Designing Student
Assessment to Strengthen
Institutional Performance in
Doctoral and Research Institutions

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1. INTRODUCTION AND OVERVIEW

This monograph reports the results of a national survey that examines institutional support for undergraduate student assessment. It provides a national profile of student assessment initiatives at doctoral and research institutions; advice for administrators, faculty, and staff who are designing student assessment approaches and support processes that are likely to foster institutional improvement; and an instrument that institutions can use to examine patterns for student assessment on their own campuses.

This report is a result of the National Center for Postsecondary Improvement (NCPI) research program examining organizational and administrative support for student assessment in postsecondary institutions. In 1997-98, NCPI researchers conducted a major literature review followed by a national survey on institutional support for student assessment. While other dissemination efforts have focused on a research audience, this report is specifically written for administrators, faculty and staff in doctoral and research universities who are involved with student assessment on their campuses.

Purpose of the Monograph

Administrators and faculty leaders have little credible and verifiable evidence to guide their planning and decision making regarding student assessment. The literature on student assessment offers many descriptions of student assessment practices at a variety of postsecondary institutions (Banta & Associates, 1993; Banta, Lund, Black, & Oblander, 1996) and a number of limited surveys have collected information concerning student assessment measures and methods used by focused groups of institutions (Cowart, 1990; El-Khawas, 1988, 1989, 1990, 1991, 1992, 1993, 1995, 1996; Johnson, Prus, Andersen, & El Khawas, 1991). There has been comparatively less consideration of how colleges and universities can develop an effective institutional strategy for assessment or of organizational and administrative practices that support internal engagement in assessment and enhance the use of student assessment data. Guidelines for planning and implementing student assessment efforts are available (American Association for Higher Education [AAHE], 1992; Ewell, 1988a, 1988b; Rossman & El-Khawas, 1987) but largely missing is any systematic examination of the relationships among various ways institutions have approached and supported student assessment and the likelihood of their reaping positive impacts from student assessment efforts (Banta et al., 1996; Ewell, 1988b; Gray & Banta, 1997). Furthermore, there has been little research focused specifically on student assessment within doctoral and research institutions.

Understanding the national profile of undergraduate assessment activities and support patterns found in doctoral and research institutions is important for several reasons. First, it is helpful for institutions to know what their peers are doing in relation to student assessment. How are other institutions responding to external demands for student assessment? What approaches to student assessment are they using? How are they supporting and promoting student assessment institution-wide through their policies and practices? How are they using student assessment data? What impacts has student assessment had on faculty as well as institutional and student performance? Finally, if student assessment activities do make a difference in terms of improved teaching and learning on campuses, how does that happen? What external influences, institutional approaches, and organizational and administrative support practices encourage internal involvement in student assessment and positive impacts from student assessment data?

This monograph will answer these questions through accomplishing three primary objectives. First, it will provide a national profile of current student assessment practices and institutional support patterns within doctoral and research universities and compare this to

assessment practices and support patterns found in all types of postsecondary institutions. A second major objective is to provide advice for administrators, faculty, and staff in doctoral and research institutions on designing student assessment approaches and support processes that are likely to foster institutional improvement. Finally this report includes the survey instrument used to gather data for this study in Appendix A. Institutions can use this inventory to examine patterns for student assessment on their own campuses.

We will discuss the student assessment methods used by institutions in this report, but it is not our intent to examine the specific instruments used or the measurement issues associated with their use. For a comprehensive review of the literature on student assessment in postsecondary institutions, readers are referred to Improving Organizational and Administrative Support for Student Assessment: A Review of the Research Literature (Peterson, Einarson, Trice, & Nichols, 1997). The data from this survey have been summarized in several forms including numerous conference papers and journal articles and a technical report entitled Institutional Support for Student Assessment: Methodology and Results of a National Survey (Peterson, Einarson, Augustine, & Vaughan, 1999). Readers who are interested in the statistical analyses conducted on the student assessment data should consult the technical report. While this report relies on those statistical analyses, it will not provide extensive statistical details.

Definition of Student Assessment

Our focus in this report is on undergraduate student assessment from an institutional perspective. We are interested in what approaches institutions use to assess student performance, how institutions are organized to promote and support student assessment, and how they use student assessment to improve student, faculty and academic performance of the institution.

In this monograph, we use the term student assessment to refer to activities other than traditional end-of-course grading that are used to measure a diverse array of dimensions of student performance or development. Institutions may decide to engage in student assessment for a variety of reasons or differing purposes. Cognitive, affective and behavioral dimensions of student performance and development may be assessed. Assessment efforts may be directed toward students as they enter the institution, during their enrollment or after they exit from the institution. Student assessment may use a variety of methods and may be planned and executed centrally within institutions or in a decentralized manner through the actions of individual academic units. This report will address all these dimensions of student assessment.

Preview of the Monograph

This report is presented in nine sections. Following this introduction, the second section, perspectives on student assessment, provides a brief recent history of the student assessment movement in general and in doctoral and research institutions specifically. The conceptual framework of institutional support for student assessment that was developed in the literature review (Peterson et al., 1997) and guided the development of the survey instrument is then presented. Section two ends with a brief summary of the methods used to conduct the research on institutional support for student assessment.

Sections three through seven present the results of a national survey of institutional support for student assessment. These sections parallel the domains in the framework. In each section, information is presented for both doctoral and research institutions and for all institutions that responded to the study. Section three focuses on institutions' approaches to student assessment. This section is followed by a summary of the institution-wide support patterns evident in the study. Section five focuses on the influence of external groups, such as state agencies and accreditors, on institutional student assessment patterns. In this section, the influence of states on institutional student assessment activity is considered for public institutions only. Section six discusses

assessment management practices and policies used by institutions to promote or assure the use of student assessment information. Section seven reports on the institutional uses and impacts of student assessment.

Section eight is based on the statistical analyses conducted on the national survey data. It presents the findings of three sets of key relationships examined in the study. The first focuses on the influence of external groups on institutional approaches to student assessment. The second examines the relationship of external influences, assessment approaches, institution-wide support patterns, and assessment management practices and policies to the institutional uses of student assessment. The third analysis examines the relationship of external influences, assessment approaches, institution-wide support patterns, and assessment management practices and policies to the institutional impacts of engaging in student assessment. Section nine presents a summary of our research findings and related recommendations for specific assessment activities within doctoral and research institutions. It concludes with general guidelines for institutions to use to examine and redesign or plan their student assessment process and functions.

2. PERSPECTIVES ON STUDENT ASSESSMENT IN HIGHER EDUCATION

An overview of the development of student assessment in higher education and in doctoral and research institutions suggests the need for the institutional perspective that guides this report. A guiding framework conceptualizes seven domains of an institution's student assessment strategy: institutional context, external influences, approach adopted, institutional support patterns, assessment management practices and policies, assessment culture and climate, and institutional uses and impacts of student assessment.

This monograph concurs with the perspective of other scholars of student assessment. We agree that at its best, student assessment is not simply an exercise to gather data or respond to accountability requirements. Rather, an effective student assessment approach is one that gathers information about selected aspects of students' characteristics, achievements and experiences and uses this information to shape institutional policies, processes, and practices in ways that lead to improved student performance and institutional functioning (AAHE, 1992; Banta & Associates, 1993; Ewell, 1984, 1987c, 1988b; Jacobi, Astin & Ayala, 1987).

