired a jet and looked down from heights that permitted a view of economic competition from overseas and of the social and economic problems of the American society...[while] members of the Holmes Group drew their wagons into a circle, seeking a moment of peace to find a way out of their troubles (p. 18).

Keppel's comments suggest that the initiators of the Holmes Group banded together in order to present a unified front against the several attacks coming from outside of the universities. The

challenges they confronted were addressed to schools of education as a collective and to university-based teacher education as an enterprise, and leaders of the Holmes Group chose to respond in a commensurate manner. In both their public reports and in internal communications, the Holmes Group expressed conviction that they would be more effective at countering the criticism and in developing and implementing plans for change if they worked together.

Consortium leaders went to some lengths to recruit prestigious members such as Harvard and Stanford to the organization, and, as I will show below, used their collective energy to try to marshal broad support for their work across the country and to participate aggressively in the national conversation about education reform.

Finally, there is evidence that Lanier and her colleagues chose to form a large coalition and work collectively because they thought doing so made sense given the nature of the work they proposed. Leaders of the Holmes Group understood that their agenda was large and uncertain, and engaging multiple institutions in research and development was a deliberate means of enriching and accelerating a complicated research and development process. The theory seemed to be that if one institution failed or encountered impenetrable obstacles, the entire consortium would learn from the experience. Similarly, a solution developed on one campus might serve as a model or lesson for faculty members struggling with the same problem on another campus. For this reason, the plan was for the consortium to invest in helping faculty members on member campuses share what they learned from their efforts to implement the Holmes agenda with each other and to disseminate findings from relevant research studies throughout the organization. I have also found suggestions that Holmes Group leaders never believed that there was only one model for delivering effective teacher education or creating a professional development school; they emphasized repeatedly that there would likely be several different ways to reach the goals they set out. The formation of the national consortium seemed to be a deliberate strategy for generating multiple solutions to the same set of problems and for increasing research and development capacity in the face of a massive set of questions.

Holmes Group leaders also anticipated that their agenda would call for significant financial resources; the development of the national consortium seemed to be partly a response to these financial exigencies. As I will show below, the Holmes Group used its collective strength to lobby the U.S. Department of Education and numerous private sources for funds. For investors who believed that broad change was possible, the fact that consortium leaders promised change in such a large number of institutions and had so many internal resources on which to draw would likely have been a selling point. The strength and visibility of a large national organization may also have been intended to lend credibility to funding campaigns on individual campuses. In the fall of 1987, Marianne Amarel, a staff member at the Educational Testing Service (ETS) and a part-time faculty member at Michigan State University who was actively involved in the national organization, argued that the "resources to forge partnerships with schools, to carefully examine new approaches, and to identify and understand their effects will have to be found by member institutions" (*The Holmes Group Forum*, Vol. II, No. 1, Fall 1987). Her comments suggest that Homes Group leaders believed that their agenda would require not only the fundraising power of a visible, national organization but the simultaneous capacity of multiple research institutions.

In short, the national consortium was intended to provide both variety in expertise and experience and strength in numbers. As a large and diverse organization, the Holmes Group could pool resources, learn from the experiences of individual campuses, lean on the authority and respect commanded by some of its more prestigious members, and draw more attention more easily than it could have had its leaders chosen to act on a smaller scale. Further, membership in the national consortium could provide motivation and pressure that deans and department chairs on individual campuses could use to help promote interest in the work of reform in teacher education to their colleagues. But the decision to form a consortium and proceed en masse also compounded some of the Holmes Group's original problems and generated new ones. For leaders of the effort at the national level, it made the work of reform difficult.

The National Consortium and the Work of Reform

The decision to build an organization that would have broad membership meant that the Holmes Group's national leaders were compelled to spend a great deal of their time developing and running the organization. Their time, particularly at the outset, was inevitably spent traveling around the country, meeting with faculty members on the campuses of member or potential member institutions, coordinating communications, and recruiting and supervising administrative support. Leaders also had to spend a good deal of time and energy crafting and delivering what amounted to public speech, not only in the form of their trilogy of reports, but in articles published in scholarly journals, in statements to the mainstream press, and in presentations at conferences and meetings. This deflected time and attention from the more fundamental problems of teacher education on their own campuses. In part, as I have already argued, the consortium invested in public speech because intervening on the national conversation was one of their reasons for being. An important goal of the Holmes Group was to change the way Americans thought about teacher education and about the teaching profession, and the consortium's strategy reflected an intentional commitment to attention-getting and public argument. But another reason that consortium leaders spent so much time publicizing and defending their agenda was that they needed to develop understanding of their argument and build commitment to it even among their own colleagues.

Because the field of education lacked not only agreement about the role of schools of education in preparing teachers and in contributing solutions to the nation's continuing public school crisis, but even collective acknowledgement that a problem existed, the first challenge the consortium faced was to convince their own membership that they had a problem. At least one member of the Holmes Group's original executive board recalls that the consortium's early leaders were so uncertain about whether their colleagues across the country would sign on to the project that they created a betting pool, with wagers on how many deans would assent to the consortium's agenda (Anonymous 8, interview, October 21, 2010, transcript i.m.p.). Although the consortium eventually succeeded in recruiting a significant number of members, they continued to face some opposition from within their own ranks and from organizations such as the

American Association of Colleges for Teacher Education (AACTE). The leaders of AACTE, for example, objected to the consortium's focus on elite universities. Many smaller and less prestigious institutions had been providing strong and labor intensive teacher education for years, they argued, and it was not fair for the Holmes Group to draw so much attention and so many resources to an improvement enterprise that stood to benefit only elite campuses (Anonymous 9, interview, April 19, 2010, transcript i.m.p.). Even after the consortium decided to expand its membership beyond the small inner circle that it once was, leaders continued to confront skepticism and even anger from peers and stakeholders across the country. As one consortium leader explains, "the deans had to deal with all their enemies in the field, and there were a lot, so Holmes...had to do damage control with respect to people who were announcing that they were wrong-headed and that it was a mistake" (F. Murray, interview, October 21, 2009, transcript i.m.p.).

Given this situation, consortium leaders had to focus their energies on arguing for change and on creating a detailed agenda for realizing improvements. Since they had assigned the design work that was at the heart of their mission to faculty members in each institution that joined the consortium, the primary work for the consortium itself—for the Holmes Group's national leaders—was to induce the membership to do the design work, and to support their efforts. They hoped that if their arguments were strong enough, and their vision sufficiently compelling, their colleagues on campuses across the country would join the movement and take up the work for which they advocated. As I will try to show below, they went to some lengths in the consortium's early years to familiarize their colleagues with this agenda, to explain and defend it, and to provide opportunities for faculty members at those institutions that would become consortium members to learn about the goals for reform. The problem was that their agenda was not as detailed as it was broad, and it implied a set of wholesale changes that would need to be implemented in weak institutions, by individuals who were not always well equipped for the work.

The Holmes Group as an "Institutional Self-Help Project"

My analysis of internal documents circulated among consortium members throughout nearly ten years of work and of interviews with key consortium leaders suggests that the Holmes Group relied on five instruments to help them make the case for their work and support their colleagues in pursuing their plans: agenda setting, design principles, opportunities for faculty members to participate in professional development, policing and pressure, and advocacy and the cultivation of strategic partnerships (see Appendix C for a table summarizing these instruments). Each of these instruments can be interpreted as "instructional," and implies a change strategy designed to help individual members of the Holmes Group build their capacity for the work of reform. Because the leaders of the Holmes Group could not compel their colleagues on member campuses to do anything in particular, they provided inspiration, incentives, and resources that they hoped would persuade faculty members to act and would help them learn to do what needed to be done. This strategy implied a significant dependence on practice and practitioners, and only heightened the dilemma the Holmes Group engendered through its ambitious plans for change. But it was the only approach that those in charge of an organization of autonomous higher education institutions could employ. Other instruments of policy-making--mandates, sanctions, financial incentives and rewards, for example--were not available to a voluntary consortium of universities. Even if they somehow had been, they are unlikely to have had any effect on deans and faculty members on individual campuses, many of whom did not know how to do the work that was required. These salient but weak instruments on which the consortium relied were yet another expression of the Holmes Group's inherent dilemma.

Agenda setting

One of the most important tools that Holmes Group leaders used to try to provoke change in teaching and teacher education was agenda setting. Because the Holmes Group relied almost entirely on its membership to carry out the work of reform, and because its membership consisted of autonomous institutions that were in turn made up of autonomous faculty members, careful efforts to guide and direct that work were essential. And as I began to argue above, there

is evidence that leaders of the Holmes Group invested a significant amount of time and effort in identifying the work that their vision required and communicating their agenda publicly. They introduced their ideas about the questions that needed to be answered; the curricula, programs, and materials that needed to be built; and the structures and expectations that needed to be developed in their published trilogy of reports and then elaborated them in later publications, many of them internal. This work to set the agenda for the project was intended to help leaders of the national consortium capture and direct the attention of their large numbers of colleagues across the country.

Writing for a skeptical, public audience—not only their own constituents, but policymakers, educational entrepreneurs, and interested taxpayers—the authors of *Tomorrow's* Teachers had laid out a comprehensive, five-year agenda for research and development that faculty members on local campuses might have found overwhelming. With that out of the way, the Holmes leadership used less public means of communication to focus their membership's work on specific elements of the agenda and to continue making the case for change. In an internal progress report published one year after the formation of the consortium, for example, they acknowledged the overwhelming nature of their agenda and cautioned that "to start everywhere at once risks dissipating resources and accomplishing little substantial change" (Work in Progress, p. ii). Though still optimistic and pointed, their tone here was more somber and had less of the bravado that pervaded the public document. In the remainder of the report, they condensed the ideas from *Tomorrow's Teachers* into seven primary aims (creating 'integrated, extended' programs for teacher education; establishing the professional studies curriculum; broadening and deepening the liberal arts preparation of prospective teachers; strengthening and integrating clinical experience; recruiting minority students and faculty; interacting with state policy on teacher education; and improving the quality of teaching and assessment in teacher education), and focused their analysis of the consortium's progress around those goals.

Unlike the rousing call to action that was *Tomorrow's Teachers*, this internal report read more like a work plan for faculty members. The list of goals was longer and more specific than

the list of five major goals the consortium had identified in *Tomorrow's Teachers*, and focused members' attention primarily on work to improve campus-based teacher education. Perhaps in recognition of both the potentially dangerous breadth of their plans and the limited jurisdiction of faculty members, the authors of the report did not mention the three original Holmes Group goals that dealt with making changes in the teaching profession and in public schools and instead focused on more local aims. Their suggestions were ambitious nonetheless; even in this scaled down plan of work, consortium leaders called for the complete overhaul of university-based teacher education.

As their work continued, Holmes Group leaders sometimes used national or regional meetings or internal publications such as the Holmes Group Forum, the consortium's quarterly newsletter, to call for work in particular areas of their sweeping agenda. These entreaties continued to focus on campus-based activity; few concerned plans to redesign the teaching profession or to act directly on public policy, both among the consortium's original goals as laid out in Tomorrow's Teachers. An article in the Fall 1987 Forum, for example, specified four "immediate tasks facing member campuses," including building a sense of the education faculty's corporate responsibility for the teacher preparation task; beginning the construction of new curricula; engaging with arts and sciences faculty; and defining the parameters of the professional development school (The Holmes Group Forum, vol. II, no. 1, p. 16). By the winter of 1990, the consortium had drafted a new strategic plan that set priorities for the consortium for the next five years, noting that the plan would "spell out 'policy directions' and detail actions to take to implement each" (The Holmes Group Forum, vol. 5, no. 2, p. 6). That same year, the Holmes Group's Northeast Region issued an \$11,000 request for proposals (RFP) to stimulate work toward the agenda among member institutions. The small size of the RFP notwithstanding, these agenda setting mechanisms permitted consortium leaders to encourage work on their agenda in places that seemed strategic given the progress being made on particular campuses and across the country--an important tool given the Holmes Group's broad and diverse membership and the decentralized nature of the organization.

At times, leaders and members of the Holmes Group also made more general calls for work in areas that would serve the consortium's goals. At a Holmes Group leadership conference in August, 1987, for example, consortium president Judith Lanier suggested that a new research agenda important to Holmes Group institutions would focus on how to promote "higher-order thinking" and teaching that took children's construction of meaning seriously-an area of inquiry that was, as I argue above, still relatively novel in 1987 (The Holmes Group Forum, vol. II, no. 1, p. 5.) Lanier contended that it was the responsibility of faculty members associated with the Holmes Group to focus the work of advanced graduate students and of clinical professors on these kinds of questions. A December, 1988 regional Holmes Group conference at the University of Virginia concluded with a presentation in which Greta Morine-Dersheimer suggested four research questions that might be pursued relative to the conference's focus on liberal arts in elementary and special education teacher preparation (The Holmes Group Forum, vol. III, no. 2, p. 18). A year later, attendees at the Northeast Region conference also recommended new research projects that would serve the Holmes agenda, including some focused on the teacher education curriculum and on assessment practices for admitting and tracking teacher education students. Although they were relatively vague, these suggestions were intended to provoke longer term work on questions important to the Holmes Group and to continue to build the intellectual infrastructure for the ongoing improvement of teacher education.

As a large, diverse, national consortium, the leaders of the Holmes Group relied on a clear agenda for the work of their members as much as they did on any other resource or tool. Judging from the time and energy they expended developing their aims and plan of work and putting their ideas into accessible form in written communications, and considering their innovative strategies for recruiting participation in particular areas of work, consortium leaders appreciated the importance of the intellectual leadership they could provide and made good faith efforts to craft and communicate a deliberate agenda. In some ways, however, their efforts at agenda setting were weaker than they might have been. Attempts to spur work in particular areas of the consortium's comprehensive agenda seemed piecemeal, for example, without

governance from a central or coherent strategy. One individual who was closely associated with the Holmes Group at the national level and had a good deal of responsibility for coordinating the consortium's efforts across campuses suggested that "no one believed...central control would be possible or desirable in a society as decentralized as ours" (Anonymous 17, interview, May 8, 2009, transcript i.m.p.). If this is true, then it implies that Holmes Group leaders either assumed or hoped that their colleagues would pay close attention to the suggestions the national consortium made about what to work on when, and make good decisions about how to organize and prioritize their own work. Whether this was an assumption or a hope, it was a potentially dubious one given stiff competition for faculty members' attention from many potential projects and areas of work. Like the other instruments that I discuss below, agenda setting was a tool the value of which depended entirely on its use in practice. Given the issues that I have raised already, there were many reasons to doubt that there would be effective use.

Principles for Design

At least as important as agenda setting were the principles for design that occupied the attention of the Holmes Group leadership throughout the consortium's history. While specific calls for research and design work told members *what* to work on, principles for design provided guidelines intended to help them figure out *how* to work on it. Writing to their membership one year into the project, Holmes Group leaders argued that if the group was "to retain a distinctive character and to serve as a catalyst for necessary but difficult change, then Holmes institutions must make good faith efforts toward common ideals" (*Work in Progress*, p. ii). Setting out those common ideals, or principles for design work, was a large part of the consortium's work, as was making sure that faculty members on individual campuses maintained a clear understanding of and interest in the ideas.

Once *Tomorrow's Teachers* was published and the consortium had come together in earnest, Holmes Group leaders made a point of elaborating and explaining their goals and principles and of involving campus-based faculty members in interpreting those ideas and in developing new ones. In their first internal progress report, consortium leaders highlighted seven

important aims and devoted several pages to explaining each one, providing more detail than they had in the public report. They clarified the rationale for each item and identified its relationship to the broader agenda, sometimes pointing out potential barriers to the work. In some cases, they described projects underway on a particular campus in the service of the goal, offering images of the possible. In relation to their aim of creating "integrated, extended" programs of teacher education, for example, Holmes leaders clarified that they did not advocate for any particular change, such as the elimination of the undergraduate major, but would instead support a variety of strategies for "extending and integrating" teacher education. They also suggested five characteristics of any extended and integrated program, including a disciplinary or interdisciplinary major for elementary as well as secondary teacher candidates; pre-education courses and experiences; education coursework in the junior and senior years; and clinical experiences that would begin in the junior or senior year and extend into a fifth year. About the goal of establishing a new professional studies curriculum, the authors pointed to projects underway across the country to use the "commonplaces" of teaching identified by Joseph Schwab as organizing schema (Work in Progress, p. 6). These clarifications, descriptions, and brief updates answered questions that had arisen since the publication of *Tomorrow's Teachers* and offered individual consortium members the opportunity to deepen their understanding of the principles for redesigning teaching and teacher education originally presented in the public report.

Efforts to develop collective understanding of Holmes Group goals and design principles—and simultaneously to develop the principles themselves—continued as the consortium pushed forward with its work. The Holmes Group *Forum* routinely contained not only reminders of consortium principles, but discussion, generally extracted from conversations that took place at national and regional meetings, about what the principles should look like in practice. In the Fall 1987 issue, for example, a summary of a meeting that had occurred at the Holmes Group's summer leadership conference in Snowbird, Utah included comments about what it would mean for Holmes institutions to forge closer connections with arts and science faculty members and to

recreate the liberal arts curriculum for prospective teachers. One year later, the Fall 1988 issue included excerpts from a discussion that had taken place at the Midwest Holmes Group regional conference earlier in the year about what general education for elementary teacher candidates should look like; in it, University of Nebraska faculty member Paul Olson opined that teacher education should provide courses "in the epistemology and structure of the disciplines for elementary teachers" (*The Holmes Group Forum*, Vol. 2, No. 1, p. 22). In an attempt to provide even more substantial elaboration of their goals for a redesigned teacher education curriculum, the Holmes Group created a national Curriculum Committee that, in 1989, presented a declaration of principles intended to guide decisions on local campuses about the content and format of courses and clinical work.

After the publications of Tomorrow's Schools and Tomorrow's Schools of Education, the consortium made similar efforts to familiarize members with the key principles for carrying out the design work for which they called. This was particularly true in relation to the construction of professional development schools, an element of the Holmes agenda that generated significant engagement across the country. Even before the publication of *Tomorrow's Schools*, the Holmes Group Forum frequently included notes about potential or developing partnerships between Holmes institutions and local schools, often with attention to the thornier aspects of the work. In the winter of 1988, for example, the Forum reported on a collaboration between the University of New Mexico (a consortium member), Albuquerque Public Schools, and the Albuquerque Teachers Federation to develop three elementary professional development schools, all scheduled to open the following fall. There were notes about the definition of a PDS ("it emphasizes professional inquiry and the infusion of research...knowledge...to assure that the school's practices are specifically appropriate to the school's clientele and to the resources available"), the criteria that were used to select the three schools from seven applicants; the selection of clinical supervisors and support teachers from both the University and the schools; and the financial arrangements that provided release time for PDS teachers (The Holmes Group Forum, Vol. II, No. 2, Winter

1988, p. 13). Similar vignettes populated the pages of many issues of the *Forum* as consortium members struggled to understand and implement this trademark piece of the Holmes agenda.

As were the consortium's efforts at agenda-setting, the provision of design principles was an essential, if insufficient, tool for accomplishing broad changes in teacher education. In light of how new much of what the Holmes Group proposed would have been to nearly everyone in the consortium, specific ideas about how the work should proceed and what success would look like were absolutely necessary to the consortium's progress. For faculty members and institutional leaders who studied them carefully and had the capability to interpret them and learn from them, the Holmes Group's ideas for change would have been informative and educative. Still, design principles could not function on their own to produce either faculty learning or changes in teacher education. Like the work Holmes Group leaders did to set the agenda for reform more generally, specific ideas about what a new design for teacher education would look like were only useful if used—and used well. In the case of faculty members, administrators, or instructors on member campuses who did not study them or could not understand them, they had little power.

Further, design principles and accompanying examples and images were only as good as the people and institutions that produced them. Particularly as time wore on, Holmes Group leaders needed to find examples from their own work to encourage their membership and support their attempts at change, and they were limited to what were necessarily fledgling and unsophisticated efforts. These images became the examples to which Holmes institutions looked for inspiration and enlightenment, and in many cases they did not represent very great progress from the status quo. The Holmes Group could have chosen to explain and illustrate their goals with reference to effective professional education in other fields—the trades, nursing, or medicine, for example—but I have found few instances in which they did so.

Still, the consortium's original lack of specificity in design principles was not a failure of planning or strategy; it was, yet again, another symptom of the dilemma at the center of the consortium's work. Operating almost entirely in the realm of the uncertain, anything that the Holmes Group offered by way of agenda setting and design principles would have been

insufficient. Everything had to be invented, tested, and refined from scratch; this was the core of the work and of the strategy.

Professional Development Opportunities

In addition to ideas about what to work on and how to work on it—themselves opportunities for learning for individuals who knew how to use them as such--the Holmes Group provided additional opportunities for professional development. Not all of these learning opportunities were explicitly labeled as professional development. Mere membership in the Holmes Group was an opportunity for faculty members to learn and to develop their capability for designing and delivering improved teacher education. An article in the Fall 1987 Forum advised that, "it is probably best to retain an understanding of Holmes as essentially an institutional selfhelp, faculty professional development project" (The Holmes Group Forum, Vol. II, no. 1, p. 16), and many individuals who worked on the Holmes agenda recall the era as a defining one in their professional lives. For faculty members who were actively involved in the consortium, paying attention to its publications and traveling to its meetings and conferences, membership meant unusually frequent opportunities to exchange ideas about teacher education and related policy and practice. Holmes Group staff made special efforts to call members' attention to relevant books and articles, to invite experts and provacateurs from a range of education sub-fields to meetings, and to keep members up-to-date on progress made across the field of education research. More directly relevant to building their capacity for pursuing the Holmes agenda, they included lengthy and well-written descriptions of projects underway on local campuses in each issue of the Forum. Conferences focused on sharing ideas and identifying barriers to change around each element of the agenda were scheduled multiple times per year, and video recordings of individual sessions were made available for members who were unable to attend. The Holmes Group also sponsored an occasional paper series and maintained a Listserv.

Holmes Group members who read the Winter 1988 issue of the *Forum*, for example, would have had several opportunities to develop their understanding of both Holmes Group pursuits and of related work taking place across the fields of teacher education and education

research. They could have read about the consortium's plans for six "idea-generating" seminars that were intended to launch work on *Tomorrow's Schools*, including themes for each seminar. They would have been treated to snippets of advice from teachers and administrators who participated in the Northeast Region's conference in Boston in October, 1987. They would have been able to acquaint themselves with problems that South Central Region Holmes Group members were encountering as they tried to collaborate with their colleagues in the arts and sciences; with the proposals Ohio State University was laying out for five new teacher certification programs apparently aligned with Holmes Group goals; with the design of the three PDSs being planned by the University of New Mexico; and with similar projects underway at six other Holmes Group campuses. Had they read to the end of the newsletter, they would have found reviews of two recently published books, E.D. Hirsch's *Cultural Literacy* and Mary Kennedy's *Inexact Sciences*, "from a Holmes Group perspective" (*The Holmes Group Forum*, Vol. II, No. 2, p. 20). Finally, they would have learned that the Mathematical Association of America had endorsed Holmes Group recommendations.

Faculty members on some campuses may also have had opportunities to participate in learning opportunities explicitly focused on helping them develop their capability to design and deliver the new brand of teacher education for which the Holmes Group called. Nancy Zimpher and Kenneth Howey, for example, then both faculty members at Ohio State University, developed and ran a network of other Holmes Group institutions that was intended to help participants—most of whom were associate deans or others in charge of academic affairs—meet consortium goals. Through a small grant, Zimpher and Howey provided travel money, room, and board for participants routinely to attend meetings, where they studied best practices and shared examples of the work they were doing on their own campuses (N. Zimpher, personal communication, February 19, 2010). In 1991, Zimpher and Howey unsuccessfully sought major external funding to create a "Holmes Group Center for Faculty Leadership and Renewal" (*The Holmes Group Forum*, vol. V, no. 3, p. 2). Although their plans never came to fruition, Zimpher and Howey had hoped that the Center would provide participants with opportunities for learning of three kinds:

"how to teach in ways that lead to a different kind of learning for their students and their students' students;" "how to design and evaluate 'conceptually coherent, research-supported' new programs of teacher preparation;" and "how to provide 'more contemporary and powerful'— 'intellectual' rather than 'behavioristic'—preparation to the expert teachers who collaborate in prospective teachers' clinical experiences" (*The Holmes Group Forum*, vol. V, no. 3, p. 2). I note this proposal even though it was unsuccessful because it provides evidence that Holmes Group leaders realized that significant learning would be required for members to reach their ambitious goals, and made at least some attempts to encourage that learning.

Neither here nor in any other instance of Holmes Group-associated professional development, however, were these opportunities to learn of the sort that analysts have argued are essential to successful implementation. The Holmes Group helped its members keep abreast of relevant new knowledge and learn from the experiences of colleagues trying to redesign teacher education, but it did not--often, it could not--help them study dramatically improved teacher education in detail because there were few resources for doing so. When faculty members on a particular campus succeeded in some area of the Holmes Group agenda—in establishing a prototype of a professional development school, for example, or in recruiting arts and science faculty members to teach a new course to prospective teachers—the consortium drew others' attention to the accomplishment and in some cases provided support for deans, department heads, or other leaders to travel to the site, talk with their colleagues there, and observe the work. I have not found any evidence, however, that such efforts were widespread or that the conversations and activities that took place through them were very detailed. Faculty members on Holmes Group campuses did not appear to study new designs in depth, to ask for or receive coaching in new ways of teaching or leading, or to otherwise practice delivering improved teacher education together. In part, this may have been because even when faculty members on a particular campus made some strides toward realizing important goals, their gains were not large or particularly significant, and thus there was little to study.

Given the nature of the problem at which the Holmes Group took aim, opportunities for professional development stood to be the most salient tool the consortium had for improving teaching and teacher education. The Holmes Group trilogy was, for the teacher educators and researchers who produced it, both a condemnation of self and an expression of faith in their own capacity for improvement, and I have tried to show that the condemnation was justified. There would have been no more logical way for consortium leaders to try to achieve the aims they set out than to help themselves and their colleagues across the country learn about how to improve teacher education. Without this "second-level" design work, Holmes Group leaders could hardly expect to see change from colleagues who by their own charge had been doing their work poorly for decades.

But the Holmes Group's efforts in this crucial area seem mixed. On the one hand, as the comment in the Forum that I quoted above indicates, the entire Holmes enterprise was selflabeled as an "institutional self-help project," and nearly everything the consortium did was aimed at helping teacher education institutions make change. On the other hand, the problems of improving teacher education were vast, and many of them played out in infinitely small ways, on the ground, so to speak, across numerous campuses and instructors and students every day. Teacher education does not take place in meetings and newsletters and conferences, but in classrooms, as instructors work directly with students. Helping teacher educators improve their practice—particularly teacher educators accustomed to a sedentary approach to professional education or disinterested in the business of preparing teachers in the first place—seems likely to require interventions much stronger than what the Holmes Group offered. The few instances that I have found in which consortium leaders enabled faculty members from one institution to travel to see examples of excellent work underway in another institution seem promising, but it appears that these opportunities were few and far between. For faculty members affiliated with the Holmes Group who were deeply interested in improving their work and well equipped to use the professional development offerings that were a part of membership in the national consortium,

there was much to learn; for faculty members who had less knowledge or appreciation relative to Holmes Group goals, learning from the Holmes Group would likely have been much more elusive.

Policing and Pressure

In addition to professional learning opportunities, Holmes Group leaders also tried to help individual campuses help themselves by holding them accountable for work toward collective goals, though efforts in this area were reportedly weak. To begin, membership in the consortium was selective, and applicants were asked to commit formally to Holmes Group goals. Dues were steep, perhaps in part to encourage participating institutions to take membership seriously. According to a membership policy drafted in October, 1988, the consortium particularly sought institutions "that can assist the Group in attracting minorities to teacher education, in designing teacher education to help all teachers provide high-quality education for minority children, and in studying the equity issues in teaching and learning" (The Holmes Group Forum, vol. III, no. 2, p. 3). At least one dean at a major research institution tried to join the consortium without explicitly committing to the agenda—he apparently admitted to consortium leaders that the group's cachet appealed to him but that he had little intention of working toward Holmes Group goals—and his bid was rejected (F. Murray, interview, October 21, 2009, transcript i.m.p.). There is some evidence, then, that the consortium screened applicants and tried to communicate the requirements of membership from the outset, in an attempt to make success in the work more likely.

At the same time, there is also evidence that Holmes Group leaders were eager to recruit as many research universities to the project as possible, and overlooked signals that prospective members might not have either the will or the capacity to commit to the consortium's agenda. Because they were eager to count as members at least one research university from every state in the nation, consortium members were sometimes forced to accept pledges from institutions that were not well equipped to carry out the work (F. Murray, interview, October 21, 2009, transcript i.m.p.). Similarly, at least one consortium leader recalls that membership was aggressively sought from prestigious private universities such as Harvard and Stanford—less for

the willingness of faculty members at those schools to participate in the Holmes agenda than for reasons of stature and attention (F. Murray, interview, October 21, 2009, transcript i.m.p.).

Because the Holmes Group was committed to attracting a large and diverse membership from across the fifty states, the requirements of initial membership may not have served as the enforcing mechanism that they were intended to be.

Accountability efforts continued, however, once institutions committed to the agenda and began paying dues. Members were required to submit annual progress reports, many of which eventually found their way into the Holmes Group *Forum*, and this may have encouraged some institutions to put more effort into Holmes Group work than they might have otherwise. Given the volume of articles and reports from a large number of consortium members published in the *Forum* and in other internal communications, there is evidence that to be a member of the Holmes Group was to participate, at least on a nominal level, in regular meetings, seminars, conferences, and correspondence. It would have been difficult for some faculty representatives from each member institution to have entirely avoided work on the Holmes project.

There is evidence, however, that attempts to police Holmes Group members were not uniformly successful. At least one Holmes Group leader reports that little action was taken in response to the disappointing annual reports that were sometimes submitted by member institutions (Anonymous 8, interview, October 21, 2010, transcript i.m.p.). Another individual—a member of the national leadership team—indicates that he never saw a single report (Anonymous 11, interview, June 4, 2010, transcript i.m.p.). By 1992, the Holmes Group Executive Board was sufficiently concerned about their efforts to foster progress on their agenda through accountability measures that they hired Edward Meade, a former education program officer for the Ford Foundation, to lead an "Accountability Panel." The new Panel was charged with helping the consortium assess its progress toward specific goals and to chart their effects on public policy and opinion (*The Holmes Group Forum*, vol. VI, no. 2, p. 4). I have found little evidence, however, that this Panel had a significant impact on the work of the Holmes Group. More generally, efforts at policing and pressure, while present, seemed to be a weak instrument for

realizing consortium aims, for, as one Holmes Group leader puts it, "It was more of a formality...there was no real way other than moral persuasion to get people to do stuff" (F. Murray, interview, October 21, 2009, transcript i.m.p.).

Advocacy and the Cultivation of Strategic Partnerships

The final instrument wielded by the national consortium was political advocacy work and the cultivation of partnerships that were strategic for the Holmes agenda. From their earliest days, Holmes Group leaders deliberately nurtured relationships with individuals and organizations who could help elevate their national visibility, increase their capacity to garner resources or even give them money, and make features of the challenging environment in which Holmes Group members worked more conducive to change within schools of education. Leaders of the consortium at the national level reported that they sought support "from everyone...the business community, professional groups, member organizations, unions, foundations" (Anonymous 17, interview, May 8, 2009, transcript i.m.p.). Holmes Group president Judith Lanier relied on then Secretary of Education Terrel Bell, for example, for support of her early meetings with the original group of Holmes deans, and Bell's influence was crucial to Lanier's ability to shepherd the deans to consensus around their proposed set of new standards for teacher education programs (see The Holmes Partnership & Lanier, 2007). Bell had recently overseen the publication of *A Nation at Risk*, and his connection to the Holmes Group was a deliberate signal that government and higher education could work together to solve the problems to which the report had pointed.

The Holmes Group also intentionally sought endorsements from both major teachers unions, recognizing that union resistance or support could be a pivotal factor in their work with K-12 schools. They invited both Mary Hatwood Futrell, then president of the National Education Association (NEA) and Albert Shanker, of the American Federation of Teachers (AFT), to appraise *Tomorrow's Teachers* at the Holmes Group's first national meeting. Futrell chastised the assembled Holmes Group members for their isolation from other colleges and universities engaged in teacher education and from existing teacher education accreditation bodies, but pledged to include teacher educators from research universities in her own organization's efforts

to improve teacher preparation. Shanker praised the Holmes Group but urged them to embrace an even more ambitious agenda for reforming schools, suggesting that they make the "radical restructuring of schools" one of their goals (*The Holmes Group Forum*, vol. 1, no. 1, p. 4). I have not found evidence of how Holmes Group members interpreted or responded to these recommendations, but the fact that the consortium invited such speakers to their meetings and published their comments in their newsletters suggests their interest in developing and maintaining a positive relationship with the unions.

Early in its history, the Holmes Group also assembled a formal committee, the Government Relations and Liaison Committee (GRLC), to investigate potential synergies and partnerships with other major national education organizations. The goal of the GRLC, which was co-chaired by P. Michael Timpane, then dean of Teachers College, and Bob Koff, SUNY Albany dean and one of the founders of the Holmes Group, was to "move from conversations to a coalition that can 'rethink the political process for reforming teacher preparation' and can influence federal, state, and regional policy on recruitment, training, certification, licensing, testing, supervision, and working conditions of teachers" (The Holmes Group Forum, vol. II, no. 2, p. 2). Sitting on the committee were individual members of the Holmes Group who were directly affiliated with a large number of relevant organizations, including the American Association of Colleges for Teacher Education (AACTE), the American Educational Research Association (AERA), the Council of Chief State School Officers (CCSSO), the National School Boards Association, the National Governors Association (NGA), and the National Association of State Boards of Education, among others. These individuals offered the Holmes Group insights gleaned from their work in other organizations and helped the consortium draft partnership agreements (The Holmes Group Forum, vol. II, no. 2).

One area of their agenda for which the Holmes Group was particularly assertive in seeking partnerships was the work to design and establish professional development schools. For example, at the consortium's second annual conference—shortly after work on *Tomorrow's Schools* was launched—Holmes Group president Judith Lanier pledged active support for the

fledgling National Board for Professional Teaching Standards (NBPTS). She announced that the standards for professional development schools would call for a percentage of teachers in every PDS to have achieved National Board certification and promised that "appropriate" teacher education faculty in Holmes institutions would be Board-certified (*The Holmes Group Forum*, vol. II, no. 3, p. 2). Nine members of the NBPTS were also appointed to a 20-member Holmes Group national steering committee assigned to monitor the progress on *Tomorrow's Teachers*. Later, the staff of the *Tomorrow's Schools* project met with 19 legislators, legislative staff, state and local school board members, teachers, and administrators at a meeting jointly sponsored by the Holmes Group, the Ford Foundation (which funded other portions of the project), and the Center for Policy Research in Education at Rutgers University. Several of the attendees provided Holmes Group members with advice about how to increase both public and legislative support for school restructuring, and all had the opportunity to familiarize themselves with the consortium's goals and hopes for the PDS. Once Tomorrow's Schools had been published, the Holmes Group's Executive Board energetically sought support for the PDS concept from state and federal policy makers and corporate leaders, hoping to achieve resources for implementing professional development schools in states across the country (*The Holmes Group Forum*, vol. V, no. 1, p. 1).

Much later, as they labored over the production of *Tomorrow's Schools of Education*, consortium leaders again pursued widespread political and collegial assistance. They invited NEA president Keith Geiger, AFT president AI Shanker, and NCATE president Arthur Wise to participate in the three working conferences that were convened to develop the ideas at the core of this third report, and included additional "leaders of national stature" in the third conference, which was designated an "action summit" in which attendees would craft an action plan (*The Holmes Group Forum*, vol. VI, no. 1, p. 2). At roughly the same time, the Holmes Group sent Raphael Nystrand, a consortium representative from the University of Louisville, to Washington, D.C. to testify at a hearing on the reauthorization of Title V of the Higher Education Act of 1965. Hoping to generate funding for professional development schools, Nystrand recommended that a requirement be written into the legislation that would support partnerships between universities

and elementary and secondary schools (*The Holmes Group Forum*, vol. VI, no. 1). These efforts were characteristic of the consortium's consistent attention to the political and economic forces that would impact their core projects. None of them could solve the problem of practice that was at the core of the Holmes Group's work, but they could help generate resources and interest and encourage partnerships that could extend the consortium's impact.

These five instruments——agenda setting, principles for design, opportunities for professional development, policing and pressure, and political advocacy and the cultivation of strategic partnerships—suggest a relatively comprehensive strategy for improving teacher education. Together, they helped Holmes Group leaders take aim at each of the core elements of the problem that the consortium sought to solve: The agenda setting and principles for design at the curriculum and programs that were at the heart of teacher education; the opportunities for professional development and policing and pressure at the capability of the teachers and faculty members who would both lead the work to design new programs of professional education and deliver those same programs; and the political advocacy at the environment in which all of this work would take place. The strategy was salient to the set of interconnected problems at hand, and each instrument had the potential to support improvements in crucial places.

At the same time, this approach meant that virtually all of the "first-level" work of designing solutions to core problems of teaching and learning was left to deans and department chairs on local campuses. There is evidence that Holmes Group leaders recognized how much work would be involved at the local level, and how much depended on deans and faculty members and their willingness to work. In their 1989 progress report, they made this clear:

The 1988 reports taken together imply several requirements for structural change in teacher education: clear, firm leadership from the dean; extended, probing discussion of the Holmes agenda among a large and representative segment of the whole education faculty; ways and means to connect the arts and sciences to education; support and resources form university-wide administration; and a cadre of faculty working together on redesign (*Work in Progress*, p. 3).

Holmes Group leaders said little, however, about whether the resources they offered would be enough to help support these requirements. An optimistic tone pervades not only the Holmes Group's published trilogy of reports, but nearly every internal communication circulated throughout the consortium's ten year project. The 1989 progress report, for example, acknowledged "ambivalence and skepticism among education school faculty on a number of campuses toward the Holmes agenda," but concluded that, "the work has been well launched" (*Work in Progress*, p. 22). This optimism implied an enormous challenge for leaders on local campuses, who were left with the task of doing whatever they could to cajole participation from and support the work of their faculty toward the Holmes Group agenda.

