EXTERNAL AND INTERNAL INFLUENCES ON INSTITUTIONAL APPROACHES TO STUDENT ASSESSMENT: Accountability or Improvement?

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The purpose of this study is to compare the influences of state characteristics related to student assessment, accreditation emphasis on student assessment, and institutional dynamics supporting student assessment on the approaches to student assessment that institutions have initiated. We conducted this study by examining the relevant literature, creating a national survey instrument, surveying undergraduate institutions throughout the United States, and analyzing the responses of the 885 public institutions who participated in our survey. Separate regressions were run for three different groups of institutional types on three approaches to assessment: cognitive, affective, and post-college. Regressions for the three institutional types explained 21 to 27% of the variance for cognitive assessment, 7 to 21% for affective assessment and 6 to 19% for post-college assessment. With the exception of a minor influence of state characteristics for doctoral and research universities, institutional dynamics and accreditation region were found to be the primary influences on student assessment approaches for all institutional types. We found that the drive for state-level accountability has not exceeded the influence of institutional accreditation and that internal dynamics appear to be the driving force of all three approaches to student assessment.

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INTRODUCTION

In the past decade student assessment has become a major focus of national, state, and institutional efforts intended both to make institutions more accountable for their performance and to help them improve educational quality (Aper, 1993; Ewell, 1997). Beginning in the 1980s, the number of states enacting stu-

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dent assessment initiatives has increased steadily (Cole, Nettles, and Sharp, 1997). In 1988 accrediting agencies became significantly involved in the assessment movement when the U.S. Department of Education revised its Criteria for Recognition of Accrediting Agencies, stipulating that agencies must require educational institutions and programs to clearly specify their educational objectives and to conduct student assessment to determine whether they were achieving these standards (Sims, 1992; Wade, 1989/1990).

In response to these external governmental and accrediting demands, many colleges and universities have initiated some form of student assessment activity (Banta, Lund, Black, and Oblander, 1996; El-Khawas, 1995). Although there is speculation as to why institutions initiate assessment programs, there is little systematic research designed to compare the influence of state requirements, accreditation demands, and internal concerns. In examining which of these three influences is strongest and how they interrelate, we should gain an understanding of why institutions engage in student assessment and how they respond to government policies, accrediting review processes, and internal dynamics. The purpose of our study is to compare the influences of state characteristics related to student assessment, accreditation emphasis on student assessment, and institutional dynamics supporting student assessment on the approaches to student assessment that institutions have initiated. We recognize these dynamics may vary by institutional type.

We conducted this study by examining the relevant literature, creating a national survey instrument, surveying undergraduate institutions throughout the United States, and analyzing their responses. For the purposes of this study, we focus on the responses of the 885 public institutions who participated in our survey. We excluded the independent institutions from this study as many of them are not under the influence of state requirements for student assessment. Project 5.1, State Policies and Regional Accreditation Practices of Assessment for Student Learning, of the National Center for Postsecondary Improvement found in their review and analysis of the state-level assessment policy documents very few examples (10% or less) of states with policies that include provisions relating to private/independent institutions (based on information collected for Cole et al., 1997).

LITERATURE REVIEW: STUDENT ASSESSMENT INFLUENCES

Based on an extensive literature review, we created a framework for analyzing institutional support for student assessment (Peterson, Einarson, Trice, and Nichols, 1997). The framework includes five environments: (1) the external influences on student assessment; (2) institutional approaches to student assessment; (3) the role of institutional characteristics in determining institutional approaches to assessment; (4) the organizational and administrative patterns for

promoting student assessment (institutional support, assessment management policies and practices, and culture and climate for assessment); and (5) institutional utilization of and impact from student assessment results. In this study, we are comparing the external influences on student assessment with internal institutional dynamics to gauge whether state characteristics and policies, accrediting region, or institutional dynamics have more of an influence in determining an institution's approach to student assessment.

Institutional Approaches to Student Assessment

Institutional approaches to student assessment can be compared on the basis of four dimensions: the domain to be assessed, the students to be assessed, the timing of assessment, and the methods of assessment. Within these dimension, the literature identified at least fourteen different types of student assessment[1] (Peterson et al., 1997). Based on a factor analysis of how extensively these fourteen types are used, we have created three indices reflecting the approach to student assessment an institution emphasizes: (1) cognitive assessment, (2) affective assessment, and (3) post-college assessment (Peterson, Einarson, Augustine, & Vaughan, 1999). Past research has demonstrated that most institutional approaches to student assessment focus on the cognitive domains of student functioning rather than on behavioral or affective domains, and typically measure student outcomes at only one point in time (entry or exit) rather than longitudinally (Peterson et al., 1997).

Institutional Characteristics and Dynamics

Several institution-wide dimensions have been highlighted in the literature as important sources of institutional support for student. These include the purpose of student assessment (Ewell, 1987a; Halpern, 1987; Kerschner, 1987), the relationship to mission and goals (Loacker and Mentkowski, 1993; Winston and Miller, 1994), and leadership and academic governance patterns for assessment (Banta and Associates, 1993; Banta et al., 1996; Braskamp, 1991; Jacobi, Astin, and Ayala, 1987; Rossman and El-Khawas, 1987). Within these three realms we have created indices to capture the institutional purpose for conducting assessment, institutional priority for its undergraduate academic mission statement, governance activities that promote student assessment, and administrative and faculty support for assessment (Peterson et al., 1999).

The literature suggests that variance in practices among institutions is due to several factors including institutional type, prestige, control, size, and curricular emphasis (Gentemann & Rogers, 1987; Muffo, 1992). Research has shown that institutional type influences how it will respond to external pressure for assessment (Ewell, 1988). Faculty orientation toward teaching or research appears to

be a critical factor—community college faculty are frequently more supportive of assessment than their four-year college peers, and exceed faculty at research universities who have often responded negatively to assessment initiatives (Peterson et al., 1997). In this study we are interested in how patterns vary by institutional type.

Influence of State Characteristics

State-level actions are believed to be an important influence on institutional engagement in student assessment efforts. The majority of state-level assessment efforts originated in the mid-1980s following the NIE report *Involvement in Learning* and other national reports that called for assessment of student learning (Aper, Cuver, and Hinkle 1990; Ewell, 1993). Since then, the number of states enacting student assessment initiatives has increased steadily. According to recent research conducted by the National Center for Postsecondary Improvement, all but four of fifty responding states reported some type of student assessment activity (Cole et al., 1997). Our literature review (Peterson et al., 1997) identified eight dimensions along which state assessment approaches can be compared. These dimensions are displayed in Table 1.

In this study, we are investigating the effects of three of these dimensions on assessment activities: state governance structure, form of student assessment initiative, and standardization of assessment indicators. Previous research has found that states with planning agencies were less likely to report state-level student assessment activity than those utilizing governing or coordinating boards as governance structures (Cole et al., 1997). However, there is no evidence of research, or specific propositions ventured, regarding the differential impact of student assessment statutes, policies, or combinations of statutes and policies on institutional support for student assessment. In addition, comparative evidence regarding the differential influence of standardized or locally selected assessment indicators on institutional support for student assessment is not available.

Nonetheless, our literature review discerned several general observations of state-level influences on higher education institutions. Several studies have found that state requirements have spurred institutional activity. Hexter and Lippincott's (1990) review of three surveys of institutional engagement in student assessment activities found that external mandates from accrediting agencies, state legislatures, and boards of regents played a prominent role in prompting assessment initiatives, particularly at public institutions. In addition, half of the institutions reported utilizing student assessment results for reports to state agencies. Ewell (1993) stressed that state requirements have prompted activity in both assessing entering students and testing students' knowledge within their major.