Growth of Student Assessment

The assessment of student performance in higher and postsecondary education is not a new concept or phenomenon. The first College Board examination designed to assess student learning outcomes on a national scale was administered in 1901. The ensuing decades are marked by events that reflect a growing concern with assessing college student performance, such as: the emergence of a regional accreditation focus on student assessment; the establishment of university-based and national testing centers; and the development of broadened taxonomies of student outcomes (Resnick & Goulden, 1987; Sims, 1992). However, these earlier developments pale in comparison to the emergence in the mid 1980s of student assessment as an important focus of educational policy at the national, state and institutional level — a focus that continues today.

This heightened interest in student assessment is the result of many broad forces. In the larger societal and political arena, concerns about consumer protection, the rising costs of education, the training and human resource needs for state and regional economic development, and fiscal pressures on state and federal government all have shaped public interest in the educational contribution of higher education institutions. At the institutional level, the challenges of expansion in the 1950s and 60s, the enrollment and financial constraints in the 1970s, and the new educational demands in the 1980s have shifted the managerial focus of performance by higher education institutions from resource adequacy, to efficiency, to effectiveness, to broader concerns for academic and institutional quality. Consequently, over the past decade and a half the assessment and improvement of student performance has been the focus of much of this discussion and of many efforts both external to and within colleges and universities.

A variety of specific activities at the national level — reports, guidelines, legislation, educational goals, and funding — have been credited with providing the initial stimulus for the student assessment movement in higher education in the last decade and a half. A series of national reports that critically examined the quality of education were published in the mid 1980s. The first, A Nation at Risk: The Imperative for Educational Reform (National Commission on Excellence in Education, 1983), prompted calls for reform in elementary and secondary education. The following year Involvement in Learning: Realizing the Potential of American Higher Education (National Institute of Education, 1984) addressed the conditions required for improving the quality of undergraduate education. Institutions were given three recommendations: set high expectations for student learning, actively involve students in learning, and develop an institutionalized process for assessing student learning. Subsequent reports such as To Reclaim a Legacy: A Report on the

Humanities in Higher Education (Bennett, 1984) and Integrity in the College Curriculum: A Report to the Academic Community (Association of American Colleges, 1985) continued this focus on issues of undergraduate education quality and assessment. In 1988 the U.S. Department of Education revised its Criteria for Recognition of Accrediting Agencies, stipulating that agencies must require educational institutions and programs to (1) clearly specify their educational objectives and (2) conduct student assessment to determine whether they were achieving these standards. In addition, the enactment of legislation such as the "Student Right to Know and Campus Security Act" and "Ability to Benefit" legislation (Education Commission of the States, 1991), adoption of the National Education Goals (Lenth, 1993, 1996; Nettles, 1995), and provision of federal funds for the development of institutions' assessment projects (Cook, 1989) contributed to the early momentum of the assessment movement.

State governments, reflecting these national developments, have also played a key role in stimulating postsecondary student assessment. The first state-level mandate for student assessment appeared when the Florida state legislature directed the higher education system to develop the College-Level Academic Skills Test in 1982. Since then, the number of states involved in student assessment has increased steadily with all but four of fifty states now reporting some type of student assessment initiative (Cole, Nettles, & Sharp, 1997). States have varied greatly in their approaches to student assessment policy, but there is evidence of a general shift in state-level approaches over the past decade. From the mid to late 1980s state assessment initiatives generally emphasized institutional improvement as their primary purpose and largely permitted institutions to design their own assessment efforts. Since 1990, states have placed greater emphasis on student assessment as a means of responding to external demands for accountability and have increasingly elected to mandate the content and form of institutions' assessment approaches.

Regional accreditation associations also have emerged as an important influence on student assessment. Regional accrediting associations vary in the length of time they have been involved in student assessment, their specific reporting requirements, and the range of assessment-related services provided to member institutions (Cole et al., 1997). Since the federal government revised its criteria for recognizing accrediting agencies in 1988, all six regional accreditation associations have required member institutions to undertake and document some form of student assessment activity. In turn, a growing number of institutions have reported that accreditation requirements are an important reason for deciding to engage in and increase their student assessment efforts (El-Khawas, 1995; Johnson et al, 1991).

Since the mid 1980s the number of postsecondary institutions engaged in some form of student assessment activity has steadily increased (El-Khawas, 1988, 1990, 1995). However, by 1990 only a small proportion of institutions had embarked on comprehensive student assessment programs (El-Khawas, 1990; Hexter & Lippincott, 1990; Johnson et al., 1991). Fewer still had reported achieving observable impacts from their student assessment efforts (Astin, 1991; Hutchings & Marchese, 1990). So it seems that, while many colleges and universities are investing faculty and administrative time and effort in student assessment, few are benefiting from its potential to improve student and institutional performance.

Characteristics of Doctoral and Research Institutions

Institutional type is an important dimension to consider when examining the approach an institution takes toward student assessment. To date, there has been little consideration of differences in effective organizational and administrative practices for promoting student assessment within specific types of institutions. Yet effective strategies and practices for planning, promoting and implementing undergraduate student assessment vary according to the type of postsecondary institution being considered — for example, what works in promoting student assessment in doctoral and research universities differs from what works in liberal arts colleges. In our national study of institutional support for student assessment, we found that there were many

statistically significant differences by institutional type on the approaches to, support for, policies and practices regarding, and uses and impact of student assessment reported by institutions and that they were typically stronger than differences by other institutional characteristics such as size or whether the institution is public or private.

The challenges doctoral and research institutions face as they develop student assessment programs are quite different from those faced by other institutions. These differences stem, in part, from the institutional mission, curricular focus, organizational complexity, governance structure, faculty roles and responsibilities, and student clientele typically associated with doctoral and research universities.

Doctoral and research universities embrace a different institutional mission focus than other types of postsecondary institutions. They are much more research-focused than two-year and other types of four-year institutions. They also place comparatively greater emphasis on graduate-level education. This emphasis on research and graduate education may affect the extent to which administrators and faculty members view improving undergraduate education through student assessment as an institutional priority, and so may influence their commitment to and involvement in assessment efforts. Building internal support for undergraduate student assessment may be more difficult to accomplish in doctoral and research universities than in other types of institutions that have a clearer focus on undergraduate teaching, such as liberal arts and associate of arts colleges.

Doctoral and research universities tend to be the most organizationally complex in terms of the number of departments, schools, research enters, and administrative units (Dill, 1997). They are also typically large institutions. The combination of organizational complexity and institutional size may increase the challenges involved in developing an institution-wide assessment program and obtaining adequate campus representation on assessment committees.

The distribution of decision-making power between administrators and faculty members within these institutions differs from that found in other institutional types. Faculty in doctoral and research universities have greater professional authority and autonomy and are more actively involved in academic decision making than their peers in associate of arts and other types of four-year colleges (Blau, 1973; Clark, 1987; Dill, 1997). These differences in governance styles suggest that effective patterns of organizational and administrative support for student assessment in doctoral and research institutions will be configured differently from those found in other types of institutions. Institutions with administratively-driven governance styles, such as associate of arts institutions, may be able to effectively use organizational policies to direct faculty involvement in assessment efforts while those institutions in which faculty have considerably more professional autonomy and decision-making power, such as doctoral and research institutions, may need to emphasize faculty leadership in planning and implementing assessment activities and require more time to establish an assessment program.

Faculty in doctoral and research institutions are expected to focus on both research and teaching responsibilities. Despite recent efforts to raise the importance accorded to teaching as an institutional activity within these institutions, faculty still perceive it is the research role that continues to have primacy in decisions regarding faculty tenure and promotion (Gray, Diamond & Adam, 1996; Gray, Froh, & Diamond, 1992). On the positive side, faculty members' familiarity with conducting research may make them quite comfortable with designing and implementing assessment methods and analyzing the resulting data. Conversely, it could be that the willingness of faculty in doctoral and research institutions to engage in student assessment is diminished by their emphasis on research.