Furthermore, the main resources that the national consortium offered appear only weakly directed at the Holmes Group's most dangerous dilemma, which was that the consortium depended for solutions entirely on the faculty members and institutions that had been central to the deterioration of teacher education into the feeble and marginalized enterprise that it was. Besides securing a written commitment to their agenda—a commitment that often proved perfunctory—Holmes Group leaders could do little more than try to persuade their colleagues to behave in helpful ways, apply pressure when they could, and offer ideas and resources. They could not require that provosts, deans, department chairs, or faculty members on member campuses engage in any particular activity, and given the organizational culture of colleges and universities, they would have been hard-pressed to set deadlines or even require attendance at meetings or conferences. For this reason, the Holmes Group depended significantly on provocation and moral suasion to convince their colleagues to pursue their agenda. And even when they convinced their members to embrace their agenda and take up the work, they were unable to offer detailed help on the ground—or else they did not see a reason to offer it. If the Holmes Group was going to undertake the kind of "second-level" work of helping practitioners learn to make changes that I argued earlier is essential to successful reform implementation, it would have to do it on individual campuses, with deans and department chairs at the helm-deans and department chairs who, the evidence suggests, may have needed the same help

themselves. In the next chapter, I investigate how these issued played out at Michigan State University.

Chapter Five

Michigan State University and the Holmes Group Agenda: Judith Lanier's College of Education

Though the Holmes Group was a national organization, its heart beat from the fifth floor of Erickson Hall – the home of Michigan State University's College of Education. Along with a small staff, Judy Lanier, who had become dean of the College of Education (COE) several years before assuming the presidency of the Holmes Group, led both entities from her offices in a brick building on the edge of Michigan State's sprawling campus. Teacher education had been serious business at MSU for more than a century, and the College of Education had a long history of innovation in the field. Herself a COE graduate and a long-time faculty member, Lanier had been deeply influenced by her experience at MSU and had in turn influenced her colleagues and her institution significantly; she and her faculty in East Lansing brought a striking degree of accomplishment in the field of teacher education to their work with the Holmes Group. Perhaps nowhere else was a faculty so well equipped to undertake significant reform of the way that teachers were prepared for practice. Still, MSU faculty members had solved few of the problems that had plagued teacher education since the turn of the century, and when Lanier began to implement the Holmes agenda in her own backyard, she faced a version of the same dilemma that I described earlier.

Despite decades of pioneering research and programming in teacher education, MSU faculty members had not, by the early 1980s, found ways to deliver practice-focused teacher education to large numbers of students—no one had, anywhere. Similarly, although they had made many strides toward identifying key elements of the work of teaching, parsing them for beginners, and designing professional education experiences focused on them, their work was far

engaged in research and design in teacher education at MSU considered themselves to be working toward a coherent agenda or pursuing goals broader than their own work. Further, the College of Education faculty was a large one, and with a broad representation of interests, orientations, experiences, and capacities. Like their colleagues in other research universities, COE faculty members juggled a variety of responsibilities and commitments; like educationists across the country, they faced myriad internal and external pressures but worked with a great deal of autonomy. For Lanier, the challenges were not very different than they were for other deans associated with the Holmes Group: How would she persuade and assist her diverse, albeit talented, faculty to design and implement a new teacher education program, and in the process transform education research, the prevailing conception of an education school, the teaching profession, and K-12 schools? Even at Michigan State, home to one of the strongest and most ambitious colleges of education in the country, the distance between the Holmes Group's aims and current practice was great.

In this chapter and the next, I examine the work that Judy Lanier and her fellow faculty members did over more than a decade to redesign and improve teaching and teacher education in East Lansing, and to craft a model professional school of education meant to inspire the field. In this period, Lanier built an already thriving college into a major player on the national reform scene, overseeing significant growth in the size of the faculty, promoting a shift in research engagements more resolutely in the direction of practice, and developing a multi-million dollar network of professional development schools. When she left the deanship in 1991—after serving for the longest term in the history of the College—teacher education at MSU looked very different than it had ten years earlier, with a substantially rearranged curriculum and many more students in extensive field placements. As a result of Lanier's efforts, the American Educational Research Association (AERA) had established a new division focused on teacher education research, and several of the faculty members Lanier had drawn to research and teach in East

Lansing were making substantial contributions to knowledge in the fields of teaching and teacher education.

At the same time, Lanier left behind a large number of colleagues worried about the distinctive direction in which the College seemed to be heading, several of whom would soon leave Michigan State for appointments elsewhere. Administrators in the provost's and president's offices, initially enthusiastic, had withdrawn a good deal of their support, and funders of the College's huge efforts to develop close connections with K-12 schools were beginning to pull back. When Carole Ames became the College's new dean in 1993, she wasted little time in implementing a more democratic governance structure and encouraging a broader array of research investments—with support from a faculty grown disenchanted with life in Judy Lanier's College of Education. In this chapter, I investigate the story behind this tumultuous era in Erickson Hall. How did Lanier accomplish as much as she did? What were she and her colleagues unable to accomplish, and why?

I focus my investigation on the resources for and challenges to realizing Holmes Group goals at Michigan State and on the tools that Judy Lanier; Henrietta Barnes, the chair of the Department of Teacher education; and other faculty leaders employed to accomplish their aims. Given how much of the design work the Holmes Group necessarily left to individual campuses, I look carefully at the extent to which Michigan State faculty members attempted to redesign the teacher education curriculum around practice, and at how they did so. Drawing on the "instructional" framework that I established earlier, I consider the ways in which reform leaders drew on and used faculty members' extant knowledge and experiences; whether they systematically introduced new ideas and provided guidance for the redesign of teacher education—and if they did, *how* they did; and how they managed environmental influences on faculty members' work, such as the university's system of incentives and rewards. Further, I investigate whether reform leaders attempted to build mechanisms that would help the College of Education as an organization learn over time and thus sustain improved delivery of teacher education.

Through my discussions with present and former MSU faculty members and analysis of documents pertaining to this period, I identify three primary tools that Lanier used in the course of her work: First, and beginning before she became dean, she invested in the capacity of the College faculty by helping her colleagues develop their analytic and research skills and by hiring a large number of young faculty members, many straight from doctoral programs, whom she hoped would embody the new breed of education professor imagined by the Holmes Group, carry out a good deal of the work of reform, and provoke other faculty members to follow suit. Second, she organized the teacher education faculty into several teams, distributing the most talented individuals across the teams, and instructed them to develop plans for a new teacher education program that would meet the kinds of goals associated with the Holmes Group. Finally, she launched an aggressive effort to construct a network of professional development schools across the state of Michigan; she intended this network to provoke, support, and disseminate the results of practice-oriented education research. In conjunction with this project, she began creating incentives and other supports that would enable MSU faculty members to engage in practiceoriented research and teaching. In the remainder of the dissertation, I examine how each of these tools functioned at Michigan State, including how salient they were to Lanier's goals, how they made use of extant resources among the faculty, and how they bore on the challenges of reform at MSU and more broadly.

I organize my analysis into two parts, according to two distinct phases of work in the College of Education: In this chapter, I address the period from 1988 to 1992, when Judy Lanier presided over both the College and the Holmes Group and fostered many plans for change in Erickson Hall. In chapter six, I study the period after 1992, when Judy Lanier had left the deanship and faculty members scrambled to implement their plans in her absence. I begin with a brief history of the College of Education, and explain how MSU came to be a center of practice-oriented research and programming in teacher education and what resources this history lent to the work of reform. I introduce the administrators and faculty members who were central actors in this turbulent period in the College of Education's history and analyze their efforts to foment

change, both on campus in East Lansing and in professional development schools across the state of Michigan.

A Cow College Comes into its Own

By the time Judy Lanier became dean of the College of Education, capacity at Michigan State for reform in teacher education was high. In fact, several individuals closely associated with the Holmes Group's efforts have opined that the national consortium was born directly out of work already underway at Michigan State, and might never have come about without it. Harry Judge, for example, a leading British education researcher who advised Lanier throughout much of her deanship and spent long periods of time in residence in East Lansing, argues that "more significant was the influence of MSU on the Holmes Group than the other way around...my reading is that the Holmes Group never would have existed but for Michigan State" (H. Judge, interview, September 23, 2009, transcript i.m.p.). Understanding the history of experimental research and programming in teacher education at MSU, and the intense commitment among the faculty to the public schools, to teachers, and to high quality teacher preparation, is central to understanding both the resources for and the obstacles to change in the environment in which Lanier and her colleagues took up the work of reform. And understanding the work that Lanier did to build the College of Education into what it was by the early 1980s is central to understanding how this dean and her colleagues were able to accomplish so much.

Like many other large American universities founded in the nineteenth century, Michigan State had trained teachers from its earliest days. Unlike some of its peer institutions, however, MSU never abandoned the enterprise and continued to maintain a strong identity as a land-grant institution committed to public service, including the preparation of teachers for the state of Michigan. When the university founded its College of Education in the early 1950s, solidifying a variety of pre-existing teacher training programs and formalizing arrangements for education-related research, the College's first dean, Clifford Erickson, not only encouraged the commitment to professional education but urged his new faculty to direct their scholarly energies toward practice and the needs of schools (Inzuna, 2002). At a time when other education deans were

turning away from the problems of the field, Erickson set the COE on a definitive path toward practice-focused research and teacher education. Other deans maintained this tradition in the ensuing years, and Judy Lanier inherited the legacy of this collective commitment. She put her inheritance to good use, capitalizing on existing resources and pushing for even greater commitment to educational scholarship and practice on the part of both her fellow faculty members and the men and women who served in MSU's central administration. In part because of her efforts, by the early 1980s, the College had been experimenting with teacher education for several decades and was home to scholars conducting cutting-edge research into teaching and teacher education, including several who pioneered practice-based approaches to teacher education. These resources were not, on their own, sufficient to produce change of the magnitude sought by the Holmes Group, but they were substantially more, and more salient to the consortium's goals, than many other universities had at the time.

Judith Lanier and the College of Education

Even among colleagues already committed to studying teaching and to preparing teachers, Judith Lanier stood out. Her keen interest in the problems of educational practice, respect for capable teachers, commitment to the values of interdisciplinary research and collective learning, and shrewd political skills helped her develop her colleagues' capacity and recruit extraordinary resources to the College of Education at Michigan State. Her vision for what schools might do for children and teacher education for practitioners, and for the ways in which a new variety of education research might inform the entire educational enterprise, far surpassed that of any of her contemporaries.

Born in Bad Axe, Michigan to a family of modest means, Judith Taack excelled in school and displayed a particular talent for debate and public speaking. Teachers and community members advised her parents to send their daughter to law school, but an undergraduate education at Western Michigan University was all the family could afford. At Western, Lanier studied French and education, planning to put her interest in public speaking to use as an elementary school teacher. Upon graduating, she became, by happenstance, the first hire at a

new laboratory school that Western Michigan had just established in Paw Paw, Michigan, a farming community along the I-94 corridor. She became immediately engrossed in the work, at first taken aback to find herself mentoring student teachers so soon after finishing her own training, and then increasingly interested in the experiences and insights of both her student teachers and her older colleagues—and in the work of helping novices learn to teach. She was captivated by her own instructional challenges, by the trials and stumbling blocks experienced by the student teachers assigned to her classroom, and by the wisdom and expertise of several bright, experienced teachers in her school. She also quickly became accustomed to keeping detailed records and logs of her own teaching and to meeting with researchers to discuss her work. Her enthusiasm for and skill at working in this kind of setting was so pronounced that she was quickly recruited by a faculty member to work at yet another lab school, this one run by the University of Wisconsin—Milwaukee, where she spent several years. In these settings, she developed an appreciation for routine inquiry into instructional practice that would never leave her and would inform every aspect of her work at Michigan State.

In these early years, Lanier also learned to value the tools of the liberal arts disciplines and the perspective they could bring to problems of educational practice. By now married to a farmer and still teaching in one of the lab schools, Lanier managed to decamp to the University of Maine for several summers in order to earn a master's degree in education. She had heard that Columbia University was home to renowned scholars of education and wanted to go to New York to study with them, but since she could not afford that, she chose what seemed like the next best alternative—the University of Maine, where several Columbia-trained scholars were faculty members. There she met L. Thomas Hopkins, an educational theorist and curriculum expert who had previously directed one of Columbia's lab schools. Hopkins challenged his graduate students to choose an educational problem and analyze it using the knowledge and perspectives of the disciplines—he forbid his students from reading education texts to perform their analysis. Lanier was hooked; she remembered her education classes at Western Michigan as "drivel" and found this way of examining educational issues significantly more compelling (J.

Lanier, interview, October 7, 2010, transcript i.m.p.). Like her interest in practice and practitioners, belief in the importance of disciplinary and interdisciplinary study would become a hallmark of Lanier's career.

Shortly after she finished her master's degree, Lanier moved with her family to Holt, Michigan, a rural community near East Lansing, and entered the doctoral program in curriculum and instruction at Michigan State University. Against advice from faculty members who thought the project impossible, Lanier wrote a dissertation in which she tried to identify what distinguished excellent teachers from mediocre and poor ones. She surveyed principals, teachers, and parents—finding significant agreement across the ratings for excellent and poor teachers and then videotaped the instruction of teachers who received high marks. Even before she finished her thesis, she was hired as a lecturer in the Learning Institute in the College Education, and then became a faculty member upon graduating. Her first assignment was to direct an enormous course in the School for Teacher Education called, ironically, The Individual and the School. More than a thousand students were jammed into a lecture hall to take the required course; Lanier was hired in part because administrators were under pressure from students to make the course more "relevant" and wanted to show some of the videotape that the young instructor had recorded in the course of her dissertation study. Lanier took over the course and soon found herself supervising more than 40 teaching assistants, one of whom she made sure was Henrietta Barnes, a talented teacher from her dissertation study who would go on to become a doctoral student, faculty member, and then Chair of the Department of Teacher Education at MSU under Lanier's deanship.

As she directed *The Individual and the School*, Lanier began exercising emergent skill at bringing people together to study and to learn. She organized voluntary meetings and seminars among the numerous other section leaders for the course, for example, often to probe instructional problems and discuss readings and other materials. An important accomplishment in this period was to solidify a definition of teaching that she had been developing since her early days of self-study and close work with teachers in the lab schools. Whereas many researchers

working in education in the 1960s conceived of the instructional process as beginning with an analysis of student learning objectives and then back-tracking to examine what kinds of teacher behaviors seemed to help produce those outcomes, Lanier paid much more attention to the work that teachers did to assess learners and their extant understanding and then to design instruction, including the selection of learning goals, accordingly. She began to think of teaching as "mind-reading," and in a book that she and her fellow instructors published for the course, she defined teaching as "manipulating the variables of instruction to produce intended changes in learner behavior" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). This conception of teaching as complicated, intellectual work challenged prevailing notions of instruction and helped to define the kind of research and practice that Lanier would value and support across her career. Lanier was on the leading edge of the turn in scholarly attention toward *teaching*, rather than teachers or learning, and her views on the matter came not from participation in conferences or research projects but from personal experience in classrooms.

Lanier also displayed an unusual aptitude for administration as she managed her gigantic course. This was the era of the civil rights movement and of campus unrest, and Lanier handled controversy over the content of the course and over whether African American students, for example, could have their own section of the course with aplomb. She found the work deeply satisfying, and her leadership abilities began to catch the attention of administrators in the College of Education. When the directorship of Michigan State's School for Teacher Education—a unit within the College of Education—became vacant, she was selected for the position over at least one other internal candidate. Excelling in that position and perhaps benefitting from new affirmative action policies, she was recruited to become the associate dean for teacher education just a few years later.

As the director of the School for Teacher Education and then later as an associate dean in the College, Lanier learned lessons that would directly influence the way in which she approached reform in the College of Education. "What I learned even before becoming dean," she says, "is that leadership in education required constant fighting back" (J. Lanier, interview,

October 7, 2010, transcript i.m.p.). As soon as she became director of teacher education, for example, she found that the associate dean had removed the budget for that unit and decided to mete out limited funds for the program himself. When Lanier demanded to know why, the dean explained that he hadn't wanted to offend the male faculty member who had also applied for the directorship—he wanted Lanier in the position, but said he could not risk any greater offense to his male colleague, and his solution was to remove the budget from the new director's control. Later, when she became associate dean for teacher education, Lanier watched as MSU's associate provost for undergraduate education repeatedly removed resources from teacher education and resisted any efforts to raise the standing of teacher education among university programs. A furious Lanier wrote a letter of protest to MSU provost Lee Winder, who immediately summoned the associate dean to his office. "I thought, uh-oh—it was a really hot letter," says Lanier, "but then I also thought, well, I really do feel strongly about these issues." To Lanier's surprise, Winder promised to watch the situation carefully and to remediate further abuses.

Meanwhile, Lanier continued to build intellectual community and capacity among her colleagues in the College of Education—to do so seemed only natural to someone who had cut her baby teeth professionally on teaching and on examining problems of practice together with co-workers. As associate dean, she invited any faculty member or instructor who wanted to come to attend a series of seminars in which the group identified and worked together on pressing problems in teacher education, such as how to prioritize in creating curriculum for learning to teach given how much there was for novices to learn and the limited amount of time allocated for initial teacher education. Lanier helped the group apply for grants to support guest speakers and led engaged discussions of the issues. Around this time, she also recruited her colleague Lee Shulman to come back to full-time work in the College of Education. Since the late 1960s, Shulman had been dividing his time between the College of Education and MSU's medical school, studying the problem solving and decision making processes of physicians, and was increasingly concerned about why teachers were not being studied as autonomous decision makers in the same way that physicians were. Now, in the early 1970s, he returned to education, interested in

pursuing research that would investigate teachers as professionals engaged in thoughtful, strategic work. He found a willing collaborator in Lanier, who paid for some of his time with resources to which she had access in her role as associate dean (J. Lanier, interview, October 7, 2010, transcript i.m.p.). Shulman would serve as an important colleague to Lanier throughout the remainder of his time in the College of Education.

Over the next few years, Lanier filled increasingly important leadership roles in the College, first as the co-director of the Institute for Research on Teaching and then as dean. Her work, along with the interests and efforts of many others, contributed substantially to making the COE into a place with the potential to support serious reform in teacher education, at a time when many other educationists were absorbed with other kinds of issues and activities. In significant part due to Lanier's careful cultivation of her environment, Michigan State by the late 1970s was developing rapidly into a locus of forward-thinking scholarship and practice. Although her most public contributions to the College were yet to come, Judith Lanier was busy in these earlier years making lasting investments in the orientations, commitments, and abilities of faculty members and administrators at Michigan State.

The IRT, NCRTE, and the History of Research on Teaching and Teacher Education at MSU

Michigan State's genesis as a leading center for research on teaching and teacher education and as a home to education researchers focused on improving practice can be traced in large part to the Institute for Research on Teaching (IRT). When the National Institute of Education (NIE) announced a competition for funding for a major new research center focused on the study of teaching late in the 1970s, Michigan State was ready to pounce. Lee Shulman and Judy Lanier worked together to write the successful proposal, and the \$3.6 million dollar award cemented the College's already strong reputation and helped turn Erickson Hall into a site for some of the most advanced research being carried out in education in the country. In securing the award, Michigan State bested Stanford, where faculty members had also fought hard for the grant. Stanford had earlier housed a major federally funded research center focused on identifying the elements of teacher effectiveness, and the shift of funding away from Palo Alto

to Michigan State signaled a broad change in research strategy in education and heralded the arrival of an exciting and productive era in the College of Education.

Although Shulman and Lanier were at the forefront of efforts to direct greater research attention to teachers and teaching, their interests were consonant with broader trends in the field. As I wrote in Chapter Two, several other researchers had joined Lee Shulman and Nathaniel Gage in an NIE-sponsored research group in 1975 which recommended that research consider teaching as "clinical information processing" and incorporate attention to teachers' cognitive processes into a variety of education-related studies (see Gage, 1975). This influential panel represented a growing backlash against the more behaviorally oriented research of the 1960s and early 1970s, including process-product research and investigations of related teacher education pedagogies. The NIE's request for proposals for a new research center that would support a different approach to research on teaching was a part of this movement, and MSU won the contest with a proposal that promised to investigate teaching as a complex practice entailing not only behavior but judgment (Institute for Research on Teaching, 1986).

Plans for the IRT bore the distinct imprimatur of Shulman's interest in cognition and decision-making and of Lanier's longstanding curiosity about the wisdom of capable practitioners as well as her tendency to make every project an opportunity for teaching and learning. The first mission of the institute was to initiate "an interdisciplinary program of research on teaching as clinical work—the study of teaching as diagnosis, prescription, judgment, and decision-making" (Shulman & Lanier, 1977, p. 44). Shulman and Lanier sought to study teachers "as gifted practitioners, capable of performances which theory may not yet explain, predict, or generate" (Shulman & Lanier, 1977, p. 45). "The idea," Lanier says, "was to study good practice, the way we did when I taught in the lab schools. And the idea was to take what we were learning from research and inquiry and make sure it was infused into teacher education" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). The institute was launched with eight research projects, on reading processes; classroom management and strategy; teacher decision making in language arts teaching; teachers' conceptions of reading; mathematics teaching; institutional, parent, and

community variables on teaching; and theory development and empirical research in the study of teacher decision making (Shulman & Lanier, 1977).

From the beginning, Lanier and Shulman called for an eclectic and interdisciplinary approach to research in the institute, and designed the IRT to train scholars from across the disciplines as well as practicing teachers to work together. "We knew," Lanier reports, "that we weren't just going to bring faculty members together from the different disciplines and have them immediately start giving each other hugs--they were going to have to be helped to see how to work together, and to see how to work on problems of practice" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). Lanier and Shulman designed carefully for the learning of researchers in the IRT. They created an "Intellectual Forum," for example, that sponsored regular meetings and colloquia for cross-disciplinary discussions; enlisted senior researchers to present formal seminars, and launched an "invisible college" that supported remote collaboration and discussion among researchers dispersed across the nation. One of the most memorable events in the early years of the institute was a seminar taught by the geneticist Joe Schwab, whom Shulman and Lanier recruited out of retirement to spend time in East Lansing teaching and talking with potential IRT researchers. Over the course of nine sessions, Schwab presented the numerous and diverse faculty members who signed up with a wide variety of intellectual and practical problems and asked them to examine them together, drawing on the perspectives of different disciplines. The group read and discussed passages from the Bible, William Faulkner's short story A Rose for Emily, and a text on the sex lives of coral reef fish, to name a few examples, and Schwab pushed participants endlessly to ask questions and present alternative interpretations. So many faculty members, from the College of Education and from across the university, signed up for the seminars that Lanier and Shulman had to institute a fishbowl format in which only a fraction of those present participated in the discussion while many more sat in a gallery to observe. Echoing many of her colleagues, Lanier remembers the Schwab seminars as "very important for socialization and for understanding the potential benefits of interdisciplinary

inquiry and bringing folks together to get smarter" (J. Lanier, interview, October 7, 2010, transcript i.m.p.).

From 1976 through 1986, the IRT fostered a number of important research projects that both attracted excellent faculty members to the College of Education and supported the learning of everyone who participated in the work. The fundamental premise of the Institute was that effective school learning requires good teaching, and that good teaching in turn requires professionals who exercise judgment in constructing learning opportunities for students. IRT leaders sought to produce knowledge that would help teachers increase their effectiveness as "semiautonomous professionals negotiating and mediating among complex and contradictory task demands as they pursue goals of excellence and equity" (Institute for Research on Teaching, 1986, p. 8). As part of their commitment to improving practice, scholars affiliated with the IRT involved teachers directly in their research and attempted to focus on "enduring" problems of practice, directly studying efforts to improve teaching (Institute for Research on Teaching, 1986, p. 6). Over the years, their research yielded several important findings, including understanding of strategies that teachers use to promote greater student learning; knowledge of what kinds of subject-matter understanding are necessary for teachers' work; and insights into the effective use of published instructional materials, the differences between teaching math and writing, and the difficulties of teacher improvement (Institute for Research on Teaching, 1986).

Several of the projects associated with the IRT spawned lasting lines of research and drew scholars to MSU whose work has significantly influenced the field. Christopher Clark and Penelope Peterson, for example, used the IRT as a launching pad for several oft-cited studies of teachers' thought processes (e.g., Clark & Peterson, 1986). Andy Anderson, Kathy Roth, and their colleagues began their influential studies of children's misperceptions in science and the ways in which teachers can act on those misunderstandings at the IRT (e.g., Anderson, 1985; Anderson & Smith, 1986). Jere Brophy initiated a series of widely read studies of teachers' strategies for managing enduring classroom problems (e.g., Brophy, 1981; Good & Brophy, 1986). Sharon Feiman-Nemser directed a project aimed at understanding how prospective teachers construct

knowledge about teaching during pre-service education (Institute for Research on Teaching, 1986; see also, for example, Feiman-Nemser, 1983; Feiman-Nemser & Buchmann, 1985). Working closely with Feiman-Nemser on that project was Deborah Loewenberg Ball, who was then a graduate student and would go on to become a College of Education faculty member and a leading scholar of the mathematical knowledge needed for teaching. A number of other researchers, including Linda Anderson, Dick Prawat, Andy Porter, Margaret Buchmann, Bob Floden, Richard Navarro, and Jack Schwille, all initiated innovative projects while affiliated with the IRT. Because Lanier and Shulman had convinced both their own dean and MSU's provost to make academic appointments in the College of Education for every researcher appointed in the IRT, all of these individuals were part of the Michigan State community, working with students, contributing to faculty discussion and debate, and influencing the general orientation and commitments of the College.

Many of the current and former MSU faculty members whom I interviewed for this study recalled the IRT as enormously influential for their own careers and for the College of Education as a collective. One long-time MSU faculty member and one-time administrator remembers that "even in the early days, there were strong people hanging around, including Judy Lanier and Joseph Schwab, all talking about how to improve teacher education...it was very exciting and stimulating to work with such interesting people" (Anonymous 1, interview, September 6, 2006, transcript i.m.p.). Another individual who became a faculty leader during the Holmes Group era reforms credits the IRT with providing much of the expertise on which she and her colleagues drew to redesign teacher education at MSU: "Many of us had benefited from Joe Schwab, who led many teaching and learning discussions during IRT times. Years of colloquium opportunities associated with the IRT influenced many of the participants" (Anonymous 3, interview, September 15, 2007, transcript i.m.p.). Another faculty member who was also involved with the Holmes Group at the national level notes that even as early as the IRT, MSU was developing a reputation as the home of first-rate scholars: "With the leadership of Judy Lanier and Lee

Shulman, MSU had assembled a very distinguished faculty, so it had status leadership" (Anonymous 17, interview, May 8, 2009, transcript i.m.p.).

Intensive efforts at Michigan State to study teachers and teaching, and to continue to build a faculty committed to the enterprise, did not end with the IRT. When funding for the Institute expired after ten years, several COE faculty members won a grant from the Office of Educational Research and Improvement, U.S. Department of Education to establish a new center for research on teachers. The National Center for Research on Teacher Education was launched in 1985, and renamed the National Center for Research on Teacher Learning (NCRTL) in 1991 (About the NCTRL, n.d.). Whereas the IRT had focused on practicing teachers and on understanding classroom instruction, the NCRTL took up questions about teacher preparation. Working on a single, longitudinal project, the Teacher Education and Learning to Teach Study (TELT), researchers examined a variety of approaches to teacher education, including preservice, in-service, alternate route, and induction programs, in order to understand the purposes of teacher education, the character and quality of teacher education, and the role of teacher education in teacher learning (About the NCTRL, n.d.). By the time Holmes Group efforts got underway in Erickson Hall in the late 1980s, NCRTL researchers were immersed in trying to understand why learning to teach was so difficult, a project that stood to contribute crucial knowledge to the enterprise of teacher education and inform the Holmes agenda. Their investigations centered around teachers' assumptions about teaching and learning, their subjectmatter knowledge and understanding of student diversity, and the effects of reflective practice. Over the years, researchers associated with the NCRTL produced more than one hundred papers, research reports, articles, and video packages, many of which are still consulted and cited in the scholarly literature. The work of several well-known researchers, including Mary Kennedy, who became the Center's director, Sharon Feiman-Nemser, Bob Floden, Bill McDiarmid, Deborah Loewenberg Ball, and Suzanne Wilson, to name only a few, was nurtured through NCRTL projects.

Building on the foundation laid by the IRT, the NCRTL helped to establish Michigan State as an epicenter of efforts to understand teaching as a complex practice and teacher education as a fundamental lever for developing a skilled, effective teaching force. NCRTL researchers brought a particular focus to bear on questions about what kinds of knowledge teachers needed in order to be effective, and what kinds of professional education experiences helped students of teaching most, the answers to which stood to contribute to the development of the teacher education curriculum. The interests and questions of these researchers often derived directly from their own experiences working with student teachers, and from a desire to understand how best to prepare instructors for America's changing classrooms. Unlike their counterparts in many other colleges of education, Michigan State faculty members were digging deeply into questions of teaching and learning. Their commitments, and the infrastructure they had built for their work by the early 1980s, made Michigan State a distinctive feature on the landscape of education research, significantly in advance of the Holmes Group and before teacher education was formally considered a field of study.

From STEP to SEPP: Three Decades of Teacher Education Experimentation

Not surprisingly, interest in the study of teaching and teacher education at Michigan State was preceded by an intense commitment to the preparation of education professionals. Decades before the founding of the NCRTL, faculty members had begun experimenting with different approaches to teacher preparation using their own program as laboratories. In the early 1960s, the College entered a period of earnest efforts to improve teacher education and expand the supply of teachers that would last through the Lanier years. Directly or indirectly, this era in the College's history and the collective learning that it engendered influenced many of the faculty members and programs later associated with the Holmes Group. Most projects centered around increasing the amount of time students spent in field placements and tying teacher education more closely to local communities, aspirations which MSU would continue to pursue throughout the 1980s and into the early 1990s. Several helped to establish MSU as a flagship site of contemporary efforts to develop field-based professional education for teachers and put the

College of Education on the map of cutting-edge American teacher education—not just in the realm of research, but in practice.

Launched in 1960 with a \$585,000 grant from the Ford Foundation, the Student Teacher Experimental Program (STEP) was the first of several internship-based programs sponsored by the College of Education. Operating alongside a larger, more traditional program, STEP placed students in year-long internships with classroom teachers in rural communities across Michigan (Inzunza, 2002). A popular program that continued to grow in enrollment, STEP was successfully converted to the Elementary Intern Program (EIP) when Ford Foundation funding ended. The EIP served even larger numbers of students than STEP had and thrived through the early 1970s. Several other experimental programs emphasizing heavy doses of field experience followed, including Training Teachers of Teachers ("Triple T"), Teacher Corps, Excellence in Elementary Education (EEE), and Secondary Education Pilot Program (SEPP) (Inzuna, 2002). While most of these programs enrolled only small numbers of students, all of them attracted faculty members with special interests in preparing teachers, several of whom took jobs at MSU because of the opportunity to work on innovative teacher education programming (Inzuna, 2002). Many of these faculty members were simultaneously engaged in research in the IRT and then the NCRTL and helped to transfer ideas across the realms of research and practice at MSU.

Judy Lanier was involved in many of these projects, and in the early 1980s launched another round of reform in teacher education. This one capitalized on lessons learned from the experimental programs of the 1960s and 1970s and on knowledge of teachers and teaching growing out of the IRT to develop four small, thematic programs that would provide alternatives to students who opted out of MSU's large, traditional teacher preparation program. According to a course catalogue from the time, each program emphasized a particular aspect of the work of teaching: *academic learning* ("designed to promote excellence in teaching four general academic subject areas: English and language arts, social studies, mathematics, and science"); heterogeneous classrooms ("designed to prepare prospective teachers to function effectively in classrooms which are characterized by the presence of students who reflect the rich diversity of

our modern American society"); *learning community* ("prepares students to create opportunities for personal and cooperative learning in classrooms"); and *multiple perspectives* ("designed to educate teachers to negotiate the difficult and often contradictory demands of teaching as they promote the purposes of schooling...conceives of the teacher as a decision-maker, not a technician"). Each program admitted between 20 and 40 students per year; all four were open to elementary education students while Multiple Perspectives and Academic Learning were also open to secondary education students (Inzunza, 2002).

The four thematic programs were immediately popular, drawing committed instructors and students alike. Faculty members who were involved remember that because of their small size, the alternative programs were able to provide in-depth academic experiences and a sense of community that were impossible in a larger program:

MSU was like a large high school that had developed a few high-quality alternative programs. There was a clear contrast between the intense academic and personal experiences students had in the four experimental units and the plain vanilla fare the mainstream program offered. Like special programs in a high school, these had the flair and dash of little boutiques. With their small size and webs of personal connection, they were able to invest in school sites with teachers who were known quantities, solving some of the big teacher education dilemmas of field placement (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007, p. 11).

For the first few years of the 1980s, the four alternative programs continued to serve as laboratories for MSU faculty members and graduate students eager to experiment with the best ways to prepare teachers. Several faculty members, including Sharon Feiman-Nemser (one of the first faculty members Lanier recruited after she became dean) and Susan Florio-Ruane, for example, devoted a great deal of time to developing and sustaining the programs with which they were involved, and Feiman-Nemser directed a research project that investigated students' progress as they moved through two of the programs (Anonymous 25, interview, August 16, 2006, transcript i.m.p.). Most COE students and instructors still participated in the large, "standard" program, but for a lucky few, the alternative programs offered special opportunities to

study the work of teaching in depth and to observe and practice their craft in excellent school field sites.

Resources for Reform

It was in the midst of all of this work that Judy Lanier found herself being recruited to the position of acting dean of the College of Education. This was a time of severe fiscal austerity in the state of Michigan and at Michigan State, and the College of Education was in trouble. In 1980, Education was losing enrollment more quickly than any other college at MSU, and the university was considering widespread budget cuts. To reduce costs temporarily, MSU's administration planned to hire a short-term acting dean for the COE before permanently filling the position vacated by Dean Keith Goldhammer. Lanier's leadership abilities and her tough stance on issues that she cared about had not gone unnoticed, and Provost Lee Winder wanted the IRT co-director to become acting dean.

Lanier accepted the offer even though she had not been seeking the position, but she did so only after a set of strategic negotiations. She knew what kinds of changes she thought needed to be made in the College of Education and she knew only too well the ways in which MSU's central administration had deprived the College of resources in the past, particularly in teacher education. Before answering Provost Winder affirmatively, she made sure she would have what she needed to make significant improvements in the College.

As Lanier negotiated with Winder, the recent history of the College of Education was very much on her mind. Despite a clear commitment to studying practice and to preparing teachers, Michigan State, like many other universities at the time, had marginalized teacher education when it came to budgeting and to protecting faculty members' time. Lanier remembers that from the time that she arrived on the faculty in the 1960s through the beginning of her deanship, the most privileged faculty members in the College were those who worked on the edges of teaching and learning—those in school administration, counseling, educational psychology, and similar fields. They had larger budgets, smaller teaching loads, and more time for research than anyone else in the College. Reportedly, many would arrive at the faculty lounge promptly at 10:00 a.m.

every morning for coffee and spend hours there talking and relaxing. "It really was a good old boys' paradise," Lanier recalls (J. Lanier, interview, October 7, 2010, transcript i.m.p.). At the same time, in the 1960s and early 1970s, the College was swamped with students who wanted to become teachers, many of them attending MSU on the GI Bill and bringing loads of tuition dollars to the university. Lanier reports that more than a thousand students at a time were often enrolled in student teaching, which cost the university almost nothing even as students were charged full tuition. Meanwhile, faculty members in teacher education were spending large amounts of time teaching over-enrolled lecture classes, with little time left over for research or other pursuits. When Lanier became acting dean, her goal was to change this.

In one of the first conversations Lanier had with Winder after he asked her to consider the position, she told the provost that she wanted "to understand why you think it's okay for the College of Education faculty, as long as they're in teacher education, not to have adequate time for research at this land-grant institution" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). Winder reportedly replied candidly, telling Lanier that he didn't think most faculty members in teacher education were capable of conducting high-quality research. Lanier remembers her response clearly:

I told him, well, probably some are and some aren't. But a good number of these people have done good work on their dissertations, they've been trained to do research, but they don't have the opportunity to do it now. And if they haven't got the skills they need, then we should give them the opportunity to learn, with controlled sabbaticals and other such things. If they can't do it, then we should punish them somehow or find something else for them to do—they shouldn't be teaching teachers anyway if they can't engage in inquiry (J. Lanier, interview, October 7, 2010, transcript i.m.p.).

Lanier apparently persuaded Winder, because the provost agreed to provide additional research support for teacher education faculty members if Lanier became acting dean, including funds for sabbaticals that were focused on learning to do particular kinds of research and trips to specialized research institutes around the country. Once she became dean, Lanier required her faculty members to submit detailed applications for sabbaticals, and denied requests that she did not think would foster the applicant's ability to carry out high quality research.

But Lanier worried also about who would support her own learning as dean, and who would look out for her if she got into trouble in the role. She explains:

I'd watched many women through the course of the women's movement take positions they weren't qualified for, and then fail, and then take the heat for it. And I learned from that. I knew better than to get myself into something that I couldn't succeed at. You're so dependent in the university on the central administration, especially if you're the weak guy on the block. I needed to have someone who wanted me to succeed as much as I wanted to succeed (J. Lanier, interview, October 7, 2010, transcript i.m.p.).

Eventually, Provost Winder agreed that Lanier could approach him directly if she ran into trouble of any kind. In part, this was to protect her from the associate provost at whom Lanier was already angry for her failure to provide resources to the College; it was also a response to Lanier's complaints about the budget being removed from her control when she had earlier become director of the School for Teacher Education and the associate dean. "This sealed it for me," remembers Lanier. "He was going to help me around the forces at the university that might otherwise do me in." In a final strategic move, Lanier convinced the provost to meet with the faculty in the College and tell them that she had his full support; when the provost arrived in Erickson Hall, he told the faculty that Lanier had "boxed him around the ears" in order to get him to commit resources for their work, and that he was fully behind her. "This was important," says Lanier, "because it showed the faculty that I was working for them, that I was going to protect them" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). Less than a year later, the faculty successfully petitioned for Lanier to become their permanent dean—a strong vote of support for a women who was clearly their champion.

Over the next several years, Lanier participated in one of the harshest periods of budget reduction in the university's history. The mandate from MSU's president and provost to reduce all budgets by at least fifteen percent would have traumatized many deans, but to Lanier, it represented an opportunity to improve the College's programs by trimming the fat and refocusing the College on core educational problems. Michigan State's central administration had already taken steps to reduce costs by eliminating secretarial positions and graduate assistantships; the

strategy now was to eliminate programs so that the university could ensure quality in what it did offer. The new dean began by making several strategic appointments to assistant and associate dean positions, making sure to select individuals who were respected throughout the College but who "were smart, liked to read, and were principled people" (J. Lanier, interview, October 7, 2010, transcript i.m.p.). She engaged them and others on the faculty in careful consideration of MSU's commitments as a land-grant institution and member of the Association of American Universities (AAU), and charged them with acting according to these principles as they proposed what to abolish. She pushed associate deans and department chairs to think hard about what the mission of a college of education in a research university should be, and she fearlessly challenged proposals that she did not think made sense, sometimes sending department chairs back to the drawing board.