However, other studies have found that institutions do not always comply

TABLE 1. Dimensions of State Assessment Approaches

State Assessment Approach	Definition
1. State Governance Structure	McGuinness, Epper, and Arredondo (1994) proposed a continuum of state governance structures for higher education, arrayed here in descending order of authority: consolidated governing boards, coordinating boards with regulatory authority, coordinating boards with advisory capacity, and planning agencies.
2. Student Assessment Initiative	State-level student assessment initiatives may take the form of a statute established by the state legislature, a policy developed by a state higher education governing board or planning agency, or a combination of legislative statutes and nonlegislative policies (Cole et al., 1997).
3. Purpose of Assessment Initiative	In much of the literature, an important conceptual distinction concerns whether state-level student assessment initiatives are oriented toward serving internal, institutional needs or external, state-level needs.
4. Relationship to Other Initiatives	State initiatives with respect to student assessment differ in terms of their consistency with the intent and functions of other state-level higher education policies (Ewell, 1993; Jones and Ewell, 1993; McGuinness, 1994).
5. Centralization of Decision-Making	States vary in the degree to which decisions regarding the design and implementation of the assessment approach are centralized in state-level agencies, decentralized to the institutional level, or determined conjointly by state-and institution-level personnel (Ewell, 1987b; Ewell and Boyer, 1988; Hines, 1988).
6. Standardization of Indicators and Instruments	States may require the use of common performance indicators or assessment instruments across institutions, or permit institutional variations in either or both of these practices (Cole et al., 1997; NCHEMS, 1996).
7. Reporting/Evaluative Uses of Assessment	States differ in terms of the content and expected frequency of student assessment-related reports required of institutions, as well as by how state agents evaluate assessment information.
8. Resource Support for Assessment	State initiatives may support institutional engagement in student assessment by providing resources in various forms (Cole et al., 1997).

with state requirements. Ewell and Boyer (1988) used interviews with state and institutional representatives from five states engaged in state-mandated assessment to explore the relationship between state approaches to assessment and institutional responses. Based on their research, they developed three general categories of institutional response: some institutions actively resisted assessment mandates provoking state measures to obtain compliance; most institutions provided minimal information, giving the state only what it was presumed was wanted; and a few institutions took a proactive stance, developing and then selling locally developed assessment programs to state officials.

Influence of Accreditation

In addition to state-level influence, accrediting associations have played an important role in driving the student assessment movement (Aper et al., 1990; Banta, 1993; Muffo, 1992; Nettles, 1987; Nichols, 1990; Steele and Lutz, 1995). In this study we are concerned with the influence of regional accrediting agencies. The six regional accrediting agencies responsible for evaluating institutions of higher education within their geographical area are Middle Atlantic Association of Schools and Colleges;,New England Association of Schools and Colleges, North Central Association of Colleges and Universities, Northwest Association of Schools and Colleges, Southern Association of Colleges and Schools, and Western Association of Colleges and Universities.

Ewell (1993) suggested that the presence of accreditation policies requiring student assessment has stimulated activity at more institutions than would have been the case if accreditors had not become involved. By requiring assessment, accreditors have influenced institutional assessment plans and approaches, organizational structures, and assessment techniques. Another recent survey found that state accountability and accreditation were major reasons given for undertaking assessment along with concerns for improved student performance and program effectiveness (Muffo, 1992). However, the totality of the literature is both scant and inconclusive concerning the impact of accreditation policies on the institutional utilization of student assessment. While there is some evidence that accreditation has stimulated institutional assessment activity (Muffo, 1992), the institutional response has not always been rapid (Gill, 1993) or comprehensive (Gentemann and Rogers, 1987). While this study will not answer the question of how accrediting agencies influence institutional approaches to and support for student assessment, it will examine the varying influences of the six accrediting bodies.

Table 2 displays the year each regional association instituted its first policy on student assessment, whether or not the association has offered training to its member institutions, and a short description of the comprehensiveness of their assessment policy. All of the regional associations have comprehensive mea-

TABLE 2. Year of Outcomes Assessment Policy, Institutional Training, and Comprehensiveness of Measures for Regional Accreditation Associations

Regional Association	Year of Initial Policy	Offers Institutional Training	Comprehensiveness of Measures
Middle States	1985	Yes (Training symposia 1996–1997)	wide ranging (i.e., cognitive abilities, information literacy, integration, and application)
New England	1992	Yes (Student Outcomes Assessment Project 1997)	wide ranging (i.e., cognitive, behavioral, and affective learning)
North Central	1989	Yes (Regional workshops introduced in 1991)	wide ranging (i.e., cognitive, behavioral, and affective)
Northwest	1994	None apparent*	wide ranging (i.e., problem solving, analysis, synthesis, making judgments, reasoning, communicating)
Southern	1984	None apparent**	wide ranging (i.e., major field and general education achievement, affective development)
Western	1988	Yes (Assessment included in all institutional self-study workshops)	wide ranging (i.e., communication, quantitative reasoning, critical thinking)

*Northwest is also the most recently created regional association.
**States in the Southern region have been active in offering institutional training; these training programs have been actively supported by the Southern Accrediting Association.

sures for assessing students. None of the associations require specific processes, nor do they stipulate a single set of outcomes. Most associations produce a broad list of possible approaches (e.g., alumni and employer surveys, course and professor evaluations, student satisfaction inventories, course completion rates) from which institutions can choose (Cole et al., 1997). All six regional associations either implicitly or explicitly acknowledge that the distinct and diverse purposes and goals of their member institutions demand equally diverse assessment approaches and processes (Cole et al., 1997). It is difficult, therefore, to quantify differences among associations in terms of their approaches to student assessment. However, they do differ in terms of the length of time they have required their member institutions to assess students.

CONCEPTUAL FRAMEWORK AND RESEARCH QUESTIONS

Since the literature has indicated that state structure and student assessment policy and accreditation requirements are the strongest of the external influences, our conceptual framework focuses on these two domains. We are comparing the impact of state characteristics, accrediting region, and institutional dynamics on institutional approaches to student assessment. We are also interested in how these influences vary by institutional type. Figure 1 presents the conceptual framework that guides our inquiry.

Our conceptual framework displays the primary constructs and relationships among them that we are examining in this study. Within our framework, state-level characteristics include state authority structure, state initiative for assessment (i.e., policy-or statute-based), and whether the state mandates common indicators and outcomes in its assessment plan. Based on our literature findings, we are proposing that state-level characteristics, accrediting association, and institutional type all affect institutional dynamics related to the purpose and support for student assessment activities. Six dimensions are used to examine purpose and support. Whether the institution conducts assessment to meet state requirements, to meet accrediting requirements, or for internal purposes are
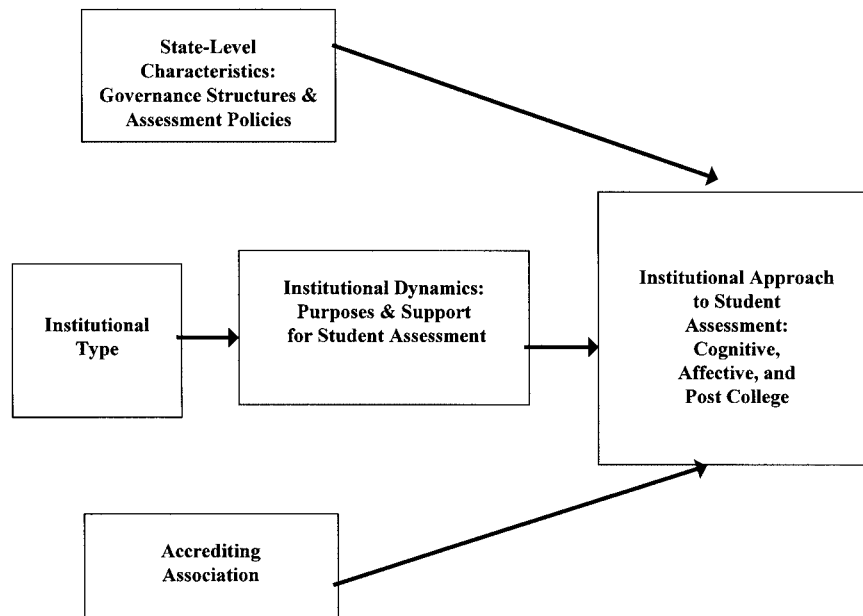

