## Teaching and Knowing

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Teaching is about many things including children, content, and methods. Prospective teachers acquire knowledge of these particular aspects of the profession in a variety of ways. Some of the most important things about teaching including how we know and the consequences of our knowing are also some of the most difficult aspects of teaching to help prospective teachers come to understand. Yet it may be these aspects of teaching which not only best capture its essence but also reflect education's developmental potential to make a difference in the lives of individual students and in who we are and in how we live together.

My thesis is a very simple one: I do not believe that epistemology is a bloodless abstraction; the way we know has powerful implications for the way we live. I argue that every epistemology tends to become an ethic, and that every way of knowing tends to become a way of living. I argue that the relation established between the knower and the known, between the student and the subject, tends to become the relation of the living person to the world itself. I argue that every mode of knowing contains its own moral trajectory, its own ethical direction and outcomes (Palmer, 1987, p. 22).

The decisions we are making and will make about the future of our institutions will reshape us as moral beings. And as we respond to challenge and change, our economic and government institutions, like our families, schools, universities, churches, and synagogues, will be crucially important—as the bearers of our collective memories and our cultural traditions, as the expressions of important but often barely conscious patterns of meaning and self-definition (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1991, p. 42).

The university fails to understand what it is doing, and what it is abetting, because indominant conception of knowledge, truth about ethical relations to others is blocked or obscured, as is also our involvement in the moody background world—matters crucial to who we are and to what education should be (Wilshire, 1990, p. 40).

Palmer draws attention to how the way we know influences who we are able to become. Bellah and his colleagues in The Good Society eloquently express what they see as decisions we must make to recapture life's meaning. Wilshire, raising similar points, focuses on the role of the university and the responsibilities and moral obligations of academics to help the young build lives of meaning. Greene (1984) focuses on the relationship between the way teachers are educated and the lives of meaning they build not only for themselves but for their students as well. Teachers-to-be...need somehow to learn what is required if they are to attend to what they are hearing with any degree of acuity to break through obfuscations. to reconstruct some of the familiar arguments, to bonder what is worthwhile and what is worth striving for, to think about their own thinking and consciously to create meanings as they live (p. 286). If we fail to do so, Greene fears we will find ourselves training talented functionaries or technical specialists instead of educating teachers (p. 286).

Educating teachers to educate—there are worlds of meaning there. Parker, Bellah, et al., Wilshire, Greene, and others hold out possibilities to consider as we ponder what it means to educate teachers. To envision teachers as individuals living in ethical relation to others, moral beings reflecting patterns of meaning and self definition, participants in communities weaving and reweaving meaning as they live requires that we see teacher preparation as something other than technical training or the transmission of knowledge. But the knowledge base of teaching that so many of us are struggling to define may lead to closed worlds of meaning rather than opening windows on possibilities. Teachingeducation—is not about knowledge but, rather, about knowing. How we perceive and respond to the knowing inherent in educating teachers will be reflected in the world the teachers we prepare are able to weave and reweave with their own students and in the common world we are all able to share and sustain.

## Introduction

Teaching is about knowing: how teachers know, how their students know, how teacher educators know, and how each facilitates the knowing of the other. In addition to knowing about content and the teaching of content, it is way of knowing that encompasses self, society, the planet, what is good, just, and meaningful, and how best to work together to achieve goodness, justice, and meaning for all. To foster that fuller understanding we must provide prospective teachers with opportunities to struggle with what it means to know, what knowledge is of most worth, and what the answers to each of these questions imply for the education of children and the establishment of communities of learning.

In this paper, I address each of those questions. Readers seeking a definitive answer will be disappointed, for I write this paper from the perspective that knowledge is constructed, built on previous knowledge, coupled with experience, transformable, evolving, and consequential. As I wrote, my thinking underwent shifts. Dialogue occurs between the writer and the written text what we know changes as we attempt to contextualize it. Thought is not reified through its textualization but rather improvised like a musical piece. One is never quite certain how it will be played or heard. One hopes that each performance adds a meaningful variation to previous plays. Numerous other musicians, employing a variety of techniques and instruments, have played the ideas I address in this paper. I hope my attempt is a meaningful variation. My prelude questions what it means to know.