In the end, the proposal that Lanier submitted to the special university committee that had been assigned to oversee the reduction process not only exceeded what the university had called for but was far more radical than the plans submitted by other deans, many of whom hadn't proposed many program cuts at all. After the College of Education's plans were submitted to the special committee during a weekend meeting, stunned committee members wondered aloud why other units hadn't accomplished what the COE had. Lee Shulman, in the room representing the College of Education, reportedly responded, "I guess they just didn't have the ovaries for it!" The committee roared with laughter, and Lanier's reputation as an intrepid leader was cemented at the highest levels of university administration. Back in Erickson Hall, several of the programs Lanier considered most marginal to teaching and teacher education were on the chopping block, and with them a number of tenured faculty members whom the dean was not sorry to see leave.

As this period of retrenchment came to a close in the mid-1980s, Lanier had built a stronger college. She had eliminated programs and faculty members that were marginal to core educational problems. She had capitalized on her positions at the helm of both the IRT and the College to develop a faculty that was skilled and experienced in both the conduct of research on

teacher training and the design and delivery of practice-oriented approaches to professional education. Under her leadership, the College had developed a vibrant atmosphere in which new research projects and new experimental programs were constantly under development. This environment, and these people, would be a tremendous resource for Lanier and for all those who continued to pursue improvement in teacher education at Michigan State. In the next few years, they made it easier for Lanier and her colleagues to contemplate designing approaches to teacher education that would directly incorporate the most up-to-date knowledge of practice and its entailments. In particular, they facilitated Lanier's efforts to recruit new talent to her faculty, even before she began the Holmes Group.

In the early 1980s, for example, Lanier invited Harry Judge, the British education researcher who had just published a caustic critique of teacher education in American research universities, to visit her campus and to participate in conversations with College of Education faculty members (H. Judge, interview, September 23, 2009, transcript i.m.p.). Judge began making extended stays in East Lansing; over the course of a number of years, he returned to campus repeatedly to observe and advise Lanier and her colleagues. He earned the respect of many COE faculty members, most of whom remember him as a major source of inspiration for the Holmes Group reforms. Lanier also used Michigan State's distinctive commitment to teacher education to draw capable scholars and professional educators to full-time faculty positions. In 1984, for example, she recruited Magdalene Lampert, a recent graduate of Harvard's doctoral program with a strong interest in teachers and teaching, to the faculty; with Lampert came her husband, David Cohen, a well-known education policy analyst with an interest in practice. The move of a tenured faculty member from the Graduate School of Education at Harvard to a cow college in the rural Midwest--particularly for the purpose of working on teacher education--was unprecedented, and signified how impressive the reputation of the College of Education had grown and how strong Lanier's pull was.

By the time Lanier began meeting with the group of deans who would form the Holmes Group, Michigan State was already ahead when it came to developing and studying strong,

practice-oriented professional education for teachers and to supporting an intellectual climate conducive to the work. One long-time MSU administrator and faculty member observed that as early as the late 1970s, the College of Education "was trying to take itself seriously as a professional school...it wasn't just a frustrated liberal arts department as a lot of ed schools were inside their universities. MSU saw itself as a distinctive professional school with professional commitments" (Anonymous 24, interview, July 18, 2006, transcript i.m.p.). As did many of his colleagues, one individual who was recruited to MSU by Lanier to play a leading role in the reforms associated with the Holmes Group reported that the work already going on in the COE was a chief reason that he took the job: "There was a general tenor of the place that said, 'You know, this is a good idea and we can combine research and a real intellectual base for all of this with good connections,' and that was all very exciting, extremely attractive to me" (Anonymous 7, interview, August 22, 2006, transcript i.m.p.). Another individual whom Lanier recruited to an assistant professorship made a similar comment: "All of the most interesting things that we were reading when I was in grad school were by people at Michigan State, like Sharon Feiman-Nemser and Margaret Buchmann and Bob Floden, and it just seemed to me like it was a place where things were happening" (Anonymous 19, interview, July 24, 2006, transcript i.m.p.).

Gary Sykes, a longtime member of the MSU faculty who contributed to the writing of *Tomorrow's Schools*, summed up the hopes Lanier and her colleagues had for what MSU could become, and why they were so optimistic:

The hope was that we would become the [Johns] Hopkins, we'd pull it off here, become the institution that other campuses would begin to emulate. And we had a shot at it, because we tried to bring two things together, and these two things co-exist very uneasily: One is the Research 1 tradition and the other is the landgrant tradition. One is dedicated largely to scholarship; the other is dedicated largely to local service. And teacher education sits at the intersection. If you want to produce a knowledge-based profession, then you need to mobilize research in the service of the profession, you needed to have research on teacher preparation, on how teachers learn how to teach...so you had to have a research faculty, but you couldn't have that research faculty pull away from the business of educating teachers...So the question was, "Could you produce a top-quality teacher preparation program at scale in an institution that merged Research 1 traditions with land-grant traditions?" That was the challenge and in some respects the hope and promise of the MSU program. The thought that it might be done came first because MSU prepared lots of teachers so it was a

large public [university], and second, with the leadership of Judy and Lee Shulman, the institution actually had assembled a very distinguished faculty—we had won the Institute for Research on Teaching. We had won the National Center for Research on Teacher Learning and it was located here. So it looked like we had this powerful conjunction of research funding, a mission to train many teachers, and a strong faculty with the expertise and the passion to pull this off (G. Sykes, interview, May 8, 2009, transcript i.m.p.).

Still, Lanier would face a difficult task when she set out, several years after the instantiation of the four alternative programs, to rally her entire faculty around a new plan for reform and to reconstruct the expectations and norms for scholarship and professional responsibilities inside a school of education. Even though research and practice at MSU were advanced, the College of Education had a large faculty, not all of whom were as committed to teacher education as some others, and Lanier relied on virtually all of her faculty members to staff fully the College's teacher education programs, which still included the large, "standard" program. Further, many earlier successes in designing innovative teacher education programs at MSU had resulted from collaborations among small groups of faculty members who were licensed to work largely on their own, independent of the rest of the faculty. Asking virtually everyone on the faculty to work together toward a single, common end would be a very different undertaking from charging small, committed teams with constructing alternative or experimental programs. And perhaps most important, Michigan State, like every other institution involved in preparing teachers, was still hampered by incomplete knowledge of teaching practice and of the work of teacher education. COE faculty members had learned a great deal, and they continued to produce knowledge relevant to the enterprise, but a great deal was still unknown. The ambitions of Lanier and her colleagues in the Holmes Group, in contrast, were vast.

Launching Reform at Michigan State

For Judy Lanier, it was not enough that MSU had developed a few "boutique" teacher education programs that served a small fraction of students well. Even as the four alternative programs thrived, the majority of College of Education students were still shuttled through the "standard program," taking required courses in no particular order, many of them in large lecture

halls, and participating in no more than ten weeks of student teaching (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). They were often denied access to advanced courses in the subjects that they would teach. And in institutions around the United States, most students of teaching received training for the classroom that was just as weak, if not worse. Lanier was determined to change this, and in the process to redefine the work of teacher educators and education researchers. She was disgusted with what she termed the "boots and galoshes" approach to teacher education, or the idea that all teachers needed to learn was how to help children dress for recess, and fed up with tolerance for irrelevant and poor quality education research. As her home campus and the inspiration for her commitment, Michigan State's College of Education became ground zero for her efforts. Soon after she formed the Holmes Group, Lanier launched what she intended to be a major reform of MSU's teacher education program and an existence-proof for other Holmes Group institutions.

As luck would have it, Lanier's decision to redesign the teacher education program was roughly contemporary with a late-1980s, university-wide faculty vote to shift MSU's academic calendar from a "trimester" plan to a "semester" plan. Beginning in the fall of 1992, the faculty decided, MSU's academic calendar would be organized into two semesters rather than three. The plan necessitated a great deal of work for members of every department across the university. Each course that the university offered had to be redesigned so that its contents could be somehow accommodated by the new schedule, and then every new course had to be assigned a number, title, and credit hours. Requirements for majors and minors in every department, including the College of Education, had to be shifted to reflect the new course listings. The compulsion to redesign every course and program so that they aligned with the new calendar provided a natural timeline for Judy Lanier and her colleagues, who adopted September, 1992—the university-wide beginning of the new semester calendar—as the start-date for the proposed new teacher education program. The approach of this deadline provided a natural motivation for change and lent a sense of urgency to deliberations and design work in the College of Education.

These deliberations and subsequent efforts to redesign the teacher education program were anything but smooth. As Lanier used the "semester transition," as it came to be known, to push a set of major changes in teacher education through MSU's Academic Governance, she began to provoke not only another round of work to improve teacher education, but a serious College-wide discussion of the responsibilities of faculty members, the role of university leaders, and the commitments of education research. These discussions challenged nearly everyone in Erickson Hall and left many weary and frustrated, if no less committed to improving teacher education.

The 1988 Taskforce Report and the Origins of Change

When Lanier and Henrietta Barnes, the chair of the Department of Teacher Education and Lanier's close colleague and confidant, began contemplating the launch of a major reform effort in association with the Holmes Group, many of their fellow faculty members in Erickson Hall were already happily absorbed in their work, some of the most prominent in the four alternative programs. A first order of business was to engage a quorum of faculty members in this new project, and ultimately to persuade the entire College to embrace the idea of change and to work on the redesign effort. Although Lanier remembers the launch of reform inside the College as a relatively smooth process in which most faculty members participated willingly, several faculty members have different recollections. Many report that Lanier accomplished this task only over some amount of resistance, and some describe having been railroaded into accepting change. By most accounts, the call for change met with very mixed reactions among a faculty that was largely satisfied with existing arrangements for teacher education.

Many of those involved point to a faculty study group convened by the dean in May of 1987 as the first step in a new direction, and artifacts from this group's work are the first indications I have found of plans for change in the COE in the late 1980s. Lanier assembled a 23-member taskforce that included several long-time members of the faculty and committed teacher educators, among them Susan Florio-Ruane, Perry Lanier, Michael Sedlak, Gary Sykes, and Andy Anderson, and charged it with making recommendations for how the College could build on its

past accomplishments to improve teacher education at MSU. The plan was for the taskforce to develop recommendations that would help shape official petitions for change in the teacher education program that would be submitted to MSU's Academic Governance.

The formation of this group, named the Task Force for Reform of Teacher Education at Michigan State University, was the dean's first opportunity to recruit her colleagues to a change effort and to help them develop a vision for how teacher education at MSU could be improved. On the surface, it looked as though Lanier had succeeded. After several months of deliberation, the taskforce produced a written report that praised the COE for its achievements in teacher education but recommended a number of changes, including the expansion of the program from four to five years and the strengthening of subject-matter, professional, and clinical training (Report of the Task Force for Reform of Teacher Education at Michigan State University College of Education). Over the next few years, the ideas laid out in the report would become the foundation for the major redesign of the COE's teacher education programs. The four alternative programs were disbanded, requirements for course-taking in the liberal arts were expanded, professional and clinical coursework was strengthened, and all students were placed in cohorts and required to complete a five year program capped by a year-long internship.

College of Education faculty members disagree, however, about the extent to which the taskforce was representative of the larger faculty or whether the written report represented the views of its authors—and their disagreement is emblematic of the intense combination of excitement, commitment, and alienation that would pervade the College of Education for the remainder of Lanier's deanship. In the introduction to their written report, produced in September 1988, taskforce members suggested that they endorsed the idea that change was needed. They described their work as "a logical next step in the educational innovation and reform that has long characterized teacher education at Michigan State University" and explained that their recommendations stemmed from both pride over what they had already accomplished on a small scale in the COE and recognition of continuing constraints on teacher education, including gaps in students' liberal arts preparation and weaknesses in the COE's relationships

with the K-12 schools in which students completed fieldwork and student teaching. They also wrote that their work was "spurred by numerous reforms proposed in reports such as *Tomorrow's Teachers, Teachers for the 21*st *Century,* and *Time for Results: The Governors 1991 Report on Education,*" suggesting a close connection between their own proposals and external calls for change on the national level. The 34 page report is concise and suggests conviction and consensus among its authors. Other than a brief reference to the "strengths and potential contributions of the current thematic approaches to teacher certification," there is nothing that indicates anything but full agreement around the taskforce's recommendations.

And some of those involved do remember the taskforce, and the subsequent changes, as largely driven by the faculty. For example, one individual, a close associate of Lanier's who served in an administrative role in the College and also worked with the Holmes Group on the national level, reports that many faculty members had grown dissatisfied by the four alternative programs' exclusive focus on only some aspects of the work of teaching, and that Lanier formed the study group to allow them a forum for their concerns:

A number of faculty associated with each of them became a little dissatisfied with the more specialized focus...they liked a lot of the features of the alternatives – the cohort quality, the connection to the field, and certainly they liked the content focus, but they realized continually what was missing was a lot of emphasis from the other three of these domains. So...somewhere around 1985, Judy convened kind of a study group that was charged with thinking about what to do, voicing these concerns. The members were drawn from each of the four programs, and they were kind of charged with highlighting what their concerns were at that time. They shared readings, talked about some of the frustrations, some of the things they thought had gone pretty well, some of the things that they would want to continue and extend if they didn't have the constraints of the four year degree, if they could focus more on a cohort model rather than just kind of random scheduling and movement through a program, if they could think more about spiraling in their curriculum and field experiences (Anonymous 24, interview, July 18, 2006, transcript i.m.p.).

In this person's memory, the impetus for change came from the faculty, rather than solely from Lanier or other members of the College administration.

But there is evidence that others were miffed by the report and by Lanier's insistence that the College launch yet another round of reform. One person who occasionally served in

administrative roles in the College of Education reports that even before 1988, Lanier had "enemies" among the faculty, particularly among those not directly involved in teacher education. He remembers that when MSU's provost conducted a fifth-year review of Lanier at the end of her first term, he commented that he had never seen such a bipolar set of views among the faculty toward a dean (Anonymous 1, interview, September 6, 2006, transcript i.m.p.). The sentiment that teacher education should be the College of Education's raison d'etre evidenced by the report did little to ingratiate Lanier among her colleagues who were not directly involved in teacher education or who had research interests outside of professional education. And even among those most committed to teacher education, there were signs of unease. Several individuals have reported that at least a few of the faculty members who were deeply involved in the alternative programs regretted the announcement of change—they repeatedly mention Susan Florio-Ruane, for example, in this context. Florio-Ruane was a committed teacher educator who had come to Michigan State from Harvard and invested a significant amount of energy in the alternative programs. One of her colleagues reports that, "Susan Florio-Ruane had regrets about losing the program that she had, which she thought was great" (Anonymous 1, interview, September 6, 2006, transcript i.m.p.). Another expanded:

Some people were really angry about there being change made, because there'd been a lot of effort associated with these alternative programs, and the people affiliated with them for the most part were very invested in them...Susan Florio-Ruane, I think, really felt like something had been stolen from her, and she was really angry, and angry for a long time, about Learning Communities ending, because there were lots of reasons to think it was a good program...There were just many good things going on and good people teaching in it, and it seemed...like the program got stripped away all of a sudden, and we suddenly had to make new programs, and it wasn't clear why (Anonymous 25, interview, August 16, 2006, transcript i.m.p.).

The individuals quoted here, and others, insist that the changes associated with the 1988 taskforce report were driven by the administration rather than the faculty.

Some of the individuals interviewed for this study recall that Lanier's interest in change simply coincided with the same interest among faculty members, and argue that although some of their colleagues may have resented what they saw as Lanier's intrusive leadership, the push

for change was widely shared. Anonymous 1, for example, opined that "it probably wasn't one way or the other... I have the sense that the initial impetus came from Judy, but then it went through and there was a taskforce and they thought about it...it [change] needed something to tip it, to get people to put the work in to think about doing something different." Another longtime faculty member recollected that "directions and ideas for reform were coming both from the dean's office and from the faculty...Judy, Joyce [Putnam, another COE administrator], and Henrietta probably made their thoughts known at the same time that faculty members were talking about [change]" (Anonymous 21, interview, July 8, 2009, transcript i.m.p.). Several faculty members who were not involved in the 1988 taskforce but participated energetically in the reforms associated with the semester transition barely remember seeing the report. One commented that she "would not have rushed to affiliate with the report," implying that she thought it was mere "window dressing," and that the real work of reform would take place in the actual design of the new program (Anonymous 5, interview, April 17, 2007, transcript i.m.p.). Another individual who was recruited to MSU specifically to participate in the reform and characterizes herself as very supportive of Lanier's efforts remembers a faculty divided: "I remember that there was a lot of talk, kind of a split faculty - people who were really supportive and people who were feeling that this was imposed on them and feeling that they were put upon and they didn't have choices" (Anonymous 12, interview, August 31, 2006, transcript i.m.p.).

I raise evidence that not all faculty members met the call for change with equal enthusiasm because simmering discontent among the faculty would become a theme of the 1992 semester transition and the work associated with it. Lanier's persuasive leadership, unmatched commitment to improving teacher education, and personal charisma would help propel the College of Education toward important changes, but the dean's apparent inability to gauge and respond to the beliefs, inclinations, and goals of her faculty, and to recruit and maintain genuine support among her colleagues, would ultimately limit what she could accomplish. Like reform in other kinds of educational enterprises, reform in teacher education at MSU depended largely on

practitioners. If practitioners could not or would not do the work that needed to be done, even a leader with the commitment and resolve of Judy Lanier could not achieve success.

Goals for Reform

Disagreement over its origins notwithstanding, the 1988 taskforce report became a widely referenced document in the College of Education. Those who worked on the 1992 semester transition frequently looked to the ideas laid out in the report, whether or not they were familiar with the document or agreed with its premise, and the report remains one of the most specific descriptions associated with the semester transition.

The ideas for change in the document were consonant with Holmes Group proposals, but narrower and sometimes more specific, reflecting themes in the four alternative programs, lessons about field experience learned from decades of prior experimentation in teacher education, and knowledge produced by scholars affiliated with the IRT. The report did not directly address some of the issues on the periphery of teacher education that were featured in the Holmes Group reports, such as changes in teacher licensure, public policy, or education research, but instead focused on initial teacher preparation.

The report's recommendations clustered around four goals for an improved teacher education program: to instill deep understanding of subject-matter and content specific pedagogy; to inculcate a commitment to equitable access to learning and to equip graduates to help all of their students achieve high standards of learning; to prepare students to establish "learning communities" in their classrooms and schools; and to instill professional norms that would improve graduates' engagement in the profession, decision-making, and practice in the future. Taken together, these goals recalled the thematic emphases of the four alternative programs and reflected developing interest in the special demands of instruction in each school subject-area and in meeting the needs of an increasingly diverse student population. The report's authors lingered for several paragraphs on the shortcomings of majors in liberal arts disciplines for prospective teachers, highlighting what they argued were their shallowness and incoherence. None of these criticisms or ideas was particularly new for faculty members in the COE; what was

special about the report was its call for changes in liberal arts departments; for professional training that would treat important aspects of teaching more equally, rather than emphasize some over others; and for the provision of high quality teacher education to all comers, rather than just a select few.

Members of the taskforce also identified eleven guidelines for program development, which they described as "non-negotiable" for any proposal for change associated with the report, particularly for documents that would be prepared for review by the university's academic governance system (p. 13):

- 1. Curriculum development should be guided by a clearly articulated conception of teaching and learning that specifies program philosophy, purposes, and goals.
- 2. Programs should be built around a conceptual change model of learning to teach.
- Opportunities to relate principles of teaching and learning to practice should be coordinated and systematically provided throughout the professional sequence of courses.
- 4. Relationships with teachers and principals within participating schools should be carefully negotiated.
- 5. Both teacher candidates and faculty should be members of cohorts.
- 6. Decisions about implementation of the approved curriculum and the operation of the program should be made at the program level.
- 7. The subject-matter preparation of prospective teachers should be strong and their ability to ensure that their students attain equally desirable levels of disciplinary and academic learning should be assured.
- 8. The professional studies program should assure the development of the teacher candidates' ability to promote equity and social justice in their classrooms and schools.
- 9. Teacher education should be more effectively connected to school improvement through innovations in the clinical preparation of prospective teachers.
- 10. The professional roles of all school-based educators should be strengthened and enriched.
- 11. The structural arrangement for teacher education at Michigan State University should be changed to include more time spent on subject-matter preparation at the undergraduate level and the extension of professional studies through an integrated baccalaureate/masters program.

Like the original four goals, these guidelines reflect several of MSU's pre-existing commitments as well as ideas gleaned from the experiences of faculty members in the four thematic programs and the IRT. The reference to a "conceptual change model of learning to teach," for example, derives from work that was underway at the IRT to identify children's misconceptions and to design responsive instruction; the focus on strong subject-matter preparation and on close connections to the field from MSU's previous experimental teacher education programs.

The interviews that I conducted for this study suggest that MSU faculty members' understanding of the primary goals of the 1992 reform accorded with the taskforce report. Most faculty members remember two main objectives: to incorporate the best of the four alternative programs into one, large program that would serve all of the COE's teacher education students; and to improve students' content-knowledge preparation. Although not all faculty members recall the 1988 taskforce report itself, virtually all of them remember that Dean Lanier touted these two goals and tried to galvanize the College into making changes in these directions. A large majority of interviewees also mentioned a desire for a more coherent curriculum—"a lock-step program in which every course is a prerequisite for every other course" (Anonymous 26, interview, August 28, 2006, transcript i.m.p.); "more integrated, not carved up like it was in the standard program" (Anonymous 24, interview, July 18, 2006, transcript i.m.p.); "a spiral curriculum" (Anonymous 21, interview, July 8, 2009, transcript i.m.p.) -- and for closer connections between on campus coursework and fieldwork in schools. They mentioned wanting to "expose interns to teachers who were open to trying new things, to developing their practice" (Anonymous 21, interview, July 8, 2009, transcript i.m.p.), to provide field experiences earlier in the program, and to ensure continuity between what was taught on campus and what students observed in local classrooms. A few individuals that I interviewed explicitly identified developing "education's equivalent of a teaching hospital" as a goal of the reform; several others mentioned changes in program structure, including, namely, putting all students into cohorts and lengthening the program to five years. But the goals most commonly named by both the report and faculty members in interviews have to do with curriculum, clinical settings, and program structure, and these match the discussion in the 1988 taskforce report.

In many respects, however, there is evidence that faculty members' understanding of the ideas in the report was deceptively limited. The report itself was often vague, probably for the same reasons that the Holmes Group's written reports were vague: Even at Michigan State, faculty members had only a general vision for what improved teacher education would be like; they could not specify the changes they sought in great detail. Near the end of the 1988 report,

taskforce members noted that they were "hesitant to impose all design specifics at this stage," and added that the new programs would need to be "developed by faculty teams with core leadership coming from the college's existing thematic alternative programs, but supplemented with additional faculty" (p. 30). Determining what constituted "strong" subject-matter preparation, identifying the content of an improved professional studies program, and designing a program around a conceptual change model all remained for other faculty members to accomplish. This lack of specificity in the 1988 taskforce report exemplified the dilemma caused by the reformers' reliance on practice and practitioners.

From the perspective afforded by the twenty first century, one area in which faculty members' uncertainty in the report stands out is in the discussion of the redesigned professional studies curriculum. Despite their repeated references to improved professional studies and to changes in the nature of work that would go on in student teachers' and interns' field placements, taskforce members were able to say little about the specific practices and skills prospective teachers should learn. Their ideas about "content-specific pedagogy" were undeveloped and there was no discussion about what novices should be able to do before receiving an initial license to practice. These gaps reflected the contemporary state of education research and teacher education. Although questions about what competent beginners should be able to do are fundamental for any field of professional education, these were not questions that many teacher educators were asking in the mid-1980s. The thin descriptions that resulted in the report make it difficult to discern the extent to which MSU faculty members envisioned a curriculum for learning to teach that would focus directly on core practices of teaching. Like the Holmes Group more generally, COE faculty members seemed to recognize that teacher education needed to attend more closely to practice, but not to know how to explain what that meant. They were only at the very beginning of what can now be viewed as a decades-long effort to develop the concept of clinical preparation for teachers, work that continues in the second decade of the twenty first century.

Additional evidence that the Holmes Group's and Michigan State's vision for practicefocused teacher education was still immature in the late 1980s comes in the form of a key omission in the taskforce report: The authors of that report rarely mentioned themselves or their fellow teacher educators as targets of change. They barely address the skill and understanding of the instructors who worked directly with prospective teachers, either on campus or in K-12 classrooms. Other than some brief discussion of the need for improvements in the professional education of school administrators in association with guideline number ten, the report makes no mention of any need for capacity building among those who worked with student teachers. With some exceptions, the Michigan State faculty members whom I interviewed did not mention a need for learning opportunities for themselves or their colleagues. One individual who became a leader in the new program mentioned seeking out strong doctoral students to work with student teachers; another remembered that teachers and administrators in local schools needed help understanding the new model once it was created. Only one faculty member explicitly recognized a need for professional development for some teacher educators, commenting that there was "teacher education work to do" with faculty members, doctoral students, and practicing teachers, "to induct them into the new standards and expectations of the program (Anonymous 24, interview, July 18, 2006, transcript i.m.p.). Even here, the focus is on "induction" into the new program rather than on developing specific skills. Other faculty members did not bring up teacher educators or the problem of instructional capacity at all.

Given my arguments in Chapter Two that more comprehensive reforms are more likely to be successful and that instructors occupy a key position in the "instructional triangle," the absence of references to teacher educators as important levers in improving teacher education among discussion of the goals of reform at MSU is conspicuous. It suggests the limits of the changes that MSU faculty members made, since greater changes would have required greater recognition of the need for learning. In fact, one reason that the individuals that I interviewed rarely indicated that they thought teacher educators at MSU would need to learn anything new may be that they did not fundamentally recreate their teacher education program. The "new"

program was not entirely new, but rather a rearrangement and expansion of older designs, with a few more substantive changes.

To summarize, I have found evidence that many faculty members at MSU regarded changes in teacher education as part of a broad push to transform the College of Education into a professional school, with professional and not just academic commitments, even though such a shift is not mentioned explicitly in the 1988 taskforce report. Several faculty members remember a college-wide drive for more practice-focused research and for the construction of professional development schools that would facilitate such research; a few mentioned plans for changing the system of incentives and rewards for faculty members so that it would recognize time spent in schools, doing teacher education and research on practice. Denizens of the College of Education in these years recall that Lanier's agenda included radical changes in the orientation of faculty members' work that would result not only in the improvement of teacher education but in the development of new knowledge about teaching. Unsurprisingly, missing from the documents I studied and the personal recollections that I gathered is in-depth discussion of the technical core of teaching and learning in the professional training of teachers. Administrators and faculty members in the COE wanted to design and implement teacher training that would prepare novices for the demands of practice. Looking back, it is possible to identify signs that they may not have fully understood what that meant.

Blunt Tools of Reform: New Faculty Members and New Teams

Given their ambitious but weakly specified goals, Judy Lanier and her fellow faculty members in the College of Education faced a challenge as the semester transition approached—one that seems, in retrospect, as though it would have been almost impossible to surmount. Provided only general guidelines, they had to redesign every aspect of their teacher education program, from the curriculum to the settings in which students observed and practiced, to the program's length and structure. They had to do all this with limited knowledge of teaching and of what approaches to teacher education were most likely to produce results. And they were

expected not only to improve their teacher education program, but to rethink what it meant to be a school of education inside a major research university.

When it came to leading teacher education reform in the 1980s, these challenges were compounded by the fact that the changes at stake required not just new kinds of scholarship, but design work and instructional efforts for which few faculty members are prepared. For Lanier, the work of reform was not just to make the case for change and encourage the faculty members on her roster to embrace it, but to engage those faculty members in doing the kind of first-level design work that I described in Chapter Three. And the goal wasn't merely to promote new kinds of scholarship, but to induce busy faculty members to use what they knew and could learn from scholarship to create a new curriculum for learning to teach, new methods and structures for delivering that curriculum, and new school settings in which students could practice. It was a broad and complex design project that would require a significant amount of collective work and learning. Given my hypotheses about how important faculty members would be to designing and implementing reform, one of the most important problems Lanier faced was how to help her faculty members learn to do this work. Among her options were to roll up her sleeves and dig into the design work herself, learning alongside the faculty and leading by example, or to provide deliberate learning opportunities for herself and her colleagues, perhaps in the form of workshops, seminars, or observations.

Instead, Lanier's strategy in Erickson Hall consisted primarily of hiring new faculty members whom the dean thought would be able and inclined toward teacher education reform, and reorganizing staffing and program structures in the College so that faculty expertise was more widely dispersed. Lanier disbanded the four alternative programs and effectively forced faculty members who had never worked together before, including some who had taught in the standard program, to come together in teams. She charged those new teams with getting the relevant design work done, and seemed to assume that they would do the work and do it well. Meanwhile, she focused her own attention on building a network of professional development schools that she hoped would encourage the fundamental shifts in education scholarship that she

sought. Throughout this period, she relied substantially on her own forceful and charismatic personality to persuade not only faculty members but numerous other stakeholders and potential supporters to participate in reform.

An Infusion of New Faculty Members

Inside the College of Education, one of Lanier's most powerful moves was to hire new faculty members. Between 1986 and 1992, she recruited more than thirty individuals to the faculty, some of them straight from doctoral programs and most of them committed to working on or in professional education and to the study of practice. Among these were several teacher educators who would both play key roles in the reform and go on to make important contributions to research on teaching and teacher education, including Deborah Loewenberg Ball, Daniel Chazen, Helen Featherstone, Joseph Featherstone, Bill McDiarmid, Lynne Paine, Cheryl Rosaen, Gary Sykes, Suzanne Wilson, and Lauren Young. This was a very large number of new hires for a single college, and Lanier accomplished it through a characteristic combination of persistence and creativity. "I'd often go over to the provost and show the credentials of young people I wanted to hire," she remembers. "I'd say, 'look at the chance we have to hire these people; if we don't get them now, we'll never get them." And if there was simply no money available for a new hire? "Well, we would mortgage it," Lanier reports. "We'd say, 'ok, this person is going to retire soon and if we can hire this other person now, they'll take this person's place.' And we'd use soft money to cover the new person until the old person retired" (J. Lanier, interview, October 7, 2010, transcript i.m.p.).

Although a few of these new faculty members had been doctoral students at MSU, most were new to the College of Education and chose to move to East Lansing specifically because they were excited to work with Judy Lanier and were drawn to the College's plans for change. Some of them, including Gary Sykes and Lauren Young, worked simultaneously for the Holmes Group on the national level. All brought a high level of energy, knowledge, and commitment to work on teacher education in Erickson Hall, and many remember this era in their careers as an extraordinarily rewarding and exciting one. In contrast with some of their colleagues who had

been working at Michigan State for several years or more, some of these new hires initially found Lanier's plans and her leadership style inspiring. One of them recalls that they had "a lot of faith that Judy would help us produce something new" (Anonymous 23, interview, April 17, 2007, transcript i.m.p.). Another recalls Lanier's persuasive sense of the possible:

I do think that Judy Lanier was a visionary...[and one of the reasons why you call people visionaries] is because they give you an image of something that's beyond your grasp. The fact that it's beyond your grasp is part of what makes it exciting and motivating and driving (Anonymous 19, interview, August 2, 2006, transcript i.m.p.).

Others made similar comments. One faculty member who would eventually assume a leadership position in the new program reports that, "We had a very strong dean and department chair...I think it was Henrietta or Judy who just said, "we're gonna make this happen'" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). Still another explains that Lanier, "had a lot of energy and there was a lot of excitement...there was this huge upside, all this energy, all this excitement, all this sense of sort of we can take on the world and do anything. She was very charismatic and people kind of fell in line" (Anonymous 6, interview, May 8, 2009, transcript i.m.p.). One faculty member who was active in the PDS work observed that Lanier, "had a tremendous amount of drive, she worked like hell, and she wasn't afraid to take on major new projects...it's difficult for most of us within the setting to imagine any of this unfolding without Judy's involvement" (Anonymous 7, interview, August 22, 2006, transcript i.m.p.). Still another made a similar remark, asserting that Judy was, "an absolute master politician. I don't know how we would have engineered the new program through the university without her" (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). In these years, support for Lanier ran high, and excitement and energy were everywhere in the College.

This wave of new faculty members, many of whom were committed to Lanier and shared her vision for dramatically improved teacher education, contributed a great deal to the efforts in the College of Education. Deborah Ball and Suzanne Wilson, for example, created the basic outline of the new, five-year program and drafted its first course descriptions; later, they would

teach extensively and, by all accounts, well, in the new program. Helen Featherstone, Joseph Featherstone, Cheryl Rosaen, and Lauren Young all served as team leaders, in the process taking responsibility for a significant amount of difficult and time consuming design work and administrative issues. Others, including David Cohen and Gary Sykes, provided moral and intellectual support to Lanier and to other leaders and helped recruit resources of various kinds to the College. Many of these individuals are still faculty members at Michigan State, and all of them helped to maintain and even grow the reputation of the College of Education as a center of excellence in teacher education. Hiring them helped Lanier accomplish a good deal.

Still, these new faculty members could not create and teach a new teacher education program, build professional development schools, and shift the course of education research on their own. They, too, depended on colleagues to contribute intellectual expertise and energy to designing and teaching the new program and to carry out research in professional development schools. Their willingness and know-how proved powerful but insufficient—and their enthusiasm for working with Lanier began to dwindle as the reform efforts progressed.

New Teams and the Push Through Academic Governance

Even as she hired new faculty members, Lanier organized virtually every member of the faculty into several rounds of design teams, and she relied on these teams to carry out almost all of the first-level work of reform. According to written timelines and other COE records, this work took place in three main stages: First, between 1989 and 1990, three university-wide teams assembled to review the 1988 taskforce report and make additional recommendations for the reform of teacher education, these primarily focused on academic majors for prospective teachers. Second, five working groups within the College of Education began designing the new professional program—one focused on professional studies; a second dealt with program credit hours and negotiations with other colleges; a third designed clinical experiences and handled the intersection with PDSs; a fourth designed student assessments and program reviews; and a fifth created and sequenced course descriptions for the new program. Finally, after the Michigan State University Academic Governance committee formally approved plans for the new program in

January, 1992, Lanier reorganized the faculty into three new, permanent teams, each of which was to be assigned a cohort of students in the new program, and charged them with implementing the approved plans. The first cohort of students began the new program in the spring of 1993.

As the teams got to work, both the fallacies of Lanier's assumptions about how she would accomplish change and aspects of her personality and leadership style that alienated many faculty members became more and more clear. Increasingly occupied with the national Holmes Group and with her plans to build a network of professional development schools across the state of Michigan, Lanier largely left MSU faculty members to their own devices as they redesigned teacher education on her own campus—perhaps assuming that her colleagues' substantial skill and commitment would propel them through the changes she sought. While many MSU faculty members dove into the work with energy and enthusiasm—particularly those who had come to Michigan State precisely to work on the reform—others, confused by the plans for change or uninterested in teacher education, became angry or frustrated and began to withdraw from the work on teacher education. Many faculty members continued to engage in reform with optimism and energy, but this period was marked by increasing alienation among the individuals on whom Lanier relied the most. Further, many of those involved in the reform found themselves colliding with features of their institutional culture and structure that made change difficult.

The earliest direct efforts to improve teacher education at MSU focused on collaborating with faculty members in MSU's liberal arts and sciences departments to redesign their undergraduate majors. Following the goals articulated by the Holmes Group and the 1988 taskforce report, COE faculty members hoped to convince their colleagues across campus to admit education students to their most advanced courses and to develop coherent curricula that would help prospective teachers understand the basic structure of the discipline and what it meant to do work in that field. They also sought to reduce the number of majors available to prospective teachers. To do so was a hallmark goal of the Holmes Group and something that was near to Lanier's own heart; it remains, in the twenty first century, a common pursuit among

those who would improve teacher education and teacher effectiveness. The frustrating experiences of the COE faculty members who worked on it in the late 1980s illustrate the persistent challenges of improving teacher education and continue to be instructive for anyone who sets out to improve teachers' subject-matter knowledge.

In the spring of 1989, Judy Lanier and Henrietta Barnes invited representatives from each of MSU's colleges and departments where prospective students took courses and majors to participate in "development teams" that were charged with examining the recommendations of the 1988 taskforce and carrying out the relevant changes. Teams A, B, and C, as they were known, each had faculty members from Education and also from at least two other fields—Team A from Natural Science and Agriculture; Team B from Arts & Letters and Communication Arts; and Team C from Social Science, Public Affairs, and Human Ecology. Over the next two and a half years, Lanier and Henrietta Barnes, sometimes assisted by other COE faculty members, met on more than 120 separate occasions with the development teams and with individual faculty members in the departments. Throughout 1990, David Cohen, who served as acting dean while Lanier took a sabbatical, met at least 13 times with deans in each of the other colleges; in the same year, Henrietta Barnes also met with the department chairs. College of Education records also show numerous phone calls and memos exchanged between Lanier, Barnes, Cohen, Michael Sedlak, Bob Floden, and other faculty members and representatives in the disciplinary departments throughout the period (Chronicle of Deliberations and Consultations Regarding Proposed Program Changes in Teacher Education at MSU, 1984-1991). Finally, in early 1991, as the semester transition approached, COE representatives met repeatedly with university officials, including the University Committee on Academic Policy and Assistant Provost Barbara Steidle, to try to reach agreement on changes to be made in the academic majors and on other details of the proposed five-year program.

Correspondence between Judy Lanier, the provost's and vice provost's offices, and the other COE faculty members who were involved in these efforts suggest a number of issues that made this initiative laborious and in some cases disheartening. In a memo to Judy Lanier dated

September 23, 1991, for example, MSU Provost David K. Scott raised questions about the budgetary implications of the proposed new program and the "assumed competence level of the students and how that matches current realities" (Memorandum to Dean Judith Lanier from Provost David K. Scott, subject: "Teacher Education Planning," September 23, 1991). He wondered whether the disciplinary departments would be able to spare faculty members to spend more time teaching prospective teachers, pointed out that the five-year program would entail a significant financial burden for some students, questioned whether demand for a fiveyear, content heavy program existed among students, and suggested that education students might not be academically equipped to undertake advanced coursework in the disciplines in the first place. In an unsigned set of notes about how to respond dated the same day, infuriated COE officials retorted that the university would need to cough up the funds to support disciplinary faculty members' time reallocated for teaching and teamwork and that "questions about [students'] assumed competence are insulting." In a letter to Lanier dated January 22, 1992, Vice Provost Steidle opined that few disciplinary faculty members seemed to have grasped the conceptual underpinnings of the proposed new program, and wondered whether it might not be a good idea to postpone implementation and instead "teach semesterized versions of the quarter courses" (Letter from Vice Provost Barbara C. Steidle to Dean Judith Lanier). Someone in the College of Education—presumably Lanier or Barnes—drew a large "X" over this suggestion and wrote a flat, "No" in the margin of the letter.