FIG. 1. Research framework.

three dimensions. The other three are (1) emphasis on student assessment in institutional mission statement, (2) institution-wide governance activities promoting student assessment, and (3) faculty and administrative support for assessment. The accreditation construct is the accrediting region in which an institution is located. Institutional dynamics, state characteristics, and accrediting requirements all potentially influence the approach to student assessment that institutions adopt (Gentemann and Rogers, 1987; Muffo, 1992; Ewell, 1993; Cole et al., 1997; Hexter and Lippincott, 1990; Aper et al., 1990; Banta, 1993; Nettles, 1987; Nichols, 1990; Steele and Lutz, 1995). Institutional type also affects its approache to assessment, both directly and indirectly through its influence on institutional dynamics (Ewell, 1988).

The specific research questions for this study are:

1. How do institutional dynamics and institutional approaches to student assessment vary by institutional type?
2. How do institutional dynamics relate to institutional approaches to student assessment?
3. How do state-level characteristics relate to institutional dynamics pertaining to student assessment and to institutional approaches to student assessment?
4. How does accrediting region relate to institutional dynamics pertaining to student assessment and to institutional approaches to student assessment?
5. What is the relative influence of state characteristics related to student assessment, accreditation region, and institutional dynamics supporting student assessment on institutional approaches to student assessment? How does this influence vary by institutional type?

METHODS

In the winter of 1998, as part of our research program on the Institutional Support for Student Assessment for the National Center for Postsecondary Improvement (NCPI), we surveyed all U.S. institutions of postsecondary education (n = 2,528), excluding specialized and proprietary institutions, on their undergraduate student assessment activities. The instrument "Institutional Support for Student Assessment" (ISSA) is a comprehensive inventory of external influences on student assessment, institutional approaches to student assessment, patterns of organizational and administrative support for student assessment, assessment management policies and practices, and the uses and impacts of assessment information. Prior to developing the instrument, we conducted a review and synthesis of the literature on student assessment (Peterson et al., 1997). Dynamics, policies, and practices mentioned or reported in the literature that related to the context of the instrument were included as dimensions or items in the inventory. Our preliminary instrument was pilot tested with chief

academic administrators in four different types of institutions (associate of arts, baccalaureate, doctoral, and research). These pilot tests led to revisions of the questionnaire, the addition and elimination of some items, and the clarification of others.

The actual survey process included five steps. First, a preliminary letter informing the chief academic officer of the nature and importance of this national study and the impending receipt of the questionnaire was sent two weeks in advance of the mailing. Second, the survey instrument was sent to the chief academic officer with both a cover letter indicating its intended use as an institutional self-study inventory and directions for completing and returning it. Third, a reminder postcard was sent a week after mailing the instrument. Fourth, approximately one month following the mailing of the questionnaire, all nonresponding institutions received a telephone call from a member of our research team encouraging them to respond and offering to answer questions. Finally, two months after the initial mailing, a thank you letter was sent to all responding institutions.

Of the 2,528 instruments mailed, we received 1,393 completed surveys by our deadline, for a response rate of 54%. Table 3 lists by institutional type the number of surveys from public institutions that were returned. In this study, we are focusing only on the 885 public institutions that completed our instrument. For the purposes of this study, Carnegie institutional types were aggregated to five groups to increase the numbers of institutions within each category: research, doctoral, master's, baccalaureate, and associates of arts.

To gain objective data on state-level characteristics and accrediting agencies, we incorporated several variables from the study by NCPI's research program

TABLE 3. Public Institution Survey Response by Institutional Type

Institutional Type	Number of Surveys		Response Rate (%)
	Sent	Received	
Research	85	58	68%
Doctoral	66	44	67%
Master's	275	181	66%
Baccalaureate	86	38	44%
Associate of Arts	952	509	53%
Unknown*	21	55	
Total	1485	885	60%

*Some institutions have changed Carnegie classifications or do not have them listed in the 1998 Higher Education Directory.

on State Policy and Regional Accreditation Practices of Assessment for Student Learning, *Assessment of Teaching and Learning for Improvement and Public Accountability: State Governing, Coordinating Board and Regional Accreditation Association Policies and Practices*. We also incorporated data on institutional characteristics from the 1995 Integrated Postsecondary Education Data System (IPEDS) survey into our database.

Most of the variables we examined are either factors or indices created from the Institutional Support for Student Assessment Survey (ISSA) or the State Assessment Survey (SAS). The definition and construction of these indices are described in Table 4. We attempted to reduce the data in our study to the extent possible to develop more accurate dimensions and to better manage analysis. Data was reduced in one of three ways: through factor analysis, cluster analysis, or by creating additive indices. In the factor analyses, items within sections with the same response scale were factored using an oblique rotation method. Items were chosen for inclusion in a factor if they weighted most strongly on that factor, their loadings exceeded .40, and they made sense conceptually. We then created factor and cluster scores by deriving the mean of items included for each variable. Alpha coefficients of reliability were calculated for each index.

Using primarily these indices, we created descriptive profiles of the responding institutions on all variables. We then ran ANOVAs and correlations to test for significant differences or relationships among our variables. These techniques were instrumental in answering our first four research questions. Finally, we used linear regression in an attempt to answer our fifth research question. We entered each variable using the stepwise method to account for changes in the R-squared for each predictor variable and we used mean-replacement for missing values. Table 4 lists all of the variables we examined in this study, an expanded definition, their values, range, coefficient of reliability, and data source. For more detailed information on how the factors were derived, see Peterson and colleagues, 1999.