The characteristics of the student body at doctoral and research universities are also likely to be different from those at other types of institutions. Given their top position in the hierarchy of institutional selectivity, doctoral and research institutions tend to attract students who are better

academically prepared than those who enroll in comprehensive, less selective liberal arts, and associate of arts institutions. Compared to other types of institutions, doctoral and particularly research institutions have a more traditional student body, enrolling more residential than commuter students and more full-time than part-time students. The high caliber of the student body may influence faculty and administrators' views regarding the need for student assessment as well as the type of student competencies that should be assessed.

The net effect of these distinctive characteristics may be to constrain the extent to which doctoral and research universities become involved in undergraduate student assessment, shape the patterns of organizational and administrative support developed to promote assessment, and limit the extent to which assessment information is used for institutional improvement. Several studies have tested and provide some support for these assertions.

Scott (1991) found that administrators and faculty at doctoral universities had significantly less involvement in, knowledge about, and belief in the importance of their institution's assessment program than did comparable respondents from associate of arts and comprehensive institutions. Multi-institution studies by Ory and Parker (1989) and Jemmott (1992/1993) found that doctoral-granting institutions responded to external mandates for assessment in a superficial and compliant manner. A large-scale national survey conducted by the American Council on Education (El-Khawas, 1993) found these institutions were less involved in student assessment than other types of institutions. However, other studies offer conflicting evidence of the extent to which these institutions have been involved in undergraduate student assessment (Gentemann & Rogers, 1987; Smith, Bradley & Draper, 1993). Although the existing literature includes some single- and multi-institution case studies of student assessment, it provides limited information concerning the current assessment activities conducted throughout the country by doctoral and research universities. Nor did we find research that examined the relationship of student assessment approaches and institutional support practices to using and achieving impacts from student assessment in doctoral and research institutions.

A Framework of Institutional Support for Student Assessment

An institution's organizational and administrative context can be a powerful source of influence on administrators', faculty members' and students' behaviors and perceptions and can shape their views of what the institution values and which activities are important to engage in. Colleges and universities purposefully create a variety of student assessment approaches and structures, processes, policies and practices to support and implement student assessment. Institutions have varied greatly in their approaches to assessing student performance and the ways in which they have organized to support their assessment efforts, a finding that is hardly surprising given the great diversity and relative autonomy of colleges and universities in the American postsecondary system. Yet there is little systematic evidence available concerning the specific manner in which postsecondary institutions have organized and administered to support student assessment and the differential results of these efforts. For these reasons, we have chosen to examine student assessment from a research-based and institutional perspective.

An extensive literature review identified what is currently known about the organizational and administrative context for student assessment in postsecondary institutions. A detailed description of the literature review process and findings is available in other publications (Peterson et al., 1999; Peterson et al., 1997). From this review, we developed a framework of institutional support for student assessment. This framework, displayed in Figure 1, consists of seven interacting domains. It conceptualizes how institutions respond to external pressures for student assessment, how they approach student assessment, the organizational and administrative patterns

Figure 1. Framework of Institutional Support for Student Assessment

Institutional Approach to
Student Assessment

Organizational and
Administrative Support for
Student Assessment

External Influences on
Student Assessment

Assessment Management
Practices and Policies

Institutional Uses and
Impacts of Student
Assessment

Assessment Culture and
Climate*

Institutional Context
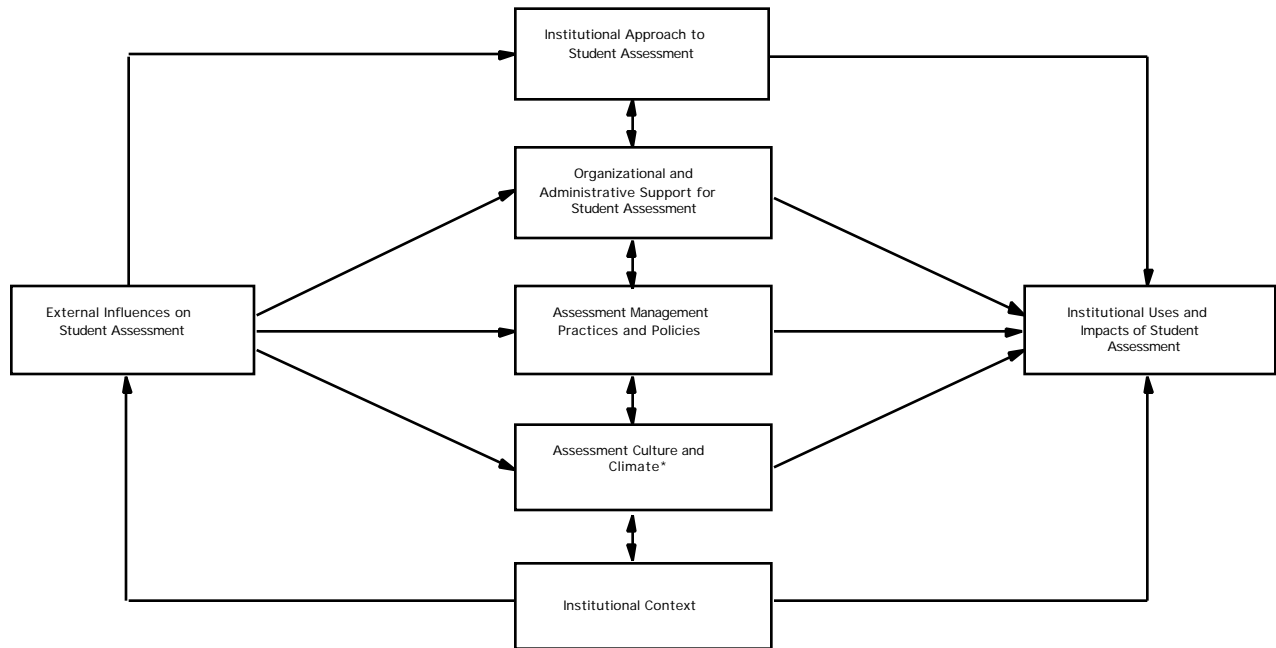
*This domain is not addressed in this study.

they use to support student assessment, the assessment practices and policies they have adopted to promote student assessment, their culture and climate for student assessment, and how student assessment information is used by and has impacts on institutions. A seventh domain, institutional context, reflects the fact that these patterns probably differ significantly by institutional type, control and size. The culture and climate domain is not examined in this report and is the focus of future research activity. The other domains are briefly described below. A description of the variables used in this study, by domain, is provided in Appendix B.

External Influences on Student Assessment. A variety of external constituencies have played an important role in initiating and shaping student assessment efforts within postsecondary institutions. In particular, state-level initiatives and regional accreditation associations may exert strong direct influences through their requirements for student assessment. The business community, private foundations, and professional higher education associations may serve as weaker sources of influence — whether as participants in institutions' assessment efforts, as consultants or sources of resource materials, or as providers of funds for assessment-related activities. National efforts appear to have largely played an indirect role in influencing institutions' assessment efforts.

Institutional Approach to Student Assessment. Institutional approach to student assessment refers to institutional decisions regarding the collection and analysis of student assessment information. Important dimensions along which student assessment approaches can be differentiated include: the type or content of student assessment measures; the extent or array of student assessment data collected; the timing of data collection; the instruments and methods used to collect student assessment data; and the analyses conducted and reported for collected data.

Organizational and Administrative Support for Student Assessment. The literature on student assessment identifies five important dimensions of organizational or administrative behavior patterns that may support student assessment efforts and enhance the likelihood that assessment will contribute to improvements in institutional performance: the institution-wide support strategy for student assessment; administrative and governance activities used to promote student assessment; leadership and faculty support for student assessment; planning and coordination of student assessment; and procedures used to evaluate and revise student assessment efforts.