There is evidence that College of Education faculty members tried to provoke serious work on questions of teacher preparation even in the face of this apparent skepticism. According to official records, for example, the mathematics working group of Team A met multiple times over the course of the 1989-1990 academic year with faculty members in mathematics, science, and agriculture to discuss the question, "What is desirable mathematics and mathematics education experience for all teachers and for math majors?" (Chronicle of Deliberations and Consultations Regarding Proposed Program Changes in Teacher Education at MSU, 1984-1991).

They also reviewed recommendations on the subject that had been made by the Mathematics

Association of America (MAA), the National Council of Teachers of Mathematics (NCTM), and the American Association of School Administrators (AASA). But COE faculty members who were involved report exhausting and contentious negotiations that resulted in few significant changes in the substance of students' work.

One individual in the College of Education who played a significant role in this process remembers spending hours with his counterparts in other departments talking over the proposed reforms and debating the nature of disciplinary learning that would be desirable for a prospective teacher. He recalls, however, that these discussions quickly bogged down in questions of enrollment and scheduling:

You had to try to use the coin of the realm, which is credits and number of students and SCH and ease of scheduling...it almost didn't matter to most of the people that were there what the difference in educational impact might be, but it was how their lives would be affected, how would their access to the students they wanted be affected...I remember just wheeling and dealing kind of discussions and trying to anticipate what their motivations were going to be, what their desires really were, and still not give away educational improvement in the whole thing...by the time it got through Governance, deals had been struck with certain fields about different aspects of the program, about their majors...and essentially deals had been struck within teacher education to back away from the pure, academic major expectation for every person...in most majors, they didn't want to have prospective elementary teachers clogging up their honors courses or their senior classes (Anonymous 24, interview, July 18, 2006, transcript i.m.p.).

Like other individuals whom I asked about these negotiations, Anonymous 24 reports that few changes were made to the content of academic majors for education students. In an attempt to narrow and deepen prospective teachers' content knowledge, several majors were eliminated, including social studies, but most remained, and remained unchanged. Further, in a distinctive break from the Holmes agenda, Lanier retained the major in education for students who intended to be elementary school teachers. Despite her desire for strong subject-matter preparation for all teachers, she argued that the College of Education would be hurt politically and financially if it ceded its authority to grant undergraduate degrees by requiring all of its teacher education students to complete majors elsewhere in the university.

This was a disappointing end to efforts around an issue that was at the core of the Holmes Group agenda and centrally important to many faculty members in the College of Education. The authors of *Tomorrow's Teachers* had identified the improvement of teachers' academic preparation as their number one goal, and committed their institutions to phasing out the undergraduate major in education. The authors of the COE's own taskforce report had contended that their own program "should instill deep understanding of subject matter disciplines" and called for more programmatic attention to "a core of enduring ideas fundamental to a discipline" (p. 6). None of these goals were realized in the course of the tiring negotiations between the COE and MSU's disciplinary departments. I have found only a few indications of substantial efforts to consider how academic courses for teachers might take up questions of disciplinary structure or bring a clear focus to bear on what might be called "enduring problems" of a given field. The political, financial, and interpersonal burdens of the work were too great, and, perhaps, the timescale for the work too short. Lanier and her colleagues in the College of Education had tried hard, but resistance from other schools and colleges on campus and lack of support from the central university administration made the project impossible.

Official efforts inside the College of Education to redesign the teacher education program proceeded in a similar fashion. With the semester transition looming, Lanier quickly assembled five groups of faculty members and charged them with drafting a comprehensive outline of the new program. The immediate goal was to create a document that could be submitted to and approved by the university's Academic Governance. But this was also Lanier's opportunity to prompt a serious redesign of the teacher education curriculum. Members of the five working groups were encouraged to fashion a new program almost from the ground up, using the ideas in the 1988 taskforce report as guidelines. One individual who served in a leadership role during the time of the semester transition emphasizes that the faculty members in the groups "were starting from a blank slate in the sense that they didn't feel they had to take an [existing] course and adapt it"—in other words, the working groups had a great deal of freedom to design the best new program they could imagine (Anonymous 1, interview, September 6, 2006, transcript

i.m.p.). Members of the working groups could craft new courses, new assignments and assessments, and new kinds of instructional activities and field experiences. If there was a moment to begin at the beginning—to analyze the work of teaching and its intellectual and interpersonal demands and to design professional education that would help novices meet those demands—this was it. Further, the project had several resources for this kind of disciplined reimagining, including the work produced by the NCRTL and affiliated faculty members, some of whom were members of the groups. The five teams had the potential to refashion the teacher education curriculum around important elements of the work of teaching, to attend to the special kinds of content knowledge needed for teaching, and to begin to develop training methods deliberately focused on practice.

But reports from faculty members who were involved with the working groups suggest that Lanier and Barnes may have partially squandered their opportunity to foster ambitious change. Many individuals who were in the groups remember little leadership for the work, and cannot explain what the purposes of the working groups were. They recall endless meetings and rushed efforts to produce written descriptions and syllabi, but cannot remember what the overarching goal was. One long-standing member of the faculty who went on to lead part of the new program suggests that she participated with little sense of direction: "I [just] remember being on one of the working groups and doing whatever it was I was supposed to be doing" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). Another faculty member who wrote several of the course descriptions for the new program and has continued to engage deeply in teacher education as a practitioner and researcher in the years since describes a free-form process that lacked direction from Lanier:

The only thing I can say for sure is that it can't have been very formative for me intellectually or as a scholar because I remember very little about it...which suggests to me that it wasn't very important to me somehow...I don't remember exactly how it was organized; it was sort of unwieldy, it was a mixture of people and we weren't really divided. I don't really remember being divided into groups; we probably were at some point, but it was a lot of people, and we weren't necessarily having any time to think together. I don't remember there being a sense of, like, "What's the point? What are we trying to build?"...I don't

remember feeling like I was driven by something (Anonymous 25, interview, August 16, 2006, transcript i.m.p.).

Still another individual recalls attending numerous meeting but cannot explain what the meetings were about:

I remember thinking, "What in the world is this meeting about?" And it just seemed very – I didn't know what the meeting was about...I remember going to the Kellogg Center and having, like, meals! Stuff like that! And I remember thinking, "What the hell is this?"...There was all of this endless conversation, and honestly I cannot remember it. But I can remember just thinking, "What is this meeting supposed to be about?"...Sometimes the ball sort of gets rolling and people just don't even know where they're going (Anonymous 6, interview, May 8, 2009, transcript i.m.p.).

Anonymous 6 remembers that in the end, a written report that was meant to reflect a collaborative effort on the part of the working groups was produced hastily and by just a few individuals. She explains that during the summer after a year of reportedly directionless conversations, "someone just sat down and wrote out the stuff, wrote out what these classes were going to be." Another faculty member who also worked in one of the groups remembers that during Christmas vacation that year, "Bob Floden asked me to quickly develop a syllabus for one course because we needed to submit it to somebody right after the first of the year" (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). Yet another individual, now a veteran member of the COE's faculty but at the time an assistant professor, reports that she and another very junior faculty member wrote most of the course descriptions for the new program themselves, with little direct input from others: "We would get up in the middle of the night and we would write these things, because somebody had to write them and other people weren't leaping up saying that they were going to write them" (Anonymous 19, interview, July 24, 2006, transcript i.m.p.).

If these testimonials and others like them accurately reflect what happened in this period, then Lanier provided little guidance for the faculty members who accepted her assignment to redesign MSU's teacher education program. No one whom I interviewed could recall Lanier issuing clear directions to the groups or formal opportunities for group members to

discuss particular design problems or to learn about specific approaches to professional education in general or teacher education in particular. All report a haphazard and rushed effort to produce a written report that could be submitted to Academic Governance.

Judy Lanier corroborates this view of what happened, and her explanation provides insight into how far her vision departed even from what she understood herself. Lanier remembers paying little attention to the details of work on the teacher education program during this period. She was absorbed in negotiations with other deans and with the university president and provost and remembers having little time to join the faculty at meetings and events going on inside the College of Education. In any case, Lanier reports that both she and Henrietta Barnes believed that sufficient capacity already existed among the faculty to reconstruct teacher education in the image of the Holmes Group reports and that neither thought that the faculty would need much additional help to make another round of change. Lanier in particular believed that the Holmes Group reforms would be old hat for a group of such experienced teacher educators:

I thought it would be up to the faculty...If I'd been in a different institution, I'd have had to start in a very different place. But the faculty at the College of Ed had thought a lot about this already, both the old guard and the new guard, and I really trusted that together they'd come up with something pretty darn good – that they'd improve on what we'd had. We had had a lot of time to learn from the alternative programs (J. Lanier, interview, October 7, 2010, transcript i.m.p.).

These comments suggest that Lanier may not have understood how great the distance was between the teacher education that was offered in the four alternative programs and the kind of teacher education that would thoroughly prepare novices to help children reach ambitious learning goals, across a broad range of K-12 settings. Alternatively, she may not have realized how much work would be required for faculty members who had worked in the alternative programs or who came to MSU with unusually strong practice-oriented training to develop a new approach to teacher education, at scale, that would offer novices thorough training. It may be that Lanier, thinking back to her own work with researchers and with student teachers in the lab school in Paw Paw, early in her career, could envision practice-focused teacher training and

research but could not see how different this vision was from what had already been developed at Michigan State. Whether or not this is true, Lanier did not see a reason to provide extensive opportunities for her colleagues to learn during the semester transition.

Even without clear leadership, the working groups did manage to urge their colleagues in the direction of a practice-focused curriculum, at least tentatively. By the fall of 1991, representatives of each group had collaborated with Henrietta Barnes, the chair of the Department of Teacher Education, to produce a written booklet outlining the proposed redesign (MSU Teacher Education: an All-University Responsibility). The brief overviews that it included of each semester of the new program, and the tentative course titles and topics, indicated a longer, potentially more in-depth, and more coherent program than MSU's existing "standard program," and required all students to study important aspects of teaching-including each of the emphases that had been the foci of the four "alternative" programs. Several of the course descriptions called for students to study subject-specific pedagogy, and the program included a year-long internship in which all students would have extensive opportunities to practice teaching under supervision. Faculty members who wrote the course descriptions identified several aspects of the work of teaching as explicit curricular goals, including "creating learning communities for diverse students," "representing content effectively for diverse learners," developing "sensitive and varied modes of communication," "examining and critiquing curriculum materials," "assessing student learning," and developing "multiple instructional strategies." At a minimum, the working groups set the stage for their colleagues to develop a program that would give students opportunities to learn to perform core elements of instructional work.

Still, the authors of the report, like the authors of virtually every report associated with this period of reform, left nearly all of the design work to their colleagues to carry out. The program descriptions and course sketches were so vague that faculty members could have used them to create almost any kind of program they wanted; one focused on practice was far from their only option. But those faculty members who remember the working groups—and not everyone that I interviewed could recall them in any detail, even some of those who were

members of a group—describe a largely pro forma process in which little actual design work took place. The course descriptions they created were general, with few notes about specific learning goals for students or what kinds of instructional activities might help students develop proficiency. And despite the increased attention to practice evident in some of the course descriptions and in the inclusion of the internship year, most of the curriculum seemed to remain focused on what might now be called "pre-active" (Grossman et al., 2009) or cognitive aspects of teachers' work. Students would, for example, "analyze diversity," "understand institutional responses to diversity," and "conceive of teaching as responsible action." They would "analyze issues of subject matter" and "understand" the relationship between subject-matter and context. Throughout the document, references to thinking and talking about the work of teaching appear more frequently than mentions of students' actual opportunities to practice the work. Further, there is no explicit discussion in the document about how the new program should differ from the old one, or about how the vision of teacher education implied in the descriptions might differ from extant practice beyond the COE. If Michigan State faculty members were to use the template offered by the working groups' report to design a practice-focused curriculum, they would have to be deliberate about it.

Once issued, however, the report was met largely with indifference. There is evidence that more than a few faculty members were put off by the process that had led to its creation and did not take the work seriously. One COE faculty member who eventually became a team leader in the new program recounts a revealing interaction that took place after the working groups had finished. Preparing to teach a course in the new program in the fall of 1992, he asked for help from the senior faculty member who had created the draft course description during the time of the working groups:

I went to ask her about some of her reasoning, and she said, "Well, ignore that; you guys figure it out." I think in some sense she didn't want to own it, she didn't want her name on it...the hypothesis I formed was that a number of people were pulled into the small group that had to write it and push it through. But the way it was experienced was a withdrawal of participation and then the emergence of a thing that was then presented...There was a feeling of, it [the old program] was taken away from us and here it [the new program] comes and

now there are faculty names associated with it...I wasn't highly alert to it, because it was obvious to me that I wasn't invited to it, I was a course instructor, a spear-carrier, as we say (Anonymous 26, interview, August 28, 2006, transcript i.m.p.).

Other faculty members report a similar disengagement from official plans for the new program, either on their own part or by those who had created the documents. One individual, for example, referred to the syllabi that were developed as "bogus" and as representing a "pseudo-program," explaining that, "it didn't come with standards, it just came with course descriptions" (Anonymous 5, interview, April 17, 2007, transcript i.m.p.).

One reason for these dismissive views of the official work to redesign the program may have been simply that many faculty members viewed this stage of the work as strictly bureaucratic, and not worth their time or attention. Instructors knew that they would have a good deal of freedom to teach what they wanted, in the way they wanted, once the new program rolled out, and saw no reason to invest significantly in a process the immediate purpose of which was to extract a stamp of approval from university administrators. Another possibility is that it is difficult to design instruction in any detail—particularly new instruction intended to be part of a dramatic reform effort--separately from the enactment of the instruction. Faculty members may have assumed it would be easier and more productive to wait to engage in serious design work until they were absorbed in the actual work of teaching the new program. Others may have been genuinely annoyed that they were being instructed to abandon the courses and programs with which they had been happily engaged for years. Whatever the reason, the efforts associated with the five working groups between 1990 and 1991 seemed to have inspired only a modest amount of faculty engagement and learning. While some faculty members—particularly those who were young or who had moved to East Lansing specifically to work with Lanier-remained energetic and engrossed in the project, others were becoming frustrated.

Lanier takes a somewhat different view of this period, more evidence that she may not have understood the serious dilemma she faced. She again reports seeing no need for a great deal of work to recruit interest and participation in the reform; in her memory, faculty members

were eager for the chance to redesign and improve their program. Lanier also does not remember significant resistance from faculty members who did not want to abandon the four alternative programs or otherwise engage in the reform of teacher education. Even more important, she argues that extensive capacity-building efforts would have been unnecessary among the faculty in this era. She articulates a clear sense that the work she had done in the days of the IRT and even before, combined with the strength of the many new faculty members that she hired as dean, were sufficient for the kind of work that needed to be done to reform teacher education further. In her view, it would not have been important for her to have spent more time interacting with faculty members around program redesign or bringing in outside assistance to help instructors rethink what it would mean to design and offer better teacher education. She believed that these faculty members could do it on their own, and that they would.

The Professional Development Schools

At the same time that COE faculty members were busy redesigning their own teacher education program and shepherding their plans through Academic Governance, Lanier was occupied not only in negotiations with university officials but in creating the professional development schools that were intended to be the hallmark of the Holmes Group. This was increasingly the case as the work to plan the new teacher education program came to a close in the early years of the 1990s.

Lanier had high hopes for what she could accomplish within the College through faculty hiring and new programs, but her confidence in what the PDS movement could achieve seemed even greater. In addition to supporting more practice-focused teacher education, she intended the professional development schools to foment work on other aspects of the Holmes Group agenda that had received little direct attention in the early stages of the MSU-specific proposals, including the implementation of a graduated career structure for teachers and shifts in researchers' work in the direction of practice. Through a combination of intensive fundraising, marshaling existing interest among the faculty for work in schools, and some strategic hiring,

Lanier managed to form a significant network of PDSs in Michigan—by 1995, she had initiated more than 26 schools across the state. For a time, the PDSs supported several close collaborations between MSU faculty members and K-12 teachers, in both research and teacher education, and fostered exciting and productive periods of work for many faculty members, graduate students, and teachers. Although there was evidence from the beginning that the PDS had serious challenges and even limits as a tool of reform, its development at MSU showed that this new institution had great potential to fuel attention to practice in both teacher education and research. The PDS became a defining feature of work on teacher education at Michigan State, and both supported and showcased the unusual interest in and commitment to improving educational practice of COE faculty members.

Designing and Implementing the PDS

Like many other aspects of the Holmes Group agenda, the PDS concept originated at Michigan State. Significantly before the national consortium published its principles for professional development schools in *Tomorrow's Schools*, MSU faculty members, many of them working in the four alternative programs, had established unusually close relationships with particular schools and teachers in those schools, and were collaborating with them in a variety of research and teacher education projects. Researchers associated with the IRT had drawn teachers as partners and collaborators from many of the same schools, and assembled a loose collection of teachers interested in research and committed to work with the university. The idea that a school or college of education might profit from a formal network of special K-12 schools that would both demonstrate best practice and provide fertile ground for investigations of problems of practice was beginning to develop at MSU even before the Holmes Group formed. By the late 1980s, Judy Lanier had developed a tremendous faith in the power of the PDS to transform teacher education and education research. Of the tools that she employed during her term as dean, she seemed to regard the PDS as the most powerful and important.

Formal efforts to develop strategically-chosen local schools as PDSs began during the 1988-1989 academic year, and would command a great deal of Lanier's attention throughout the

remainder of her deanship and beyond. In an exhibition of her inventiveness and willingness to create new roles to suit new needs, Lanier had appointed Charles Thompson, an education researcher with little background in either teaching or teacher education but with a strong interest in research administration, to the newly created position of associate dean for clinical studies and charged him with leading the work on the professional development schools. The idea of clinical studies had been inspired by the MSU College of Human Medicine's system of educating doctors in a network of community hospitals. Rather than carrying out all of its research and training in a single teaching hospital, the College of Human Medicine had affiliated with at least six hospitals around Michigan, each of which cared for patients, prepared medical students and residents, and carried out research. One of Charles Thompson's primary duties was to develop an analogous network of K-12 schools that would support the three functions of service delivery, training, and research, as well as promote changes in both schools and colleges of education as organizations (Kennedy, 1990). Thompson took the non-tenure-line job--his appointment was largely administrative—and immediately began working with Lanier and others to develop the concept of the professional development school and to raise interest and support for it among faculty members, teachers and administrators, legislators, and other stakeholders.

In the spring of 1988, Thompson and Lanier secured two hundred and fifty thousand dollars from the Michigan legislature to create an "Educational Extension Service" with two components: a network of professional development schools and a new, statewide system for disseminating the results of the R&D conducted in the PDSs. Deans and other leaders from a number of other Michigan universities and education related associations, including Northern Michigan University, Northwestern Michigan College, the University of Michigan, Wayne State University, the Michigan Association of School Administrators, the Michigan Education Association, the Michigan Federation of Teachers, and the Middle Cities Education Association submitted formal letters of support for the ambitious proposal (*Appendices* to the *Proposal Submitted to the Educational Innovation Grants Program, Michigan Department of Education*, October 14, 1988). Thompson and Lanier's plans closely reflected the goals of the Holmes Group

and called for the construction of ambitious professional learning communities inside of the PDSs. As had the authors of *Tomorrow's Teachers*, Thompson and Lanier committed to helping school administrators and teachers explore and, they hoped, adopt, new ideas about teaching and learning for understanding and for conceptual change; develop new structures for governance and organization that would support collaboration and collegial deliberation and leadership; build a professional culture that would foster risk-taking, experimentation, and continuous learning; and create new approaches to school-based teacher education that would help prospective teachers develop skill in the practice of teaching (see "Cycle of Change in Professional Development Schools" in *School and University Alliance and Educational Extension Service, Third Year Report*, Volume 2, November 1991, no page number). Their plans suggested a serious rethinking of what work could be like for a classroom teacher, with a clear assumption that schools could be organized to support ongoing professional inquiry across the career span.

The early written plans for the PDSs did not, however, include much detail about the mechanisms through which these changes would be made, and the work proved to be a challenge—perhaps a bigger one than anyone had predicted. The first major hurdle Thompson encountered came in the form of negotiations with the Michigan Education Association (MEA). Few of the union representatives were familiar with the idea of the professional development school, and Thompson and his colleagues did not have many resources to draw on in explaining the concept. *Tomorrow's Schools* had not been published, the descriptions of the PDS in *Tomorrow's Teachers* were vague, and there were no existing examples to which they could point to illustrate the idea. Many of the union representatives and the school teachers and principals to whom Thompson spoke were reportedly mistrustful of university people, and they were reluctant to enter into an agreement which would place additional time demands on classroom teachers (C. Thompson, interview, August 22, 2006, transcript i.m.p.).

After nearly a year of challenging conversations, union officials were persuaded to accept an agreement, but it came at a cost to MSU: Because Thompson was concerned with building and maintaining trust with the MEA and with the teachers and principals it represented, he did

not insist that schools designated as PDSs agree to follow any particular curriculum or program of instruction or commit to any particular set of activities around teacher education or research. Some MSU faculty members had earlier argued that arrangements with potential PDSs would need to include whole-school agreements about what the teachers in those schools would teach and how, about how many and which individuals in a given school would need to commit to the relationship, and about how many interns from the College of Education would be accommodated each semester and what their activities would include (C. Thompson, interview, August 22, 2006, transcript i.m.p.). Instead of negotiating these issues, however, Thompson agreed to a much looser set of arrangements according to which he and other MSU personnel would simply try to find individuals within the PDSs who were interested in working with them and "see what we could accomplish."

Recalling these early years of the PDS work, Thompson remembers that there were many details to work out. He had been hired to transform a relatively vague idea into reality, and he reports that although Lanier and her colleagues "had this sort of general concept of professional development schools," they provided few specific instructions, directions, or in-depth support for constructing what was clearly intended to be a very new kind of institution. He also recalls indifference to the enterprise on the part of many of the faculty members in the College of Education with expertise in organizational studies and educational administration—exactly the individuals he might have expected to help him negotiate the complicated terrain of organizationbuilding. He observes that despite many kinds of expertise among faculty members, "there was really no theoretical or research-based leadership in the schools." As Thompson remembers the situation, there were a number of faculty members at MSU at the time who had strong backgrounds in research on teaching, learning, and teacher education, but none working regularly in the PDSs who had a strong command of organizational research or research on leadership. He adds that he "didn't think people had really thought through exactly how this would happen at all," but that this lack of specificity did not surprise him as he had been hired to work out the details (C. Thompson, interview, August 22, 2006, transcript i.m.p.).

Once Thompson began working, however, he and his colleagues did not always specify in detail the kind of teaching and learning that would need to go on in a PDS site in order to provide fertile ground for research and teacher education aligned with Holmes Group or COE goals.

Thompson explains the situation this way:

We didn't say, okay, in mathematics education we have the following ideas about mathematics curriculum and teaching, and we expect the people who enter into these relationships with us to work along the following lines, and then the same for science and literacy and so forth. People who were working at these schools generally tended to share some ideas, families of ideas, teaching for understanding and that sort of stuff...but we didn't organize programmatically saying, you know, here's what we think students ought to know and be able to do and here's how we think we ought to teach them and therefore we can evaluate this effort along the following lines...it was not a very programmatically worked out set of moves, it was much more organized around individual faculty members' own research and preferences and beliefs (C. Thompson, interview, August 22, 2006, transcript i.m.p.).

One reason that Thompson and other MSU faculty members were not clearer about the approaches to teaching and learning that they sought in potential PDS sites may have been that these ideas were not easily communicated beyond the walls of the university. Knowledge and understanding of subject-specific instruction, for example, then emerging from the IRT, the NCRTL, and other MSU-based research projects, was still very new, and not always written up or otherwise packaged in ways that would have made it conveniently transferrable or explainable to school people. Still, given that MSU was a hotbed of such work, with not just a few but many scholars deeply invested in understanding and improving content-specific pedagogy and teacher preparation, and considering Judy Lanier's obvious commitment to making the PDS a powerful new mechanism for teacher education, research, and children's learning, it is curious that efforts to design the PDS so that it would function the way MSU needed it to were not more deliberate. Several of the individuals that I interviewed for this study report that Lanier and her closest colleagues were much more absorbed in raising money to expand the number of PDSs and in recruiting other kinds of economic and political support to the enterprise than they were in thinking about exactly what would go on inside the schools. Lanier clearly knew and understood the ideas about teaching and teacher education that her faculty members were generatingindeed, many of them were growing from seeds she had planted during her days in the IRT—but her attention in these years was on the broader landscape of education reform in Michigan and across the country.

But another reason for the cautious start had to do with the traditionally sensitive nature of relations between university and school people. MSU faculty members believed their investment in the PDS would pay off only if their colleagues in the schools trusted them and could see potential for their own gain (or their students') from a partnership with researchers. They did not wish to alienate teachers and administrators, and so proceeded slowly and often with few explicit goals for what they wanted to accomplish—the thinking was that good ideas would come from teachers as well as researchers. Much time, effort, and expense in the first few years of the Educational Extension Service went into helping everyone involved learn about the purposes and features of a PDS and building a sense of esprit de corps. During the first few summers, for example, MSU hosted two well-attended summer institutes for university faculty members and for school and university personnel involved with the PDSs. Although some of the workshops offered at the institutes took up questions of teacher education, many were concerned with issues of school culture, change management, and conflict resolution, as well as team building.

Some effort was made during the summer institutes and at other times to address K-12 instructional issues such as assessment, interdisciplinary and thematic teaching, and "becoming a teacher for understanding" in specific school subject-areas (see "Summer Institute 1991 agenda" in *School and University Alliance and Educational Extension Service Third Year Report*, Volume 2, November 1991, no page number), although it seemed to be fueled by the interest and availability of faculty members rather than by any overarching, collective agenda. MSU faculty members including Deborah Ball, Suzanne Wilson, Perry Lanier, Laura Roehler, Magdalene Lampert, and Charles Anderson all worked in PDSs or with PDS teachers to develop emerging notions of teaching for understanding and for conceptual change in the content areas, but not all PDS teachers were able to participate in the work, and specific goals for what would be

accomplished by when did not seem to exist. For whatever reason or combination of reasons, designs for the professional development schools, even several years into their genesis, were no more specific than other plans associated with the Holmes Group or the reform at MSU.

Over the next few years, COE faculty members spent hours in their colleagues' classrooms in the schools, often merely observing, talking and reading together, and getting to know students and teachers. They attended faculty meetings, shared lunches and sometimes dinners with teachers and principals, and participated in science fairs and other all-school events. Sometimes university faculty members and PDS teachers would team-teach in MSU's teacher education courses, either on MSU's campus or in a PDS site (Issues Involved in PDS Research, August 20, 1993). One faculty member who worked extensively in several PDSs, primarily carrying out research, reports that it would often take her an entire year of "hanging out" in a school until she found a teacher who was interested in collaborating with her and who would trust her (Anonymous 12, interview, August 31, 2006, transcript i.m.p.). Other faculty members also recall having to make significant initial investments in relationships with teachers in order even to broach the possibility of a collaborative research project. Particularly at the beginning of the PDS movement, university and school people alike seemed more focused on building community and on developing their own understanding of what it meant to be part of a PDS, and less focused on constructing and pursuing a specific agenda of scholarship and instructional or school improvement.

Further, the connections between the PDSs and MSU's teacher education program were much more tenuous than might have been imagined given the goals that both the Holmes Group and the College of Education held for the development of more practice- and school-based teacher education. Particularly at the beginning of the PDS movement, there were far too few professional development schools to accommodate all of MSU's student teachers or interns—most teacher education students were still placed at non-PDS school sites. And while most professional development schools worked with MSU interns from the outset, teacher education was not a primary focus of any of the partnerships. One long-time MSU faculty member who

eventually became a team leader explains that the PDS effort "started out as an initiative to mobilize teachers in collaborative research on the reform of teaching...and then we sort of grafted teacher preparation onto that" (Anonymous 5, interview, April 17, 2006, transcript i.m.p.). Another team leader observed that, "there was a chasm at the outset between the larger PDS effort and the new team effort, although all teams got assigned PDSs – the whole PDS setup was not thought of as an integrated thing with the teacher ed thing" (Anonymous 23, interview, April 17, 2007, transcript i.m.p.). At Michigan State, the PDSs were developed more as a mechanism to support collaborative, practice-oriented research than as a mechanism to support practice-oriented teacher education.

Work in the Professional Development Schools

However casually, a wide variety of projects eventually developed between MSU faculty members and PDS teachers. Most were focused more on the teaching and learning of children than on teacher education, but they demonstrated at least the beginning of progress toward Holmes Group goals for both school- and university-based participants. Small groups of faculty members and teachers—often one faculty member and a small number of teachers, but sometimes partnerships between a single teacher and single university faculty member--would cluster around a problem or topic of mutual interest, and agree to study an issue together or try out a possible solution or new approach. Some projects had to do with teacher education, but many were focused directly on the design of instructional activities for children and on issues of school organization and climate. During the 1990-1991 school year, for example, MSU- and school-based faculty participants at the Averill Elementary Professional Development School were involved in three projects focused on K-5 teaching and learning (one in literature, another other in math, a third in community building in the classroom); three projects focused on teacher education (two were study groups, one for teachers to re-conceptualize the role of experienced teachers in mentoring novices; the other for teachers, teacher educators, and field instructors to examine and reflect on the clinical practices of field instruction; the third investigated how teacher education candidates could be incorporated into a "learning community school" and on

how teachers might take on the role of teacher educator); three projects focused on school and university restructuring (these addressed supporting students with specific learning problems, integrating regular and special education, and using lunch periods for teaching and learning purposes); and one project focused on school governance.

During the same year, at the Elliott Elementary Professional Development School, there were three formal projects, all of them focused on the teaching and learning of children (one on literacy in science and social studies; another on conceptual understanding in mathematics; and a third on "developmentally appropriate curriculum") (*School and University Alliance and Education Extension Service Third Year Report*, Volume 1, November 1991, pp. 22-31). In addition, several Elliott teachers participated in MSU teacher candidates' field activity and student teaching and served as mentor teachers and co-instructors in MSU teacher education seminars. There was a similar diversity of projects and activities at the other PDS sites, with a preponderance of activities related to the teaching and learning of children. In addition, most school sites created steering or management committees to make decisions about PDS projects and to ensure communication among all parties, and each site was assigned an MSU-based coordinator.

There is evidence that those who worked in the professional development schools made important progress toward developing the kind of teaching and learning community that the authors of *Tomorrow's Schools* sought, even in the first few years of their work. In a progress report published in November of 1991, for example, faculty members in the Averill Elementary PDS recorded their efforts to develop a professional community that would encourage serious, open scrutiny of teaching and learning; closer attention to diversity and to the needs of a variety of learners; a "conceptually-oriented" rather than "skills-oriented" approach to instruction; and more "collegial accountability" (*School and University Alliance and Educational Extension Service Third Year Report*, Volume I, November 1991, p. 17). They described a series of faculty meetings that had led them to identify and contest the "unwritten rules" that seemed to govern communication in the school, including, "Don't challenge others' ideas or ask people what they

mean" and "Avoid talking about substantive issues, especially in the lunchroom" (p. 16). They reported confidence "that Averill School is very much in transition...from a view of learning community as a classroom phenomenon to a recognition that learning community is a school-wide, professional issue; from reliance on personal accountability to a commitment to collegial accountability" (p. 17). Similarly, teachers at Holmes PDS observed that their efforts to introduce more "teaching for understanding" rather than traditional instruction required them to "take risks and to learn to live with greater uncertainty and ambiguity," as well as to respond to parents and students who did not understand the shift (p. 32). Records from other schools presented in the same volume indicate similar changes in school climate, as well as organizational shifts including extended lunch periods and faculty meetings, intended to facilitate opportunities for collective discussion and work.

The PDSs also enabled the beginnings of the kind of changes in university-based faculty members' work that Lanier and her colleagues in the Holmes Group sought. Several faculty members who initiated school- and classroom-based research projects began presenting their work at national conferences, sometimes alongside the teachers with whom they were collaborating, and some went on to publish books and articles directly informed by PDS-based research projects (e.g., Peters, Klein, & Shadwick, 1998; Peters, 1999; Rosaen, 1994; Rosaen & Roth, 1995). Others taught classes or lessons to children in PDSs or collaborated closely with classroom teachers to design instruction (Inzuna, 1997). Although MSU's PDS period did not reach its zenith until the mid 1990s, the professional development schools drew ready participation from significant numbers of faculty members from the very beginning. Many of these faculty members were those who had come to East Lansing specifically to work with Lanier on teacher education reform or practice-oriented research, and remember these years as a time when they were intensely engaged in their work. Several maintain deep appreciation for the opportunity the PDS movement afforded them to stay closely connected to practice. One reports, "I was very interested in it...very committed to it...and wanted to stay very connected to schools and classroom practices" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). Another

said, "The part that is just very strongly in my memory is the energy, the excitement, the sense of commitment that people had in these professional development schools...the amount of backand-forth was just unbelievable" (Anonymous 6, interview, May 8, 2009, transcript i.m.p.). Another emphasizes the rewards of being at the "front edge of teacher education and to share that knowledge with colleagues at conferences...school and university faculty presented at conferences together and wrote together...we were moving toward teaching becoming a profession" (Anonymous 3, interview, September 15, 2007, transcript i.m.p.).

Supports, Incentives, and Rewards for Work in the PDS

If exciting and stimulating, work in the professional development schools was also demanding and time consuming for both K-12 teachers and administrators and MSU faculty members. For teachers, it meant taking on additional responsibilities that demanded time and energy; for MSU faculty members, it required many more hours than did other kinds of research and service. Finding ways to support and reward those who worked in the PDSs became a major concern for Thompson and others who headed up the PDS enterprise.

To encourage and enable teachers to participate, Michigan State offered stipends directly to teachers or to schools and worked with principals to secure release time for PDS-related work. In most PDSs, teachers were freed for an hour and a half per week, and occasionally for three or four hours per week (*Issues Involved in PDS Research*, August 20, 1993). Sometimes, MSU interns were asked to take over classroom instruction and supervision in order to free up a PDS teacher, thereby reducing the cost of release time for the teacher (Anonymous 20, interview, August 8, 2007, transcript i.m.p.). Judging from the numbers in which teachers signed up to participate in projects with MSU faculty members and to attend the summer institutes, the PDS enterprise was inherently exciting and rewarding. In many cases, release time from regular classroom responsibilities was sufficient to induce participation from teachers. Still, there is evidence that at least some PDS teachers, particularly those who were the most invested in the enterprise and spent the most time on the work, became exhausted and overwhelmed. One MSU instructor who worked in several PDSs reports that the principal of one school "had a nervous

breakdown" because of the pressure and time commitment associated with the work (Anonymous 6, interview, May 8, 2009, transcript i.m.p.).

The situation was at least as complicated for MSU faculty members, many of whom felt pressure to publish relatively large amounts of scholarly work in order to achieve tenure, promotion, and other forms of professional recognition. Lanier and other COE administrators sometimes assigned load time for PDS work, permitting faculty members to teach less or perform less service, and some faculty members who worked in the PDSs were assigned paid research assistants (Anonymous 12, interview, August 31, 2006, transcript i.m.p.). They also paid some faculty members who became extensively involved in the PDSs to carry out research-related activities and writing during the summer (Inzunza, 2002; J. Lanier, interview, October 7, 2010, transcript i.m.p.). These measures were rarely sufficient, however, to compensate for the amount of time faculty members needed to invest in order to develop robust partnerships and research projects in the PDSs. Although several faculty members found the PDSs to be rich sites for scholarship, the time required to develop relationships with collaborating teachers and to design and implement projects worried those who were hoping to achieve tenure or to advance on the academic career ladder (Anonymous 26, interview, August 28, 2006, transcript i.m.p.; Anonymous 14, interview, August 4, 2006, transcript i.m.p.). Certain that the expectations for faculty members' work would need to shift to accommodate practice-based research, Lanier and her colleagues in the dean's office promised to adjust the requirements for promotion and tenure to accommodate the demands of PDS work. One faculty member who had a leadership role in the teacher education program and was involved in the Holmes Group reports that Lanier worked hard to ensure that faculty members who worked in the professional development schools would not see their academic careers derailed as a result:

Judy was making cases with the provost and others in the central administration that the ways in which one looked at tenure decisions needed to be brought out of the ways in which they were traditionally looked at, so that you would take into account the kinds of work that faculty were doing in professional development schools...Writing was still expected in the professional development schools but the nature of that writing had its own issues and concerns. Faculty might have been collaborating with teachers in particular ways...and even though

the faculty may have captured accurately the nature of the interactions, some of the individual teachers did not want the faculty to write out of that experience. So there were a number of issues like that, not to mention just the time that it took to establish those kinds of relationships, to travel back and forth...but yes, a number of those folks did end up getting tenure...I don't think that the criteria [for getting tenure] shifted; I think it was the implementation of the criteria that shifted to include a broader array of activity done at a strong level. So it wasn't to say that for tenure there were no longer standards for quality in research; there were criteria that were still in place. However, I think that the number [of publications] that were required shifted because of the conversations that Judy and others had with central administration (Anonymous 20, interview, August 8, 2007, transcript i.m.p.)

According to some accounts, Lanier directly controlled the tenure and promotion process in the College of Education and significantly influenced or decided most cases. Some of her colleagues report that final decisions about promotion and tenure were made by a committee that Lanier chaired, and that the other committee members were all department chairs, associate deans, or faculty members whom Lanier had appointed and who were personally close to the dean and devoted to her agenda (Anonymous 4, interview, October 14, 2010, transcript i.m.p.; Anonymous 16, interview, September 22, 2010, transcript i.m.p.). In the view of these individuals, several faculty members were awarded promotion or tenure in this period whose work did not merit it. College of Education records do indicate that several faculty members who spent significant amounts of time working in the professional development schools achieved tenure during Lanier's time as dean. Some of these faculty members believe that the standards for tenure were adjusted so as to reward them for the time they invested in the schools. One individual, for example, reports that his tenure review committee "wasn't as demanding of the number of published pieces that they might otherwise have been" (Anonymous 2, interview, May 5, 2007, transcript i.m.p.).