RESULTS

Role of Institutional Type

Institutional Approach

Analysis of variance was used to examine research question number one on the influence of institutional type on both institutional approach to student assessment and institutional dynamics. Research institutions collect the least amount of data on student cognitive competencies, but are near the top in terms of collecting data on affective competencies (see Table 5). Doctoral institutions are neither highest nor lowest on any of the types of data collected. Although not significant, master's institutions collect more data on post-college students

TABLE 4. Operational Definitions of Variables

Variable	Definition	Values	Data Source
Institutional Approaches to Student Assessment			
Cognitive assessment	Factor including: competence in major field, general education competencies, higher-order skills, vocational or professional skills.	Alpha = .71 Scale range[1] = 1–4 Mean = 1.62	ISSA[2]
Affective assessment	Factor including: student experiences and involvement, student satisfaction, personal growth.	Alpha = .68 Scale range[1] = 1–4 Mean = 1.74	ISSA
Post-college assessment	Factor including: vocational or professional outcomes, further education, satisfaction/experience with institution after leaving.	Alpha = .83 Scale range[1] = 1–4 Mean = 2.27	ISSA
Institutional Dynamics			
Mission emphasis	Additive index: emphasizes excellence in undergraduate education, identifies educational outcomes intended for students, refers to student assessment as important activity.	Range = 0–3 Mean = 1.48	ISSA
Conducts assessment for internal purposes	Factor including: guiding undergraduate academic program improvement, improving achievement of undergraduate students, improving faculty instructional performance, guiding resource allocation decisions.	Alpha = .79 Scale range[3] = 1–4 Mean = 2.48	ISSA
Conducts assessment to meet state requirements	Individual item	Scale range[3] = 1–4	ISSA
Conducts assessment to meet accreditation requirements	Individual item	Scale range[3] = 1–4	ISSA

TABLE 4. (*Continued*)

Variable	Definition	Values	Data Source
Administrative & governance activities	Additive index: annual institution-wide forums/seminars, rewards/incentives for administrators promoting use of assessment, incentives for academic units to use assessment information, assessment workshops for administrators, board of trustees committee addresses assessment, faculty governance committee addresses assessment, student representation on assessment committees.	Range = 0–7 Mean = 2.33	ISSA
Administrative/ faculty support for assessment	Additive index: chief executive officer, academic affairs administrators, student affairs administrators, faculty governance.	Range = 4–20 Mean = 17.18	ISSA
Institutional Type	Grouped Carnegie classifications	Associate of Arts Baccalaureate Master's Doctoral Research	IPEDS[4]
State Characteristics State authority structure	Governance structure, based on McGuinness et al., 1994.	1 = Planning agency 2 = Coordinating advisory 3 = Coordinating regulatory 4 = Consolidated governing	SAS[5]
State initiative for assessment	Whether the state's assessment initiatives were guided by legislative or other means.	1 = No state plan 2 = State policy 3 = State statute 4 = Combination of policy & statute	SAS

TABLE 4. (*Continued*)

Variable	Definition	Values	Data Source
State's use of common indicators/outcomes	Whether states mandate common indicators and outcomes.	1 = No indicators or outcomes 2 = Institutional specific 3 = Common for some 4 = Common for all	SAS
Accrediting Association	Regional accrediting association	Middle States North Central New England Northwest Southern Western	IPEDS

[1] 1 = not collected, 2 = collected for some, 3 = collected for many, 4 = collected for all students.
[2] Inventory of Institutional Support for Student Assessment.
[3] 1 = no importance, 2 = minor importance, 3 = moderate importance, 4 = very important.
[4] Integrated Postsecondary Education Data System.
[5] *Assessment of Teaching and Learning for Improvement and Public Accountability: State Governing, Coordinating Board and Regional Accreditation Association Policies and Practices* (Cole et al., 1997).

TABLE 5. Institutional Approach to Student Assessment by Institutional Type

	Institutional Type						
	All Insts. N = 826	Research N = 58	Doctoral N = 44	Master's N = 180	Bacc. N = 38	Assoc of Arts N = 507	
Institutional Approach	*M*	*M*	*M*	*M*	*M*	*M*	*F*
1. Cognitive assessment	1.62	1.54	1.76	1.73	1.86	1.55	6.05**
2. Affective assessment	1.74	1.90	1.78	1.87	1.91	1.66	9.18**
3. Post-college assessment	2.28	2.12	2.17	2.35	2.29	2.27	2.13

**p < .01.

than the other types of institutions. Baccalaureate institutions collect both cognitive and affective assessment data on more students than do the other four types of institutions. Associate of arts institutions collect the least amount of data on student affective competencies, and they are also near the bottom in terms of collecting data on cognitive competencies.

Institutional Purposes

In examining the institutional dynamics, there are significant differences by institutional type on all six dimensions of institutional purpose of and support for student assessment (see Table 6). Research universities are least likely to conduct assessment for any of the three given purposes. Doctoral and master's institutions are most likely to stress that they conduct assessment to meet accrediting requirements. Baccalaureate institutions are neither highest nor lowest on any of these three purposes for conducting student assessment. Associate of arts institutions are most likely to report that they conduct assessment both for internal purposes and to meet state requirements.

Institutional Support

Examining the dimensions of institutional support for student assessment, it is not surprising that research universities are least likely to stress assessment in their mission statements. These institutions also score the lowest on faculty and administrative support for student assessment. Doctoral institutions are neither highest nor lowest on the three institutional support dimensions. Master's institutions are most likely to include statements regarding assessment in their mission statements, followed closely by baccalaureate institutions. Interestingly, master's institutions are also most likely to have institution-wide administrative and governance activities that support student assessment, while baccalaureate institutions are least likely to engage in such activities. When it comes to reporting faculty and administrative support for student assessment, however, baccalaureate institutions score the highest. Associate of arts institutions were neither highest nor lowest on these three institutional support dimensions.

Institutional Dynamics and Approach

Research question number two examines the relationship of institutional dynamics pertaining to and institutional approach to student assessment (see Table 7). Although there are several statistically significant relationships between institutional dynamics pertaining to and institutional approaches to student assessment, it is clear that engaging in assessment to meet external demands of either state reporting or accreditation requirements is related only minimally to collect-

TABLE 6. Institutional Dynamics: Purposes of and Support for Student Assessment by Institutional Type

	Institutional Type						
	All Insts. N = 826	Research N = 58	Doctorals N = 44	Master's N = 180	Bacc. N = 38	Assoc of Arts N = 507	
Institutional Dynamics	*M*	*M*	*M*	*M*	*M*	*M*	*F*
Purposes							
1. Conducts assessment for internal purposes	2.49	2.23	2.30	2.44	2.45	2.52	5.38**
2. Conducts assessment to meet state requirements	3.31	2.84	2.98	3.13	3.35	3.44	9.37**
3. Conducts assessment to meet accreditation requirements	3.59	3.21	3.68	3.67	3.57	3.59	5.49**
Support							
4. Mission emphasis	1.49	1.27	1.48	1.66	1.63	1.45	2.99*
5. Hold administrative and governance activities	2.33	2.15	2.31	2.75	2.06	2.20	6.79**
6. Administrative and faculty support for student assessment	17.15	16.17	16.58	17.01	17.84	17.30	3.79**

*$p < .05$, **$p < .01$.

ing any of the three types of student assessment data. Institutions that profess to engage in student assessment for internal purposes (such as improving the teaching and learning process) are more likely to collect cognitive, affective, and post-college data on a greater number of students. Similarly, mission statement

TABLE 7. Correlations Between Institutional Dynamics Pertaining to and Approaches to Student Assessment Institutional Approaches

Institutional Dynamics	Cognitive Assessment	Affective Assessment	Post-College Assessment
Internal purposes	.31**	.25**	.24**
Mission emphasis	.22**	.20**	.19**
Admin. & governance activities	.23**	.16**	.14**
Admin. & faculty support	.19**	.16**	.17**
Purpose to meet state reqs.	.06	.07*	.08*
Purpose to meet accrediting reqs.	.09*	.09*	.06

*p < .05; **p < .01.

emphasis on, administrative and governance activities for, and administrative and faculty support for student assessment are all positively related to the three types of student assessment approaches.