Assessment Management Practices and Policies. Assessment management practices and policies refer to specific practices, policies, procedures, or activities intentionally devised by institutions to implement and support their student assessment efforts. A number of content activity areas of this domain have been identified as potential influences on student assessment including: academic resource allocation; student information systems; internal access to student information; distribution of assessment reports and studies; student involvement in assessment; professional development for student assessment; faculty evaluation and rewards; and academic planning and review processes.

Institutional Uses and Impacts of Student Assessment. Ideally, institutions will use the information collected through student assessment processes to contribute to improvement in institutional and student performance. Three broad domains of institutional uses and impacts of student assessment information are suggested in the literature. These are the use of assessment information for institutional decision making, its impact on various internal constituents and phenomenon, and its impact on the institution's relationships with its external constituents.

Institutions may apply assessment information to several areas of academic decision making such as academic planning and review, the academic mission and goals, internal resource allocation, and faculty evaluation and rewards. Student assessment information may have both internal impacts, such as stimulating faculty interest in teaching and enhancing student learning,

and external impacts, such as influencing state funding or re-accreditation decisions. The primary concern of this framework is to examine the relationship of external influences, institutions' assessment approaches, patterns of organizational and administrative support for assessment, and assessment management practices and policies to institutional uses and impacts of assessment information.

Institutional Context. Broad institutional characteristics such as institutional type, control and size are expected to moderate external influences on assessment, the institutional approach to student assessment, organizational and administrative support patterns, assessment management practices and policies, and institutional uses and impacts of assessment information.

Description of National Survey

Based on our review of the student assessment literature, we developed a survey instrument or inventory called "Institutional Support for Student Assessment" (ISSA). The instrument focuses on the assessment of undergraduate students conducted by postsecondary institutions — not by individual faculty or academic sub-units within institutions. The instrument is designed as a comprehensive inventory of external influences on institutions' student assessment efforts, institutional approaches to student assessment, organizational and administrative support patterns for student assessment, assessment management practices and policies used, and institutional uses and impacts of student assessment information. The instrument was intended to assist institutions in obtaining a clear picture of their own student assessment efforts, to provide a national profile of undergraduate student assessment efforts in postsecondary institutions, and to increase current understanding of how institutions can engage in and promote student assessment that produces positive impacts on academic, student and institutional performance. A copy of the survey instrument is included in Appendix A.

In January 1998, the ISSA instrument was mailed to the chief academic administrator at all postsecondary institutions recognized by the U.S. Office of Education that offer undergraduate programs at the associate or baccalaureate degree level, excluding proprietary and specialized institutions. Completed surveys were received from 1,393 of the 2,524 institutions meeting these criteria for an overall response rate of 55%. Doctoral and research colleges and universities were well represented in survey responses. Of the 229 doctoral and research institutions to whom instruments were mailed, 145 or 63% completed and returned the survey. More than half of eligible public and private doctoral and research institutions participated. Survey responses were quite evenly distributed across states and accrediting regions. Given this strong and diversified response rate, we are able to offer a representative profile of undergraduate student assessment activities undertaken in doctoral and research colleges and universities. Throughout this report, we compare student assessment activities within doctoral and research institutions to student assessment activities within all institutions responding to our survey, including doctoral and research institutions.

3. THE INFLUENCE OF EXTERNAL GROUPS

Examines state and regional accreditation association requirements and external sources of support for student assessment. While both states and regional accrediting agencies have influenced institutions to engage in student assessment, accrediting associations are reported to have greater influence than states on doctoral and research institutions' assessment initiatives. Professional associations are the most frequently used external source of support for student assessment.

State officials and regional accreditation associations have increasingly required postsecondary institutions to become engaged in student assessment. Together with professional associations and private foundations, they have also offered various services to support institutions' student assessment efforts. There has been relatively little examination of institutions' perceptions of and experiences with these external groups. To examine this domain, our survey included questions concerning: state requirements for student assessment; regional accreditation association requirements for student assessment; and external sources of support for student assessment. The following sections address each of these areas in turn.

State Role in Student Assessment

States have varied widely in the development and content of their initiatives for postsecondary student assessment (Cole et al., 1997). The survey asked for institutions' perceptions of three dimensions of state assessment plans: the development process and reporting requirements of state assessment plans; the influence of state requirements on institutions' assessment efforts; and state review of institutions' assessment plans or processes. The questions in this section were directed to state-funded institutions only.

Development and Reporting Requirements of State Assessment Plans

<u>Development</u>. Scholars have suggested that the influence of state assessment initiatives on institutions' assessment efforts may depend on whether or not institutions have had input in the development of the initiatives. Survey respondents were asked to indicate whether their state's plan for student assessment was developed primarily by state officials, through joint consultation between state officials and institutional representatives or whether no state plan or requirement for student assessment existed. Responses from public doctoral and research universities and all institutions receiving state funding are displayed in Figure 2.

Figure 2. Development of State Plan for Student Assessment

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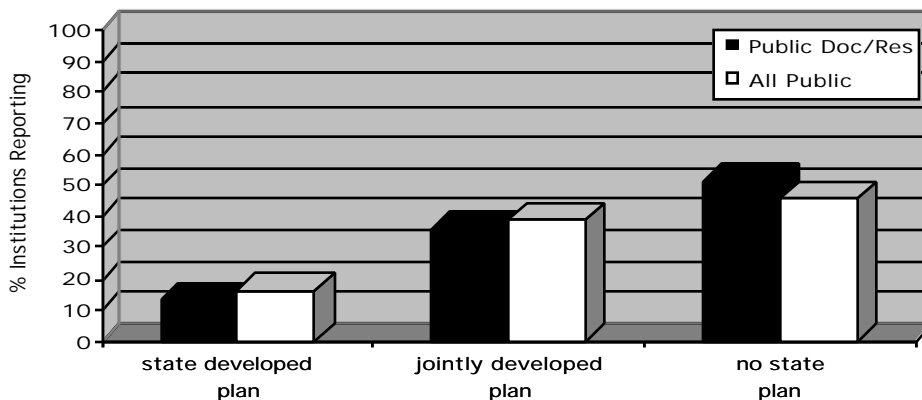
Half of the public doctoral and research institutions in our study report that a state plan or requirement for student assessment exists. Institutions more often report having a state plan for assessment that was developed in consultation between state and institutional officials (36%) than by state officials alone (13%). Public doctoral and research institutions differ little from all public institutions in their perceptions of the existence and development of state plans for student assessment.

Reporting Requirements. Scholars also contend that the influence of state assessment initiatives will vary with the specific nature of the reporting requirements associated with these initiatives. What types of information are institutions required to report to state officials? We asked institutions with state plans for assessment which of the following types of information they were required to report as part of their state's assessment plan: evidence of a student assessment plan; measurement of state-mandated student performance indicators; measurement of institutionally-developed student performance indicators; and evidence of having used student assessment information. Institutions checked all applicable reporting requirements. Responses from doctoral and research universities and all institutions receiving state funding are displayed in Figure 3.