Still, any shifts that were made in the requirements for tenure and promotion were not always sufficient. According to their colleagues, several assistant professors who initially spent long hours in the professional development schools either stopped doing so and shifted some of their time in other directions or else left Michigan State entirely "because they saw the writing on the wall in terms of the productivity expected for tenure" (Anonymous 2, interview, May 5, 2007,

transcript i.m.p.). And some faculty members who achieved tenure in part based on their work in the professional development schools have never been promoted beyond the rank of associate professor, which raises the possibility that their work has not met the standards set by the faculty members and administrators who have governed such matters in the years since Lanier left the College of Education. Indeed, Anonymous 2, who reports achieving tenure based at least in part on the numerous official reports he wrote on behalf of the enterprise—work not normally considered scholarly—speculates that he might not have received tenure at all were it not for his PDS work since he doubts he would have maintained sufficient interest in more traditional forms of scholarship.

By some accounts, tenure committees at the college and university level never formally rewrote the standards for promotion. One individual, now a senior faculty member at MSU, reports that changes, while discussed, were never made:

What didn't happen was that the tenure committees at the department and College level didn't get around to rewriting the rules by which faculty were rewarded. There was talk of it but it didn't get there and notice, too, that even though at the department or College level there had been receptivity, you still had the university. And within the College, when you got up to a College committee, you didn't have just a teacher ed department, you had kinesiology and educational administration and CEPSE [the Department of Counseling, Educational Psychology, and Special Education]—you had all these parts of the College that weren't intimately connected to the Holmes agenda, and those committees were all going to continue to push to maintain the traditional standards, criteria, indicators, evidence, artifacts, around the traditional reward structure that was in place. Because interests were involved, you know? In kinesiology, you win by bringing in grants from the National Institutes of Health by doing your research and publishing in your journals. How were they going to go out into professional development schools and mess around (Anonymous 17, interview, May 8, 2009, transcript i.m.p.)?

These comments illustrate the complexity of making changes in the system of expectations and rewards in which university-based teacher education was entrenched, and suggest how difficult Lanier's task was. According to the evidence available, the dean did push several of the levers that research suggests might support her project, including offering incentives and rewards for faculty members who took on work in the professional development schools, but it was a complicated effort and not entirely successful. As the PDSs developed and became more

numerous, concerns over the special demands of PDS-associated research and their implications for professional advancement in the university would only grow.

The Michigan Partnership for New Education

By late 1989, Lanier's efforts to marshal financial support for the PDSs were successful enough to enable the development of a new organization, the Michigan Partnership for New Education. Established as a non-profit corporation, the Partnership, as it was called, was a collaboration among the Michigan legislature, several public universities in Michigan, and members of the state business community. Leaders billed it as the largest public-private educational venture in the United States, and expressed commitment to "responsible innovation and change in Michigan's public schools and colleges of education" (*The Michigan Partnership for New Education*, p. 1). The organization was intended to support not only the implementation and operation of a growing number of professional development schools, but the broad dissemination of the knowledge produced in PDSs. It brought many new resources to the enterprise, but it also seriously challenged the interest, will, and capacity of faculty members in the College of Education and became a significant factor in Lanier's eventual departure from MSU.

Lanier's vision for the Partnership was characteristically grand, and stretched far beyond the establishment of local school-university partnerships. Through four different program units, including the School and University Alliance (SUA); the Business and Community Alliance (BCA); the Collaborative Leadership Center (CLC); and the Educational Extension Service (EES), Lanier intended the Partnership not only to help construct and support PDSs, but to offer professional development to practicing teachers and "career transition programs" to professionals in other fields interested in entering teaching; to develop pre- and post-doctoral programs that would train teacher educators; and to conduct policy studies aimed at understanding effective teaching and learning strategies, leadership, technology use, education workforce supply-and-demand and hiring practices, and school management and organizational effectiveness (*School and University Alliance and Educational Extension Service 1991-1992 Report*, Volume 2, September, 1992). In addition, the Partnership was to package what was learned and make it accessible to schools

across Michigan—and then to help the teachers and administrators in those schools use it.

Lanier's vision for the complete transformation of the educational enterprise in Michigan and across the country was embodied in the dean's work on the Partnership.

Given the work Lanier had in mind for the Partnership, one way of viewing the organization is as a mechanism for supporting the kind of "level-two" work that I described earlier. The Partnership was to be not just a network of school-university partnerships and not just an educational extension or outreach service, but a device for ensuring the ongoing supply of practitioners and researchers who understood the goals of reform and could both design and carry out the new kinds of teacher education and scholarship that Lanier sought. The Partnership's functions included aspects of K-12 and teacher education reform often ignored, including the provision of targeted professional development and attempts to manage the influences of environmental factors on reformers' work. For example, Partnership staffers went to lengths to build support for the idea of professional development schools across the state of Michigan, and to develop legislators' and business people's understanding of the importance of teaching quality. In theory, these levers were very salient to the goals of the College of Education and the Holmes Group, and stood to facilitate the work of reform in teacher education in comparatively powerful ways.

According to many of those who worked with her, Lanier had complete faith in the ability of the Partnership to help her realize her goals, and devoted a great deal of her attention to the organization during the first few years of its existence. She became more and more engrossed in and committed to the work, and, by some accounts, increasingly enjoyed the opportunity to rub shoulders with some of Michigan's wealthiest and most powerful citizens. Much of her time was spent trying to raise the 48 million dollars that she and her staff had decided they needed, and she found herself frequently occupied in closed-door negotiations and expensive dinner meetings. She worked closely with then-governor James Blanchard, Blanchard's successor John Engler, and local business magnate Alfred Taubman, trying to cajole funds from them directly and to use their connections to attract support from other places. At least one of Lanier's staff members in

the Partnership reports that the dean expected Taubman—a man who had become wealthy building shopping malls and was now interested in education reform—to offer up a significant portion of the money himself, although she also aggressively and often successfully sought funds from a number of other sources, including the Pew Charitable Trusts and the Carnegie Foundation (Anonymous 10, interview, October 29, 2009, transcript i.m.p.). This work, combined with tasks such as hiring and supervising staff members and trying to develop and implement the substantive agenda of the Partnership, consumed much of Lanier's time in the late 1980s and early 1990s. In this period, Lanier secured enough funding to rapidly expand the number of professional development schools and to recruit more and more people to the work.

For many of the staff members who worked with Lanier on the Partnership, this period brought both exciting opportunities and a significant dose of stress and worry. One young Partnership staffer, now a faculty member elsewhere, remembers that it was "quite thrilling" to sit in high-level meetings with her boss "and watch someone influence policy at that level" (Anonymous 10, interview, October 29, 2009, transcript i.m.p.). She, like other staff members, had come to work at the Partnership out of a deep commitment to the idea of the professional development school and the expectation that educational practice could be improved through systematic research, development, and dissemination, and the chance to work at an innovative organization was exhilarating. Others, however, recall excitement but also serious anxiety, some of them pointing to the same kind of "downside" of working with Lanier identified by faculty members inside the College. One individual remembers a colleague reporting that she vomited each morning before going to work because she so dreaded the encounters she might have with Lanier, who demanded complete commitment and an exhausting work schedule and showed little tolerance for error (Anonymous 7, interview, August 22, 2006, transcript i.m.p.). Anonymous 7 remembers that this person's colleagues simply nodded in recognition of the feeling. Anonymous 7 also reports an "extremely high anxiety" and even "toxic" work environment, and also remembers that, "every day when you walked into the building there was a sense of foreboding and dread." According to these reports, Lanier would not tolerate dissent among her staff and

could not accept mistakes or imperfections. If someone displeased her, she would move that person aside however she could and swiftly hire a replacement.

For many MSU faculty members inside the College, working with Lanier was also beginning to become more challenging, though faculty members could not be dismissed or replaced as easily as Partnership staff members could. Just as she did in the redesign of the teacher education program, Lanier depended on faculty members' interest, willingness, and capacity to work in the PDSs; without them, the Partnership would be able to achieve little. Lanier's vision demanded not only a great deal of political, organizational, and administrative work, but an extraordinary amount of substantive leadership and project engagement. Although the Partnership had a growing staff of its own to handle financial and programmatic matters, only faculty members could carry out the teacher education and research that were central to the project—and Lanier expected them to step up to the task. According to many individuals interviewed for this study, Lanier began to make clear to the faculty that she expected them to shift their research interests toward studies that could be conducted in the professional development schools, and to make the necessary investments of time and energy. This rankled many of her colleagues.

To many teachers and researchers in the COE, it began to look as though the only kind of work that their dean appreciated was work in the professional development schools. Lanier heaped praise, funding opportunities, and other kinds of subtle- and less-subtle rewards on those who worked in the PDSs; she all but ignored those who did not. When COE faculty member David Labaree, for example, won a prize from the American Educational Research Association for the best book of the year, Lanier reportedly failed to congratulate him or even to mention the citation (Anonymous 10, interview, October 29, 2009, transcript i.m.p.). Labaree's research was increasingly well regarded by peers within and outside of the College of Education, but it was sociological and historical in nature and not carried out in K-12 school settings. When Labaree began publicly to question the direction in which the College was heading, he was reportedly shunned by Lanier. One observer recalls that Labaree seemed to be "perceived by Judy as

someone who for whatever reason was undermining a noble exercise with fiddling difficulties and fiddling objections" (Anonymous 13, interview, September 23, 2009, transcript i.m.p.).

Similarly, faculty members recall a strong sense that those who worked in the PDSs and were willing and able to commit extraordinary numbers of hours to the enterprise formed a seeming "in-crowd" in the College. One individual remembers the discomfort this caused:

There was a very, very strong sense that there were people who were "in" and people who were "out" – people who were in this particular group and who I think you'd have to say were favored in terms of promotion and being placed on the public stage and being celebrated in a number of ways and those who were laboring in the vineyard, getting on with the job and not getting much of the glamour and the glitter and I think that, you know, for people who cared about their professional relationship, that became a bit stressful (Anonymous 13, interview, September 23, 2009, transcript i.m.p.).

Another faculty member has a similar memory:

I think [some people] were upset by this cohort of faculty that Judy and others were recruiting to the College...the [existing group] was characterized as faculty members who had been doing their work in a particular kind of way and did not want to change the way they were doing that work. Then all of a sudden here's this huge new cohort of people coming from...institutions of prestige – a lot of folks from Harvard, a lot of folks from Stanford, and it was perceived that these folks had access to resources that this other group didn't have, either in terms of support for the work that they were doing or the kind of release time they were being given...there were a number of very cantankerous comments and ill-feelings from that group, particularly directed to Judy, and then some of the residue of that kind of fell on anybody who was recruited during that time (Anonymous 20, interview, June 19, 2006, transcript i.m.p.).

Still another reports a "problem with entitlement" among those who worked in the PDSs, or a feeling that, "we're entitled to this; you aren't" (Anonymous 2, interview, May 5, 2007, transcript i.m.p.).

For those faculty members who wanted to work in the PDSs but worried that they were risking professional advancement by committing to the time consuming work it required, praise and special rewards and resources from Lanier were reassuring. For others, the sense that College administrators were prioritizing certain kinds of research over other kinds was concerning. Even those individuals committed to Lanier's agenda began to resent the assumption that their work should focus entirely on the PDSs and to doubt the long term sustainability of

Lanier's approach to transforming the college and the field of education research. One longtime MSU faculty member who was deeply involved in both the teacher education program and the professional development schools, for example, remembers that some of her colleagues "were just put into professional development schools and that just didn't work;" she adds, "that was a leadership style I just didn't agree with...there seemed to be a time period when people felt like they were supposed to be doing PDS work but just weren't committed to it" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.).

Despite growing ill feeling among the faculty over what appeared to be a single minded focus on PDS-related research and over Lanier's apparent failure to demonstrate respect and appreciation for a variety of forms of scholarship, the dean did not slow her quest to expand the Partnership or the PDS movement—in fact, she intensified it in the early years of the 1990s. Several faculty members had counseled the dean to begin the PDS enterprise with just a small number of schools and then to scale up only once those schools were successful (Anonymous 19, interview, July 24, 2006, transcript i.m.p.). One longtime faculty member and occasional administrator remembers Lanier planning for 50 or 60 professional development schools, and points out that, "MSU has only 140 faculty members and the numbers doing teacher education are even smaller...that's just not enough people to make it work" (Anonymous 1, interview, September 6, 2006, transcript i.m.p.). Nonetheless, Lanier insisted on creating as many schools as she could fund, and began developing plans for comparatively vast numbers of PDS sites across the state, in addition to launching other components of the Partnership such as the Business and Community Alliance and Educational Extension Service. Charles Thompson remembers that Alfred Taubman, who had become Lanier's closest collaborator, was enthused by the idea of creating a large network of schools:

Taubman wanted to change the world, he was used to thinking big so he wanted not just those few professional development schools—and it was just nearly all we could do to operate those and they had deep problems and challenges, but suddenly he wanted this to be done on a much larger scale and take on the whole problem of essentially reforming education in Michigan, or at least in the middle cities and maybe Detroit, too (C. Thompson, interview, August 22, 2006, transcript i.m.p.).

Lanier, too, was driven by her enormously ambitious vision for change; she refused to set her sights on anything less than the complete transformation of the educational system in her home state. She spent more and more time with Taubman and others, aggressively touting their plans all over the state of Michigan and nationally, and trying to raise funds from anyone who might give them. More and more professional development schools were established, and Lanier's attention was less and less on affairs inside the College of Education.

As the Partnership began to bring in larger amounts of money, Lanier hired additional staff to manage the organizational and administrative aspects of the work. According to several of those who worked with her, however, she strove to maintain close connections to virtually every piece of the project, and even to control the portions of it most important to her.

Thompson, for example, reports that as the Partnership grew, it became clear to him that Lanier wanted to make a change in the leadership of the PDS enterprise. When the Michigan Partnership for New Education was created some years later, Lanier installed Henrietta Barnes, who had been her graduate student and very close colleague for years, in his place. But even much earlier, when Thompson secured funds from the Michigan legislature to initiate the PDSs at Michigan State, there were tensions:

Suddenly when the dollars came in the door Henrietta started behaving like, 'Well, now I'll sort of take charge of all this.' That was a complete shock to me, I was just stunned when this started to happen, and we had some fairly difficult back-and-forth about it, and throughout the remainder of the time when I worked with professional development schools...there was a lot of stress and strain back and forth around who was really in charge of all of this (C. Thompson, interview, August 22, 2006, transcript i.m.p.).

Thompson eventually stepped down as head of the PDS effort, worked for a time as the director of the Educational Extension Service, and eventually left Michigan State entirely. Others were also feeling increasingly marginalized by Lanier, whose personality often seemed to prevent her from learning about others and recognizing how they could contribute to a project that was rapidly becoming much too large for one woman to run by herself. In the words of one of her

colleagues in the Partnership, for example, Lanier was "not a manager, but a visionary" (Anonymous 10, interview, October 29, 2009, transcript i.m.p.), and her difficulty delegating work, offering praise when it was due, showing appreciation for the accomplishments of others, and carefully developing understanding and support for a very new initiative were starting to derail the enterprise which she was working so hard to build.

One of Lanier's greatest weaknesses seemed to be her inability to recognize the lack of capacity around her for implementing her enormous, ambitious plans, and to adjust her plans accordingly. She was disposed toward grander and grander schemes, in part because of what seemed to be a lack of interpersonal awareness and skill and in part out of seeming necessity. One individual who worked closely with Lanier opines that Lanier never understood that other people were not like her in the sense that they lacked the drive and the capacity for work that Lanier possessed. She compares Lanier to Margaret Mead, who was known for both her own commanding personality and competence and her inability to understand that others lacked similar abilities:

Judy was this weird blend of being politically astute globally and not locally. She understood the empire that she had to create—Taubman and Blanchard and all that—but she didn't understand that she had to treat her faculty in a particular way, because she thought they were all generals, like her...she saw limitations as laziness, like she thought everybody should be as dedicated [as she was]. But this isn't even stuff that she dwells on (Anonymous 10, interview, October 29, 2009, transcript i.m.p.).

A different individual, a longtime MSU faculty member and contributor to the Holmes Group, explains that Lanier was forced to think big and not to dwell on the lack of capacity around her because the exigencies of fundraising demanded it:

She built this big, giant infrastructure around MSU with Taubman—she literally used the Scheherazade analogy; that's how she felt. It was like she had to come up with a captivating new story every night in order not to get killed the next day. That story became powerful in her mind. How do you get the big kahunas with the money? You have to propose a grand vision that is [in fact] cockamamie. I mean, people in this place would read Judy's plans and say, "What is she thinking?! She's on dope! This is ridiculous!" But that's what it took in the corporate community; that's the story you've got to tell. But the folks doing the work know it's inconceivable. How do you solve that problem? What you say to get the money is ridiculous, but without the money you can't do the

work. So you're caught in this kind of bind—it's very difficult (Anonymous 17, interview, May 8, 2009, transcript i.m.p.).

For all of these reasons, as Lanier's plans for the professional development schools and the Michigan Partnership for New Education became more and more elaborate, her colleagues in the College of Education grew more tired, more annoyed, and more cautious.

The Best Dean in the History of the Universe

By the early 1990s, both excitement and tension were running high in the College of Education. Energetic faculty members with deep professional and intellectual commitments to educational practice and to teacher education abounded, many of them engrossed in efforts to build what they hoped would be the best teacher education program in the country and in the conduct of practice-oriented research in the innovative professional development schools. Many of these individuals describe themselves in these years as being on a kind of professional "high:" They were working directly on problems of education practice that had intrigued them for years, and they were receiving an unprecedented amount of support for it in a period when many other schools and colleges of education were closing their doors. They had been invited to redesign teacher education and to reinvent what it meant to be a professor of education and a practitioner of teacher education by a dean who cared deeply about teachers and teaching and was willing to devote herself to the cause of improving education in the United States. They were surrounded by co-workers who challenged and stimulated them on a daily basis, many of whom would remain their friends and colleagues for many years after the Holmes Group era. The majority of those who had been faculty members in the College for decades had never been more professionally content, and those who had only recently come to East Lansing to work with Lanier rarely regretted the move.

But Lanier's personality and leadership style cast an increasingly dark shadow over life in the College of Education, and many faculty members experienced considerable unease and even bitterness in the midst of great excitement and an influx of new resources. Some resented the intrusion on programs and projects that they had taken years to develop; others were uncomfortable with the assumption that only one kind of research should matter in a school of education. Many were exhausted and worried about the toll their commitment to redesigning the teacher education program and working in the PDSs might take on their professional and personal lives, and few had much faith that their dean would look out for their well-being as the semester transition approached. Life in the College of Education in this period was fraught for many, with high highs and low lows, overflowing resources and extraordinary demands. For some, the lows were far worse than any highs. Indeed, anonymous faculty members in this period began publishing an underground newsletter called "Voices" which they distributed throughout the College. It contained enraged and sometimes satirical essays about Lanier as well as cartoons that depicted, for example, the dean smashing hammers and other instruments over the heads of her colleagues. Articles in the newsletter made clear that many faculty members felt at best ignored and at worst deeply humiliated and ridiculed by their dean (Anonymous 4, interview, October 14, 2010, transcript i.m.p.).

For Judy Lanier, too, this was a difficult moment. The dean of MSU's College of Education was now also the president of the Holmes Group and the president of the Michigan Partnership for New Education. In addition, she served as acting dean of Lifelong Education Programs at Michigan State. This position afforded her the opportunity to bolster the university's already strong program in higher education and add even more faculty members to the College of Education but worsened her crushing workload (Inzunza, 2002). By all accounts Lanier was not a person who ever admitted to being tired or discouraged, but several of those who worked with her in these years report that the dean's over-commitment was beginning to take its toll, not only on her, but on the projects on which she worked (Anonymous 13, interview, September 23, 2009, transcript i.m.p.; Anonymous 10, interview, October 29, 2009, transcript i.m.p.). Still, Lanier did not give up any piece of her work or slow down in the slightest.

For many faculty members, including several who were originally among Lanier's greatest champions, the dean's plans for continued expansion of the professional development school project and for the continued growth of the new teacher education program—the curriculum for

which still had not been fully designed—as well as her apparent disinterest in consulting with colleagues and drawing respectfully on their expertise where possible, were simply too much. During a series of private, off-the-record meetings, sometimes held in living rooms, a group of faculty members decided to tell Lanier that they would not participate in plans for growing the new teacher education program and or building enough professional development schools to ensure placements for all of MSU's intern teachers (Anonymous 23, interview, April 17, 2007, transcript i.m.p.; Anonymous 27, interview, April 17, 2007, transcript i.m.p.; Anonymous 5, interview, April 17, 2007, transcript i.m.p.; Anonymous 26, interview, August 28, 2006, transcript i.m.p.). In addition, they decided that the dean and department chair's stated plans to appoint leaders for each of the three new teacher education teams and to assign faculty members to those teams were unacceptable. One attendee remembers discussion "of how the dean and the department chair were trying to push this on us" (Anonymous 26, interview, August 28, 2006, transcript i.m.p.). Anonymous 26 reports that four of the faculty members in attendance had been asked by Lanier and Barnes to be team leaders, but had "balked." Later, some of the same individuals staged a "confrontation" in the dean's conference room on the fifth floor of Erickson Hall where "the dean and department chair were sort of told it wouldn't happen that way--that there was to be broader consultation to carry out the new program—and there was a sort of restart."

According to Anonymous 26, it was only after this fifth floor meeting that COE administrators established an Ad Hoc Transition Committee to oversee the design of and transition to the new program and transferred some of the responsibility for assembling the new teacher education teams to members of the faculty—the plan previously had been for Lanier and Barnes to direct the team-development process themselves. Several other faculty members also recall a struggle to appoint team leaders, as the dean's original nominees refused the request. In the end, there is evidence that several of those individuals who eventually agreed to serve as team leaders were among those who had led the reported confrontation in the dean's conference room—which suggests that their resistance may have been not to the idea of change, but to the

administration's attempt to appoint team leaders and reorganize the faculty on their own, without direct participation from faculty leaders and broad consultation with the entire faculty.

One of the individuals involved in these meetings recounts the mixed emotions the decision to resist the dean's approach engendered among faculty members who were deeply committed to improving teacher education and who cherished their dean's own commitment:

We had a sort of revolt of the people doing the teacher certification program, who just downed tools and said, "We won't be able to do all that, you know, we can't. We don't think we can do what we're supposed to do, anyway"...We couldn't run this proposed program without sort of a mutiny against Judy, and yet there we were, mutinying against the best dean in the history of the universe, of world education, there was nobody as good who had better ideas. It was just totally tragic, I thought (Anonymous 23, interview, April 17, 2007, transcript i.m.p.).

Shortly after this "mutiny," David Cohen and Magdalene Lampert announced their plans to leave Michigan State for positions at the University of Michigan, citing Lanier's unrealistic ambitions as among the causes (D. Cohen, personal communication, March 2, 2011). Their departure was a serious blow to Lanier, who valued loyalty among her colleagues and had counted on these two prize recruits to support her plans. Other prominent faculty members, including Deborah Loewenberg Ball, would also leave in the next few years.

Meanwhile, a faculty forum on the teacher education program held on August 26, 1992—approximately four months before the first cohort of students was scheduled to enroll in the new teacher education program—showed more evidence of discontent among the broader faculty. In this open meeting, faculty members submitted on index cards questions and concerns that demonstrated their growing unease over who was making important decisions in the College, and how; a clamoring for information and guidance about the intended substance of the new program; and increasing anxiety about whether the College had the resources to support the proposed changes (Questions from index cards from the faculty forum on the new teacher education program). They demanded to know how the decision to spend \$902,500 of money dedicated to the new program on clinical faculty support had been made. They wanted to know how the Ad Hoc committee members had been selected, and why they were being permitted to

assign faculty members to teams when they had not been chosen by the faculty. They wondered about the struggle to appoint team leaders, and one index card read, "What obstacles and negative expectations have led so many able faculty to want no leadership role?" Another asked for "more conversation about the underlying issues which keep faculty from making decisions about their own lives in the academy." Some worried about losing what had been learned from the four alternative programs, and one observed that, "only one member of the Ad Hoc committee has been involved in TE program coordination (and we didn't hear from him today)."

Other questions addressed program design, and reflected how skeletal plans for the new program remained despite the previous years of committee work. One faculty member remarked that the list of program commitments that had been passed around were "excellent," but wondered, "how to embody these commitments in content and in process of future development?" Still another asked, "Where in the new program do students learn specific teaching methodologies for the various subject-matter fields?" And another: "Are there themes and conceptual organizations already in place? If so, what are they?" Notes from this faculty meeting indicate that while Academic Governance had approved the COE's plans, those plans were far from clear to faculty members. The effects of the faculty disengagement and feelings of disenfranchisement that had been visible in earlier stages of the reform were now more obvious. And the work that remained to turn vague plans and commitments into reality was significant.

By this time, Alfred Taubman, now increasingly involved in the Partnership, had, according to several reports, become concerned about Lanier's overextension and by evidence of discontent among the faculty in the College of Education. He shared his worries with Michigan State University administrators, who eventually asked Lanier to make a choice between leading the Partnership and leading the College (Anonymous 4, interview, October 14, 2010, transcript i.m.p.; Anonymous 16, interview, September 22, 2010, transcript i.m.p.). Lanier chose the Partnership. She left the dean's office in October 1992. She maintained her positions as president of both the Michigan Partnership for New Education and the Holmes Group and continued to work on the expansion of the professional development schools network, but her term at the

helm of the College of Education had ended. Bob Floden became acting dean of the College as MSU launched a search for permanent leader in Erickson Hall.

Conclusion

When Judy Lanier left the College of Education, she brought to a close a distinct era in the College's history. Almost every initiative underway in Erickson Hall bore Lanier's imprimatur, and the dean's forceful personality and indefatigable efforts to recruit resources of all kinds had been a defining feature of life in the College for more than a decade. Judy Lanier pushed aggressively and relentlessly against the boundaries that had long defined the work of teachers, teacher educators, and education researchers. She believed that the American educational system needed to be re-centered and she had a clear vision for how to re-center it. She was fearless and willing to work late into the night, every night; she simply did not allow herself to imagine that she might not achieve her goals. Although she was a polarizing figure who drove many of her closest colleagues and supporters away from her, Lanier played a major role in helping Michigan State's College of Education earn its prominent position in the landscape of American education. If the College continued to be better equipped than most of its peer institutions to engage in teacher education reform even after Lanier's departure, it was to an important degree because of the dean's work and influence. And if educators across the country caught even the smallest glimpse of what a different education system could look like, it was because of what Lanier helped them imagine.

But Lanier could not entirely overcome the same dilemma that has stymied reformers in other fields and in other attempts to improve educational enterprises. The same conviction and huge vision that allowed her to see and to achieve so much also seemed to prevent her from identifying and addressing certain kinds of challenges. Lanier blasted through glaring obstacles such as open prejudice against student teachers on the part of other deans or miniscule budgets for teacher education, but she could not see more subtle but perhaps more insidious problems such as lack of capability or other kinds of human resources. When she did see them, she tended to respond with anger and scorn rather than attention and assistance. She provided very little of

the instructional leadership that I have argued is crucial to teacher education reform, and consequently failed to develop the capability and support that she needed from her faculty members. Her ambitions required a large amount of what I have called "first-level" design work, but Lanier organized few formal opportunities for faculty members to learn to do that work, provided little substantive guidance about what the work should look like and how it might be carried out, and ultimately alienated many of the individuals on whom she depended for success. Traces of the kind of "second-level" reform work that I identified in Chapter Two were few during Lanier's deanship.

Her colleagues have called Lanier a "tragic" figure; if she is tragic, it is in part because she worked in an environment that contained so much capacity and so many resources for the work that she cared about so deeply but was not able to develop and use that environment to the extent that she might have. Lanier employed the kind of "instructional" approach that I argued in Chapter Three is important to reform in education, but she did so rather weakly, without taking aim at the core problems that made change difficult for her colleagues. There is evidence that this was less a shortcoming on Lanier's part and more a symptom of the inherent difficulties of her situation. Examples of her vision were nowhere to be found in practice, and the dean was able to see possibilities that were difficult to explain to others. She was in fact so absorbed in this vision that she may have been unable to recognize that those around her were not only less absorbed in it, but less able to see what she saw. When she left the College of Education, she left behind a faculty that still cared deeply about improving teacher education but still had a great deal to learn about how to design and implement better teacher education. They would now have to work without someone who had championed their cause for many years.

Chapter Six

The Semester Transition and the Work of Reform

The beginning of the 1992-1993 academic year was a busy time in the College of Education at Michigan State. Even before Judy Lanier left the dean's office, COE faculty members had begun serious discussions among themselves of how to design the new teacher education program and be ready to welcome the first cohort of students to it by January. Although they did not begin from scratch—they used the many reports and other documents that had been generated by the earlier internal working groups as a foundation and their work was generally guided by Holmes Group principles and by the reform ethos that had pervaded the COE for at least a decade—there is evidence that they viewed themselves as starting over, or perhaps as beginning the actual work of reform, as opposed to participating in the obligatory bureaucratic necessities that had occupied them for the past several years. Responsibility for the many substantive, logistical, and practical tasks of the reform was now theirs, and with faculty members assigned to lead the new teams and to shepherd the transition process and new students scheduled to enroll in just four months, the work finally seemed both legitimate and urgent.

Facing the faculty during this transition period and in the ensuing years were myriad tasks, from how to organize instructors and students into teams, to what the content of courses in the new program should be, to which schools and teachers should serve as partners. What had been an entirely undergraduate teacher preparation program had to be redesigned into a five year program, and in addition to redeveloping the undergraduate portion of the curriculum, faculty members still had to build the fifth year of the program. Several key questions about this work had not been fully answered by the committees and working groups that had been

convened earlier, and the new faculty leaders now had to deal with them in short order. Team leaders and members of the Ad Hoc Transition Committee worked quickly during the fall immediately prior to the transition, drawing sometimes on work that had already been done but often capitalizing on their own interests and preferences to take the work in new directions. In the years that followed, they continued to develop the new program and to build professional development schools and other field sites that would effectively accommodate their students.

Even without Judy Lanier's leadership, Michigan State faculty members accomplished many changes in teacher education in a relatively short time period—their work after the semester transition produced a teacher education program that is still regarded as one of the best in the country. Perhaps more importantly, their efforts yielded many opportunities for knowledge building, not only for themselves, but for the field more broadly. Although they scaled back their plans to some degree, College of Education faculty members still aspired to goals that implied significant change from past practice. This meant that they had to contend directly with some of the same problems that had slowed down or impeded teacher educators who sought reform in earlier periods in the United States, including insufficient knowledge, capability, and interest among their own ranks. From Michigan State's attempt to deal with these challenges, much can be learned about the problems of teacher education reform.

Transition Year Design Work: Fall 1992-Spring 1993

Work on teacher education reform at MSU after Judy Lanier's departure took place in two stages: First, during the summer and fall of 1992, the Ad Hoc Transition Committee and then the Teacher Preparation Coordinating Council worked rapidly to organize and staff the new program and to prompt substantive work on the content of courses and fieldwork. Second, beginning in the winter of 1993, team leaders, course instructors, field instructors, and professional development school staff continued to put flesh on the bones of the new design, even as they taught the program's first students. It was in this period that they grappled most seriously with questions about what students should learn in the new program and how they should learn it,

and with the resource implications of trying to provide high quality professional education for a comparatively large number of students.

During the summer and early fall of 1992, members of the Ad Hoc Transition Committee and then the Teacher Preparation Coordinating Council met routinely to organize and staff the new program. The plan was for every faculty member and incoming student in the Department of Teacher Education, as well as many faculty members from other units in the College of Education, to be assigned to one of three teams, each with its own leader or leaders. These teams would become the organizing structures of the new program, with each one responsible for one of three cohorts of students, and would replace the standard program and the four alternative programs. By the early winter of 1992, once teams were formed and the most basic logistical questions were answered, faculty members began working in more detail on the substance of the new program. In particular, they interrogated the purposes of each of the nine courses that had been outlined for the new program and started to specify in more detail the features of the K-12 schools with which they hoped to build relationships and the nature of the school partnerships they intended to develop.

There were two important aspects of the work of reform in the College of Education during this transitional year. The first was that the faculty members who had assumed leadership roles in the transition—team leaders, members of the Ad Hoc Transition Committee, and members of the Teacher Preparation Program Coordinating Council—tended to tread lightly and carefully in their interactions with colleagues, fearful of imposing ideas or assumptions on their fellow faculty members in the way that Lanier had. The second was that despite this initial hesitation, a much closer kind of what I have called "level-one" and even "level-two" design work took place in this period than it had in earlier phases of the reform. College of Education faculty members devoted a significant amount of time to instructional design and even to specifying their intentions for school-university partnerships, although most of it was focused on a single course, TE 301. At the beginning of the transition year, team leaders and other faculty members were forced to spend a large percentage of their time on practical matters such as how to

organize, staff, and even fund the new program. Their colleagues needed to know which team they were on and what courses they would teach; graduate student teaching assistants, field instructors, cooperating teachers, secretaries, and administrative assistants needed to be hired, and budgets needed to be developed. By December of 1992, however, they were increasingly able to spend time designing the new courses and field experiences.

A Cautious Start

Throughout all of this work, but particularly at the beginning, concern for faculty members' intellectual and professional freedom and for maintaining the good graces and cooperation of all was pervasive. In addition to the notes from the faculty forum on the teacher education program that I discussed in Chapter Five, other documents from this transition year demonstrate faculty members' resentment over Dean Lanier's assumptions about them and show their determination to shift the culture in the College so that it more firmly embraced the principle of faculty autonomy. In late August of 1992, for example, the Ad Hoc Transition

Committee drafted a long set of "shared commitments" that they hoped would govern the design of the new teacher education program. The 28 items on the list show a clear dedication to the provision of excellent teacher education, but also affirm faculty members' right to determine their own research pursuits and to exercise freedom in designing courses and programs. In the document's introduction, the authors noted, "Mindful of the kinds of concerns that the new program raises for all of us, we constructed this draft of commitments...[which] represent the kind of program we wish to create, and the quality of faculty worklife and institutional culture we aim to build" (*The New Teacher Preparation Program Shared Commitments*, August 25, 1992).

Many of the commitments reflect ideas from the 1988 taskforce teport, but others are signs of the conversations that took place among frustrated faculty members in the final years of Lanier's deanship:

- 12. that there may be many good models for teacher education;
- 18. faculty will be able to express their choices regarding their work in the teacher preparation program, and that their preferences, interests, and areas of expertise will be treated with respect;

- 20. faculty members will make commitments to a faculty team and to the students for a three-year period and these commitments will be reassessed at three-year intervals;
- 22. we should achieve a complementary balance between the two essential ingredients in faculty members' work: their opportunity to effectively pursue their individual intellectual endeavors while also contributing to our collective commitments:
- 23. our program commitments apply to the college faculty in the aggregate. Participation in a teacher preparation program does not mean that the individual is obligated to pursue a particular line of research or participate in a particular research site;
- 24. varied kinds of faculty relationships with schools are valuable;
- 25. varied lines of and foci of research are worthy and legitimate;
- 27. for us to work productively as a learning community, faculty members' associations with one another are crucial; and that faculty choices about the people with whom they work, honoring both existing relationships and embracing opportunities to forge new ones, must play an important role in forming program groups;
- 28. the expression of divergent points of view will strengthen the development of our programs, and that an environment in which alternative perspectives can be expressed and explored must be fostered.

The list reflects the ways in which Lanier's commitment to transforming her college of education had collided with her colleagues' expectations of intellectual and professional autonomy. By this point in the reform, faculty members on a collective level seemed to resent Lanier's single-minded focus on professional development school research and her apparent desire to assign her colleagues to teams, committees, and projects without their assent. They appeared frustrated with Lanier's assumption that there was one right way to deliver teacher education and angry that their ideas and preferences were not treated with respect. Notably, they express a willingness to continue to pursue reform, but a refusal to do it on anything but their own terms. Judging from this list, faculty members were no longer willing to sacrifice individual interests, preferences, or creativity to achieve changes in teacher education.

The legacy of Lanier's bruising leadership presented a new dilemma as members of the transition committee and then the coordinating council began their work. Because of the alienation and distrust already evident among the faculty, the new leaders were hesitant to impose decisions on their colleagues or to do anything that would detract from the principle of faculty autonomy. At the same time, turning the very general commitments and guidelines that

had been generated by the earlier working groups into a functioning teacher education program required substantial leadership, and it was up to the team leaders and committee members to provide it. In a memo to the Ad Hoc Transition Committee dated August 12, 1991, a wary tone reflects this quandary as team leaders Tom Bird and Perry Lanier raised a set of major questions for their colleagues about how the design work would proceed:

The present task is to discover how we – the education faculty – should organize ourselves to work with school teachers and members of other colleges to carry out the new teacher education program. The question here is how we should group ourselves, who should typically meet with whom, and for what reasons. At stake, potentially, are faculty members' affiliations and investments in the teacher education program...In that connection, we hold that the consent of the governed and the willing engagement of the faculty in the teacher education program are precious; it is worth taking some risks to secure them, by broad participation in the processes that settle the pattern of organization...That pattern of organization should serve and satisfy an essential set of programmatic, financial, and institutional constraints as well as shared commitments...At the same time, the pattern of organization should leave maximum latitude for the faculty, once organized in smaller grouping, to employ their wisdom and resources to plan and carry out the program in accordance with the commitments and constraints. We project as a virtue that faculty groups, once organized, will proceed to satisfy the commitments and constraints in substantially different ways, thus providing the College with internal opportunities to compare the relative merits of alternatives (Memorandum to the Ad Hoc Transition Committee from Tom Bird & Perry Lanier, August 12, 1992).

These comments demonstrate Bird and Lanier's desire to respect their colleagues' intellectual freedom and professional autonomy and their understanding that they could not force faculty members to do anything they did not want to do. In the remainder of the document, the two team leaders also raised questions about the potential financial and human resource demands of the new program, and about the implications of those demands for faculty members' working lives. Among the issues they pointed to were how faculty members would be assigned to teams; how much time both the design work and the instructional responsibilities would take; whether and how participants would be compensated for their time and effort; and whether the professional development schools, then under construction, would provide sufficient placement sites for students. Obviously hesitant to impose answers to these questions on their colleagues, Bird and Lanier declared that, "Team organization and leadership properly are part of the

experiment, that is, are features of program design that might well vary with the team's approach to teacher education, its composition, its current relationships with other colleges and with schools, and other circumstances."