Influence of State Characteristics

State Authority Structure

Research question number three examines the relationship of state characteristics (authority structure, nature of initiative, and common indicator requirements) to institutional dynamics pertaining to and approaches to student assessment. State authority structure (see Table 8) is significantly related to all three approaches to student assessment. Institutions in states with consolidated governing boards were most likely to collect the greatest amount of data on student affective competencies. Institutions with coordinating regulatory boards collect the most data on cognitive competencies and on post college students, and come in second on collecting data on affective competencies. Institutions in states with coordinating advisory boards score the lowest on all three institutional approach variables, indicating that institutions in these states collect the least amount of student assessment information. Institutions in states with planning agencies scored quite highly on both cognitive and post-college assessment.

Examining institutional purposes for student assessment reveals significant differences by state authority structure. Institutions in states with consolidated governing boards were most likely to agree that conducting assessment for internal purposes is important. Institutions in states with coordinating regulatory boards are most likely to indicate that meeting state reporting requirements is an important reason to conduct assessment, while institutions in states with planning agencies and coordinating advisory boards were least likely to cite this

TABLE 8. Institutional Approach, Purposes, and Support by State Authority Structure

	All Insts. N = 885 Mean	Consolidated Governing N = 255 Mean	Coordinating Regulatory N = 467 Mean	Coordinating Advisory N = 110 Mean	Planning Agency N = 53 Mean	F
		State Authority Structure (51 states including DC)				
Institutional Approach to Student Assessment						
1. Cognitive assessment	1.62	1.63	1.69	1.27	1.68	6.86**
2. Affective assessment	1.74	1.79	1.75	1.58	1.69	4.92**
3. Post-college assessment	2.27	2.27	2.35	1.96	2.28	13.70**
Purposes						
4. Conducts assessment for internal purposes	2.48	2.53	2.49	2.37	2.43	2.85*
5. Conducts assessment to meet state requirements	3.29	3.32	3.45	2.84	2.77	18.33**
Institutional Support						
6. Mission emphasis	1.48	1.47	1.55	1.37	1.17	3.50*
7. Hold administrative and governance activities	2.33	2.28	2.35	2.37	2.43	.30
8. Administrative and faculty support for student assessment	17.18	17.30	17.30	16.52	17.02	2.99*

$*p < .05;$ $**p < .01.$

reason as important. Furthermore, institutions in states with coordinating advisory boards were least likely to list internal purposes as an important reason to conduct assessment.

Turning to institutional support patterns, only mission emphasis on and faculty and administrative support for student assessment varied significantly by state authority structure. Institutions in states with coordinating regulatory boards were most likely to emphasize assessment in their mission statements, while institutions in states with planning agencies were least likely to do so. Finally, institutions in states with either consolidated governing or coordinating regulatory boards were most likely to report that their faculty and administrators supported their assessment activities.

State Initiatives

There are few statistically significant relationships between state level initiatives and the institutional approach, purposes, and support variables (see Table 9). Regarding institutional approach to student assessment, there is a significant relationship only with cognitive assessment. Institutions in states that used a combination of statute and policy to initiate student assessment are most likely to gather the most data on cognitive competencies. Interestingly, institutions in states that only rely on statute are least likely to gather extensive data on cognitive competencies.

There are no significant differences among institutions by state initiative on conducting assessment for internal purposes. However, institutions in states with only a statute and in states with both a statute and a policy are most likely to believe that conducting assessment to meet state reporting requirements is important. Not surprisingly, institutions in states with no state plan are least likely to agree with this importance.

In terms of institutional support for student assessment there were no differences by source of state initiative on institutions' mission emphasis or on administrative and governance activities for student assessment. Only administrative and faculty support for assessment varies significantly by state initiative. Institutions in states that have used a combination of policy and statute report the greatest amount of internal support, while institutions in states without state plans report the least amount of support.

Common Indicators

There are also few significant differences in institutional approach to and dynamics pertaining to student assessment by state indicator and outcome requirements (see Table 10). Whether the state requires common indicators and outcomes as part of their assessment plan makes a difference in how extensively

TABLE 9. Institutional Approach, Purposes, and Support by State Initiative for Assessment Plan

	All Insts. N = 682 Mean	State Initiative for Assessment Plan (46 statesincluding DC)				F
		Both Policy & Statute N = 144 Mean	State Statute N = 215 Mean	State Policy N = 265 Mean	No State Plan N = 57 Mean	
Institutional Approach to Student Assessment						
1. Cognitive assessment	1.64	1.74	1.56	1.65	1.60	3.07*
2. Affective assessment	1.75	1.76	1.81	1.71	1.64	2.41
3. Post-college assessment	2.28	2.33	2.27	2.27	2.27	0.51
Purposes						
4. Conducts assessment for internal purposes	2.48	2.53	2.47	2.48	2.36	1.71
5. Conducts assessment to meet state requirements	3.28	3.39	3.43	3.22	2.75	8.73**
Institutional Support						
6. Mission emphasis	1.51	1.58	1.57	1.47	1.30	1.84
7. Hold administrative and governance activities	2.35	2.28	2.31	2.39	2.48	.44
8. Administrative and faculty support for student assessment	17.27	17.66	17.09	17.32	16.71	2.64*

*p < .05, **p < .01.

TABLE 10. Institutional Approach, Purposes, and Support by the State Requirement for Common Indicators

| | All Insts. N = 750 Mean | State Indicators and Outcomes Requirement (44 states including DC) | | | | F |
		Common for All N = 243 Mean	Common for Some N = 197 Mean	Institutional Specific N = 204 Mean	No Indicators or Outcomes N = 106 Mean	
Institutional Approach to Student Assessment						
1. Cognitive assessment	1.62	1.51	1.63	1.72	1.64	5.09**
2. Affective assessment	1.75	1.71	1.75	1.80	1.73	1.06
3. Post-college assessment	2.28	2.22	2.26	2.34	2.30	1.41
Purposes						
4. Conducts assessment for internal purposes	2.48	2.44	2.48	2.53	2.46	1.31
5. Conducts assessment to meet state requirements	3.25	3.14	3.37	3.46	2.90	9.96**
Institutional Support						
6. Mission emphasis	1.48	1.58	1.37	1.49	1.45	1.96
7. Hold administrative and governance activities	2.36	2.33	2.37	2.35	2.44	.17
8. Administrative and faculty support for student assessment	17.23	17.06	17.31	17.37	17.21	.62

**p < .01.

institutions collect data on cognitive competencies. Interestingly, colleges and universities in states that allow institutions to define their own indicators and outcomes collect the most data on student cognitive competencies. Institutions in states that prescribe common indicators and outcomes collect the least amount of data on cognitive competencies, even less than do those institutions in states with no requirements for indicators or outcomes. Emphasis on common indicators is not related to conducting either affective or post-college assessment.

Regarding institutional purposes, institutions in states that allow each college and university to develop their own indicators are most likely to report that an important reason for conducting assessment is to meet state reporting requirement needs. Not surprisingly, institutions in states that do not require indicators or outcomes are least likely to stress that conducting assessment to meet state requirements is important. There are no differences by indicator requirements on institutions reporting internal purposes for conducting assessment. Neither were there differences on any of the three measures of institutional support for student assessment by the state indicator requirement.

Influence of Accrediting Region

Institutional Approaches

Research question number four examines how accrediting region relates to institutional approaches to and dynamics pertaining to student assessment (Table 11). Accrediting regions appear to make a substantial difference in terms of the approaches to student assessment that institutions emphasize. In terms of the types of approaches institutions use, institutions in the North Central region, closely followed by the Southern region, are most likely to collect data on student cognitive competencies. Institutions in the Southern region are most likely to gather data on student affective competencies. Institutions in the Middle States region, closely followed by the Southern region, are most likely to collect data on former students. For all three of these variables, institutions in the Western region are least likely to collect data extensively. Institutions in the Northwest region also score fairly high on these three variables, while New England region institutions' scores are relatively low. It should be noted that both of these regions initiated their student assessment requirements later than the other regions.