## What Does It Mean to Know?

No agreement can be reached on an answer to this question. It has been debated for centuries. What does it mean to know? More importantly, perhaps, what are the implications of how we know for what we can know? Many attribute the current crises we face, including the ecological crisis (Bowers, 1984, 1992; Rifkin, 1991), the overemphasis on individual autonomy (Bowers 1987; Bellah et al., 1991), and the loss of spirit (Barrett, 1986; Palmer, 1987) to an epistemology based on a model of technical rationality. This way of knowing seeks to control the natural world, to empower the autono-

mous individual, to objectively ascertain truth by assigning values to the province of subjectivity. The familiar fact/value and individual/community dichotomies reflect a way of knowing based on a rational view of the universe. The objective, autonomous individual stands idealized at the center. What is out of focus are the spirit and the soul in our knowing, the communities we are each a part of, and the intuition and insight that enables us to see possibilities our objectivity masks. Wilshire (1990) points out, we must be vulnerable to insight, no matter how strange or disturbing, no matter from what source it originates, or how imperfect its articulation. This must be an ethical obligation, and its observance is essential to our dignity as persons. For each of us holds resources which transcend the self as mere ego . . . and to subordinate and control impulses which arise from conditioning by society or biology. If the obligation is not heeded the zest and energy is gone: the boiling and buoying sense that [we] can...make a difference (p. 25).

Others further suggest that the key to self transcendence and our development as a society and a species reside in how we know (Bowers, 1993; Kegan, 1982; Purpel, 1989). To limit ourselves to a rational/logical way of knowing may be foolhardy and unwise, for intuition and insight may lead to understandings that logic would disallow—understandings which generate possibilities that could never be achieved rationally. Is it logical to sense an interconnection between all life on the planet? Is it rational to limit our consumption so that others can have more? Some would say not. Can what is morally right and ethical always be decided logically? Does it make sense to sometimes go with what the heart says although there is no rational reason for doing so? Might it be possible that there is value in both intuition and logic?

In the complex, important human endeavor we call education should we not find ways to use all of the possibilities available to us—does not teaching require insight and ethics as much as it does rationality and logic? How might we help our students come to know in multiple ways—to know ethically, morally, intuitively, and insightfully as well as logically and rationally? Some of our colleagues have suggested how (Bowers & Flinders, 1990; Greene, 1986; Noddings, 1984; Purpel, 1989). Why does it seem that many of us dismiss them? If we accept that teachers must know in multiple ways, we must also acknowledge that they

must know something as well. If we accept that we cannot, within the span of any educational program, help them acquire all they must know, we must decide what is most important and worthwhile for them to know.

## What Knowledge is of Most Worth?

As the canon debates indicate, the answer to this question may be more a reflection of the individual who responds to the question than a response to the question itself. To have a clear idea of what is most worthwhile to know requires a certainty in knowing that may no longer be epistemologically or morally supportable. The normative frames we use to interpret the world influences what we value, and worth certainly implies valuation. Using one normative frame above all others, for example, one developed from a western perspective, leads to, or is predetermined through, valuing certain epistemological orientations over others. Palmer (1987) suggests it may preordain our moral trajectories. For example, in education we have often convinced ourselves that what is most worthwhile to know can be rationally and objectively determined by identifying what is most effective—a technical rational approach. What is most effective will not necessarily help us fulfill our moral obligations to each other or to our communities. Effective implies productive and efficient; we do not have to reflect very long about efficient and productive teaching to understand the limitations and deceptiveness of effective as the sole criterion for worth. Perhaps the crucial questions are: What purpose does our knowing serve? What are our aims? Knowledge that gives us power over others is different from knowledge that emancipates others. Knowing ways to efficiently store surplus grain is substantively different from knowing how to feed the hungry. Knowledge used to save an endangered species is vitally different from knowledge used to clear a rain forest. Knowledge has moral ends as well as practical ends and what is moral is not always practical. How should we decide on ends on the knowledge of most worth?