Acceptance of the idea that the three new teams would contribute to an "experiment" and would likely vary significantly in theme and personality is a striking feature of the reform in the post-Lanier period. It made sense on many levels. Knowledge for constructing practicefocused teacher education was still insufficient at the time that Lanier and her colleagues began their work, and authors of the Holmes Group reports had repeatedly emphasized that their plans for reform lacked specificity for good reason. Further, the specification that Lanier and the original taskforces and working groups had provided for the design of the new program was so general that a variety of different ideas and assumptions could be accommodated within the basic direction that had been outlined. In the face of this uncertainty, it is not surprising that MSU faculty members would perceive the division of the teacher education program into three separate teams as an opportunity to experiment with different approaches. At the same time, one of the original motivations for the reform at MSU had ostensibly been to create a single program that corrected the special emphases and orientations of the four alternative programs. Lanier had deliberately attempted to redistribute the like-minded faculty members that had clustered together in the alternative programs in order to disrupt intellectual silos and to spread ideas and expertise across what was meant to be a single program that had been divided into three teams only for administrative purposes. Yet there is evidence that even before Lanier left, faculty members believed the best way forward would be not only to form teams according at least in part to preferences and pre-existing affiliations but to allow the teams to develop somewhat idiosyncratic curricula.

In a letter to the COE faculty dated September 2, 1992, for example, the Ad Hoc Transition Committee noted a set of "competing goods:"

On the one hand, expertise should be distributed across development teams, and on the other hand, faculty preferences and choices should be respected; on the

one hand, membership in the development teams should be stable to ensure progress in developing the new program and, on the other hand, faculty should be able to realign themselves to ensure team effectiveness and cohesiveness (Letter to the College of Education faculty, September 2, 1992).

Later in the letter, they asked faculty members to let them know "which themes or angles on the preparation of teachers" they were interested in helping to develop, and asserted, "we expect that the development teams, over time, will begin to evolve distinct intellectual foci just as the alternative programs—Learning Community, Academic Learning, Heterogeneous Classrooms, and Multiple Perspectives—manifest distinct themes." The purpose of the letter was to solicit information on faculty members' expertise and preferences so that everyone could be assigned to a team in a way that would not offend or disgruntle. Although the authors of the letter acknowledge the need for distributed expertise, nowhere do they suggest that the teams should work together to develop a common curriculum, activities, or themes; instead, they seem to believe that just the opposite would be best.

Several faculty members whom I interviewed for this study reported that they formed teams with colleagues with whom they had worked closely previously, and with whom they also shared already close relationships with K-12 teachers and schools. One individual, who reported "not having felt particularly connected to the work of [working groups] A, B, and C" recalls "huddling" with like minded colleagues to form a team—in fact, she remembers "some fancy footwork to get our team together" (Anonymous 5, interview, April 17, 2007, transcript i.m.p.). Her colleague adds that they made sure to "get rid of lemons" who might otherwise be assigned to their team (Anonymous 23, interview, April 17, 2007, transcript i.m.p.). Another individual, one who had been a faculty member in one of the four alternative programs and later became a team leader in the new program, reports affiliating primarily with faculty members with whom she had worked in her alternative program (Anonymous 14, interview, August 4, 2006, transcript i.m.p.).

Once teams were formed, faculty members' time was initially taken up with pressing practical matters rather than with instructional design. The assignment of remaining faculty members to teams, the selection of team leaders, and the assignment of students to teams took

up a considerable amount of time in September and October, with faculty members eventually assigned to teams based on their stated preferences and then permitted to rearrange themselves as they wished (see Agendae and minutes from meetings of the Teacher Education Program Coordinating Council meetings, 1992-1993). Each team elected two provisional leaders, who then joined the Teacher Preparation Coordinating Council. With that out of the way, the Coordinating Council members then began to address a large collection of issues and problems that had to be managed quickly, including the fact that not all COE faculty members wished to participate in a team, program finances, how to compensate faculty members for the time they would spend on curriculum development, admitting and communicating with new students, creating course schedules and assigning instructors to students, finding field placements, recruiting faculty from other colleges to participate in the new program, governing the new program, hiring administrative staff, and interacting with the National Council for Accreditation of Teacher Education (NCATE), to name just a few examples. Minutes from the weekly meetings of the Teacher Education Program Coordinating Council during the fall 1992 semester show that the Council also worked steadily on assigning students to cohorts, establishing section times for courses, and on issues related to the new post-B.A. program which the COE was also trying to establish at the same time that they revised the undergraduate program.

Staffing the teams with a sufficient number of instructors presented a particularly trying challenge for team leaders, as a number of faculty members, apparently including some with expertise relevant to the work, had not participated in the survey designed to solicit their interests with respect to the new program, despite the expectation that everyone would sign up for some part of the work. A memo from Susan Peters, a faculty member in the Department of Counseling, Educational Psychology, and Special Education who was closely involved in the development of the new program and in the PDS effort, dated October 5, 1992, makes clear that some faculty members had little interest in participating in the program development work or in the new teams (Memorandum to Members of the Teacher Preparation Transition Committee from Susan Peters, October 5, 1992). Peters noted that twenty percent of the faculty in the

Department of Teacher Education, the unit with primary responsibility for the new program, failed to sign up to be included in the new teams. In some other departments within the College, participation was estimated at below 25 percent. Although teacher education was naturally not a primary preoccupation of faculty members in other units, leaders of the reform had hoped for broader interest from across the College. In her memo, Peters suggested that the provision of incentives for participation, including the assignment of load time, might help, and also advised Transition Committee members to enlist support at the department level as they entered into negotiations with individual faculty members who were "not on the list." She also worried at several points in the memo about the uneven distribution of expertise across the teams, a problem that would plague the new program for the next several years.

Coordinating Council minutes also reflect ongoing concern about insufficient faculty and instructor participation (Agendae and minutes from meetings of the Teacher Education Program Coordinating Council meetings, 1992-1993). On October 22 and again on October 29, the minutes show that Sharon Feiman-Nemser and Jay Featherstone, the leaders of the new Team 1, worried that their team was "operating at a real disadvantage" because their members lacked "heavy-duty teacher educators" compared to other teams, and asked the Council to consider moving 3-4 individuals from Teams 2 and 3 to Team 1. There is also evidence of continuing concern over those faculty members who were not offering to participate at all, and on October 29, the Council suggested instantiating a "draft" process to force the hands of non-participants. Several days later, Tom Bird noted in a memo to the Council that, "We have wondered repeatedly whether there are (or have claimed that there are not) sufficient faculty and other resources to implement the new teacher education as it has been described to MSU. This is a strategic question" (Memorandum to Teacher Preparation Program Coordinating Council from Tom Bird, November 2, 1992). Bird recommended a campaign of letter writing from the Council to faculty members that would notify remaining at-large individuals about the different ways they might become involved in the new program with minimal time commitments. (Also worth noting about Bird's comment here is his reference to the new program "as it has been described to

MSU," phrasing which suggests a disassociation between the group of faculty members who were then working on the reform and the original plans for change.) Several weeks later, Sharon Feiman-Nemser wrote a memo to the Coordinating Council regarding "issues of balance on teams" in which she charged the teams with inequitable distribution of numbers and expertise, including in terms of experience coordinating a teacher education program and strength in subject-matter and pedagogy (Memorandum to Coordinating Council from Sharon Feiman-Nemser, n.d.). She again proposed that 1-3 people from other teams move to Team 1, and also suggested distributing graduate students in ways that made up for the inequitable distribution of faculty members.

Another place where there was considerable worry about insufficient resources for staffing the new program—as well as substantial design work—was around TE 301, a course planned for the new program titled "Learners, Learning, and Teaching in Context." Because TE 301 was one of the first courses students would take in the new program--it was intended to introduce students to some of the central problems of teaching—and because Coordinating Council members viewed it as a potential vehicle for discussing the overall framework and orientation of the new program, team leaders made a more concerted effort during the fall of 1992 to plan for and design the course than they did for other aspects of the program. In a November 5 meeting of the Coordinating Council, several faculty members worried out loud that there would not be adequate numbers of faculty available to teach the course a few months hence—fifteen individual sections needed to be staffed (Notes from Town Meeting on the Teacher Preparation Program, December 4, 1992). Henrietta Barnes apparently suggested that first year graduate students be deployed as instructors, an idea to which team leader Lauren Young objected on grounds that brand new doctoral students should not be expected to assume significant teaching responsibilities. Faculty member Linda Anderson then suggested that the course be subdivided into five week chunks, each focused on a different aspect of the course, and that faculty members or graduate students rotate in and out according to expertise. Eventually a sufficient number of faculty members and graduate students were recruited to

teach, though worries over the sustainability of the model continued to dog Council members throughout the year.

Designing TE 301

Concern over the human, financial, and intellectual resources for designing and implementing the new program would be a nearly continuous feature of work on teacher education reform for COE faculty members. By late in the fall 1992 semester, however, team leaders and their colleagues had sufficiently finalized staffing and other logistical arrangements for the new teams to begin careful instructional design. In the ensuing months, they launched relatively fine grained efforts to clarify the purposes of each course in the new program, to identify relevant instructional activities and reading assignments, and to create guidelines for continuing to develop productive relationships with the school sites that would provide field placements for their new students, including the year long internship that would become the program's hallmark. This work built on prior efforts, including that of the 1988 teacher education taskforce and the various working groups, but it was much more detailed. Artifacts suggest that faculty members took it considerably more seriously than they had the earlier committee work that had taken place under Lanier's leadership.

According to the outlines that had been developed by the working groups in the previous year, MSU's new teacher education program was to consist of nine courses taken over the course of the junior, senior, and internship years, with two courses required in the freshman and sophomore years as prerequisites to program entry. These courses, which continue to form the teacher education curriculum at Michigan State today, are summarized in Table 1.

Table 1: Elementary and Secondary Teacher Preparation Program Coursework at Michigan State University

Offiversity	Elementary Program	Secondary Program
Prerequisites	TE 150 Reflections on Teaching	
	TE 250 Human Diversity, Power,	
	and Opportunity in Social	
	Institutions	
	-or-	
	CEP 240 Diverse Learners in	
	Multicultural Perspective	
Junior Year Spring	TE 301 Learners and Learning in	TE 302 Learners and Learning in
	Context	Context
Senior Year	TE 401 Learner Diversity and the	TE 407 Learner Diversity and the
	Teaching of Subject-Matter	Teaching of Subject-Matter
	TE 402 Designing and Studying	TE 408 Designing and Studying
	Practice	Practice
Intern Year	TE 501 Internship in Teaching	TE 501 Internship in Teaching
	Diverse Learners I	Diverse Learners I
	TE 801 Professional Roles and	TE 801 Professional Roles and
	Teaching Practice I	Teaching Practice I
	TE 802 Reflection and Inquiry in	TE 802 Reflection and Inquiry in
	Teaching Practice I	Teaching Practice I
	TE 502 Internship in Teaching	TE 502 Internship in Teaching
	Diverse Learners II	Diverse Learners II
	TE 803 Professional Roles and	TE 803 Professional Roles and
	Teaching Practice II	Teaching Practice II
	TE 804 Reflection and Inquiry in	TE 804 Reflection and Inquiry in
	Teaching Practice II	Teaching Practice II

In November of 1992, team leader Tom Bird convened a planning group for the purposes of designing TE 301, the first course in the sequence. Over the next few months, Bird spearheaded many of the efforts to raise and answer questions about the purposes of TE 301 and about what course readings and instructional activities would best serve those purposes. He convened at least one "town hall" meeting for the entire faculty in which TE 301 was a focal point, met with the graduate students who had been appointed to teach sections of the course, and coordinated meetings among all of the other course instructors. Records suggest that Bird's work and the work of one or two other faculty members to help themselves and their colleagues design TE 301 served as the kind of "level-two" design work that was absent elsewhere in the MSU reforms. Bird identified a series of questions that needed to be answered about the course, created rubrics listing these questions for his colleagues to fill in, assembled all of the existing

descriptions of the new program that he could find, and directed instructors' attention to them at specific moments in the planning process. He created concept maps and diagrams to illustrate alternative frameworks for the course, provided written advice about how to proceed with the design work, and circulated notes about possible course readings and activities. His colleague Linda Anderson did the same, and minutes from the numerous meetings that ensued to plan the course show engaged participation in the discussions from a number of other faculty members.

In a document dated November 8, 1992 and titled, "A Starting Place for Designing TE 301," for example, Bird observed that the "existing material on TE 301 emphasizes topics and goals" and suggested that they needed "to be clearer about the strategy for the course" (A Starting Place for Designing TE 301, November 8, 1992). He then suggested three items as "central design questions" for the planning group:

- How do we discover and address what our students believe when they enter TE 301-about teaching, learning, schooling, and learning to teach?
- How can we fully engage our students in our program? That is, how do we
 create conditions in which it is rational for students to devote their "inner
 attention" or "soul action" (Dewey's terms) to our course, as distinct from going
 through the motions, engaging in procedural display, or devoting only their
 "outer attention" to the work?
- How do we help our students to construct knowledge that is closely related to strong images of professional action?

In a related document, Bird listed specific problems to be addressed in the class alongside related goals from the 1988 taskforce report (*A Framework for Problems of TE 301*, November 2, 1992). He also noted that, "the new TE curriculum is said to be, or intended to be, an integrated and spiraled curriculum," asked what the professional curriculum was supposed to "spiral" around, and then suggested "that the curriculum spirals around the student's (and teacher's) question, 'What should I do-with this subject matter, and these students, in this situation- and why?'" (*A Starting Place for Designing TE 301*, November 8, 1992).

These are some of the only examples I have found of a faculty member directly consulting the formal documents that had been created to guide the reform effort in the context of close planning of the new courses. Bird also raised a set of more general questions about the

design of the new program, including how the faculty would engage students intellectually in the work, what aspects of teaching and related phenomena instructors should represent to students, and how; how instructors should engage their students as individuals; how the faculty should organize students into cohorts, and what understandings, roles, norms, practices, and tools should characterize the cohorts as learning communities. In an agenda for the TE 301 Planning Group dated November 12, 1992, Bird advised "a deliberately simple approach" to the planning process and suggested that he and his colleagues assume that they were developing a temporary course that could be easily changed, "work from the bottom up" and "develop a syllabus with readings and activities, and then a rationale for it, instead of the other way around;" "assume that variation by instructor and team is expected and desirable, particularly if we can feed experience back into re-design;" "hold that it is better to be crude and right than refined and wrong—work with an ax rather than a scalpel;" and "do enough at first to build a shared sense of overall strategy, chunks, flow, so can break into working parties to develop pieces and then try to pull it back together" (Agenda for TE 301 Planning Group, November 12, 1992). Bird's work here is important for its attention to the process of design and to the learning needed to make, study, redesign, and institutionalize changes.

In a similar though less detailed set of documents, Linda Anderson contributed "some thoughts and a proposal to add to the pile" (Memorandum to 301 Thinkers/Planners from Linda Anderson, n.d.) She suggested that TE 301 be organized around a central guiding question or small set of questions, with students assigned to reexamine continually their ideas about the question or questions. She also proposed that the instructional staff of the course agree on a small set of key ideas that would serve as "conceptual tools" and "provocation" as students responded to the guiding question, and that these key ideas guide the selection of readings, cases, and assignments for the course. She subsequently proposed potential guiding questions, including, for example, "How should I act as a teacher?" and five potential key ideas, all of which she described as challenging "students' entering notions about learners and learning." Notes from meetings of the TE 301 Planning Group and the Coordinating Council during the remainder of the

semester refer to numerous conversations about the ideas of Bird and Anderson as well as other faculty members' suggestions for how to organize the course.

Other faculty members and graduate students also supplied detailed ideas and proposals for TE 301. Dirck Roosevelt, for example, an advanced doctoral student who would later become a faculty member on Team 1, shared a memo suggesting a potential organizing question for the course ("What resources do I have and will I continue to have as a student of learning and of teaching and as a professional?). He proposed using written recollections and reflections in the class as a means of eliciting students' ideas about this question (Memorandum from Dirck Roosevelt, December 1, 1992). Jay Featherstone, soon-to-be leader of Team 1, circulated pages of written ideas for the content of TE 301 (Memorandum to 301 folks from Jay Featherstone, n.d.). Faculty members on Team 2 passed around thick packets of notes toward the development of the course, including detailed ideas for the content of each class meeting, proposals for activities students might complete in the "laboratory" section of the course, assignments, and readings (e.g., Memorandum to 301 Planning Team from Teresa Tatto, n.d.; Questions/Suggestions on Possible Course Content, n.d.; Sample syllabus for TE 301, n.d.). In some cases, their notes about what they might do in a single class meeting encompassed several pages of texts and diagrams, and occasionally included ideas about potential alternatives for each class meeting. They also considered in writing more meta-level questions about what they would need to do as instructors in order to teach TE 301 effectively. They anticipated teaching problems that they would encounter as course instructors (e.g., "How can/should I engage the students with the subject-matter? How can/should I organize the class as an instrument of academic learning as an element of curriculum in itself, and as a way of living now?") and suggested answers; they made notes about how they could use TE 301 as an "introduction to a discourse community;" and they examined their role as instructors (e.g., "a desirable role we could play sometimes is someone who reads, learns, and tries along with students"). These artifacts suggest highly engaged faculty members who were willing to put hours of work and careful thought into

course planning and into a collective effort to improve teacher education (*Ideas about TE 301 for Team 2*, December 15, 1992).

There is less evidence of detailed planning on the other new courses in the sequence. TE 301 seemed to consume most or all of faculty members' time in the fall of 1992, and I have found few references to collaborative discussion and planning of other parts of the curriculum. Such planning may have occurred, but if so, it did not result in the prolific paper trail that documents the work on TE 301. In November of 1992, Tom Bird did circulate a new document summarizing key questions, goals, and topics for each of the remaining courses in the new program, including those that would take place during the internship year, but his notes seem to be derived primarily from preexisting documents generated by the working groups (*Program* Summary Page One, November 2, 1992). Few of the individuals that I interviewed recall engaging in any in-depth design work for the new program beyond what they did for TE 301; instead, they report spending a preponderance of their time planning course schedules, cohort structure, and advising procedures; investigating possibilities for providing financial aid to the students who would soon be required to spend an extra year in college, completing the nowrequired internship year; and interacting with the many doctoral students who would be teaching in the new program. In December of 1992, less than one month before students would arrive, a cross-team taskforce was assembled to consider the integration of computers and other forms of technology into the new program, and team leaders began looking in earnest for teachers and schools with which to place students in field work. But there is little evidence of detailed design work on other parts of the program. Much of the work to determine the content of the new curriculum would take place after the program had already begun.

Michigan State's New Program—or Programs

Because so little design work had been completed prior to the arrival of the first cohort of students, most of the faculty members who served as team leaders during the semester transition remember the beginning of the new program as an overwhelming time. When asked about the work of "implementing" the new program, for example, one team leader countered

that, "the language of 'implementation' doesn't really capture what the teams had to do, which I think was as much invention—or more invention—than implementation" (Anonymous 5, interview, April 17, 2007, transcript i.m.p.). The leader of a different team agreed, explaining that, "we were building the boat as it was sailing out of the open harbor and into the open sea" (Anonymous 3, interview, September 15, 2007, transcript i.m.p.). Still another described the work as "trying to fix a flat tire while the car is still rolling down the road...you were attempting to offer a program while you were still developing it, and it was just so enormously challenging" (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). A fourth team leader provided a less metaphorical account: "We had to design a program at the same time as we were implementing a program at the same time as the university was moving from quarters to semesters" (Anonymous 20, interview, June 19, 2006, transcript i.m.p.).

Over the next three years, these team leaders and their colleagues made an effort to design and execute professional education that met the goals of the reform—and to do it while coping with all the practical demands of restructuring. They enrolled their students in cohorts that offered considerably more intimate learning environments than had the original "standard program," they provided more extensive field placements for all students than they had before, sometimes within professional development schools, and they began to develop assignments and activities that engaged students more closely in studying the knowledge and skills needed for teaching. But the incomplete state of knowledge about teaching and teacher education combined with the lack of time for detailed planning prior to the semester transition and the paucity of guidance for any design work meant that MSU's new program only approximated practice-focused teacher education. And the fact that most teams were composed of faculty members who shared particular views of teaching and teacher education and brought their own goals to the enterprise resulted in significant variation from one team to the next.

Inching Toward Practice

After the semester transition, the most distinguishing feature of Michigan State's new teacher education program was the required fifth year internship. After completing two

prerequisite courses in educational psychology and diversity and three traditional courses in the College of Education, MSU students spent an entire academic year observing and practicing in a single K-12 classroom, under what was intended to be close supervision and mentorship of both a university field liaison and the classroom teacher. Few other undergraduate teacher education programs in the United States offered an entire year of mentored classroom experience, and Michigan State drew respect and praise from across the Holmes Group membership for this risky-seeming and expensive commitment. After an initial dip, large numbers of undergraduates continued to enroll in the COE's program, proving wrong earlier concerns about the deleterious effect the fifth year requirement might have on prospective students' interest in the program. Many students did report struggling with the financial burden of a fifth year of college and with the practical challenges of traveling to or even relocating to the community in which they taught, but the new program drew enthusiastic praise from students. Within a few years, applications to the program were more numerous than they had ever been before (Anonymous 4, interview, October 14, 2010, transcript i.m.p.).

Inside the junior and senior year courses, teacher education at MSU also began to look very different than it had just a few years earlier, with many more opportunities for students to study the work of teaching closely. Many faculty members went to lengths to equip students with content knowledge for teaching and to help them understand classroom instruction as a complex, skilled practice. The new program was designed so that the first year—the junior year, during which students completed TE 301—would help students learn to "think like a teacher;" the second year would help students "know like a teacher;" and the internship year would help students "practice like a teacher" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.; Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Whereas assignments for students in the earlier standard program had consisted primarily of brief written papers and exams, instructional activities in the new teams were intended to engage students much more directly in work with children and in close interrogation of school subject-matter, in how children understood that school subject-matter, and in what a teacher needed to know and be able to do

in order to help children learn (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). In TE 301, students were expected to spend two hours per week working closely with an individual child, studying how that child interacted with subject-matter and what his or her misconceptions and understandings were. During each of the two senior year courses, students were expected to spend an average of four hours per week in fieldwork, interviewing teachers and students about curriculum and planning and teaching individual and small groups of students. In addition, some instructors used video records to engage students in analysis of teaching. A few faculty members even developed their own cases, sometimes using a combination of written and video records (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). The use of cases in general and video records of practice in particular was relatively new at the time and demanding for instructors; it introduced a more professional and less traditionally academic approach to preparing teachers.

Another important feature of the new program was the closer relationships it afforded between faculty members and students. Whereas many students in the standard program had few occasions on which to interact with a course instructor or other faculty member, students in the new program could not help but come in frequent contact with MSU instructional staff.

Classes were smaller and often relied on discussion and every student had a field liaison and mentor teacher. In addition, most teams hired a coordinator to address students' questions and concerns and help them handle registration and other practical matters, and to mediate any conflicts that might emerge between students and instructors. In some cases, the student coordinator also played a key role in helping students understand their obligations and responsibilities as new members of a profession and make the shift from college student to professional teacher. Sometimes, the student coordinator worked with mentor teachers and team leaders to make high-stakes decisions about whether students would be permitted to graduate from the program (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). It was a much closer-knit learning environment in which it was difficult for students to "slip through the cracks."

This kind of teacher education placed new demands on the faculty members, doctoral students, and classroom teachers who worked with MSU students and interns. Recognizing this, several faculty leaders tried to invest deliberately in the instructional capacity of everyone on their team. Some, for example, held regular team retreats in which they met with teachers, doctoral students, and anyone else who would be interacting with student teachers and interns to discuss course goals and teaching strategies. One team leader reports inviting the instructors on her team to bring to these meetings examples of course assignments and student work for everyone to study together, as well as asking them to develop collective agreement around "what they were looking for in a student teacher" (Anonymous 5, interview, April 17, 2007, transcript i.m.p.). On a different team, leaders occasionally held meetings with the cooperating teachers who worked with their students; they often asked more experienced cooperating teachers to share expertise with new additions to the team (Anonymous 3, interview, September 15, 2007, transcript i.m.p.). Many of the professional development schools also supported mentor teacher study groups in which cooperating teachers worked on common problems of helping new teachers learn. Averill Elementary Professional Development School was the site of some of the most extensive of these efforts, and Sharon Feiman-Nemser chronicles her work with teacher Kathy Beasley and one of Beasley's interns in Team 1's book.

Overall, however, teacher education at MSU after the semester transition moved only a few steps closer to practice. The most significant changes were the deliberate sequencing of courses, the requirement that all students enroll in a relatively small cohort, and inclusion of more field experience, particularly the fifth year internship. Despite these structural changes, however, intended outcomes were still not defined in terms of specific knowledge or specific practices that students should be able to do, and there were no performance assessments. Just as it had during reform efforts at other times and at other places, teacher education at Michigan State retained a mostly course-based structure, and students could graduate without demonstrating the ability to perform any particular set of teaching moves. Much was left to chance; students who were fortunate enough to be assigned to a field liaison or mentor teacher

who was skilled at supporting novice practice might learn a great deal, while students who worked with less able or interested instructors might learn much less—there was no collective understanding of what all students should learn, and no accountability for either instructors or students. Other than the occasional use of cases and video analysis, instruction generally took the form of relatively traditional class discussions, papers, and projects.

Variation Among the Teams

But instruction at Michigan State also did not look exactly the same from one team to the next. Almost immediately, the teams began to develop in somewhat different directions, each earning a reputation for a particular emphasis or personality. Perhaps the most distinctive was Team 1, the "progressive" orientation of which is chronicled in a book recently published by some of its most involved faculty members (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Team 1 leaders name both the Holmes Group and the "history of reformist teacher education" at Michigan State as influences, but they also credit their own personal and political identities with defining the program that they created together. Some of the Team 1 leaders had been active in the civil rights movement and were committed democratic activists; many subscribed to the views of educational progressives such as John Dewey, Lucy Sprague Mitchell, Theodore Sizer, and Deborah Meier. Several had spent time working at the Prospect School, an independent, progressive school in North Bennington, Vermont that had flourished throughout the 1970s and 1980s. They brought to MSU and to their work on teacher education a vision of K-12 classrooms as democratic learning communities in which all children would be deeply engaged intellectually and personally, and they sought to produce teachers who would be "a mix of artist, scientist, and activist" (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007, p. 18). Indeed, Joseph Featherstone, who co-led Team 1 with Sharon Feiman-Nemser—herself a veteran of MSU's Learning Communities program, which emphasized the importance of children learning to participate in a classroom culture of intellectual exchange was one of the authors of Tomorrow's Schools, the Holmes Group's second report in which a

significant amount of space was dedicated to describing schools as oases of learning and community.

One hallmark of Team 1's work was Child Study, or the practice of analyzing an individual child and his or her educational strengths, needs, and views for an extended period of time.

Although all or most of the teams in MSU's new program assigned their students to work closely with individual pupils as part of TE 301 fieldwork, Team 1 made traditional Child Study as it had been defined by Patricia Carini at the Prospect School a central focus of the curriculum. They intended their students to use Child Study to develop a deep appreciation of the inherent capacity of every child to learn and to participate in community, broadly defined, and they viewed the practice as essential to helping prospective teachers develop necessary moral and intellectual habits and instructional skill (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Students in Team 1 spent at least an hour every week of their first semester in the teacher education program in a local classroom, observing, interviewing, and analyzing the work of a single child. They kept detailed logs of their observations, wrote memos and reports, and often made oral presentations to their classmates about their focus child.

Although Team 1 instructors assigned many other projects and activities across the program, they frequently invoked Child Study and the ideas and principles that guided it in other parts of the curriculum. In the view of Team 1's leaders, inquiry into the worldviews, strengths, and needs of individual children was essential to countering the rising tide of standardized testing and of the research-oriented university "monoculture" that threatened progressive, democratically-oriented teaching and teacher education (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Instructors on Team 1 tried to teach their students that the work of teaching included the continuous identification and exploration of problems, and that they would need to create their own knowledge if they were to teach in ways that helped children develop curiosity, agency, and intellectual knowledge and skill—Team 1 leaders were skeptical that traditional university research—divorced from practice and practitioners—would yield powerful knowledge that could profitably guide classroom teachers. They embraced instead

the action-oriented research pioneered by their colleagues Magdalene Lampert and Deborah Loewenberg Ball and tried to instill a commitment to similar inquiry in their own students.

For faculty members on Teams 2, 3, and later 4, child study was important but other issues and aspects of teaching and learning to teach mattered as much or more. Instructors on Team 2, for example, made literacy and learning to teach literacy, rather than child study, the focus of TE 301. Many of the Team 2 faculty members had previously worked together in the Academic Learning alternative program, and helping prospective students understand school subjects, develop skill at teaching them, and appreciate the fundamental importance of school as a place where students could learn academic content was paramount. Because they viewed literacy skills as fundamentally important to success in school across subject-areas, it made sense to them to focus prospective teachers' attention on them from the beginning of their professional training. Team 3 introduced yet a different focus, this one on the needs of urban schools and on the challenges of teaching in urban classrooms. At least one of Team 3's leaders spent a considerable amount of time working in professional development schools in Flint, Michigan-a decaying and challenged city struggling with the aftermath of recent shifts in the auto industry and made problems and lessons from that work a central focus for her team. Students on Team 3 were encouraged to complete fieldwork in urban schools and to study the problems of teaching in under-resourced environments. Although such a focus was certainly compatible with an orientation toward academic learning or toward the construction of democratic learning communities, Team 3 instructors gave less attention to these issues.

These varying orientations and approaches to teaching and teacher education meant that within a few years of the semester transition, Michigan State once again housed several distinct teacher education programs. Faculty members clustered together in teams that reflected their common interests and orientations, and each team developed a reputation for particular emphases and commitments. Still, students across all four teams were enrolled in courses with the same titles and the same overarching goals, and they followed a specific sequence of course-taking that reflected an instructional vision that was much more coherent than that of the so-

called "standard program" of earlier years. All students participated in field experiences, some of them closely mentored, and all completed a year-long internship. The teams had important commonalities as well as differences, and all of them introduced many more opportunities to study and practice the work of teaching than had been available in the standard program.

By the mid-1990s, when some of the logistical hurdles of establishing the new teams had been cleared, some faculty members even made overtures in the direction of greater commonality. The department chair and several other faculty members, for example, were able to begin trying to assemble representatives from across the teams to develop some consensus around program standards (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). Sharon Feiman-Nemser discusses some of this work in Team 1's book, and suggests that MSU eventually made strides in the direction of common standards for all. Some of these efforts appear to inform teacher education at Michigan State even today. At the same time, many members of the COE community were growing increasingly discouraged as they realized that Michigan State simply did not have the human or financial resources to carry out the new program as they had intended. The intense demands on instructors were leaving many exhausted, and financial and moral resources were beginning to dry up.

The Professional Development Schools as Instruments of Reform

At the same time that faculty members were building and implementing the new teacher education program, many were also investing significant amounts of time in the professional development schools. By 1994, Michigan State had established fourteen PDSs and was sending at least thirty tenure-line faculty members to work in them every year. Eighty MSU interns spent four days per week or more at PDS sites and approximately 250 teachers across the fourteen schools were engaged in PDS activities. Financial support for the enterprise from the Michigan Department of Education and the Michigan Partnership for New Education had risen from the initial grant of a quarter of a million dollars to over 1.5 million dollars annually (*Professional Development Schools and MSU: The Report of the 1995 Review*, 1995, p. 4).

Looking back at this era, it is possible to see how the professional development schools as Michigan State had created them bore on the work of reform as well as what their inherent shortcomings were as instruments of change in this very early stage in their genesis. By the early 1990s, MSU's professional development schools were beginning to demonstrate that a new kind of school-based learning community might be possible. They supported a variety of research and teacher education activities, from MSU-based research projects led by faculty members to smaller, site-specific teacher inquiry projects to study groups for teachers and student teachers. Reports issued by the Michigan Partnership for New Education and by the College of Education in this period indicate that participation in these activities was still enthusiastic, and there is evidence that PDS-related work produced important advances in research and teacher education. If, in retrospect, the PDSs disappointed, it was because faculty members and administrators at Michigan State and in the Michigan Partnership for New Education had still not developed a formal research and development agenda nor organized structures that would support collective learning from the work.

One important function of the MSU professional development schools in this period was to serve as a site for efforts to identify the features of what scholars were beginning to call "teaching for understanding" (Cohen, McLaughlin, & Talbert, 1993). Researchers including Deborah Loewenberg Ball, Magdalene Lampert, Penelope Peterson, and Suzanne Wilson used funds provided by the Michigan Partnership and the hospitable atmosphere of local PDSs to study what it took to help students achieve deep and lasting learning in school subjects. Often building on work begun by researchers in the National Center for Research on Teacher Education and even by earlier Francis Parker, John Dewey and their colleagues, they used daily classroom teaching as an opportunity to study the challenges of promoting meaningful encounters with subject-matter for pupils. Deborah Loewenberg Ball, for example, designed and studied her own teaching with an eye toward understanding what it took to engage students in productive whole group discussions, in making and evaluating public conjectures about mathematics, and in constructing mathematical understandings collaboratively (Ball & Rundquist, 1993). Similarly,

Suzanne Wilson worked with full-time teachers to explore the roles of time, trust, communication, and courage in what she called "adventurous" social studies instruction (Wilson, Miller, & Yerkes, 1993) and to identify the pedagogical content knowledge needed to teach (e.g., Ball & Wilson, 1996). These efforts were part of a broader push among educationists across the country to define a new vision of excellence in classroom teaching and to probe the demands of that vision for teachers' knowledge and skill. They were directly relevant to the work of reform in teacher education.

The professional development schools in this period also served as a site for the development of teacher education pedagogy. Several Michigan State faculty members seized on the opportunity to work closely with teachers whose time had been freed up for such collaboration to interrogate the role of the "cooperating teacher" and identify specific moves that cooperating teachers could make to support interns' learning. At Averill Elementary School, for example, Sharon Feiman-Nemser and other Team 1 instructors worked with teachers to begin to develop a repertoire of on-the-spot coaching moves that cooperating teachers could use in their work with novices. They also experimented with the use of video in teacher education, developing analytic tasks for viewing videotapes of student teachers' practice and crafting related conversations (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). At a different PDS, Magdalene Lampert, an MSU faculty member who also taught fifth-grade mathematics in a professional development school, and Ruth Heaton, an MSU doctoral student who taught fourth-grade at Lampert's school, regularly observed each other teach, identified instructional dilemmas together, and experimented with solutions. They zeroed in on the problems of teaching specific mathematical content. Their goal was to give serious attention to the work of teaching a specific subject and to make explicit what was involved in this kind of detailed, subject-matter focused conversation between teacher educator and novice teacher (Heaton & Lampert, 1993). All of these projects rejected the prevailing assumption that all cooperating teachers could or should do was to turn over their classrooms and watch helplessly as student teachers struggled. Feiman-Nemser, Lampert, and their colleagues were beginning to

establish not just teaching, but teacher education as a professional practice with a body of knowledge and skill that, if mastered, might support novice teachers to achieve better results.

Ball, Wilson, Feiman-Nemser, Lampert, and other MSU researchers working in the PDSs provided essential resources for the reconstruction of teacher education. Identifying the features of effective subject-matter instruction was central to determining the components of an improved teacher education curriculum; articulating the moves and activities that would support productive interactions between student teacher and teacher educators was similarly necessary to building professional education that would influence practice. These faculty members and their colleagues were beginning to unpack problems of teaching and teacher education and to specify practice in ways that few had tried to do since the end of the nineteenth century. In the process, they were demonstrating rare examples of rigorous classroom instruction and collaborative, practice-focused research. All of this work was of exactly the sort that members of the Holmes Group intended the professional development schools to promote and support, and it was central to the goals of reform.

As instruments of change, however, the professional development schools in their infancy suffered from at least two shortcomings. One was that the faculty and staff who oversaw the initiative did not seem to promote or support consistent work on the research agenda that I described above—serious inquiry into teaching and teacher education took place only in some subject-areas and grade-levels and only on some aspects of practice. It tended to be driven by the interests of particular researchers and teachers rather than by a collectively-determined and strategically-identified set of questions that needed to be answered for the purposes of broad change. Second, there was no formal feedback loop in place that would increase the likelihood that what was learned from work on this agenda would systematically inform teacher education reform. Some instructors in MSU's teacher education program altered their teacher education practice according to what they learned from their own work in the PDSs or their colleagues' work; others did not. Other than the meetings that took place inside of some of MSU's four new teams, there were no formal conferences, publication series, or other mechanisms for reviewing

and disseminating findings from the work and for determining how to use the knowledge to inform change. Similarly, there was no one charged with coordinating an intellectual agenda for the PDS movement or supporting organization-level learning from the work. Consequently, although the professional development schools seemed to encourage work that was relevant and sometimes even crucial to reform, and although they sometimes impacted the work of particular students and teachers, they did not automatically lead to widespread changes in practice.

This interpretation of how the professional development schools functioned is consistent with my analysis of how other tools of reform worked—or failed to work—at Michigan State. Judy Lanier chose blunt instruments of change that were salient to her goals but that did not always apply direct pressure to the problems she hoped to solve. In the case of the professional development schools, Lanier either assumed that they would work on their own to produce lasting changes in education research and particularly in teacher education, or else she simply had no time to consider exactly how they would work. The thinking seemed to be that the PDSs would foment not only inquiry and knowledge production directly relevant to reform, but also efforts to harvest from what was learned and turn that learning into widespread change. Even where Lanier deliberately created mechanisms for extracting ideas from the PDSs and disseminating them, as she did through the Educational Extension Service that was part of the Michigan Partnership for New Education, the focus was primarily on structural changes rather than on substantive ones. The Educational Extension Service, for example, was set up to foster the spread of ideas across the professional development schools and even among other public schools, but its staff took no responsibility for creating and maintaining a specific agenda of work that might help answer particular questions about the features of excellent classroom instruction or the curriculum of teacher education. Lanier's approach was not dissimilar in other aspects of reform; on campus, for example, she hired new researchers and rearranged the faculty into new teams in order to facilitate the development and dissemination of new ideas, but she provided few specific instructions for how the faculty should work or on what problems.

This apparent lack of specificity in Lanier's direction is important in part because it suggests just how ground-breaking this work was. Given how early Lanier and her colleagues were in the process of developing the PDS concept and learning about what would be required to build an effective network of schools, specifying the features of the schools or the terms of, for example, the Educational Extension Service, would have been difficult. Just as Lanier and the COE faculty were learning as they worked about how to design and teach a practice-oriented teacher education curriculum, they were learning how to build a network of K-12 schools that would help produce the enormous changes they envisioned in teachers' work and in the work of teacher educators. They could not know what an effective PDS enterprise would require until they tried to build it.