Figure 3. State Reporting Requirements for Student Assessment
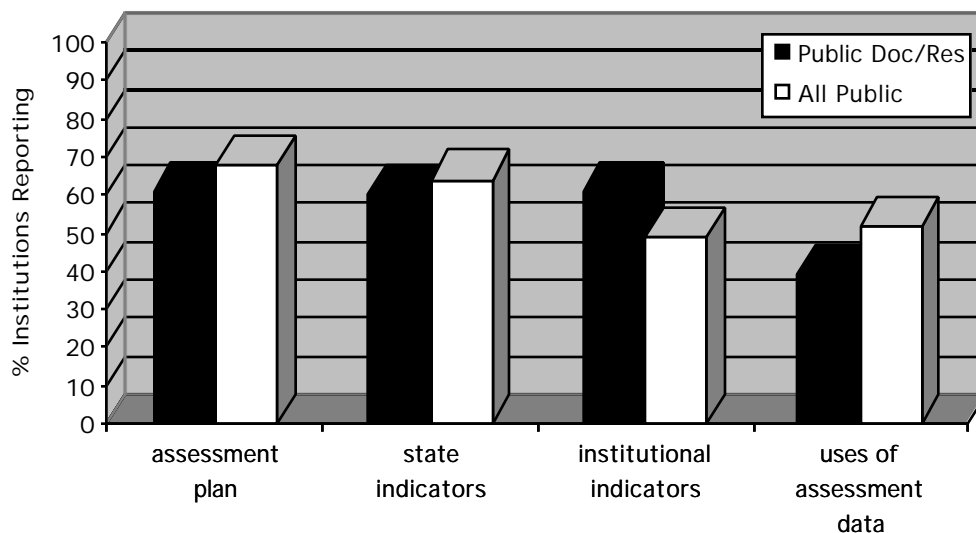
*Only institutions with a state plan for student assessment responded to this question.

The most common reporting requirements for public doctoral and research institutions are evidence of a student assessment plan (61%), state-mandated student performance indicators (60%), and institutionally-devised student performance indicators (61%). A much smaller proportion (39%) are required to provide evidence of having used student assessment information. Compared to all public institutions in our study, public doctoral and research institutions are more likely to report on institutionally-devised measures of student performance and less likely to provide evidence of assessment information use. This emphasis on institutionally-developed student performance indicators may promote institutional support for student assessment. However, the low emphasis on providing evidence of assessment information use may reduce the likelihood that state requirements will encourage doctoral and research institutions to apply assessment results to institutional improvement.

Influence of State Assessment Requirements

What influence have state assessment requirements had on institutions' undergraduate student assessment activities? Institutions were asked which of the following impacts on their assessment efforts they attributed to state assessment requirements: were an important reason for institution initiating undergraduate student assessment; increased institution's involvement in undergraduate student assessment; were not a factor in institution's undergraduate student assessment activities; or were a negative influence on institution's undergraduate student assessment activities. Institutions selected all applicable influences. Responses from public doctoral and research universities and all public institutions are displayed in Figure 4.

Figure 4. Influence of State Requirements for Student Assessment on Institutions' Assessment Activities*
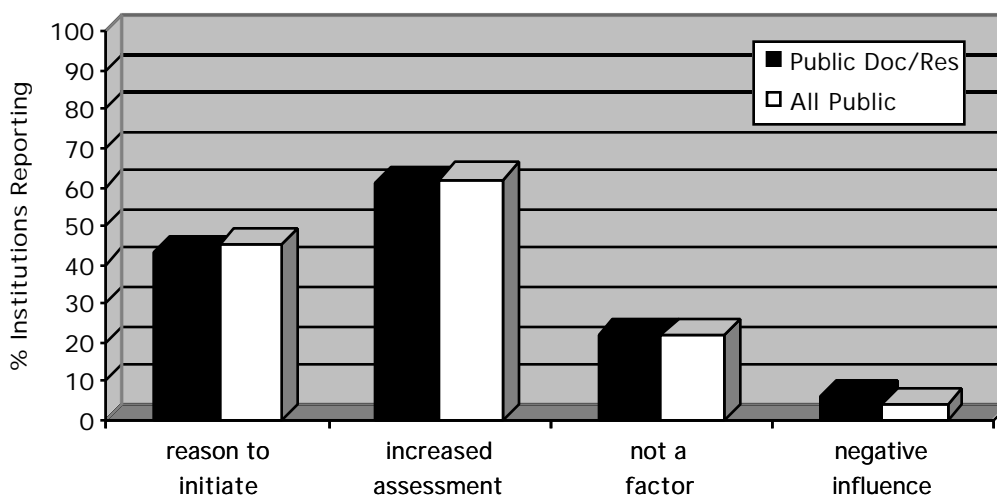
*Only institutions with a state plan for student assessment responded to this question.

Public doctoral and research institutions most often report positive influences of state requirements on their student assessment activities. Almost two-thirds (61%) report state requirements have increased their institution's involvement in undergraduate student assessment and two-fifths (43%) indicate state requirements played an important role in their institution initiating student assessment efforts. Less than one-quarter (22%) believe state requirements have had no influence on their institution's student assessment efforts while only 6% indicate state requirements have been a negative influence. Survey respondents from public doctoral and research universities do not have appreciably different perceptions of the influence of state assessment requirements than do respondents from all public institutions in our study.

State Review of Institutions' Student Assessment Plans

Occurrence of State Review. States vary in terms of whether and how they evaluate institutions' student assessment plans or information (National Center for Higher Education Management Systems, 1996). The survey asked respondents whether state officials had reviewed or evaluated their institution's student assessment plans or processes. If a state review or evaluation had occurred, respondents indicated whether this review had been conducted by state officials, external reviewers or the institution itself. Responses from public doctoral and research universities and all public institutions are presented in Figure 5.

Figure 5. Methods Used to Review Institutions' Student Assessment Plans or Processes*
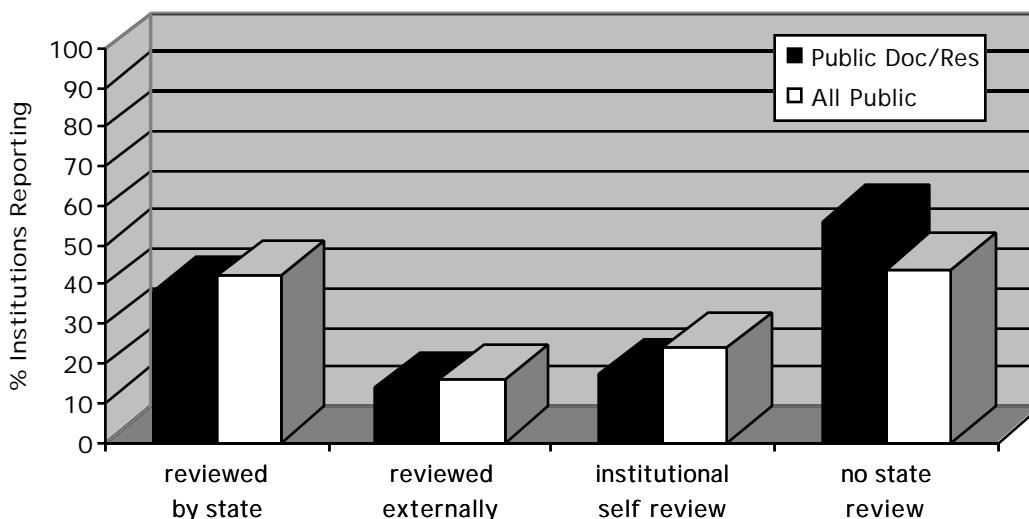
*Only institutions with a state plan for student assessment responded to this question.

Slightly less than half of public doctoral and research institutions report their undergraduate student assessment plan or process has been reviewed by their state higher education agency (46%). Public doctoral and research institutions are much less likely than all public institutions to have undergone a state review of their undergraduate student assessment plan or process. More than half (56%) report that their state higher education agency has not conducted such a review. When a state review has occurred, it has most often been conducted by state officials (38%) and less often by external reviewers (14%) or the institution itself (17%).