Tentativeness in knowing requires commitment (Perry, 1970). It is important for educators to be committed to knowledge that is supportive of the dignity and respect that all individuals deserve—to moral ends. If we lack the knowledge, a willingness

and commitment to learn from others and from experience will foster a recognition of the situatedness of knowledge and, thereby, a recognition of the fundamental relationship between knowledge, knowing, and ends. For example, to hold a newborn child in one's arms is to know as a parent and in knowing so to become fully aware that the knowledge of most worth extends beyond situation and into an indeterminate future. We also become aware, if we listen to our hearts, that our moral obligations to the future must be more inclusive than those we feel here and now. Numerous scholars suggest what we know and how we know are inextricably linked to who we become (Barrett, 1986; Bowers, 1988; Greene, 1986; Mezirow, 1991; Palmer, 1987; Rifkin, 1991). The character of our knowing, nurtured by the knowledge of most worth and multiple ways of knowing, provides a foundation for becoming. We begin to understand that what we know and how we know influence the voices we can hear and the knowledge we value. This, in turn, may lead to the understanding that the knowledge of most worth is that which leads to ways of knowing that foster the openness, integration, and inclusion (Mezirow, 1991) which establish the moral context that encourages multiple voices in the naming and resolution of educational dilemmas. Greene (1986) eloquently reminds us that not hearing the multiple voices that are so much a part of the educational process contributes to our communities remaining closed, exclusive, and separate in fundamental and dangerous ways. How can we help prospective teachers hear the multiple voices?

The knowledge of most worth is brought into being dialogically. It is said and heard in multiple ways—transformed in the sharing enriched through the multiplicity. Dialogue allows students to become aware of what they share in common, as well as the uniqueness of each of them as individuals. Self-understanding thus emerges through the engagement with others who may think differently. These others can be conceived concretely, as classmates, teachers, friends, rivals, etc., or abstractly, as the other one might engage in the understanding of a subject matter that embodies a different point-of-view, a different interpretation of the nature of the world and one's place in it. One does not know where one is, what place one has, unless one develops a sense of the possibility of being elsewhere, of what else is possible.

This requires an openness to the world, such that what we are and what we can become returns to us from places other than the ones in which we have already come to exist. This engagement, this traversing, not only brings with it the realization that other possibilities exist. It also brings with it the self-recognition that one's own place is itself a possibility among others, and not a fixed actuality (like the property of an object). We are, in other words, participants with others in a play of multiple roles and positions, a play in which one's place is not set once and for all (Misgeld & Jardine, 1989, p. 269). Education can foster this understanding. This can be accomplished when teachers create environments that nurture an openness to possibilities. But, first, teachers themselves must see possibilities—the possibilities in their own becoming.

#### How and What Should Teachers Know?

Are we enabling teachers to know in multiple ways, to recognize the knowledge of most worth? Traditionally teachers have been prepared in ways that develop declarative and procedural knowledge. With less frequency they have been prepared in ways that support the development of contextual knowledge. Declarative and procedural ways of knowing reflect education's attempts to become science-like. The effective schools movement, the effective teaching literature, much of the educational research conducted in the last three decades reflects an attempt to provide teachers with ways to organize classrooms, manage instruction and students, teach conceptually, and understand learners as individuals.

In the last several years, scholars have worked to identify teaching's knowledge base or what all beginning teachers should know (Houston, 1990; Reynolds, 1989; Shulman, 1986). Most often these findings and recommendations reflect knowledge and skills we think teachers should develop. We continue to add to our understanding of pedagogical content knowledge or what teachers must know about how to teach varying content to their students. We revisit the goals and aims of education and struggle with how to reconfigure them to reflect a changing population. We refine our understanding of how students learn and the factors that effect that learning. But we seem to seldom question how teachers know or should know—their epistemological beliefs and development. Even the broadest

investigations into schools and classrooms, those that include the contextual complexity of those settings, often fail to question the assumptions supporting what goes on in classrooms and why.

The achievements of individual students receive priority in our studies of education with investigators seeking a richer understanding of what does or does not occur in classrooms. Facilitating the academic learning of students is seen as a teacher's first priority. A concern for others and the moral obligation to community are not seen as explicit goals of education but rather as outcomes of an educated citizenry. Numerous scholars and practical experience suggest that this is not the case (Bellah et al., 1991; Goodlad, 1994; Noddings, 1984; Palmer, 1987; Purpel, 1989; Rifkin, 1991; Wilshire, 1990). One of the contributing factors in the failure to engender a concern for others and sense of responsibility to one's community, according to some, is that we often separate freedom from responsibility. A central concept of the nature of mankind is that individuals ought to be free. Freedom implies the right to make choices unencumbered by anyone else. That does not mean that the choices made are unfettered by consequences or conditions. While respecting one's freedom to make choices, we are not obligated to relieve him or her of the burden of resulting consequences—nor must we alter the conditions which impinge upon the circumstance. Thus, any institution which is concerned with the moral imperatives must teach responsibility, for responsibility is the other side of morality (Thompson, 1991, p. 4).