One symptom of the immaturity of the PDS initiative in this period was that some of those involved seemed to view the creation of the schools as an accomplishment in and of itself rather than as a vehicle toward achieving other goals. The close professional relationships that often developed between MSU faculty members and PDS teachers, for example, were celebrated as inherently good. Official reports and articles published in the popular press in this period reflect conviction that involving teachers in research and teacher education was so obviously beneficial that evaluation of the results of the partnerships and research projects that developed was unnecessary. "Reform Partnership Makes Bridging Gaps Its Business" read one headline in Education Week in August, 1993; the article praised the PDS initiative for fostering collaboration among professors, teachers, and business leaders but said little about specific outcomes (Richardson, 1993). When stakeholders did attend to results, they tended to focus on student test scores in specific PDS sites. These metrics made sense given the early stage of the work, as they reflected important milestones in the creation of a new kind of institution, particularly one with children at the core. Studies that might have provided information about whether the professional development schools were promoting widespread changes in teaching or teacher preparation would have been at least as useful, but I have not found evidence that anyone conducted them at Michigan State.

Building the professional development schools and forming the Michigan Partnership for New Education was an ambitious and time-consuming enterprise, and the faculty and staff members who were involved accomplished a great deal in a relatively short period of time. That they did not accomplish more may be yet another expression of the dilemma inherent in the work at Michigan State. The professional development school concept was such a pioneering one that it would have been difficult to know in advance what it would take to make it work. Lanier and her colleagues were at the beginning of what could have become a large and long period of design and development, and learning how to build a network of professional development schools that could serve effectively as a tool of reform in teacher education and education research may only have been possible by beginning to do the work. It was too early to expect that these new institutions would do any more than what they did.

Overarching Challenges by the Mid-1990s

By 1995, it was becoming clear that the College would not be able to attain Lanier's full vision for reform. During the 1994-1995 academic year, COE administrators commissioned formal reviews of both the teacher education program and the professional development schools, both of which surfaced problems that were challenging faculty members' commitment to reform.

There were at least three sets of issues. One was the still-limited knowledge for the work and, more importantly, corresponding limits in what many of the instructors who taught in the new program knew how to do. A related problem was that faculty members and administrators lacked strategies for navigating the professional expectations of higher education as they engaged in work that differed significantly from traditional education research. A third challenge had to do with the imperative to scale up Michigan State's new program rapidly and then sustain it over the long haul, even in the face of these constrained resources. The exhaustion and discomfort that dealing with these issues produced were beginning to erode commitment to the goals of reform within just a few years of the semester transition.

Knowledge, Instructor Capability, and MSU's New Program

One of Judy Lanier's most critical assumptions had been that a sufficient number of MSU and school-based personnel had the skill and the interest to design and implement practice-oriented changes in teacher education. When Lanier became dean—and in large part due to her efforts—a comparatively large number of faculty members in the College of Education did have strong interests in practice and were uncommonly smart and experienced teacher educators. At the same time, MSU's teacher education program relied on many instructors with no special interest in teacher education or teacher education reform. Some of these were senior faculty members who had been employed at MSU for decades and were no longer very active in their fields; others were adjunct instructors or doctoral students who were drawn or forced into teacher education out of financial necessity. Still others—particularly doctoral students—were interested in teacher education but utterly inexperienced. Further, teachers in the professional development schools and other field placement sites were often poorly equipped for mentoring or otherwise supporting novice teachers. As team leaders struggled to staff their courses and to administer programs that met the original goals of the reform, this lack of capability around them became a significant problem.

Insufficient skill was most obvious when it came to staffing on-campus courses in the teacher education program. All of the team leaders whom I interviewed for this study reported that they usually could not ensure that every course for their team was taught by an instructor whose teaching skills and approach matched the expectations of the new program. Their most common complaint was about very traditional, lecture-based instruction that focused on sometimes-outdated educational theory. One faculty member opined that she could never make assumptions about what kind of instruction students received in their other courses because those courses varied wildly from one instructor to the next, and that many of them were of poor quality (Anonymous 19, interview, August 2, 2006, transcript i.m.p.). Others made similar reports, often remarking on the scale of MSU's program and the inconsistent quality of instruction in Erickson Hall (Anonymous 18, interview, July 23, 2007, transcript i.m.p.; Anonymous 14, interview, August 4, 2006, transcript i.m.p.; Anonymous 20, interview, June 19, 2006, transcript

i.m.p.). Without observing in those classrooms, it is impossible to determine exactly what kind of instruction took place; across the course of this study, however, not a single individual reported consistent or sufficiently skilled teaching in the new program.

College of Education faculty members also charged instructors in the disciplinary departments with poor teaching, or with teaching that was not aligned with the goals of reform (Anonymous 14, interview, August 4, 2006, transcript i.m.p.; Anonymous 3, interview, September 15, 2007, transcript i.m.p.). Some of the central goals of both the Holmes Group and Michigan State faculty concerned changes in prospective teachers' academic preparation, but COE leaders continued to encounter resistance and disinterest in preparing teachers from their colleagues in the arts and sciences. Many courses retained a lecture-based structure, and few seemed to take seriously the knowledge demands of teaching. In the College of Natural Sciences, the dean reportedly refused to allow prospective teachers even to enroll in courses in his unit (Anonymous 16, interview, September 22, 2010, interview i.m.p.). One exception was in the English department, where several faculty members created a small set of required courses for prospective English teachers that combined the study of English with study of the pedagogy of English. Such efforts in the departments were reportedly few (Anonymous 16, interview, September 22, 2010, transcript i.m.p.).

Disinterest, in addition to lack of capability, was also a problem among faculty members inside the College of Education. After the semester transition, team leaders were often forced to beg some of their colleagues to work in the new program, and frequently resorted to asking large numbers of doctoral students to take on teaching responsibilities for which they were not prepared. In one team leader's account, some faculty members simply were not interested in working in an urban-oriented teacher education program, and demurred when asked to participate (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). This team leader reports that at one point, her team had only two regular faculty members teaching in it: herself, and her co-leader. Another team leader reports being forced to staff her program with members of "the old guard" of faculty members, or individuals who were disinterested in the reform or in

improving their own practice, but were compelled to teach because they lacked funding from research grants that would have enabled them to "buy out" their teaching time (Anonymous 20, interview, June 19, 2006, transcript i.m.p.). A different kind of problem resulted when talented, research-focused faculty members were able to buy out their teaching time; this same team leader explains that by the mid-1990s, she felt she was "involved in something of a losing battle as more and more faculty were able to elect to do other kinds of things."

A lack of capability and interest were also problems when it came to working in the professional development schools. As I discussed in the last chapter, many teachers and administrators in the PDS sites were enthusiastic and capable participants in partnerships with MSU. Several COE faculty members can point to specific teachers who not only served as coinvestigators in research projects, but provided student teachers and interns with excellent examples of practice in ways that matched MSU's inquiry-oriented vision of what classroom teaching could be. Vivid portraits of their work can be found in Team 1's book (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Here again, however, all of the team leaders that I interviewed reported that they were never able to find enough skilled individuals in the schools to serve as cooperating teachers and mentors to their students. One team leader estimated that only fifty percent of the teachers that she worked with taught in ways that were aligned with the goals of the MSU reform (Anonymous 20, interview, August 8, 2007, transcript i.m.p.). Others demonstrated instruction that did not attend to children's ideas and misperceptions, or else lacked the skill or interest required to help a novice practitioner identify and emulate important elements of teaching. In some cases, engaging in collective study of practice was simply so new that few knew how to do it.

In some of the PDSs, for example, College of Education faculty members would send their students in to observe the practice of a particular PDS teacher—in some cases, they would even observe with them. In an approximation of the morning rounds in teaching hospitals that are routinely used to train medical students and residents, the faculty member would then debrief the instruction with the PDS teacher, often in front of student teachers or interns, and

sometimes even on the MSU campus. These debriefing sessions would include asking the teacher to explain the decisions that he or she had made in the course of the instruction and to talk about his or her reactions to student work. One individual who participated in these sessions explains that in some cases, both faculty members and teachers struggled with this very new kind of public practice: "Having a teacher publicly talk about what was going on in their classroom and why they made those decisions and stuff...this was just so far out of the norms that there were not enough people who knew how to do it" (Anonymous 6, interview, May 8, 2009, transcript i.m.p.). This same individual reports that she lacked the skills to facilitate these discussions well herself. She also describes herself as not particularly skilled at the team-teaching in which she participated with teachers in a PDS high school. In an effort both to demonstrate effective instruction to MSU student teachers and to "have a more authentic way to talk about what it was like to be [a teacher in a public high school], and to share the experience," this COE instructor spent time co-teaching in a PDS with a full-time teacher. She explains that as an experienced high school teacher herself, she knew how to teach the class, but was entirely uncertain about how to collaborate with the regular teacher, or how to talk about the work with her own student teachers:

The skills you needed to implement so much of this work was way beyond any of the academic training that any of us had. It took—it would have taken—somebody with knowledge way beyond [what we had]. Many people [on the MSU faculty] may have known math, they may have known social studies, but they didn't know how to partner with some of these people, especially in some of these difficult, difficult schools. The other big problem was that it was very hard to get administrators—superintendents, principals—to open their buildings up, because it opens you up to a whole lot of criticism. And some people opened them up and then closed them because all of a sudden it was way too public about what was going on—way too public (Anonymous 6, interview, May 8, 2009, transcript i.m.p.).

Teachers in the professional development schools sometimes expressed similar concerns.

At Elliott Elementary Professional Development School, for example, teachers professed needing "to get better at helping novices learn more about what it takes to create the kinds of learning communities they see at Elliott instead of coming away thinking it looks easy..." They added that,

"figuring out meaningful TE course-related tasks that are also integrally connected to the daily work of teaching remains a challenge...we must continually look for ways that course assignments can move the work of teaching along in productive directions" (see Michigan Partnership for New Education 1995-1996 Plan, p. 114). Teachers at Holt High School also acknowledged struggling with the new norms that came along with work in a professional development school:

To move from isolation to community, we must also learn how to collaborate in substantial mutual efforts that alter our practice, learn how to share our experience with each other, and learn how to provide and accept constructive criticism. We have to renegotiate the norms for interaction among adults in the school, as well as former understandings about that interaction. For example, we have to change the long-standing tradition that, "Experienced teachers can and should handle everything by themselves" (*Michigan Partnership for New Education, 1994-1995 Report*, December 1995, p. 96).

To be sure, these comments suggest not failure, but movement and growth in the direction of the kind of professional community that Judy Lanier and her colleagues envisioned. There were few other formal efforts among "cooperating" teachers in the United States in the early 1990s to improve teacher education practice. As time went on, however, the lack of or slow growth of skill among PDS teachers seemed to be less of a problem than lack of interest or commitment. By the mid-1990s, many PDS teachers and administrators were exhausted, worried about budgets, or simply disinterested. Funding for the Michigan Partnership for New Education was beginning to dry up, and annual plans and reports noted not only cut-backs in projects, but decreasing interest in PDS activities across most of the school sites. In some cases, there were hints that even those PDS teachers who were originally among the most committed no longer believed that their work would ever lead to substantial changes. Teachers at the Northwestern High School Professional Development School in Flint, MI, for example, wrote that they "became even more convinced during the 1994-1995 academic year, that a handful of teachers, administrators, and university faculty cannot change a school culture" (Michigan Partners for New Education 1994-1995 Report, December 1995, p. 160). Just as faculty members were on MSU's campus, PDS teachers were overworked, tired, and sometimes confused about the purposes of

their efforts and the potential for rewards. And these were the teachers who participated eagerly; many others had little or no interest in the enterprise.

Many of these challenges at Michigan State derived from a larger problem that resided not with individual faculty members or teachers but with the field of education research. Looking back at the work of the Holmes Group and of the MSU faculty, it is possible to see how the limits of the knowledge about teaching and teacher education that existed in the 1990s impeded reform, and to see this to a degree that might not have been possible at the time. As researchers and reformers working more recently have developed the concept of practice-focused teacher education, they have begun both to produce new knowledge that can serve as the basis for this new approach to professional training and to point out how much education researchers and teacher educators still need to learn. Some have begun to develop theories about the kinds of content knowledge that are needed for teaching (e.g., Ball & Bass, 2003) and about what instructional practices matter the most for competent beginning teaching (e.g., Boerst, Sleep, Ball, & Bass, 2011; Franke, Webb, Chan, Ing, Freund, & Battey, 2009; Hatch & Grossman, 2009), neither of which were available when the Holmes Group was active. Many of these same researchers also point to continuing gaps in collective understanding of what knowledge and skill are essential to competent beginning teaching (e.g., Grossman & McDonald, 2008). Thirty years ago, even less was understood about which practices were the most important for beginning teachers to learn and what knowledge would enable competent engagement in those practices. In fact, many of the researchers studying these issues today were young faculty members in the days of the Holmes Group. The origins of their current research can sometimes be traced to the ideas on which the consortium chewed.

But because teacher educators in the 1990s were only at the beginning of work to define practice-focused teacher education, the components and requirements of what was a still-new concept could not have been clear. By "components," I mean not only understanding of what knowledge and practices should form the core of the teacher education curriculum, but of what teacher educators, including those who worked in K-12 schools as "cooperating" teachers,

needed to know and be able to do in order to implement that curriculum, and of how departments of teacher education needed to be structured to enable the entire enterprise to function. In many ways this was at the heart of the College's struggle to achieve a comprehensively practice-focused curriculum, although very few of the faculty members whom I interviewed for this study ever mentioned the issue—which itself is indicative of the problem. In their first report, members of the Holmes Group had asserted that research and development in the curriculum of professional studies for teachers would be a large part of the consortium's work, and urged their colleagues to pursue several lines of inquiry, including the study of the pedagogy of specific school subjects. Lanier and several of her colleagues on the national level seemed convinced that such studies would be carried out in short order and yield knowledge which would directly inform the reconstruction of the teacher education curriculum. But although several researchers at Michigan State and at other institutions did maintain cutting-edge studies of instruction and of the knowledge and skills needed by teachers, the results of their work did arrive quickly enough and reform leaders did not harvest from them deliberately enough for the new knowledge to inform the redesign of teacher education at MSU directly.

One team leader—one of the few individuals involved in the reform who pointed to this particular problem—described the situation this way:

We were still in the process of trying to identify what ARE the knowledge, skills, and dispositions that we were looking for [among teachers]...I don't think that any individual person had a list, and what we had to do was develop a list around what things we were going to assess students on—in the process [of initial teacher education] and at the end of their program. Now, we did not necessarily have a set of the specifics of what it is about mathematics that you as a prospective lower elementary teacher really needed to know...we had a little bit of evidence coming out of the Center's [i.e., the National Center for Research on Teacher Learning] work, and the work that had come out of the IRT, but how all of this got put together, I didn't know. If there was a broader base of evidence around those practices, I did not know what they were, and I'm not sure a whole bunch of other folks did, either (Anonymous 20, interview, June 19, 2006, transcript i.m.p.).

One of the challenges that would have attended any effort at MSU to identify the core elements of the curriculum of practice would have been the kinds of questions that still drove

research on teaching and teacher education in this period. As I argued in Chapter Two, many education researchers were still preoccupied with the knowledge demands of teaching even by the mid-1990s. There had not been any serious work to hypothesize about what elements of practice were important for novices to learn since the 1970s. Under the guidance of Sharon Feiman-Nemser, COE faculty members did—late in the 1990s—begin to develop common standards for what interns should learn to do, but these efforts came only several years after the semester transition, did not result in a list of specific practices that students should learn to do, and were never translated into formal performance expectations. The state of thinking about the work of teaching and its relationship to teacher education was simply not in a place that would have permitted such changes.

The relationship between the state of knowledge about teaching and teacher education and the Holmes Group and its plans was an important feature of the reform efforts that were associated with the consortium, including the work at MSU. Both members of the Holmes Group on a national level and the faculty leaders who spearheaded the work at MSU argued clearly that teacher education needed to be developed into a more powerful intervention-one of their chief goals was to improve professional education so as to produce more effective classroom teachers. In this sense, their project was to develop more practice-focused teacher education. In places, the Holmes Group reports were crystal-clear about the paucity of knowledge of and for practice and the need for extensive research that would inform the teacher education curriculum, including research focused on the skills necessary for effective teaching. At the same time, a great many of the individuals whom I interviewed for this study seemed either to assume that sufficient knowledge existed to permit a confident redesign of the curriculum for learning to teach, or not even to think at all about potential gaps in collective understanding of practice. With the exception of Anonymous 20, quoted above, none of the MSU teacher educators with whom I discussed the work associated with the semester transition pointed to insufficient knowledge on a collective level as a challenge to the reform of teacher education at Michigan State. They worried about the skill and interest of their colleagues and occasionally of

themselves, but they did not seem concerned that they might not know how teacher education should be different.

This situation exemplifies the dilemma inherent in the Holmes Group's plans and in the work at Michigan State. The visions of the consortium in general and of Judy Lanier in particular suggested changes in practice that were so great that the practitioners who were implicated may not even have understood the degree of departure that they implied from extant practice, or the knowledge requirements of that departure. Making an accurate assessment of their own readiness to design and implement reform might not even have been possible in the face of their own incomplete understanding. The deeper MSU faculty members found themselves in the work of curriculum redesign and PDS development, the more they pushed up against the limits of what they knew how to do, sometimes even without realizing it.

Institutional Expectations and the Demands of Reform

Michigan State faculty members also struggled to use their new work to advance individual scholarly careers and to produce generalizable knowledge that would satisfy the expectations held for them as researchers in an institution of higher education. Their encounters with the promotion and tenure system, for example, suggest that any efforts that were made at MSU to help faculty members learn how to use the new activities in which they were engaged to make a broad impact on the field and to advance their own careers may not have been enough.

This problem, like many others encountered through the course of the semester transition, had deep historical roots. Education faculty members working over the course of the twentieth century had built their schools and colleges to accommodate the kinds of teacher education and education research that were evolving concurrently. This kind of teacher education relied primarily on traditional, campus-based courses, including subject-matter work in disciplinary departments supplemented by limited "field experiences." There was no need for substantial interaction between the disciplinary departments and the school of education or for instructors in the teacher education program to spend much time away from the university campus. Similarly, the research carried out by most faculty members required little collaboration

with anyone outside the school of education and rarely involved the design or testing of original interventions. Faculty members built their institutions accordingly: schedules, communication channels, organizational structures, staff roles, expectations for promotion and tenure, and faculty members' understanding of what they needed to do to succeed professionally and how to do it all reflected the prevailing traditions of teacher education and research. When reform at Michigan State challenged these norms, many faculty members and administrators had a difficult time adapting.

One set of problems was practical. The changing requirements for when students would take courses, the fifth-year internship, and the intensified collaborations between the College of Education and local schools strained university systems, sometimes in ways that were fatal to the goals of reform. It was difficult, for example, to decompose the fifth-year internship into parts that could be assigned credit hours in accordance with the university's scheduling and credit system, and managing the problem frustrated and exhausted COE faculty members (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). Similarly, Lanier and other faculty members tried to require students of teaching to enroll in courses in the liberal arts departments that had no room for them; they sometimes gave up because those other units would not or could not find ways to accommodate more students from Education (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). In addition, the new program challenged COE and university communication systems. The improved sequencing of courses in the new program and the closer integration of courses inside the COE with courses in other departments called for close communication among faculty and administrators across the university, but this proved hard to achieve. Further, the fifth-year internship and even earlier field experiences demanded close coordination between university faculty members and teachers in the schools, but this was also often difficult to accomplish. The final report of the 1995 program review committee noted extensive complaints from both faculty members and students about misinformation and lack of information about a range of substantive and logistical matters.

More serious problems derived from the revised set of expectations for faculty members' working lives. Many faculty members were accustomed to working independently and enjoyed a great deal of autonomy and control over their teaching and research. In contrast, the redesign of the teacher education program and the push for more research in the professional development schools called for faculty members to spend more of their time on collective program design work and on relationship-building in the schools, neither of which immediately seemed to inform research directly, and both of which took a great deal of time. The design of the new program also assumed that MSU would find ways to staff courses with effective instructors who were willing to use a common syllabus, even though the university had long permitted faculty members great flexibility in deciding what to teach and how to teach it. These changing expectations challenged the ways in which faculty members understood the norms of academic freedom and of faculty and departmental autonomy.

Although faculty members who had been engaged earlier in the four alternative programs and in other projects in the College of Education had often collaborated with each other and with teachers in local schools to a degree unusual in higher education, the reform associated with the semester transition asked them to do even more collective work, and under different conditions. In earlier times, it had been easy for instructors to choose with whom to work, in what schools, and on what courses and projects. Those who were less interested in collaborative work were free to teach in the standard program, or, in some cases, not to participate in teacher education at all. Everyone had a good deal of freedom to design and teach their courses as they saw fit, collaborating in the development of syllabi if they wished or planning alone if they preferred it. After the semester transition, not all faculty members welcomed the push to implement a more common program of teacher education or understood how to use work in professional development schools to contribute to collegial discussion and to broader scholarly progress.

Particularly after Judy Lanier left the College, some faculty members stopped participating in meetings concerned with the teacher education program and found ways to avoid

teaching teachers. Pam Grossman, who had been commissioned by the 1995 Program Review Committee to carry out an external review of the new program, noted in a March 27, 1995 memo to the committee that the College's original plans had assumed "faculty's willingness and ability to collaborate on all facets of curriculum design, development, and instruction across time" (Memorandum to Linda Anderson and the Program Review Committee from Pam Grossman, March 27, 1995). Grossman observed that this assumption was proving false and pointed out that even when a core group of faculty was willing to collaborate, the process of bringing people together and organizing their work was time-consuming and laborious. The committee's own final report from May of 1995 also recorded a lack of interest in collective work among instructors and recommended that the COE take more aggressive steps to make work in the teacher education program rewarding to tenure-track faculty (Report of the Teacher Certification Program Review Committee, May 15, 1995). With Lanier gone, there were no sanctions for faculty members who refused to use a common syllabus to teach courses in the new program, and team leaders found that they had no authority over such matters (Anonymous 18, interview, July 23, 2007, transcript i.m.p.). Faculty members with large research grants were able to "buy out" their teaching time, even when their team leaders desperately needed them to staff core courses in the new program (Anonymous 20, interview, June 16, 2006, transcript i.m.p.).

These kinds of problems were at least as great among faculty members outside of the College of Education. The authors of the 1995 Program Review Committee Final Report observed that faculty members in other departments seemed reluctant to participate in work in the teacher education program. They noted that some disciplinary faculty were not interested in teaching courses the content of which had been dictated to them and that others felt "a sense of betrayal and/or loss of trust from past encounters" with COE administrators (p. 17).

Records from this period suggest that some faculty members viewed the imperative to produce a common program of professional training as conflicting with norms of academic freedom and professional autonomy. In an undated memo to colleagues in the secondary teacher education program from this period, for example, team leader Andy Anderson wondered how

faculty members would "reconcile continuity [in the program] with academic freedom and flexibility in scheduling" (*Note to APPC members*, n.d.). Written notes from a conversation among several faculty members, also undated but apparently from the same time, read, "large scale integration doesn't match entrepreneurship; program rests on collaboration but ethos of environment doesn't" and "program calls for collaboration when many faculty want to teach their course in their area of expertise but are not interested in coordinating or collaborating with others" (Summary of faculty dialogue about significant program issues, n.d.). The final report of the 1995 Program Review Committee reflected uncertainty on the same matters:

At the heart of this issue are questions about control, freedom, and responsibility: What should be centralized and common? What should be local and varied? Who gets to make what decisions? To what extent are individual faculty free to determine curriculum and teaching arrangements? When consensus among faculty is necessary, how should decisions be made? If variation in program structures are encouraged, how does the institution monitor and evaluate those variations to maintain common standards for student learning? (*Report of the Certification Program Review Committee*, May 18, 1995).

Once Judy Lanier left the dean's office, attempts to persuade faculty members of the value of a collaborative approach to curriculum design or to incentivize participation in teacher education and in PDS work waned. One of the biggest problems was that time spent on program leadership and teaching was infrequently rewarded. Faculty members on Team 1 complain in their book that they had to fight continuously to receive formal credit for time spent on program design or on responsibilities such as student advising (Carroll, Featherstone, Featherstone, Feiman-Nemser, & Roosevelt, 2007). Leaders on other teams report that they would sometimes receive a reduced course load to compensate for the time they spent on program design, leadership, and administration, but that it was rarely sufficient (Anonymous 3, interview, September 15, 2007, transcript i.m.p.; Anonymous 18, interview, July 23, 2007, transcript i.m.p.). One of the primary recommendations of the Program Review Committee was for departments participating in teacher education to reconsider how faculty load was assigned, implement fairer standards for faculty work, and find better ways to reward teaching in the program and make it an attractive option for instructors.

In a section titled, "A Final Word: Maintaining the Cutting Edge," the authors of the Final Report of the 1995 Program Review Committee reflected on what they saw as inherent tensions in reforming teacher education inside of a research university and warned that MSU would need to find ways of managing the problems of institutional structure and culture raised throughout the report:

If we are to maintain our reputation as an institution committed to extra-ordinary teacher education, we must confront the fact that our work is full of inherent tensions. On the one hand, high quality teacher education, no matter how well organized or deeply understood, requires resources that go well beyond traditional norms and expectations for staffing university courses. On the other hand, we are an institution committed to the preparation of large numbers of teachers and we work within an organization that needs to maintain those numbers while living within a budget. There is no easy compromise. Both the faculty and the administrators who are charged with the oversight of teacher preparation must continually think about creative ways to marshal many resources--financial, human, and organizational--in order to keep M.S.U. on the cutting edge of teacher education. In no way do we wish for any of these recommendations to suggest that this committee supports retrenchment to traditional modes of teacher preparation. If there is a place where teacher education can be reinvented, we believe that it is here at M.S.U. However, such work requires sustained commitment, experimentation, reflection, and revision; we offer these recommendations in that spirit (pp. 24-25).

These comments suggest COE faculty members' growing understanding that teacher education as they wished to deliver it would require not only interest and commitment, but changes in staffing structures and job descriptions. What had been possible on a small scale during the days of the four alternative programs would not be possible for hundreds of students every year unless College administrators fundamentally altered the way faculty members' work was organized and supported. Continued improvement would require finding economical ways to ensure constant learning and capacity-building and ensure a steady flow of other kinds of resources to the program.

That the COE faculty found itself overwhelmed by the demands of running the new program by the mid-1990s is another symptom of the virgin territory into which they had crossed. Whereas educators in other professional fields had for years been refining the delivery of practice-oriented training at scale, the challenges of such work were new in teacher education.

Medical educators, for example, had devised the residency system more than a hundred years earlier (Starr, 1949). As it developed over the course of the twentieth century, the medical residency engaged senior ("attending") physicians and more advanced trainees in a hierarchical system of supervision, with more experienced doctors responsible for the quality of care delivered by their immediate subordinates. This system carefully guarded the time and energy of more expensive senior doctors while simultaneously ensuring nearly constant opportunities for learning for interns and residents. Teacher educators at Michigan State were just beginning to recognize the extent of the need for a similar system in their own field; building the system would likely require many more changes in the College's financial model and in faculty members' perceptions of what constituted appropriate work for a professor of education.

In addition to these signals that teacher education reform would mean shifts in how faculty members and administrators viewed their work and in how programs were staffed, there was evidence by the mid-1990s that faculty members would need to learn how to make a case that the new kinds of design work and research that many were doing were legitimate activities in higher education. The reluctance that many education researchers had developed during the twentieth century to engage in anything other than the most traditional kinds of research at times seemed to conflict with the goal of developing and studying more practice-oriented approaches to training and to conducting research on instructional practice. At Michigan State, some faculty members worried about whether their work would have currency in the university's promotion and tenure system. An even larger concern, unremarked on at the time, was that even fewer faculty members knew how to use the work that they were doing to advance their scholarly agenda.

These problems were especially evident among those who toiled in the professional development schools. The challenge of extracting publishable material from PDS work that had begun to crop up early in the project continued to grow for faculty members seeking tenure and promotion. In a 1995 review of the PDS initiative, Harry Judge, Ruben Carriedo, and Susan Moore Johnson observed that both the time-consuming nature of PDS research and the difficulty

of harvesting from that work to contribute to a tenure or promotion portfolio presented stumbling blocks particularly for more junior faculty members. They noted, for example, that the process of arriving at common understandings between faculty members and PDS teachers and forming productive relationships that would support collaborative work had resulted in "an excessive emphasis on process and accommodation rather than on clear findings and outcomes" (*Professional Development Schools and MSU: The Report of the 1995 Review,* p. 11). Assistant professors who had eagerly come to East Lansing to work in the PDSs were beginning to struggle to identify aspects of their work about which they could write and to show how their work contributed to larger efforts to produce generalizable knowledge. Although a thoughtful dean or department chair might have been able to help with this, none of the individuals whom I interviewed reported receiving direct assistance or mentorship in harvesting from their PDS work for scholarly purposes.

Judge, Carriedo, and Johnson also reported finding numerous examples of publications, presentations, and even policy documents that had their origins in a professional development school but were never labeled as such. During the time of their review, for example, some faculty members working in a PDS with PDS teachers developed and published new guidelines for science assessment in the state of Michigan, but never made clear the relationship between the project and the PDS in the report; the fact that the document resulted from PDS work went unrecognized by many of those who read it. The review team concluded that an "impressive volume of work of quality has been generated by the research culture of the PDS," but added that they regretted that "more was not done at an earlier stage to ensure that evidence to support this conviction would be more readily and publicly available" (p. 12). This apparent tendency for PDS-generated work to go unrecognized was a problem not only for the faculty members who had participated in the work but for anyone who was invested in the initiative and wished to argue the benefits of professional development schools.

Two years earlier, Charles Thompson had also observed that differences in school and university cultures created dilemmas for the PDS enterprise. In a 1993 report titled *Issues*

Involved in PDS Research, he reflected on the hopes of the Holmes Group and the reality of onthe-ground work:

...the problem of conflict between the reward system and culture of the university and the reward system and culture of the school was anticipated in *Tomorrow's Schools*. Yet, its severity and intractability may not have been fully appreciated. It is exceedingly difficult to satisfy simultaneously (a) the expectations of university colleagues oriented to generalizable knowledge, theory, the collection of more or less objective data, the slow and sometimes tortuous process of thinking and writing, and the place of a given piece of work within a developing line of research nationally, and (b) the expectations of school colleagues oriented to the particular children they are teaching, how a class went earlier in the day or is likely to go later in the day, difficulties with parents, and so on... *Tomorrow's Schools* looked forward to the creation of a new institution with a new culture, one in which these conflicts would be diminished or eliminated. But even if a PDS does develop the envisioned new culture, neither the university nor the school changes in its totality. They retain their own powerful norms, values, and expectations (*Issues in PDS Research*, p. 10).

Thompson's comments offer further evidence that faculty members and administrators at Michigan State at times viewed practice-oriented research and work in the PDSs as in conflict with their professional responsibilities. Although the professional development schools were intended to promote the production of useable knowledge that would advance collective understanding, MSU faculty members often found instead that they impeded their efforts to conduct research because they were so time-consuming and difficult to manage and control. Working in K-12 schools by turns exhilarated and exhausted, but rarely seemed to lead directly to the kinds of scholarly productions that were valued in a large research university. A dean or department chair with experience in these matters might have been able to help faculty members plan for and use their new work more deliberately, in ways that would directly inform the production of generalizable knowledge and of scholarly books and articles. At Michigan State, however, there is little evidence that administrators or faculty leaders provided such assistance. There is no reason to suspect that they either recognized the problem or would have known what to do about it had they recognized it; this was one of the first significant forays into practice-oriented research and design work for education professors.

Scaling Up and the Challenges of Sustainability

Problems of individual and collective capability were exacerbated by the push to scale up quickly the work on teacher education reform and in the PDSs. A central imperative of the reform initiated by Judy Lanier was to expand the kind of coherent, intimate programs that the four alternative programs had offered to a select group of students to the entire undergraduate population in the College of Education. Implicit in Lanier's goals was the assumption not only that sufficient intellectual and professional resources existed to carry out such efforts, but that they existed in large enough quantities to deliver improved teacher education to hundreds of students every year. Similarly, Lanier seemed to assume that the resources required to carry out intensive, field-oriented teacher education for large numbers of students and to conduct research in professional development schools—that is, the money and the personal and professional stamina—would be forthcoming indefinitely. The dean did not seem to anticipate that funding for this new kind of teacher education and for small-scale, school-based research might become difficult to find or that her colleagues would not be able to sustain the long hours their work required. Yet these became overwhelming problems within just a few years.

For faculty members working in the four alternative programs in the 1980s, keeping track of students' progress and maintaining close working relationships with administrators and teachers in local schools had been demanding but manageable. Student cohorts were relatively small and each program worked with only a small number of schools and teachers. Building similarly intimate programs for much larger numbers of students was much more difficult. The problem was not just that resources were scarce; it was also that the amount of work required to administer and support this more field-oriented teacher education on a large scale did not seem sustainable over the long term.

The directive to improve the quality of field placements for all students in the new program was the source of many concerns. Team leaders and their assistants struggled not only to find high-quality field placements for their students in professional development schools but sometimes to find any placements at all. There were never enough professional development schools for all of Michigan State's students to work in one, particularly during the internship year,

and program coordinators often had to scramble to find a classroom anywhere for their fifth-year students. In her March 1995 memo to the Program Review committee, Pam Grossman devoted an entire section to problems with field experiences, pointing out that an insufficient number of placement sites with effective cooperating teachers were available and noting that the initial plans for reform had erroneously assumed that a large number of professional development schools would train student teachers. She recommended that the College explore other ways to ensure useful field placements for students (Memorandum to Linda Anderson and the Program Review Committee from Pam Grossman, March 27, 1995).

A related problem had to do with supplying instructors who were equipped to teach in the new program over the long-haul, both on campus in East Lansing and in school-based field placements. Like many other university-based teacher education programs, the College of Education relied extensively on graduate students and on adjunct, temporary instructors to staff courses and to serve as field instructors. This meant a nearly constant turnover in the instructional staff, particularly among doctoral students who often taught for only a short period of time. Doctoral students, most of whom arrived at the College with little or no experience teaching teachers, needed training and mentorship as they took on teacher education responsibilities. In the four alternative programs and in the early years of the new program, several faculty members had devoted significant amounts of time to mentoring doctoral students and helping them develop their own practice as teacher educators. Doing this for comparatively large numbers of students, however, was time-consuming—sometimes too much so for faculty members who now had numerous demands on their time and attention.

In her 1995 memo to the Program Review Committee, Pam Grossman recorded many concerns from doctoral students who felt that they were not receiving sufficient mentoring for their roles and who reported being asked to teach outside their area of expertise because of a shortage of instructors. Grossman observed that this problem would not go away and recommended that COE faculty develop permanent structures for handling the problem. She suggested, for example, that the College institute an apprenticeship model akin to the medical

residency in which more advanced doctoral students would mentor their less experienced colleagues under the supervision of an "attending" faculty member. Members of the Program Review Committee reached similar conclusions; they recommended, for example, that the College establish credit-bearing courses for doctoral students focused on learning to teach teachers, supervise field experiences, or work as school liaisons. In 1995, however, the College was not organized to support this kind of learning and teaching, even though the problem of ensuring adequate instructional staffing over time was, as Grossman pointed out, endemic to the delivery of practice-oriented teacher education at scale. The financial resources and the skills that this kind of effort would have required were in short supply.

Another problem by this point was that COE faculty members felt exhausted. Many report being tired not only from the work of redesigning their teacher education program and managing ongoing staffing, scheduling, and communications challenges, but also from trying to develop and carry out research in the professional development schools. Even for those who were most excited by the advent of the PDS era and most committed to the kinds of teacher education and inquiry that might be possible in those settings, the work involved in building relationships with teachers and administrators, helping cooperating teachers develop their practice as teacher educators, and constructing collaborative research projects felt increasingly fatiguing. Several team leaders and faculty members who spent significant amounts of time doing research and teacher education in the PDSs remember feeling constant stress and weariness by this point; they report spending so many hours driving back and forth between the MSU campus and PDS sites and meeting with teachers that they often had no energy left over for writing, even when they could identify potential writing projects related to the work (Anonymous 6, interview, May 8, 2009, transcript i.m.p.; Anonymous 7, interview, August 22, 2006, transcript i.m.p.; Anonymous 14, interview, August 4, 2006, transcript i.m.p.; Anonymous 18, interview, July 23, 2007, transcript i.m.p.). One observes that the work was "a back-breaker for MSU faculty...it's just like teaching: You could never do enough. There is always more and more and more and honestly it was not a sustainable - it was not sustainable" (Anonymous 6, interview, May 8, 2009, transcript

i.m.p.). Another elaborates: "working with teachers is exhausting for anyone – you have to fit your work in with their schedule, come in when they're working on what you want to work on, get their lesson plans – it requires sustained effort" (Anonymous 14, interview, August 4, 2006, transcript i.m.p.). And the wear-and-tear affected personnel in the professional development schools as well as MSU faculty members; some PDSs had to take breaks from being professional development schools to allow students and staff to recover from the extra effort required to manage the hustle-and-bustle of constantly coming-and-going faculty members and interns.

In their final report, members of the Program Review Committee observed that "overextension of personal resources" was a major theme throughout their review, and suggested that the College might eventually need to reduce the credits required for certification in the new program in order to ease the burden on faculty members. They noted in particular that the team leader role was "incredibly demanding and draining" and recommended redefining the job to make it "more doable as part of a regular faculty member's academic life." Comments about "burned-out" faculty members pervade the document. By 1995, faculty exhaustion and concerns over whether the College had the instructional resources to support the new vision for teacher education combined with growing money problems to threaten seriously the sustainability of what had begun as Judy Lanier's project.

The Fall of the House of Cards

As faculty members worked to design and implement the new teacher education program after the semester transition, a new dean, Carole Ames, had taken over the reins and begun making changes that reflected a new vision for the future of what had been Judy Lanier's College of Education. Ames' goals and commitments differed significantly from her predecessor's and may have been partially responsible for many of the challenges described above. But Ames also inherited a college in a precarious financial situation and a faculty with what seemed like an insupportably large number of unproductive, exhausted, or angry members. As the new dean began untangling the College's finances and trying to improve and broaden the faculty's research

engagements, the "house of cards" that Judy Lanier had built over the previous ten years rapidly came tumbling down.