Purposes

Turning to the relationship with institutional purposes, institutions in the Southern region are most likely to report that internal purposes are an important reason to conduct assessment. Institutions in the Western, Northwest, and New

TABLE 11. Institutional Approach and Dynamics by Accrediting Region

	All Insts. N = 880 M	Accrediting Region						F
		Middle States N = 102 M	North Central N = 341 M	New England N = 38 M	Northwest N = 60 M	Southern N = 283 M	Western N = 57 M	
Institutional Approaches to Student Assessment								
1. Cognitive assessment	1.62	1.47	1.72	1.37	1.61	1.70	1.08	16.92**
2. Affective assessment	1.74	1.68	1.73	1.60	1.77	1.84	1.47	6.58**
3. Post-college assessment	2.27	2.41	2.27	2.19	2.14	2.38	1.74	13.58**
Purposes								
4. Conducts assessment for internal purposes	2.48	2.44	2.49	2.37	2.35	2.57	2.30	4.58**
5. Conducts assessment to meet accreditation requirements	3.59	3.51	3.64	3.54	3.54	3.62	3.38	2.14
Institutional Support								
6. Mission emphasis	1.48	1.64	1.36	1.27	1.19	1.66	1.50	5.91**
7. Hold administrative and governance activities	2.33	2.13	2.46	2.32	2.39	2.21	2.41	1.61
8. Administrative and faculty support for student assessment	17.18	17.15	17.21	16.97	17.10	17.37	16.39	1.43

**p < .01.

England regions, respectively, are least likely to report that internal purposes are an important reason to conduct assessment. Interestingly, there are no differences by accrediting region in institutions reporting that meeting accrediting requirements is an important purpose for conducting assessment.

Institutional Support

Regarding institutional support dimensions, only institutional mission emphasis showed statistically significant differences by region. Institutions in the Southern and Middle States regions are most likely to report that assessment is emphasized in their mission statement, while institutions in the Northwest region are least likely to report such an emphasis. There were no significant differences by region in institutions' administrative and governance activities for or administrative and faculty support for student assessment.

State, Accreditation, and Institutional Influence

Tables 12–14 address research question number five. They present the results of the regression analyses used to determine the relative influence of institutional dynamics, state characteristics, and accrediting region on each of the three institutional approaches to assessment by institutional type. For these analyses, we merged the baccalaureate with the master's institutions and the doctoral with the research universities to increase our sample sizes. Post-hoc analyses of ANOVAs between variable differences did not show any significant differences between either baccalaureate and master's institutions or doctoral and research universities on our three dependent variables.

Cognitive Assessment

Table 12 displays the results of the regression of the state, accrediting, and institutional dynamics variables on the institutional approach of collecting data on cognitive competencies. For associate of arts institutions, the model explains 21% of the variance. Institutional dynamics variables and accrediting region are significantly associated with collecting data on cognitive competencies for these institutions. Specifically, three institutional dynamics variables—conducting assessment for internal purposes, emphasizing assessment in the mission statement, and holding institution-wide governance and administrative activities—have positive influences on the dependent variable, and in combination account for 15% of the variance. However, the strongest negative association is being located in the Western accrediting region[2] which accounts for 9% of the variance.

For baccalaureate and master's institutions the model explains 27% of the

TABLE 12. Cognitive Assessment Regressed on Institutional Dynamics, State Characteristics, and Accrediting Region by Institutional Type

	Assoc. Arts N = 509		Bacc & Master's N = 219		Doctoral & Research N = 102	
	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR^2
R^2	.21**		.27**		.22**	
Institutional Dynamics						
Mission Emphasis	.18**	.04				
Governance	.13**	.02				
Fac/Admin Support			.15*	.02		
Internal Purpose	.22**	.09	.27**	.14	.24*	.06
State Characteristics						
Purpose: to meet state reqs						
Authority Structure						
Assess. Initiative						
Common Indicators/Outcomes					−.25**	.06
Accrediting Region						
Purpose: to prep self study						
Middle States			−.29**	.06		
North Central					.24*	.10
New England	−.08*	.01	−.15*	.02		
Northwest***						
Southern						
Western	−.27**	.07	−.18**	.03		

*p < .05; **p < .01.
***Since accrediting region was a categorical variable, Northwestern Accrediting Region was left out of this regression because its affect on cognitive competencies, based on ANOVA, was closest to the mean.

variance on collecting data on cognitive competencies. Two institutional dynamics variables are statistically significant and positive, accounting for 16% of the variance. Faculty and administrative support for assessment, 14% of the variance, is the largest predictor, while having internal purposes as important reasons for engaging in student assessment accounts for 2%. Accrediting region is again negatively associated. Institutions in the Middle States region are less likely to collect data on cognitive competencies (6% of the variance), as are institutions in the New England and Western regions[2] (2% and 3% of the variance, respectively).

For doctoral and research universities, the model explains 22% of the vari-

ance. The pattern changes more dramatically for these institutions. One variable from each of the three constructs is associated with assessment of cognitive competencies. For these institutions, data collection activity is positively associated with whether the institution stresses internal purposes for conducting assessment as important (6% of the variance) and whether the institution is located in the North Central region[2] (10% of the variance). State mandates for common indicators and outcomes are negatively associated with collecting data on cognitive competencies explaining 6% of the variance.

Affective Assessment

Table 13 displays the results of the regression on the institutional approach emphasizing affective assessment. This model only explains 12% of the variance for associate of arts institutions. As was the case for collecting data on cognitive competencies in associates of arts institutions, institutional dynamics and accrediting region are both significantly associated with collecting data on affective competencies, while state characteristics are not significant. Specifically, two of the institutional dynamics are positively associated and account for 10% of the variance. Institutions that stress that they conduct assessment for internal reasons (8%) and those that include an emphasis on assessment in the mission statement (2%), are more likely to collect student assessment data on affective competencies. Institutions located in the Western Accrediting region[3] are slightly less likely to collect this data (2%) while those in the Southern region are slightly more likely (1%).

This model is a very weak predictive vehicle for baccalaureate and master's institutions, explaining only 7% of the variance. For these institutions, only two variables are significant in this regression model. Institutions that hold internal purposes as important reasons for engaging in student assessment (5%) and institutions in the Southern accrediting region[3] (2%) are more likely to collect data on affective competencies. Once again, state characteristics are not significant.

This model works best for doctoral and research universities, explaining 22% of the variance. Institutional dynamics are most important and account for 17% of the total variance. Institutions that conduct assessment for internal purposes (11%) and that hold institution-wide administrative and governance activities (6%) are most likely to collect data on affective competencies. As with the regression on cognitive assessment, these institutions are again the only ones to be affected by state characteristics. In states where their initiative for assessment is strong, these institutions are more likely to collect data on affective competencies (4%). Accrediting region is not significant for these institutions.

TABLE 13. Affective Assessment Regressed on Institutional Dynamics, State Characteristics, and Accrediting Region by Institutional Type

| | Assoc. Arts N = 509 | | Bacc & Master's N = 219 | | Doctoral & Research N = 102 | |
	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR^2
R^2	.12**		.07**		.21**	
Institutional Dynamics						
Mission Emphasis	.13**	.02				
Governance					.24*	.06
Fac/Admin Support						
Internal Purpose	.22**	.08	.19**	.05	.29**	.11
State Characteristics						
Purpose: to meet state reqs						
Authority Structure						
Assess. Initiative					.21*	.04
Common Indicators/Outcomes						
Accrediting Region						
Purpose: to prep self study						
Middle States						
North Central***						
New England						
Northwest						
Southern	.09*	.01	.16*	.02		
Western	−.15**	.02				

*p < .05; **p < .01.