How can we help students of teaching assume responsibility for the students and communities they will become a part of? How can we provide them with a sense of connectedness and membership in a caring community? We do not belong anymore, if we ever did. We move in and out of jobs, communities, marriages, families, and schools. Our focus, seemingly out of necessity, is often on ourselves. Students come to know about themselves as autonomous individuals, independent, and seemingly free from obligations to others. How can we help prospective teachers know about themselves in a different way—as members of ever expanding communities, living in reciprocal relation, with far ranging moral and ethical responsibilities and obligations? How can we help them understand that as we transcend the self and become part of the whole we do not lose our

individuality but rather our egocentricity? As the absolutes in our knowing fall away we learn that we know best in concert with others and that, in a sense, it is the only way any of us can know. Members of our species become individuals in and through being socialized into networks of reciprocal social relations, so that personal identity is from the start interwoven with relations of mutual recognition. This interdependence brings with it a reciprocal vulnerability that calls for guarantees of mutual consideration to preserve both the integrity of individuals and the web of interpersonal relations in which they form and maintain their identities. Both of these concerns—with the inviolability of the person and the welfare of the community—have been at the heart of traditional moralities (McCarthy, 1990, p. x).

How can we help teachers-to-be come to understand what it means to know morally, culturally, sociologically, historically, and ethically so that they can facilitate the knowing of all of their students? In encouraging teachers to develop these understandings we will help them begin to know sociocentrically (Soltis, 1981) rather than egocentrically. The necessity to know sociocentrically becomes ever more urgent as the schools and the population of students entering schools changes with unprecedented rapidity. Schools and the schooling process can only be understood in light of their full complexity. Teachers must be aware of the cultural contexts that shape not only their students' ways of knowing but their own way of knowing as well so that they can move beyond singular ways of knowing for to be caught up in ego is to be blinded to one's communal bonds to others, to ethical obligations (Wilshire, 1990, p. 28). When we acknowledge our own communal bonds and moral obligations, we are able to see in different ways—in more inclusive ways—and better able to help students do so as well.

To accomplish this aim teachers must know about society writ large, about the historical and cultural roots of who and what we are as a nation and a people. How can we help prospective teachers understand the connections between the social framework schools are placed in and the constraints on teaching and learning that are a result? How can we help them recognize common, taken-for-granted assumptions that are a reflection of those historical and cultural roots: that the individual receives priority, that competition is good, that success and

achievement are the way to a happy life, that we must be first above all others as a nation? How can we also help them come to know what are not taken-for-granted assumptions but perhaps should be: that community should take precedence over individuality, that cooperation may be our only way to survive as a species, that a happy and a good life may not be the same thing, that we must be the most just and compassionate of nations?

Teachers must know what we all must know, but they must know in a way that carries into their teaching and learning. They must know in a way to enable them to help their students come to know they should strive for a good life rather than a happy life and that one pursues the good life in ways very different from a happy life. The massive accumulation of environmental problems—air pollution, acid rain, the greenhouse effect, ozone depletion suggests that few of our citizens and virtually none of our politicians have seriously considered that the very meaning of progress in the future must be different. A proliferation of consumer goods can no longer be the chief definition of progress. Genuine progress today still requires technological advance, but advance by means of appropriate, nonpolluting technology, and, even more, progress in the learning capacity of our citizens, in what Robert Dahl, following long tradition, calls enlightened understanding. Only progress of this kind enables us to discern a common good, which is clearly not the same as the sum of individual goods (Bellah et al., 1991, p. 97). How can we help teachers-to-be know that enlightened understanding leads outward to a biocentric way of knowing? How can we help them understand that the common good must include that which has no voice just as it includes those who have been voiceless? We must all hear, in the audible silence, the cacophony of otherness that becomes the symphony of life when we listen with care.

If, in our educational institutions, we only enable students to know as *their* families, *their* communities, or *their* nations know, will they ever be willing to risk knowing as the other knows? Or, more importantly, risk knowing in a way that reflects all of the best that we have in common—to know with compassion, care, love, hope, joy, integrity, dignity—as well as the richness in our diversity? If we focus on what makes us different should we not also foster an appreciation of what we share in common? Why do we so often say you

cannot possibly understand rather than please help me understand? In understanding the other and in helping the other to understand, all understanding is enriched.