State Review Criteria. Institutions that had undergone state review of their student assessment plan or process specified if the evaluation: reviewed the institution's student assessment process; compared the institution's student performance record to its past performance; compared the institution's student performance record with that of peer institutions; or compared the institution's student performance record with that of other institutions in the state. Responses from public doctoral and research universities and all public institutions are presented in Figure 6.

When public doctoral and research institutions have undergone a state review of their student assessment plan or process (44% of our doctoral and research respondents), this review has most often focused on the institution's student assessment process itself (66%). Comparisons of institutions' student performance records are less common. If conducted, these most often involve comparisons of the institution's student performance to other institutions in the same state (54%), followed by comparisons to their own past performance (51%) or, least often, to the student performance records of peer institutions (34%). Compared to all public institutions in our study, public doctoral and research universities are much more likely to have their current student performance record compared with other institutions in the state. No other differences in state review criteria are evident.

Regional Accrediting Role in Student Assessment

Regional accreditation agencies have been reported as important influences on institutions' decisions to begin or expand their student assessment activities (El-Khawas, 1990, 1992, 1995; Johnson et al., 1991). The majority of doctoral and research institutions participating in our study

Figure 6. State Review Criteria for Institutions' Student Assessment Plans or Processes*
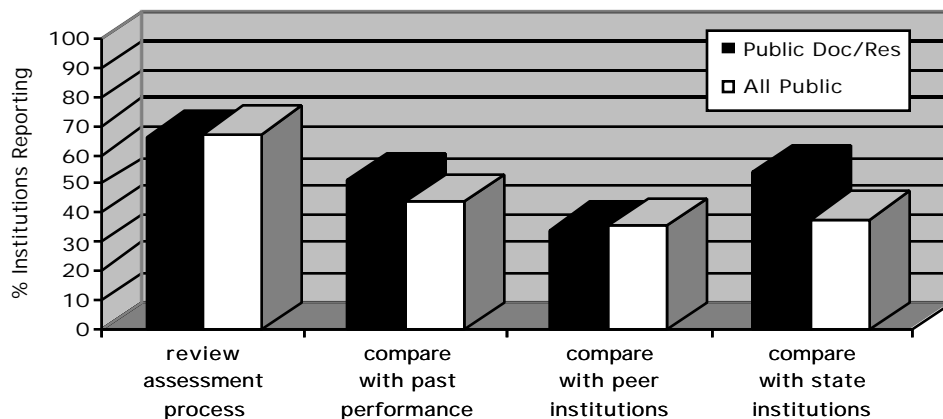
*Only institutions with state plans for student assessment responded to this question.

(78%) have completed a regional accreditation review which required undergraduate student assessment. To examine the role of regional accreditation associations in student assessment, the survey asked about the reporting requirements for regional accreditation and institutions' perceptions of the influence of regional accreditation requirements on their assessment efforts.

Regional Accreditation Reporting Requirements for Student Assessment

Regional accreditation associations vary in terms of the evidence they require institutions to report about student assessment efforts. Accreditation requirements to report on the use being made of assessment information may contribute to greater institutional impacts from assessment than requirements that ask merely for evidence of an assessment plan or assessment data. We asked institutions which of the following types of information they were required to report to their regional accreditation association: evidence of a student assessment plan; intended institutional uses of student assessment information; results of student assessment; and evidence of having used student assessment information. Institutions checked all applicable reporting requirements. Few (9%) doctoral and research institutions were unfamiliar with their regional accreditation requirements for student assessment. Responses from doctoral and research universities and all institutions are displayed in Figure 7.

The majority (83%) of doctoral and research institutions must provide their regional accreditation association with evidence that a student assessment plan or process is in place. A large proportion are required to provide evidence of the use they have made (70%) or intend to make (68%) of student assessment information. Slightly fewer report having to provide the results of student assessment (60%). The regional accreditation reporting requirements for student assessment reported by doctoral and research institutions do not differ much from those reported by all institutions in our study.

Influence of Regional Accreditation Association Requirements for Student Assessment

What influence have regional accreditation association requirements had on institutions' undergraduate student assessment activities? Institutions were asked which of the following impacts on their assessment efforts they attributed to their regional accreditor's assessment requirements: were an important reason for initiating undergraduate student assessment;

Figure 7. Regional Accreditation Association Reporting Requirements for Student Assessment
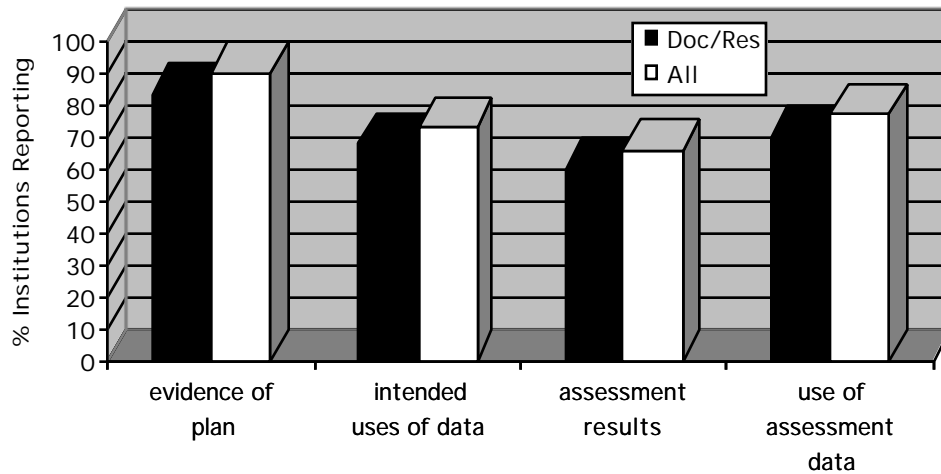
increased institution's involvement in undergraduate student assessment; were not a factor in institution's undergraduate student assessment activities; or were a negative influence on institution's undergraduate student assessment activities. Institutions selected all applicable influences. Responses from doctoral and research universities and all institutions are displayed in Figure 8.

Figure 8. Influence of Regional Accreditation Requirements for Student Assessment on Institutions' Assessment Activities
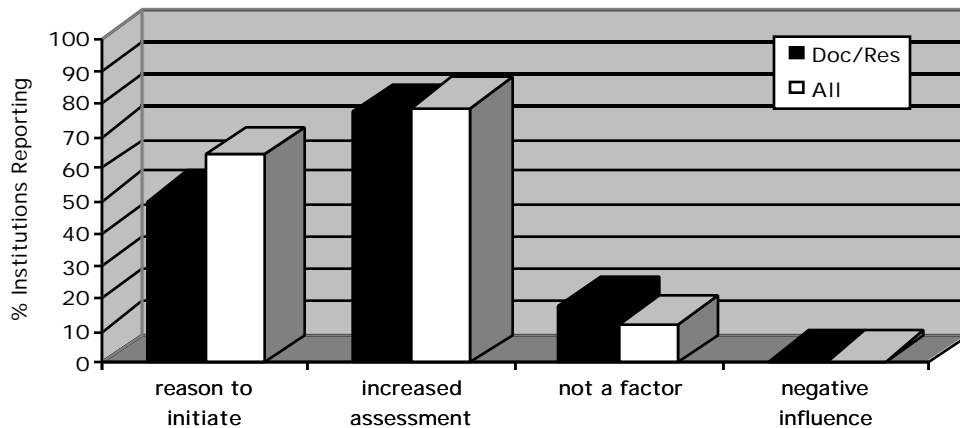
Three-quarters (77%) of doctoral and research institutions report regional accreditation requirements have led to an increase in their institution's involvement in student assessment. Only half (50%) state these requirements were an important reason for their institution to initiate its undergraduate student assessment activities while almost one-fifth (18%) report that regional accreditation requirements have had no influence on their institution's assessment efforts. Virtually none (1%) report negative consequences on their assessment efforts stemming from these requirements. While doctoral and research institutions generally report positive influences from regional accreditation requirements for student assessment, they are somewhat less positive in their perceptions of accreditation influences than are all institutions in our study. In particular, they are much less likely to credit accreditation requirements with initiating institutional assessment efforts.