***Since accrediting region was a categorical variable, North Central Accrediting Region was left out of this regression because its affect on affective competencies, based on ANOVA, was closest to the mean.

Post-College Assessment

Table 14 displays the results of the regression on the institutional approach emphasizing collecting data on former students. For associate of arts institutions, this model explains 19% of the overall variance. Associate of arts institutions are again most influenced by institutional dynamics and accrediting region in their emphasis on collecting data on former students; state characteristics are not significant. Three of the four institutional dynamics are significantly related, accounting for 7% of the variance. Institutions that stress that they conduct

**TABLE 14. Post-College Assessment Regressed on Institutional Dynamics,
State Characteristics, and Accrediting Region by Institutional Type**

	Assoc. Arts N = 509		Bacc & Master's N = 219		Doctoral & Research N = 102	
	Beta	ΔR^2	Beta	ΔR^2	Beta	ΔR^2
R^2	.19**		.08**		.06*	
Institutional Dynamics						
Mission Emphasis	.13**	.02	.14*	.02		
Governance	.09*	.01				
Fac/Admin Support						
Internal Purpose	.16**	.04	.18**	.05	.25*	.06
State Characteristics						
Purpose: to meet state reqs						
Authority Structure						
Assess. Initiative						
Common Indicators/Outcomes						
Accrediting Region						
Purpose: to prep self study						
Middle States	.14**	.01				
North Central***						
New England						
Northwest						
Southern	.10*	.01				
Western	−.27**	.09	−.14*	.02		

*p < .05; **p < .01.
***Since accrediting region was a categorical variable, North Central Accrediting Region was left out of this regression because it s affect on former student data, based on ANOVA, was closest to the mean.

assessment for internal reasons (4%), those that include an emphasis on assessment in the mission statement (2%), and those that hold institution-wide governance and administrative activities (1%) are more likely to collect student assessment data on affective competencies. Accrediting region accounts for 17% of the variance in this model. Institutions located in either the Middle States or the Southern accrediting region (compared to the model region) are slightly more likely to collect this data (1% each), while those in the Western region are considerably less likely to do so (accounting for 9% of the variance).

This model is much weaker for baccalaureate and master's institutions—explaining only 8% of the variance in predicting the collection of data on former

students. For these institutions, two institutional dynamic predictors that account for 7% of the variance are significant. Institutions that hold internal purposes as important reasons for engaging in student assessment (5%) and those that refer to assessment in their mission statement (2%) are more likely to collect data on former students. In addition, institutions in the Western accrediting region, compared to the model region, are less likely to collect data on former students (2%).

This model is weakest in predicting the propensity of doctoral and research universities to collect data on former students, accounting for only 6% of the variance. Only one predictor is significant. Institutions that conduct assessment for internal purposes are more likely to collect data on post-college students.

SUMMARY

Influence of Institutional Type

Institutional Approaches

Research question number one asked how institutional dynamics and approaches to student assessment vary by institutional type. In general, more institutions collect data on former students than they do on their current students' cognitive and affective competencies. This finding in itself is interesting. In terms of differences by type, baccalaureate institutions are highly active, comparatively speaking, in collecting data on both cognitive and affective competencies. This finding is not surprising given their focus on undergraduate student learning. Although research institutions are less active in collecting cognitive data, they too are very active in collecting affective data. Perhaps they are becoming more responsive to criticisms focused on undergraduate education in research universities. In addition, these institutions often have resources to devote to student studies that other institutions may not have; they are more likely to have an office of institutional research and of academic or student assessment than are other types of institutions. Associate of arts institutions are not active in collecting data on either cognitive or affective competencies, placing greater emphasis on collecting data on former students. These institutions may be more interested in occupational and transfer placement outcomes than in assessing their current students. Their student populations are often quite diverse and non-traditional.

Institutional Purposes

For all three purposes for collecting student assessment data (internal, state, and accrediting), research universities cited each as relatively unimportant. This finding may reflect their lesser emphasis on undergraduate education, their be-

lief that student assessment itself is less important, or their greater degree of autonomy. Associate of arts institutions are most likely to say that student assessment is important both for internal and for state reporting purposes, which contrasts somewhat with their relative inactivity in collecting data. Perhaps associate of arts institutions profess to be more responsive to external constraints, yet lack either the resources or the institutional philosophy to actually conduct extensive student assessment. Doctoral institutions are most likely to stress that they conduct assessment for accrediting purposes, perhaps indicating that they are more susceptible to the pressures of accreditation reviews.

Institutional Support

In terms of institutional support, research universities are least likely to refer to assessment in their mission statements and least likely to have the support of their faculty and administrators for assessment activities. Master's institutions evidence support for assessment by referring to it in their mission statements and by having institution-wide administrative and governance activities. Baccalaureate institutions also evidence support for assessment by referring to it in their mission statements and by the support of their faculty and administrators.

Influence of Institutional Dynamics on Institutional Approaches

Purpose and Support

Research question number two asked how institutional dynamics relate to institutional approaches to student assessment. The results of the correlations demonstrated that internal purposes, emphasizing assessment in the mission statement, having institution-wide administrative and governance activities, and evidencing faculty and administrative support were all significantly and positively related to collecting student assessment data. Conducting assessment for external purposes is not as likely to be related to an institution's efforts at data collection.

Influence of State Characteristics

State Authority Structure and Institutional Approaches

Research question number three asked how state level characteristics relate to institutional dynamics and approaches to student assessment. Of the three state characteristics we examined, the governing structure evidenced the most significant differences among institutional approaches and dynamics. In terms of approach, institutions in states with planning agencies were more likely to collect data than were institutions in states with coordinating advisory boards.

Institutions in states with coordinating regulatory boards were more or almost as likely to collect data as were institutions in states with consolidated governing boards. Institutions in states with coordinating advisory boards were least likely to collect student assessment data on cognitive, affective, or former student competencies. This finding is not surprising, given the relative weakness of this governing structure. However, the continuum proposed by McGuinness, Wpper, and Arredondo (1994), arrayed in descending order of authority—consolidated governing boards, coordinating boards with regulatory authority, coordinating boards with advisory capacity, and planning agencies—did not produce the expected patterns. It is important to note that we did find a weak relationship between institutional approaches to student assessment and engaging in assessment for state reporting requirements.

State Authority Structure and Institutional Purposes and Support

In terms of institutional dynamics, institutions in states with consolidated governing boards were most likely to agree that conducting assessment for internal purposes is important. This finding is interesting because it may be that these institutions have operated in states with strong, centralized governing boards that may have initiated student assessment requirements early in this movement. Further research may discern whether more of these institutions have come to believe that assessment is important for internal reasons simply because they have worked in a state that required assessment for the greatest length of time. This line of reasoning is further supported by institutions in states with coordinating advisory boards, a weak form of oversight, being least likely to list internal purposes as important reasons to conduct assessment. In addition, institutions in states with either consolidated governing or coordinating regulatory boards (the two most centralized forms of governance) were most likely to report that their faculty and administrators supported their assessment activities.