# Communities of Learning—Can We Get There from Here?

How can we foster communities of learning wherein prospective teachers see the value in multiple ways of knowing, appreciate perspectives different from their own, and understand the historical and cultural roots of not only their way of seeing the world but of their students' ways of seeing the world? How can we help them learn to make decisions in light of education's indeterminateness, decisions which are fundamentally ethical and political decisions? How can we enable them to do this at the same time that they are teaching? The ethical and political nature of the teaching act cannot be separated from its pedagogical nature. If teachers-to-be are not enabled to see in these ways will they be able to provide environments that will foster their students' ability to see in these ways? To step outside of our ways of knowing, to question those ways of knowing, to acknowledge that others may see in ways that are more open and inclusive than our own asks us to risk our sense of who we are—asks us, our students, and our students' students. But unless we are willing to do this will we ever have unity in our diversity? Will we ever have a community that encompasses all?

One way we may help students move beyond their singular ways of knowing is to provide them with opportunities to become aware of the assumptions that give meaning to who and what they are. In structuring opportunities that focus on their experiences and how those experiences influence their interpretations of the world and the values they bring to those interpretations, they may begin to reinterpret their experience. Musgrove (1977) notes, consciousness changes when [the] relationship between self and social experiences is reinterpreted and seen in a new light: when what was formerly taken for granted, unremarkable, scarcely visible, becomes obtrusive and problematical, when old and well-worn distinctions and categories lose their usefulness and new typifications and definitions are brought into play (p. 15).

Awareness of and the ability to step back from the context for one's beliefs and values—one's taken for granted assumptions—are necessary steps to being able to critique one's way of viewing the world. The ability to critique one's way of viewing the world is necessary to move beyond that view. For example, value in the belief in an autonomous, independent self may be based on certain assumptions about how we form our own identities. Whereas becoming aware of interdependence that supports our individuality may lead to the realization that in letting go of false autonomy we become part of a greater whole. When we do so the community is for the first time a 'universal' one in that all persons, by virtue of their being persons, are eligible for membership. The group which this self knows as 'its own' is not a bseudo-species, but the species (Kegan, 1982, p.104).

One way to foster students' questioning of their taken for granted assumptions is to provide them with a broad context for their examination. What they cannot see on their own may be illuminated through dialogue. By engaging in dialogue with others students will be able to place their way of being in the world in the context of multiple ways of being. As Misgeld and Jardine (1989) indicate, these others can be conceived concretely, as classmates, teachers, friends, rivals, etc., or abstractly. as the other one might engage in the understanding of a subject matter that embodies a different point-of-view, a different interpretation of the nature of the world and one's place in it (p. 269). Engaging with others will allow students to see that each of us brings assumptions to any encounter, assumptions which may limit our ability to hear and to understand. They also see that in working together we may find better ways of being.

We can help students begin to understand that, although there may be few right answers, there are more inclusive answers, thus helping them recognize that reliance on authority for a single view of the truth is clearly maladaptive for meeting the requirements of a complex, rapidly changing, pluralistic, egalitarian society and for meeting the requirements of educational institutions, which prepare students for such a world (Belenky, Clinchy, Goldberger, & Tarule, 1986, p. 43). We can also encourage them to develop the habits of mind to accept the ambiguity in teaching's ill-structuredness and to make commitments in spite of that indeterminateness. We

can encourage them to make a commitment broader than a commitment to self or to a narrowly defined community—a commitment to all of the children in their care and to the multiplicity of views that they may encompass. Would we not consider this a moral obligation of all educators?

We can also provide students with opportunities to connect action to consequences and encourage them to assume responsibility for their actions. Engaging in ongoing dialogue with individuals who are different from themselves, individuals whose assumptions are informed by different historical and cultural contexts will help them become aware of and accountable for the choices they promote. Opportunities to encounter subject matter that embodies different points-of-view will enable them to begin to see that there are multiple interpretations and answers and that choices must be made in light of ambiguity. We can also help them understand that they should make their choices in full recognition of their moral and political consequences. Wolfe (1989) points out, the problem in modern liberal democracies is not that ordinary people do not have a say, but rather that it is so easy for them to say what they prefer without being forced to think through the consequences of their opinions for others (p. 219). Once students begin to understand that their choices have consequences for others they may also become aware of the consequences for themselves in others' choices and interdependence will become a lived reality.