External Sources of Support for Student Assessment

External constituents may influence institutions' involvement in student assessment by providing funding or services to support assessment efforts. Little is known about the extent to which institutions have availed themselves of these external sources of support. Our survey asked institutions about their use of external grants and other services for improving their student assessment efforts.

Receipt of External Grants for Student Assessment

Institutions were asked if they had received grants to improve or support their student assessment practices from any of the following external sources: Fund for the Improvement of Postsecondary Education (FIPSE), other federal agencies, state incentive programs, and private foundations or corporate sources. Responses from doctoral and research universities and all institutions are presented in Figure 9.

Figure 9. Receipt of External Grants for Student Assessment by Source
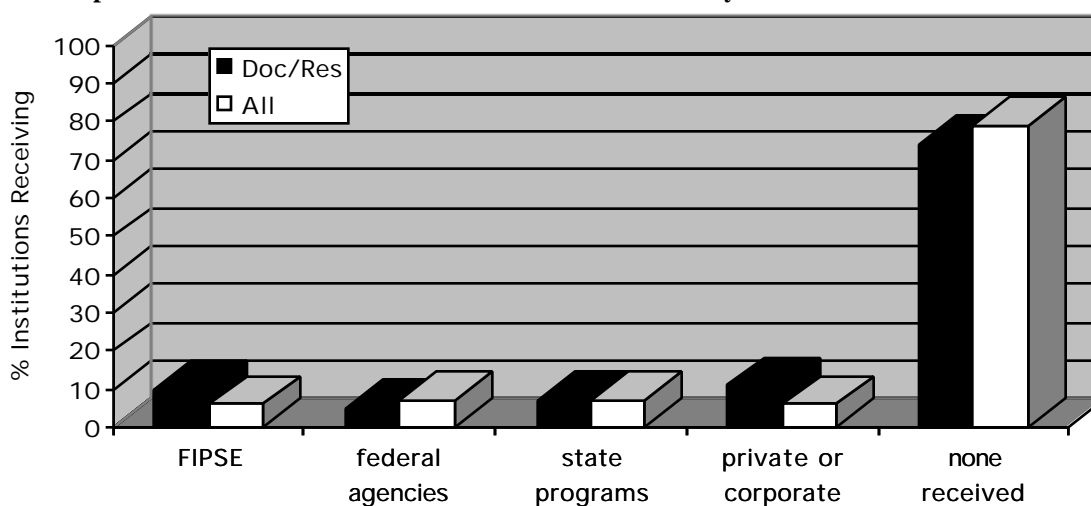
The majority of institutions, both doctoral/research and all, have not received external grants for improving student assessment practices (74% and 79% respectively). When doctoral and research institutions have received grants, these are most likely to have come from private foundations or corporate sources (11%) and FIPSE (10%). However, no more than 11% of doctoral and research universities report receiving assessment-related grants from any of the external sources considered in this question. It is unclear whether this low rate of grant receipt stems from unavailability, ineligibility, or lack of awareness of external funding opportunities.

Use of External Services to Support Student Assessment

A variety of postsecondary organizations — professional associations, regional accrediting associations, state-level agencies, and consortia of institutions — provide a range of services intended to support institutions' student assessment efforts. These services include consultation, assessment conferences, training workshops, and publications or research reports on student assessment. For each of these four types of postsecondary organizations, the survey asked institutions which, if any, of these student assessment services they had used. Responses from doctoral and research universities and all institutions in our study are presented in Table 1.

Table 1. Institutional Use of External Services to Support Student Assessment by Service Provider

| | % of Institutions Using | | | | | | | | | |
| External Service Provider | Services not used or not available | | Consultation services | | Assessment conferences | | Training workshops | | Publications or research reports | |
	D/R	All	D/R	All	D/R	All	D/R	All	D/R	All
Professional associations	24	29	17	13	62	51	38	32	63	51
Regional accrediting association	37	30	14	19	31	41	28	32	40	45
State-level agency	68	54	10	14	19	26	15	22	16	22
Consortium of institutions	56	53	14	13	29	30	11	18	25	20

Doctoral and research institutions' use of assessment-related services varies by the type of external service provider. They are more likely to use services from professional associations, and to a lesser extent, from regional accreditation associations than from state agencies or institutional consortia. They also use certain types of assessment support services more than others, regardless of service provider. Doctoral and research universities make most frequent use of conferences and publications or research reports on student assessment. A smaller proportion have used training workshops from one or more providers while consultation services are least likely to have been used. Compared to all institutions in our study, doctoral and research universities make much greater use of publications and conferences on assessment provided by professional associations and less use of assessment conferences provided by regional accreditation associations.

Summary Observations

The previous sections have addressed the influence of external constituencies, particularly state agencies and regional accreditation associations, on doctoral and research institutions' undergraduate student assessment efforts. State-level efforts clearly play an important role in student assessment. Half of the public doctoral and research institutions in our study report they are subject to some form of state plan or requirements for undergraduate student assessment. Assessment plans are more likely to have been developed through the joint efforts of state and institutional representatives than by state officials alone. Based on our respondents' reports, there is a tendency for state reporting requirements to be accountability-oriented —more often requiring evidence of institutional assessment plans or student performance measures than institutional uses of assessment information. In contrast to earlier studies (Ory & Parker, 1989; Jemmott, 1992/1993), public research and doctoral respondents are as likely to perceive their institution as having been positively influenced by external mandates for student assessment as are respondents from all types of public institutions. However, they are less likely than other types of institutions to have undergone a state review of their student assessment plan or process.

Compared to state-level efforts, regional accreditation associations appear to be a source of even stronger and more positive support for doctoral and research institutions' engagement in student assessment activities. According to survey respondents, regional accreditors more often require evidence of institutions' intended or actual uses of student assessment information than do state reporting requirements. This pattern of reporting requirements may be more conducive to building institutional support for and use of student assessment than the more accountability-oriented approaches employed by state-level officials. Doctoral and research institutions are less likely than all institutional types to perceive accreditation requirements as a reason for beginning

their assessment efforts. But overall, compared to state assessment requirements, regional accreditation requirements are more often viewed as having been a positive influence and less often reported as having had no influence or a negative influence on institutions' engagement in assessment. These findings support past research concerning the strong role of regional accrediting associations in promoting student assessment in postsecondary institutions.

Finally, doctoral and research institutions have made varied use of potential external sources of support for student assessment. Most have not received external funds to improve their student assessment efforts. They are more likely to make use of assessment-related services provided by professional associations, particularly conferences and publications on student assessment. Services from regional accreditation associations, institutional consortia and state agencies are used less often. Given the strong disciplinary affiliation typically maintained by faculty in doctoral and research universities, it is logical that professional associations offer the most appropriate external venue of support for student assessment.

4. APPROACHES TO STUDENT ASSESSMENT

Addresses the type or content of student assessment measures used by doctoral and research institutions, the timing of those assessments, their use of standardized instruments and less traditional student assessment methods, and types of assessment studies conducted and student performance reports produced. With the exception of basic college-readiness skills, doctoral and research institutions collect more extensive data on affective or behavioral measures than cognitive measures, and from current rather than former students. Tests and instruments are used more often than less-traditional assessment methods. Compared to all institutions, doctoral and research universities more often conduct various analyses of collected assessment data. Assessment reports are most often prepared for the institution as a whole and for schools or colleges within the institution.