An educational psychologist, Carole Ames arrived at MSU in the middle of a traditional research career. Her scholarly interests were in children's academic and social motivation, and she had previously served as the director of the Institute for Research on Human Development at the University of Illinois. She had little personal interest or experience in teacher education, and she accepted Michigan State's offer against the advice of colleagues who doubted that she would fit in in an institution so focused on the professional education of teachers (Anonymous 4, interview, October 14, 2010, transcript i.m.p.). Although she professed support for both MSU's distinctive commitment to teacher education and the research that took place in the PDSs, Ames made clear from the beginning that fostering traditional scholarly productivity—across a variety of sub-fields, not just in teacher education—was her top priority for the College.

Carole Ames discovered a complicated situation in her first few months on the job. At the time that she became dean, many COE faculty members remained as committed as ever to teacher education but were reeling from the pressures and assumptions that had come along with working with Lanier. Some were continuing to expend enormous amounts of time and energy to keep the new program afloat even as they confronted serious challenges. Still others had turned away from teacher education completely—or had never been interested in the first place—and were disgusted with the emphases on teacher education and on professional development school research that prevailed during Lanier's deanship. One or more faculty members made sure to leave a large stack of "Voices," the anonymous newsletter that had provided an outlet for anger and frustration with Lanier, outside of Ames' office door, no doubt to ensure that the new dean understood exactly how miserable Lanier had made them (Anonymous 4, interview, October 14, transcript i.m.p.). Others gathered at a private dinner to discuss plans to force out the new dean; among these were several prominent faculty members who seemed to fear for the future of teacher education under Ames' leadership (Anonymous 4, interview, October 14, transcript i.m.p.).

Ames was eventually able to win support and trust from many of her new colleagues. She met with frightened, tired, and angry faculty members and assured them that things would be different during her tenure. She turned up uninvited at the dinner held to discuss her ouster and reassured the guests that she intended to listen to their concerns and to institute a democratic governance structure in the College. She also met with retired faculty members and alumni who had all but severed their ties to the College in protest over Lanier's initiatives and eventually won back support from some of them (Anonymous 16, interview, September 22, 2010, transcript i.m.p.).

But faculty sentiment was not the only factor that made Ames' situation complex. The College was also in a convoluted financial predicament, largely because of Lanier's commitments to the Michigan Partnership for New Education. Before leaving the deanship, Lanier had hired a large handful of individuals to work in the Partnership and simultaneously appointed them to professorial or staff roles in the College of Education. When there were no tenure lines available to offer to candidates who wished for a faculty job, Lanier sometimes promised them the first tenure-track position that became available. She put her promises in writing, and the College was thereby bound to honor them—even in the case of individuals who were not showing promise as researchers or rainmakers for the College. By this point, large numbers of preexisting faculty members also worked in the PDSs; many of them did not write grants independently and thus did not bring money into the College that could be used to support other pursuits. Lanier had directed virtually every dollar that arrived in the College to the professional development schools and to work in the Partnership. By the mid-1990s, it was difficult to separate the finances of the College from the finances of the Partnership, as many faculty and staff members within the College were paid from Partnership money and Lanier had committed to providing many of the PDSs with hundreds of thousands of dollars a year to support COE interns and to free up teachers to engage in research with faculty members.

A related issue was that many faculty members in the College were not engaged in the conduct of traditional research and were not winning external grants. There were several faculty

members at this point who headed up major research projects with significant amounts of external funding, including Deborah Loewenberg Ball, Jere Brophy, Mary Kennedy, Bill Murphy, Penelope Peterson, Steve Raudenbush, and Suzanne Wilson. But others spent virtually all of their time in the PDSs and rarely sought funding from outside sources—another symptom of how poorly equipped some faculty members were to use the PDSs as mechanisms for the conduct of formal research. As one faculty member puts it, "a lot of faculty went native—they forgot they were here to do research and they were out in the schools working with teachers, developing curriculum materials...but never getting anything published" (Anonymous 4, interview, October 14, 2010, transcript i.m.p.). But another possibility was that some faculty members lacked the capability they would have needed to harvest from their PDS work.

According to some reports, Carole Ames found when she became dean that some of these individuals were not skilled grant-writers—some had never even authored a major application for external funding. Several senior faculty members and administrators at MSU explain this by reporting that when Lanier was dean, she and her staff had pooled the money that was coming into the College through the Partnership and then doled it out in chunks to faculty members, with instructions for how to use it (Anonymous 4, interview, October 14, 2010, transcript i.m.p.; Anonymous 16, interview, September 22, 2010, transcript i.m.p.). According to these reports, the faculty members who received the money and the instructions never had to identify their own research projects or write their own grants because they were always supplied with ideas and with money by Lanier. Some of these individuals reportedly dissolved into tears when they were told by Ames that they would need to begin writing their own grants; according to one individual they were not angry but frightened (Anonymous 4, interview, October 14, 2010, transcript i.m.p.).

Shortly after assuming the deanship, Carole Ames began to reevaluate the College's commitments and to signal her intention to redistribute resources and rethink expectations for faculty members' work. Her first order of business was to disentangle the College's finances from the Michigan Partnership for New Education and, ultimately, to cut the College's formal ties to the

Partnership. She did so over aggressive and bitter protests from Judy Lanier, who was still leading the Partnership, and who, by some accounts, seemed to expect that her successor would follow her instructions and maintain her reform agenda. Encounters between Lanier and Ames were so heated that the university was reportedly forced to hire a mediator to manage meetings between the two deans (Anonymous 4, interview, October 14, 2010, transcript i.m.p.).

Nonetheless, Ames was able to recruit support from the university's central administration and to withdraw College of Education funds from the PDSs and redirect them toward faculty research in short order. She refused to accept new monies offered to the College through the Partnership or the PDSs and eventually phased out the College's involvement with the Partnership entirely. She was still obliged to support the several faculty and staff members who had been hired by Lanier to work on the Partnership and had outstanding contracts, but within three years, there was no other formal relationship between the College of Education and the Michigan Partnership. Lanier became a less and less frequent presence in the College of Education even though she remained on the faculty for several years. By 1997, the Partnership dissolved completely and the PDS era at Michigan State came to an end. Close relationships between campus- and school-based faculty members often remained, but the College of Education no longer offered financial or other kinds of support for professional development school work. The push to place all student teachers and interns in a PDS was over.

Meanwhile, Ames also pressed her faculty to increase and diversify their applications for external research funding and to publish aggressively in major journals. In cases where faculty members seemed uncertain about how to conceive of research projects and seek appropriate funding, she organized interest groups around topical areas such as policy, teacher education, and math and science education and provided seed grants to stimulate faculty members' thinking and work. She significantly increased the infrastructure in the College's research office, assigning Bob Floden to survey national funding opportunities and put the information in faculty members' hands and hiring three staff grant writers (Anonymous 16, interview, September 22, 2010, transcript i.m.p.). She tried to make it absolutely clear to the faculty that their mandate was to

conduct high-quality research and to publish it in prestigious journals. She continued to support research in and on teacher education, but she encouraged and pushed for research in many other areas, from higher education to kinesiology to international education. She also supported faculty members pursuing many different kinds of research, including large-scale quantitative studies, historical inquiry, and instructional design. Research engagement in the College grew, but less and less of it happened in conjunction with practicing teachers or in what had been the professional development schools. One assistant professor who was heavily engaged in PDS work in this period echoed many colleagues when he or she reported hearing this advice from a senior administrator: "Go away and closet yourself and churn out a few publications" (*Professional Development Schools and MSU: The Report of the 1995 Review*, p. 9.)

Ames also created new guidelines for faculty workloads and instituted changes in the College's promotion and tenure processes. She set clearer expectations, for example, for how many courses faculty members would teach each year. She created new by-laws for the College that required formal review committees for promotion and tenure and she taught committee members how she expected them to interrogate cases. She generated standards and templates for how faculty members would present evidence of their work, including their teaching, and receive credit for it. Eventually, she created formal teaching awards within the College and publicized the standards for winning them. Under Ames' watch, several faculty members who had been closely involved in the reform of teacher education and in PDS research failed to achieve tenure; some who had been tenured during Lanier's deanship have still never been promoted beyond the rank of associate professor. No longer were faculty members formally rewarded for spending hours in K-12 schools or conducting small-scale research with teachers. Publication in prestigious, peer-reviewed journals became the coin of the realm, with few exceptions.

As faculty members adjusted to new expectations and new possibilities in this period, their work on teacher education reform slowed. Many seemed resigned to some of the endemic problems of delivering large-scale teacher education. The search for effective cooperating teachers, for example, continued, but faculty members and team leaders often seemed to give

up hope that they would ever find a systematic way of ensuring high-quality field placements for all. They seemed to accept as a given that they would never be able to find excellent placements and excellent field mentors for all of MSU's student teacher and interns. Doctoral students and adjunct professors continued to deliver a significant amount of instruction in the teacher education program, but the program did not always prepare them for it. The emphasis on field experience remained and the fifth-year internship has continued to be a hallmark of MSU's teacher education program, but College-wide efforts to rethink the professional education curriculum for teacher education became less frequent and drew less participation. The era of the Holmes Group and of the reforms spurred by Judy Lanier was over.

What Carole Ames and the faculty rebuilt after Lanier left was a strong college, if a much more traditional one. Although she devastated Lanier and upset several of the former dean's closest colleagues and most ardent advocates for reform in teacher education, Carole Ames did nothing out of the ordinary. If deanships and college presidencies represent chapters in an institution's history, and if every new leader corrects the excesses of his or her predecessor and introduces particular passions of his or her own, then Ames' influence on the College of Education was much to be expected. Under her leadership, education at Michigan State reverted not to the mean but perhaps to something rather more excellent than the mean—but it did revert.

Considering the aftermath of Judy Lanier's polarizing deanship, this reversion can seem almost inevitable. Carole Ames was charged with leading many angry and disengaged colleagues who resented the direction in which the college had been moved; the course corrections she introduced may have seemed necessary in an institution that relied on the will and commitment of faculty members in order to function. Had Judy Lanier and her colleagues in earlier days approached reform differently, however, the College of Education might have been more resistant to Ames' moves and Lanier's vision might have been more fully preserved. A smaller and more concentrated effort to redesign the teacher education program and to build professional development schools, for instance, might have left fewer faculty members exhausted or disenchanted; more concerted efforts to create routine mechanisms through which graduate

students and more junior faculty members could learn about the new program and develop skills in teacher education could also have yielded a more sustainable reform that might have withstood a change in the college's leadership. Instead, Judy Lanier and other leaders in the College of Education during the era of the Holmes Group did not sufficiently plan for their own or their colleagues' continued learning and growth and ultimately depleted their resources for reform to fatal levels.

Conclusion

Despite the dramatic denouement of the first years of Carole Ames' deanship, COE faculty members had accomplished a great deal by the end of the 1990s. They had built one of the nation's only five-year undergraduate programs of teacher education and one that took the knowledge demands of teaching unusually seriously. They had crafted a coherent professional curriculum that engaged relatively large numbers of academically average students at a large public university in critical inquiry into the purposes of schooling and into children's ideas about school subjects. Unlike faculty members at many of their peer institutions, they knew the schools and the teachers with whom they placed their student teachers and interns for "field experiences," and in some cases had worked for years to develop consonance between what they taught on MSU's campus and what their students observed in K-12 classrooms. Some experimented with the use of video to support the close study of instruction and others spent time in K-12 schools alongside their students, demonstrating and analyzing teaching.

No matter what they studied in their own work or how, College of Education faculty members were also active researchers—they were not the sluggish, moldy education professors portrayed by Arthur Bestor, James Koerner, or Harry Judge, but engaged scholars with serious questions about a host of educational issues. Even ten years after Lanier's departure, the College of Education remained a vibrant place. It did not very closely resemble the school of pedagogy imagined by Bunnie Smith or even one of the Holmes Group's "tomorrow's schools of education," but it was an institution with genuine commitment to improving education practice and professional education for teachers. Now, at the beginning of the twenty-first century, several of

the College's programs are routinely ranked by *U.S. News & World Report* as among the best in the country in its annual survey of professional education programs for teachers. Year after year, the teacher education program receives the highest ranking in the United States.

At the same time, the work in the College of Education exposed persistent problems of reform in teacher education. Straining against the limits of their own energy, skill, and understanding, COE faculty members were unable to achieve many of their own goals or the goals of the Holmes Group. In 1988, the faculty had identified among their primary objectives for reform the development of teachers who have "deep knowledge and cognitive flexibility with the subjects they will teach" and "practical skills needed to manage the complexities of teaching for understanding" (MSU Teacher Education Reform an all-University Responsibility, May 10, 1991, pp. 3-4). In *Tomorrow's Teachers*, members of the Holmes Group had asserted that teachers "must have a greater command of academic subjects and of the skills to teach them" (The Holmes Partnership & Lanier, p. 10). Faculty members in the College of Education may have designed a program that helped students acquire these things, but if so, there is little evidence of it. Although many demonstrated a strong commitment to preparing students for practice, COE faculty members did not identify a clear set of instructional tasks and activities or specific kinds of content knowledge to be the focus of their program. Rather than look to the normal schools or to competency-based teacher education for ideas and inspiration-both examples of practicefocused teacher education—they continued to define teacher training in terms of coursework, field experiences, and written assignments. Efforts to specify the specific teaching skills that students should learn and to coach students as they practiced those skills were sporadic, and all students were permitted to graduate without passing performance exams focused on their ability to perform specific aspects of the work of teaching. Instead, faculty members often seemed to approach the work of redesigning the curriculum by drawing on personal and professional interests that were peripheral to classroom instruction, such as a commitment to urban education, to community in the classroom, or to multiculturalism. A thorough consideration of the

work of teaching and a subsequent analysis of what aspects of that work might be most important to address in initial professional training did not occur.

That Michigan State did not rebuild its program more directly around practice is another symptom of the era in which the Holmes Group worked and of the near-impossibility of the task the consortium and its members in East Lansing set for themselves. As I argued in Chapter Two, teacher educators in the early 1980s were trying to correct the excesses of microteaching and of process-product research and reintroduce attention to teachers' thinking to their work. To faculty members at MSU who wanted to ensure that their students understood and respected the complexity of instruction and the centrality of children's thinking in the work of teaching, the curriculum redesign that they accomplished in East Lansing might have looked more as though it were approaching an ideal of practice-focused teacher education that it does from the vantage point of 2011. Today, some teacher educators, including several who began their careers at Michigan State, are just beginning to explicate the idea that clinical training for teachers might encompass the intellectual, relational, and practical aspects of teaching in pedagogical approaches that incorporate commitments and practices from earlier eras while still attending to teachers' knowledge and thought processes. This kind of understanding might have been unfamiliar to many of those who worked in the College of Education during the Holmes Group era, and difficult to explain even by those who were beginning to articulate and experiment with it. In the 1980s and 1990s, the difference between studying teaching and practicing teaching was still poorly understood, not only at MSU, but across the field of teacher education. With their focus on the knowledge needed for teaching and on convincing novices of the complexity of practice, MSU faculty members took an important step forward from the era of CBTE, in the direction of more sophisticated pedagogies of practice. Similarly, in experimenting with the professional development schools, they explored new models for designing clinical and laboratory settings for educational practice and research, in the process exposing obstacles and resources for the work. In this respect, efforts at Michigan State stands to contribute a great deal to

collective understanding of what it means to design and implement practice-focused teacher education and research, and of what that work requires.

For the College of Education as an institution, however, one of the shortcomings of the reform associated with the semester transition was the lack of recognition that the knowledge needed to reconstruct teacher education so that it would significantly impact practice was incomplete and that the modal teacher educator lacked the skill he or she would need to coach students of teaching to success. As I have already argued, the great ambition of the Holmes Group reforms introduced an inherent dilemma, as the consortium sought changes that it did not understand very well and could not be prepared to realize with ease. But this dilemma was a predictable one. All designers operate in the realm of the uncertain and the unknown, and the more successful design for that uncertainty. Leaders of the Holmes Group did not have to know what they could not know in order to know that there were inevitably things that they did not know. But Lanier and her colleagues did not plan their work deliberately so as to manage their own lack of knowledge and the constrained capability that they inherited from the troubled field of education research. Lanier developed neither specific learning opportunities for her faculty in direct association with reform nor structures for constant organizational learning and regeneration that might have supported ongoing program improvement. Over and over again, Lanier seemed to assume that the faculty knew what they needed to know to design and implement reform and that the resources for the work would be forthcoming indefinitely.

The professional development school initiative, for example, foundered in part because it relied entirely on soft money. Lanier never found ways to institutionalize support for faculty members who wanted to teach and do research in K-12 schools or to facilitate the development of learning communities within the schools. She never incorporated formal structures for her instructional faculty to study their own practice, track outcomes, and redesign accordingly. She never created formal learning opportunities for doctoral students or adjuncts and other temporary instructors to develop their skills as teacher educators. Had she recognized that the reform of teacher education was necessarily a long-term project and that her faculty would need

to engage in a continuous cycle of design, study, and redevelopment, she might have been able to manage these challenges. And had she not alienated so many people and taken the College in such extreme directions, then her faculty might have chosen as a replacement for her someone who would have instituted structural changes to support learning from and for reform. The college that she and Carole Ames have built is strong, but it is not Tomorrow's School of Education.

But this, too, may be just another expression of the dilemma that arises when visionary reformers reach for goals that extend far beyond what they know how to do. Neither Lanier nor many of her fellow faculty members at Michigan State had much training in the science of design, and they may not have realized how important it was to design for designing. Their experience in East Lansing suggests that the careful management of innovation is central to any improvement process, be it in teacher education or another field.

Chapter Seven

Conclusion: The Work of Reform in Teacher Education

I began this dissertation by asking why it has been so hard to improve teacher education in this country and what might be learned from the experience of the Holmes Group. My analysis indicates that inattention to the problems of teaching among teachers, teacher educators, and education researchers is at the core of the problem. Disinterest in practice in university study of education over more than a hundred years has resulted in collective uncertainty about what teaching is and what is required to learn it and to teach it. This reality challenges all efforts to improve teacher education, whether they are in higher education or in so-called "alternate" routes to teaching. By the late twentieth century, this persistent disinterest had also constrained the capability of researchers and teacher educators who would improve teaching and teacher education. And it has continued to shape the ways in which education faculty members understand their work, making improvements in university-based teacher education particularly challenging.

Knowledge, Practice, and the Infrastructure for Improvement

Throughout their history, teachers and teacher educators have operated without shared, specific knowledge about what constitutes effective instructional practice, often without seeming to realize it. Beginning in the early decades of the twentieth century, education faculty members, responding to pressure of many kinds, turned their attention away from the problems of classroom instruction that had begun to engage their predecessors in the normal schools. Efforts to identify effective instructional skills and activities, to understand the knowledge required for teaching, and to design and test shared solutions to problems of practice slowed significantly. Whereas knowledge of pharmacology, pathology, and medical practice grew and informed the

study and practice of medicine, for example, and federal, state, and case law accumulated and informed the study and practice of law, a formal body of knowledge and skill for the practice of teaching has been developing much more slowly and has yet to be codified. There is no shared understanding of the problems of teaching and no collective effort to develop and share a core technology for the work. The practices of classroom teaching and of teacher education remain immature, particularly when compared with other professions and skilled trades. It has been difficult to improve teacher education because teachers and teacher educators are not sure what teaching is—what knowledge and skill make instruction effective or what elements of practice are most important for beginning teachers to learn.

Researchers at Michigan State at the time of the semester transition were preoccupied with questions about the kinds of knowledge that would inform practice and the understandings and orientations that would help new teachers succeed in K-12 schools. They seemed less engaged by—or perhaps they simply had less time for—questions about exactly what skills and practices were important to competent beginning teaching or about the knowledge and skills required to teach others to teach. Collectively, they seemed to pay little attention to the work that had been done in the decades immediately prior to identify competencies for new teachers and thus to help define the work of teaching. Although both COE faculty members and the authors of the Holmes Group reports expressed a commitment to influencing teaching practice through teacher education, they were not as oriented toward focusing the teacher education curriculum on problems of practice as some reformers are today.

The problem of developing knowledge of and for practice in teaching and teacher education is, at its heart, a problem of intellectual and educational infrastructure. It is not the case that no one knows anything about teaching or teacher education; rather, the problem is that there are few mechanisms for sharing and growing knowledge collectively. The infrastructure problems that I discussed in Chapter Two—the lack of a common language for describing and analyzing teaching, the absence of systems for compiling and sharing the results of experiments in instruction, and the fragmentation of governance in education—have all

impeded a cumulative and collaborative approach to building core knowledge for practice.

Knowledge produced in one classroom or by one researcher is rarely shared beyond a small circle of colleagues, and the lack of a common language means that researchers studying the same question may not even recognize the relationship between their separate projects. These problems are made worse by the prevailing view of teaching in the United States as intuitive work that depends more on individual creativity and charisma than it does on special skill. The sociologist Dan Lortie (1975) has observed that teachers themselves have maintained an individualistic conception of practice and have rejected the notion that the field could build a common, technical vocabulary to describe their work.

These problems of knowledge and of infrastructure for building knowledge were the most significant barrier to reform at Michigan State. I framed this study in terms of implementation, but the work of reform in teacher education is less implementation than it is invention—an observation that was made by more than one team leader in the College of Education at MSU. When the Holmes Group and the faculty at MSU began their work, there was nothing to implement—no specifications for the curriculum for learning to teach, no blueprint for the professional development school. All of it needed to be invented, and invention depended at least in part on knowledge that did not yet exist. Even where knowledge did exist, it had to be parsed and packaged into units that could be accessed by novice teachers and by teacher educators. Knowing about the difficulties that children often have decoding words, for example, is not the same as designing instruction that will help prospective teachers learn about those difficulties and learn to design for them as they plan and teach a lesson. At the very center of the work of reform in teacher education—in the time of the Holmes Group and today—is a long-term research and development agenda focused on the production of knowledge and the design of instruction in teaching and teacher education that uses that knowledge.

Constrained Capability and the Impact on Reform

The absence of knowledge for teaching and teacher education did not go completely unrecognized by the individuals who founded the Holmes Group; indeed, the consortium was

born out of this recognition. Judy Lanier and the other education researchers who wrote *Tomorrow's Teachers* set out in part to build shared understanding of teaching problems and to foment collective work on their solutions. Bringing scholarly and practical attention to the work of teaching and rebuilding the teacher education curriculum around what was learned was a central part of their agenda. But as researchers and teacher educators who had grown up inside of a field that had been persistently nudged away from its professional origins, few of the administrators or faculty members who worked toward the Holmes agenda could know very much about how to solve the problems they saw. Their own intellectual inheritance made it almost impossible for them to accomplish many of the Holmes Group's goals.

A related challenge concerned the K-12 schools in which MSU's students completed field experiences and student teaching. Many of these schools, like many schools elsewhere in the United States, were staffed by teachers who were no more able to demonstrate skillful instruction than some MSU faculty members were able to design practice-based teacher education pedagogy. As MSU faculty members found, it is difficult to create K-12 school settings that make effective sites for professional education without teachers who can both demonstrate excellent teaching and make it visible to and learnable by others. And it is difficult to produce teachers who can demonstrate excellent teaching without effective teacher education. As I tried to show in Chapter Six, an insufficient number of effective placement sites was a key obstacle at Michigan State, and it is likely to be an obstacle to reform in teacher education anywhere.

In these respects, the Holmes Group embodied what David Cohen and his colleagues have called a key dilemma of social policymaking. Consortium members set their sights on solving a problem that they did not know how to solve because they had developed professionally in the shadow of the problem and thus had become part of the problem. There is evidence that reaching the Holmes Group's goals would have required a good deal of learning on the part of many of those involved, but no one could know what there was to be learned without trying to solve the problems. This predicament—faced by anyone who would improve an

educational enterprise in this country—is also central to why reform in teacher education has been so elusive.

One symptom of how unfamiliar this dilemma must have been to leaders of the Holmes Group was Judy Lanier's approach to reform in the College of Education at Michigan State. Lanier's professional history meant that the dean understood a great deal about the inadequacies of teacher education and the obstacles to addressing them from within the university, and both the Holmes Group and the work at Michigan State progressed as far as they did in large part because of her vision and strength of conviction. But I found that Lanier saw little reason to provide her faculty members with special opportunities to learn to design and trial changes. She issued few instructions or suggestions for how she hoped the curriculum would look different after the semester transition and did not mobilize a fundamental rethinking of what prospective teachers needed to learn. The imperative she set was to scale up, to make content preparation more thorough, and to improve field placement sites--but not to overhaul the professional curriculum. Her approach to work on the professional development schools was similar; she charged her colleagues with building relationships with schools and teachers and seemed to assume that practice would change as a result. All of what might be called "level-two" design work took place early in Lanier's tenure in the College of Education, in the days of the IRT, and little of it was about classroom teaching or teacher education.

When Lanier and her colleagues did implement some elements of the "instructional" approach to reform that I described in Chapter Three, they chafed against faculty members' perceptions of what kinds of work were appropriate and required in higher education. Many faculty members in the arts and science departments at MSU refused all arguments for improving liberal arts training for prospective teachers. Some of the education faculty members who were successfully encouraged to spend time in K-12 schools or to lead parts of the teacher education program worried terribly about the impact the work would have on their research and ultimately on their careers. Others bitterly resented what seemed like intrusions on their academic and

professional freedoms. Many eventually withdrew their support and their interest from Lanier's project.

There were many reasons for this disengagement, but an important one derived from the complicated inheritance of education researchers and teacher educators at the end of the twentieth century. In other fields of university-based professional education, including medicine and law, the need for a common training program is rarely questioned or seen to conflict with faculty members' rights. Professors of law do not protest that teaching in the traditional sequence of first-year law courses violates norms of academic freedom, because intellectual authority for the construction of the law curriculum derives not from individual professors but from the demands of work in the legal profession. In virtually every law school in the country, first year students study torts, contracts, civil procedure, property, criminal law, constitutional law, and legal methods because most lawyers need to know these subjects in order to practice law. Faculty members in law schools perceive a professional responsibility to prepare students for the work that they will have to do when they graduate, and that work, rather than faculty members' individual interests, dictates the content of the required curriculum. The same is true in several other fields of professional practice, including medicine and nursing. In the professional schools that train novices in these fields, faculty members view themselves as the keepers and conveyers of a common technology of practice, and to teach novices from a standard curriculum is viewed not as an affront or a challenge to intellectual freedom or personal creativity but as an essential professional responsibility.

But faculty members in schools and colleges of education are on uneasy terms with the notion that they work in a professional school. Their field has evolved largely as a social science discipline, one in which a broad range of topics and problems are viewed as legitimate objects of study and faculty members are free to teach courses in their interest areas and even to avoid teacher training. The idea that education faculty members bear responsibility for preparing novice practitioners through a curriculum that derives not from instructors' individual interests and inclinations but from the work of teaching was just beginning to evolve in the days of the Holmes

Group. After the semester transition in the College of Education Michigan State, the implications of this new vision were anathema to some instructors who were accustomed to a great deal of independence.

Even those faculty members who embraced the call for collective design work and for collaboration with PDS teachers were not always prepared to use their new work to negotiate the tenure and promotion process. The way that the field of education research had developed constrained faculty members' capability not only for designing and teaching practice-oriented teacher education but for harvesting productively from collective work and from efforts in the professional development schools. Few professors or administrators at Michigan State seemed to know how to use local design projects, for example, as vehicles for examining broader problems and contributing to collegial discussion outside of the College of Education. As a result, they struggled, both individually and collectively, to persuade their colleagues elsewhere on campus at Michigan State or in other schools and colleges of education that practice-oriented design and research was a legitimate occupation for a professor in higher education. Their struggles discouraged them, and may have discouraged onlookers, and made the pursuit of knowledge that would inform the work of reform in teacher education even more elusive.

The Work of Reform in Teacher Education

For some of the individuals who worked on reform at Michigan State, memories of the Holmes Group era are tinged with regret and can provoke despair about the future of improvement in teacher education. One longtime MSU faculty member who was active in the national consortium calls the experience "one of the sadnesses of my life" (Anonymous 17, interview, May 8, 2009, transcript i.m.p.). But although the Holmes Group solved few problems, it illuminated the work of reform in teacher education and thus stands to contribute significantly to progress in the field.

Analysis of the Holmes Group efforts brings into stark relief the significance of the research and development project that remains the core work of reform in teacher education and highlights how much capability would need to be built to carry out that project. The consortium's

successes and failures suggest that those who would reform teacher education in the twenty-first century, whether they work in higher education, in nonprofit organizations, or in school districts, should consider how to develop an infrastructure that would support collective experimentation and the diffusion of innovation. This infrastructure would need to bring at least some coherence to an enterprise that is increasingly diffuse and foster ongoing learning for everyone involved. Improvement in teacher education has often been treated as a problem of political and personal will, but the Holmes Group experience and the work at Michigan State teaches that the problem is much more substantive, with origins deep in the nineteenth century. Building a powerful national network or offering incentives or rewards for presidents, provosts, deans, or faculty members to invest in teacher education will not be enough to produce change; researchers, teachers, and teacher educators will also have to learn.

Recently, there are signs that the infrastructure for work on education in the United States is improving and that a common curriculum of practice for prospective teachers may be easier to achieve now than at any other time in the past century. A 2010 report issued by the National Council of Accreditation for Teacher Education (NCATE), for example, signifies a national push for more practice-oriented teacher education, as does the birth of numerous district- and school-based teacher education programs. Broader recognition of the core problems of teacher education may be approaching. The advent of the Common Core State Standards also suggests an unprecedented willingness to address the infrastructure problems endemic to the United States education system. Perhaps the construction of a common curriculum for K-12 students and the development of a corresponding curriculum for prospective teachers are not as far off as they might have seemed even ten years ago. The popularity of programs such as Teach for America, which attracts top college graduates to teaching and to complementary fields, may also indicate the beginnings of a shift in Americans' attitudes toward the profession of teaching and the work of classroom instruction. What once seemed like work for women or for upwardly mobile lower-income men may increasingly seem like a fit occupation for the most talented and ambitious applicants. Finally, the growing interest in evaluating teachers in part according to their impact on student achievement may prove to be a crucial impetus for improvement in teacher education and professional development.

But the lessons of the Holmes Group remain crucially important as the United States churns through yet another period of ferment in teacher education. Several recent reports have once again called for teacher education to offer more practice-focused preparation (Farkas & Duffett, 2010; Greenberg & Walsh, 2010; National Council for Accreditation of Teacher Education, 2010). All urge improvements in clinical training, including more extensive student teaching opportunities, the cultivation of cooperating teachers who are skilled mentors and coaches, and closer relationships between teacher education programs and P-12 schools. Although none of these reports is as vast in scope or as ambitious as the Holmes Group's manifestoes, many present some of the same challenges as *Tomorrow's Teachers* did more than thirty years ago. It is one thing to advocate for improvements in teachers' clinical training, and still another to design a curriculum of practice. Increasing the amount of time that students of teaching spend "in the field," for example, is still a largely structural reform, as it does not necessarily influence what students learn to do. The same dilemma that faced members of the Holmes Group is likely to face teacher educators who attempt to realize the goals of more recent reform documents: A core technology of teaching must be built, and a curriculum of practice built around it, but the people responsible for doing that work are poorly equipped for it.

Those who take on this work and lead change efforts inside schools and colleges of education in the coming years might pay attention to the lessons of the Holmes Group as they try to manage this dilemma. They might recruit their colleagues' interest and commitment carefully and build their capability deliberately. They could help faculty members look backward, toward the history of the normal schools and of competency-based teacher education, for ideas and lessons, and outward, toward accomplishments in other fields of professional education, for models to follow. Lanier and the other leaders of the Holmes Group did little of this; doing more might have helped their project. Exactly how to do it, and how to make sure that practice-oriented research and teacher education is rewarded, is still uncertain and still requires the same

kind of trial-and-error approach of the Holmes Group. But the consortium's efforts have demonstrated the central importance of level-one and level-two design work in reform.

There are also signs that work to rebuild teacher education in the next few decades will not all take place inside of schools and colleges of education. At the beginning of *Tomorrow's* Schools of Education, Judy Lanier and the other authors of the Holmes Group's final report famously declared that schools of education should either "link their educational contributions closely with improved schooling for America's young...or surrender their franchise" (p. 202). In the years since the Holmes Group, organizations external to schools of education have begun to seize the franchise from their academic colleagues and construct parallel instructional programs for students and for teachers. Teach for America, for example, has developed its own conception of instruction based in part on ideas from business management and built a program that trains and develops more than four thousand teachers annually (see Farr, 2010). Leaders—many of them Teach for America alumni--from three of the most successful charter management organizations (CMOs), KIPP, Achievement First, and Uncommon Schools, have recently collaborated to create the Relay Graduate School of Education, an independent teacher training program unaffiliated with an existing college or university. Relay's curriculum focuses on instructional practices that leaders in the CMOs have identified as most effective—drawing not on academic research but on their own experiences. Doug Lemov's 2010 text Teach Like a Champion: 49 Techniques That Put Students on the Path to College is a national best-seller and Lemov is increasingly in demand as a trainer of teachers (see Lemov, 2010).

Researchers have not measured the effectiveness of these K-12 instructional regimes or their teacher education corollaries, so it is difficult to know if their popularity is warranted. But it is clear that schools and colleges of education no longer have any particular claim to the work of designing instruction or preparing teachers. In fact, Teach for America and the many teaching and teacher training programs being developed by its alumni could be viewed as an effort to build a profession of teaching in the space left open by colleges and universities and by teachers trained in those institutions. These organizations are developing vocabulary for studying and

teaching about teaching, creating a professional culture with particular norms and values, and building mechanisms for members to share questions and information.

This shift in the location of work on central problems of teaching and teacher education from universities to other kinds of organizations may be a rational response to the challenges university-based teacher educators and reformers have encountered over the past one hundred years or more. Since the days of Henry Holmes, those who would try to connect professional education for teachers to the problems of classrooms have found that faculty members' perceptions of their work and constrained capability will often stymie their efforts. Assumptions of professional autonomy permit and even encourage education faculty members to work in relative isolation from one another, often on problems determined entirely by their own interests and preferences rather than by the exigencies of practice. As the MSU faculty members who worked in the professional development schools discovered, doing classroom-based research and providing leadership in teacher education is time consuming and rarely well-rewarded. To be fair, these pursuits have not been well-developed by the field and are hence rarely well-done, which has complicated the problem that they are rarely well-rewarded.

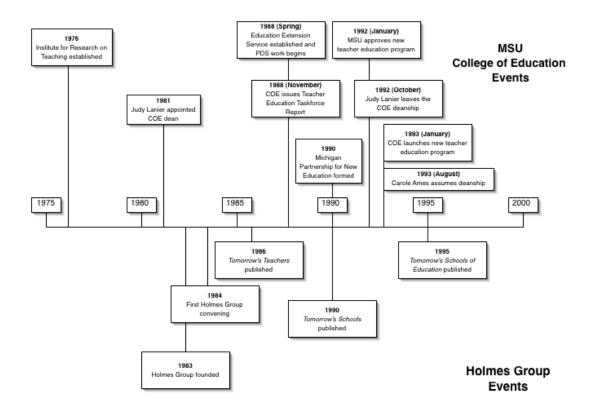
But for everyone involved in teacher education, from university professors to leaders in the charter management organizations to independent consultants like Doug Lemov, the work of reform in teacher education remains the design, study, and redesign of the pedagogy of practice. Until researchers and practitioners in the fields of teaching and teacher education can identify the central tasks of teaching and the knowledge and orientations that underlie the work, and then build a corresponding curriculum for those who intend to teach, they are unlikely to make significant progress on any other front. The Holmes Group and its work at Michigan State amplified the position of teacher education in the larger landscape of educational research and practice, but did not close this fundamental lacuna in the field's work. To the contrary, its most important contribution may have been to expose it.

The Realities of Scale

Apart from the other challenges I have raised, the scale of the United States school system is an escapable feature of teacher education and an unavoidable reality for reformers. There are nearly fifty million children enrolled in public schools in the United States and nearly four million teachers staffing their classrooms (National Center for Education Statistics, 2010). The work of reform in teacher education is not just to design a practice-focused curriculum that can help large numbers of college graduates—many of whom will not be outstanding students learn to teach, but to organize for its efficient and cost-effective delivery at scale. Since the beginning of the twentieth century, the annual demand for thousands of teachers and the reality that few teachers can afford to pay for high-cost training has magnified the challenge of designing practice-focused teacher education that can be implemented effectively. It means not only that capability must be developed among large numbers of teacher educators but that costs must be kept in check even as resource-intensive clinical training is improved. If Michigan State struggled with the realities of scale, other institutions and programs would surely struggle as much or more. As tens of thousands of teachers retire in the next ten to twenty years, the pressure to scale up will challenge everyone who prepares teachers, from faculty members at Michigan State to leaders in the charter management organizations.

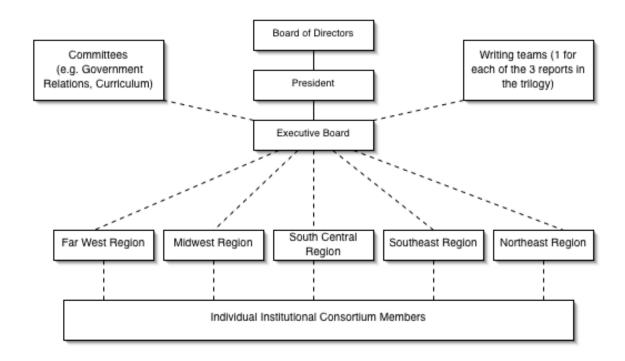
Appendix A

Timeline of Events in the Michigan State University College of Education and the Holmes Group, 1975-2000



Appendix B

Key Structures of the Holmes Group



Appendix C

Key Instruments of the Holmes Group

Instrument	Description
Agenda-setting	In their trilogy of reports and in other publications, Holmes Group leaders introduced their ideas about the questions that needed to
	be answered by consortium members; the
	curricula, programs, and materials that needed to be built; and the structures and expectations that needed to be developed.
Design principles	In publications and other communications, and during meetings and conferences, Holmes Group leaders articulated design principles that they hoped would guide the work on individual campuses. When possible, they provided relevant examples from work going on across the country.
Professional development	Through publications, meetings, and conferences, Holmes Group leaders offered individual faculty members and administrators on member campuses opportunities to exchange ideas about teacher education and related policy and practice.
Policing and pressure	Through selective membership processes, required annual progress reports, and an "Accountability Panel," Holmes Group leaders attempted to encourage work on their agenda among institutional members.
Advocacy and strategic partnerships	Holmes Group leaders nurtured relationships with individuals and organizations that could help elevate their national visibility, increase their capacity to garner resources or even give them money, and make features of the environment in which consortium members worked more conducive to change within schools of education.

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