State Initiatives and Institutional Approaches

How the state initiated student assessment had less of an influence on an institution's approach to assessment. Institutions in states that had used a combination of policy and statute to mandate assessment, however, were most likely to collect data on student cognitive competencies. While this finding is not surprising, the relationship between mandated indicators and outcomes to institutional approach is rather unexpected. In states where institutions are allowed to develop their own indicators and outcomes, institutions are more likely to collect data on student cognitive competencies. This finding reflects the theme of institutions being more responsive to internal dynamics than to state requirements.

State Initiatives and Purposes and Support

Institutions in states that have used a combination of policy and statute are more likely to say that they have the support of their faculty and staff. Again, it is interesting to find that states that have instituted programs of student assessment may be garnering institutional support for assessment, even if internal purposes appear to be greater indicators of activity than state reporting requirements. Nonetheless, institutions in states with either a statute or a combination of a statute and a policy are more likely to say that meeting state reporting requirements is important.

State Indicators and Institutional Approach, Purposes, and Support

Perhaps surprisingly, institutions in states that allow them to use their own indicators and outcomes are most likely to both collect data on cognitive competencies and to say that meeting state reporting requirements is an important reason to conduct assessment. Perhaps these institutions view their states more favorably, as they are given freedom from state mandated indicators and outcomes.

Accrediting Influence on Institutional Approach, Purpose, and Support

Research question number four asked how accrediting region relates to institutional approaches to, purposes of, and support for student assessment. In terms of institutional approaches, accrediting region does make a difference. Institutions in the North Central and Southern regions are most likely to collect data on cognitive competencies, institutions in the Southern region are most likely to collect data on affective competencies, and institutions in the Middle States and Southern regions are most likely to collect data on former students. These three regions are often cited as leaders in the assessment movement. In terms of institutional purposes and support, institutions in the Southern region are most likely to stress that they conduct assessment for internal purposes. Those in the Southern and Middle States regions are the most likely to refer to assessment in their mission statement. This finding parallels the finding in the section on state characteristics; it is likely that institutions that have conducted assessment for the longest time period (as would be the case for those in the Southern region) would be most likely to have developed internal support for assessment.

Relative Influence of State, Accreditation and Institutional Dynamics

The Model

Research question five addressed the relative influence of state characteristics, accrediting region, and internal institutional dynamics on the extent to which differing types of institutions emphasized different assessment approaches. The

three regressions do not adequately capture many of the dimensions influencing an institution's student assessment activity. Regressions for the three institutional types explained 21 to 27% of the variance for cognitive assessment, 7 to 21% for affective assessment and 6 to 19% for post-college assessment. Clearly, additional variables are needed to understand what influences institutions to assess students.

There are at least three avenues that could be explored in the search for additional variables. First, the model did not address the influence of student assessment at peer institutions. Are faculty and administrators learning about student assessment from their peers at conferences and hoping to replicate the peer activity at their institution? Further studies could attempt to determine how much influence student assessment activities at peer institutions may have.

Second, we did not attempt to measure the influence of institutional prestige. At least one previous study (Muffo, 1992) found that respondents at more prestigious institutions were least likely to react positively to assessment activities on their campuses. Although institutional type may approximate prestige among all institutions, there are certainly varying levels of prestige among institutions within each type category.

The third avenue for further research is the institution's pattern of centralization, culture, and governing style. These three aspects likely vary considerably by institution and are also likely to affect whether and how students are assessed. For example, in a decentralized institution, the institutional culture for student assessment is more likely to determine whether decentralized units assess students. Conversely, if an institution is fairly autocratic and most decisions are made by higher level administrators, the variation in student assessment activity will be more dependent on the values of those administrators. Certainly, culture has been conceptualized as mediating the influence of external initiatives on undergraduate education (Jones and Ewell, 1993). Throughout this year, the National Center for Postsecondary Improvement's Project 5 at the University of Michigan will be conducting several institutional case studies to examine how institutional culture influences student assessment activities.

Primary Influences

Some patterns across the three regressions, however, are informative in examining the relative influence of state, institutional, and accrediting dimensions. With the exception of a minor influence of state characteristics for doctoral and research universities, institutional dynamics and accreditation region are the primary influences. An internal improvement purpose for student assessment is positively related to all three approaches to student assessment across all three institutional types. Having a mission emphasizing student assessment was significant in four of the regression models, and having governmental administrative activities promoting student assessment was important in three of them.

The influence of accrediting region is more mixed. Accrediting region is significantly associated with all three types of approaches to student assessment for both associate of arts and baccalaureate and master's institutions. It is only associated with cognitive competencies for doctoral and research universities. However, being in the Western accrediting region is negatively associated with use of cognitive and affective competencies for all three institutional types. Being in the New England region is negatively associated with cognitive measures for both associate of arts and baccalaureate and master's institutions. Being in the Southern region is positively associated both with affective assessment for associate of arts and baccalaureate and master's institutions and with post-college assessment for associate of arts institutions. Being in the North Central region is positively associated with the use of cognitive measures in doctoral and research universities. For all of the interpretations by accrediting region, it is important to remember that these regions are all being compared to the modal region—whichever region was the most "average" of the six.

Patterns by Institutional Type

There are some interesting differences by institutional type. In associate of arts institutions, assessing students for internal purposes and referencing it as a part of their mission statement is positively associated with all three approaches to student assessment. Having institution-wide governance and administrative activities is positively related to cognitive and post-college assessment for these institutions. There are also differences by accrediting region—associate of arts institutions in the Western region are less likely to collect data on all three student assessment measures, institutions in the Southern region are more likely to collect data on two of the measures, and institutions in the Middle States region are more likely to collect data on one of the measures. Nonetheless, the overall pattern suggests that associate of arts institutions are primarily focused on using student assessment for internal reasons.

The pattern for baccalaureate and master's institutions also reflects the strong influences of engaging in student assessment for internal purposes on all three assessment measures. These institutions also are influenced positively by having faculty and administrative support in the case of cognitive measures and a mission emphasis in the case of post-college assessment. Being located in one of three accrediting regions has a strong negative influence on cognitive assessment.

Not surprisingly, in doctoral and research universities, engaging in student assessment for internal purposes is positively associated with all three student assessment measures. Use of common state indicators negatively influences engagement in cognitive assessment, but state assessment initiatives positively influence (albeit slightly) the use of affective measures. Accreditation is a nonin-

fluence for these institutions with the exception of a positive association between institutions in the North Central region and the use of cognitive measures.

CONCLUSION

Clearly, additional research is needed to explore the complex reasons that institutions decide to emphasize and use differing approaches to student assessment. It does appear, however, that state influences on the level of student assessment activity is minimal, that accrediting influence is mixed, and that institutional dynamics are critical. There are important differences by institutional types that probably reflect their balance of emphasis on undergraduate education, the nature of their undergraduate efforts, and the types of student populations they serve. To date there is little evidence that the drive for state-level accountability has exceeded the influence of institutional accreditation. Internal dynamics appear to be the driving force of all three approaches to student assessment. How exactly these dynamics work on campus clearly requires further research.

NOTES

1. (1) student academic intentions; (2) basic college readiness skills; (3) higher-order skills; (4) general education competencies; (5) competence in major field; (6) vocational or professional skills; (7) affective development; (8) student involvement; (9) student satisfaction; (10) academic progress (11) former student vocational outcomes; (12) former student further education; (13) former student civic roles; and (14) former student satisfaction.
2. All of the accrediting regions in the model are being compared against the Northwest region. The Northwest region represents the most average region in terms of how each region scored on this dependent variable.
3. All of the accrediting regions in this model are being compared against the North Central region. The North Central region represents the most average region in terms of how each region scored on this dependent variable.

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