Perhaps, most importantly, we should provide a caring environment. In caring environments, taken-for-granted assumptions can be questioned. They also provide space to work together to find something to substitute for discarded assumptions as we construct and reconstruct lives of meaning. Building programs on dialogue—dialogue across our differences—helps us accomplish these aims. Three prospective kinds of benefits can be derived from dialogue across differences: those related to the construction of identity along lines that are more flexible without becoming arbitrary; those related to broadening our understanding of others and, through this, our understanding of ourselves, and; those related to fostering more reasonable and sustainable communicative practices (Burbules & Rice, 1991, p. 404).

In fostering meaning perspectives that are more open, integrated, and inclusive dialogue across difference enhances students' understanding of how

they make meaning in their own lives. They also become aware of the validity in perspectives different from their own and begin to sense the essential interdependence in our ways of being and becoming.

### Conclusions

Circles within circles overlapping, interpenetrating, becoming spheres—rondo. Are we educating teachers in the way we wish them to educate their students? How does what we are able to do influence and limit what we can enable them to do which, in turn, influences what and who their students are enabled to become? Our moral obligations seem almost overwhelming. We find ourselves in webs of significance that reflect society and the world we live in. Is it a good society (Bellah et al., 1991)? Is it just and compassionate (Purpel, 1989)? Is it a society that provides meaning in the lives of its peoples (Mander, 1991)? Is it a world where all life is respected (Bowers, 1992)?

I do not suggest that assuming the responsibilities I advocate will be easy, but I believe it is crucial that we do so. Education can make a difference in individual lives and in how we live in relation to the world. But this will be very difficult if we lose sight of the interconnections among schools, communities, cultures, nations, and the planet that gave birth to our species as well as all the other elements of a multi-layered cosmos (Bowers, 1992, p. 3). Too often our focus seems to be on our own limited needs. Perhaps many of us will choose to continue to see in that way. It provides a relative sense of order and control over our lives—a false certitude. To see in more inclusive ways requires that we live with ambiguity, that we risk what we know for undetermined possibilities, that we learn to trust one another, that we live in ethical relation to other life, that we commit to the common good above the individual good.

We must question what we are about. What are our aims, our purpose? I suggest that community must be our aim—to facilitate its development, nurture it, support it. By community I mean a capacity for relatedness within individuals—relatedness not only to people but to events in history, to nature, to the world of ideas, and yes, to the spirit (Palmer, 1987, p. 24). If this is the case, it may be necessary to see education differently. Can there be a clear demarca-

tion between teacher and learner or should we all be considered learners and teachers? Should not the moral dimensions of teaching be internal to the practice of teaching? Is not the moral dimension essential to the achievement of excellence in teaching? Defining excellence through the realization of the moral dimensions of teaching, the learner, the teacher, and the act of educating will all be extended (MacIntyre, 1981).

In doing so, a relational ethic becomes part of our teaching practice and at this point in our history as a species, with real threats to the destruction of the global village, can we afford not to make this explicit in our programs? Should not all educators find ways to work toward consensus on how to move us to better ways of being and becoming while continually revisiting that issue? What should we retain and what should we give up? Should we not critically reflect as we prepare our students to critically reflect? Is it not important for all of us to ask why and with what consequences, with consequences being viewed in light of an ever expanding community—with its circle extending outward as we weave and reweave its boundaries? Our primary task in education is not to throw our premature, distracting and obfuscating solutions to ill-conceived problems but is instead to clarify the questions that are of most worth. These questions can help educators develop appropriate responses, but they must be guestions rooted not in the existing arsenal of the education establishment but in the most vital concerns of the culture's and individual's search for meaning (Purpel, 1989, p. 23).

Perhaps the reason we narrow our focus, when we think about the educational process, is because the responsibilities and moral obligations inherent in helping all of us traverse the zone of mediation where meaning is made (Kegan, 1982, p. 2) are so awesome. But should we not broaden our focus so that we are able to build, share, and sustain a common world that will nurture all of us?

This paper began with the presupposition that teaching is about knowing. That is a prior question. Because it was never addressed, it was left unanswered. I took it as a taken-for-granted assumption or one regarded as too true to warrant discussion (Douglas as quoted by Bowers, 1988, p. 98). Because I did not raise that as a question does not mean that the reader should not. And if the reader concludes that teaching is not about knowing, then what is it

about? And what do your answers imply for the education of teachers? And what does that imply for all of us?

### References

- Barrett, W. (1986). The death of the soul: From Descartes to the computer. Garden City, NY: Anchor Press.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R. & Tarule, J. M. (1986). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books, Inc.
- Bellah, R.N., Madsen, R., Sullivan, W.M., Swidler, A. & Tipton, S.M. (1991). The good society. New York: Alfred M. Knopf.
- Bowers, C.A. (1988). The cultural dimensions of educational computing: Understanding the non-neutrality of technology. New York: Teachers College Press.
- Bowers, C.A. (1987). Elements of a post-liberal theory of education. New York: Teachers College Press.
- Bowers, C.A. (1993). Education, cultural myths, and the ecological crisis: Toward deep changes. Albany, NY: State University of New York Press.
- Bowers, C.A. (1992). Multiculturalism and the ecological crisis: Addressing the double binds in teacher education. A paper presented at the AERA Annual Conference, San Francisco.
- Bowers, C.A. (1984). The promise of theory: Education and the politics of cultural change. New York: Longman.
- Bowers, C.A., & Flinders, D. (1990). Responsive teaching: An ecological approach to classroom patterns of language, culture, and thought. New York: Teachers College Press.
- Burbules, N. (1993). Dialogue in teaching: Theory and practice. New York: Teachers College Press.
- Burbules, N. & Suzanne, R. (1991). Dialog across difference: Continuing the conversation. *Harvard Educational Review*, 61, 393 416.
- Goodlad, J. (1994). Educational renewal: Better teachers, better schools. San Francisco: Jossey-Bass.
- Greene, M. (1986). *The dialectic of freedom*. New York: Teachers College Press.
- Greene, M.(1984). Excellence, meanings, and multiplicity. *Teachers College Record*, 82, 283-297.

- Harrington, H. L. & Garrison, J. (1992). Cases as shared inquiry: A dialogical model of teacher preparation. *American Educational Research Journal*, 29(4), 715-735.
- Houston, W. R. (Ed.). (1990). Handbook of research on teacher education. New York: Macmillan.
- Kegan, R. (1982). *The evolving self.* Cambridge, MA: Harvard University Press.
- MacIntyre, A. (1981). After virtue: A study of moral theory. South Bend, IN: University of Notre Dame Press.
- Mander, J. (1991). In the absence of the sacred: The failure of technology and the survival of the Indian nations. San Francisco: Sierra Club Books.
- McCarthy, T. (1990). Introduction. In J. Habermas, Moral consciousness and communicative action. Cambridge, MA: The MIT Press.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass.
- Mezirow, J. & Associates. (Eds.). (1990). Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning. San Francisco: Jossey-Bass.
- Misgeld, D. & Jardine, D. (1989). Hermeneutics as the undisciplined child: Hermeneutic and technical images of education. In M. Packer and A. Addison (Eds.), Entering the circle: Hermeneutic investigation in psychology. Albany, NY: State University of New York.
- Musgrove, F. (1977). Margins of the mind. London: Methuen and Co Ltd.
- Noddings, N. (1984). Caring: A feminine approach to ethics and moral education. Berkeley, CA: University of California Press.

- Palmer, P. (1987). Community, conflict, and ways of knowing. Change, 19, 20-25.
- Perry, W. G. (1970). Forms of intellectual and ethical development in the college years. New York: Holt, Rinehart and Winston, Inc.
- Purple, D. (1989). The moral and spiritual crisis in education: A curriculum for justice and compassion in education. Granby, MA: Bergin and Garvey Publishers, Inc.
- Reynolds, M. (Ed.). (1989). Knowledge base for the beginning teacher. Oxford, G.B.: Pergamon Press.
- Rifkin, J. (1991). Biosphere politics: A new consciousness for a new century. New York: Crown Publishers.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15, 4-14.
- Soltis, J. (1981). Education and the concept of knowledge. In J. Soltis, (Ed.), *Philosophy and Education: Eightieth Yearbook of the National Society for the Study of Education* (pp. 95-113). Chicago, Ill: University of Chicago Press.
- Thompson, D. L. (Ed.). (1991). Moral values and higher education: A notion at risk. Albany, NY: State University of New York Press.
- Wilshire, B. (1990). The moral collapse of the University: Professionalism, purity, and alienation.
  Albany, NY: State University of New York
  Press.
- Wolfe, A. (1989). Whose keeper? Social science and moral obligation. Berkeley, CA: University of California Press.