Assessment approach decisions may be influenced by external mandates, institutional context, and domains of the organizational and administrative environment. An institution's assessment approach may shape the uses and impacts of assessment information. Assessment scholars contend that institutions that collect comprehensive student assessment information — those that collect data on various dimensions of student performance, at multiple points in time, through a variety of assessment methods — and that conduct and report a variety of analyses of assessment data are more likely to use and achieve positive impacts from student assessment data.

What approaches to student assessment have doctoral and research universities adopted? The ISSA instrument addressed the type or content of student assessment measures used by institutions, the timing of those assessments, their use of standardized instruments and less traditional student assessment methods, and types of assessment studies conducted and student performance reports produced. Here we examine the profile of student assessment approaches in doctoral and research institutions and compare it to the profile for all types of postsecondary institutions.

Type and Extent of Student Data Collected

Data Collected from Current Students

What types of data do institutions collect from their students? Survey respondents reported the extent to which their institution collects data on ten types of student data for currently enrolled students and four measures for former students. Figures 10, 11 and 12 display mean scores for the extent to which doctoral and research universities and all institutions collect these data.

Cognitive Data. Figure 10 shows the extent to which institutions collect five types of cognitive data: basic college-readiness skills, higher-order skills (for example, critical thinking and problem solving), general education competencies, competence in major field of study (discipline- or program-specific knowledge), and vocational or professional skills. The latter four of these five types of data factored together to create a "cognitive assessment" index that we used in regression analyses presented in section eight.

Doctoral and research institutions collect extensive data on students' basic college-readiness skills. The mean score for this measure (3.16) indicates these data are collected for many to all students. Doctoral and research universities collect comparatively less data on other measures of their current students' cognitive performance. Data on students' competencies in their major field and general education are collected from some to many students (mean scores of 2.53 and 2.42

Figure 10. Extent of Cognitive Data Collected on Current Students
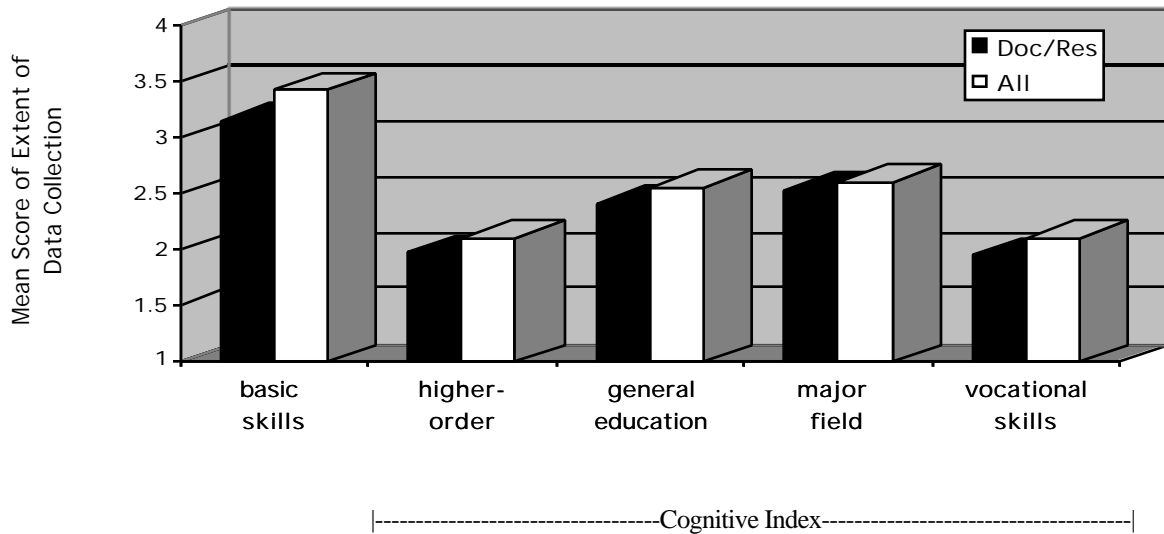
|-------------------------------Cognitive Index-----------------------------------|

1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students.

respectively), but most doctoral and research universities collect data on vocational and higher-order skills from only some of their students (mean score of 1.96). They do not differ appreciably from all respondent institutions in their extent of data collection for these cognitive measures.

Affective and Behavioral Data. Figure 11 presents five types of affective and behavioral data collected from currently enrolled students: personal growth and affective development, experiences and involvement with the institution, satisfaction with the institution, academic intentions, and academic progress. The first three of these items factored together into an "affective assessment" index that we used in regression analyses presented in section eight.

Figure 11. Extent of Affective and Behavioral Data Collected on Current Students
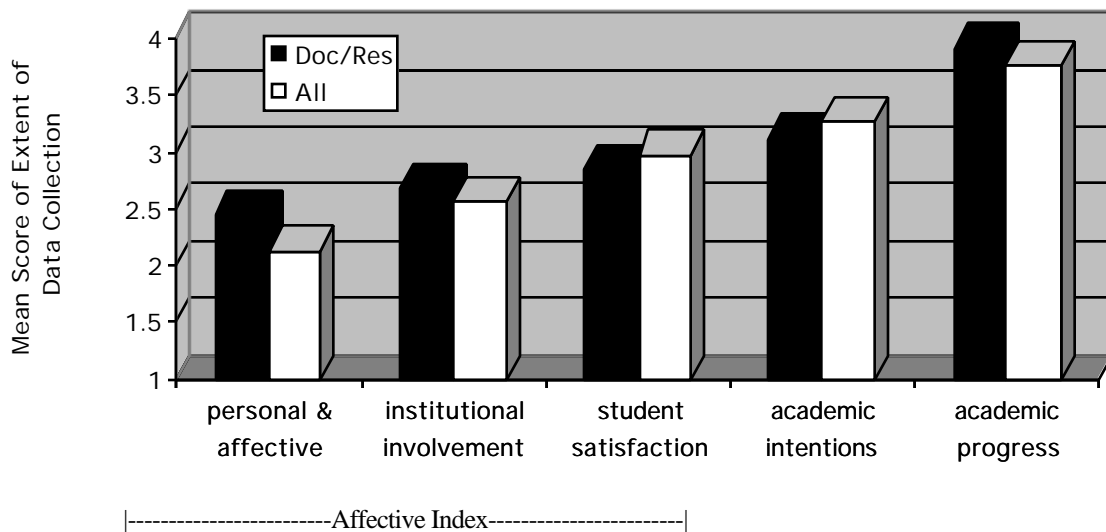
|------------------------Affective Index----------------------|

1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students.

Doctoral and research institutions collect data on the academic progress of virtually all their students (mean score of 3.91). This type of data is a common component of routine internal record-keeping. However, they are slightly less likely to collect data on students' academic intentions (mean score of 3.11). It is probably easier to monitor academic progress via transcripts and other institutional data than it is to collect and update information on students' academic goals. Doctoral and research institutions ask many students about their satisfaction with the institution (mean score of 2.84) but collect comparatively less information on aspects of their students' experiences and involvement within the institution (mean score of 2.69) and students' personal growth and affective development (mean score of 2.43). Compared to all institutions participating in our study, doctoral and research universities place more emphasis on assessing students' personal growth and affective development.

Data Collected from Former Students

Figure 12 displays mean scores for the extent to which doctoral and research institutions and all institutions collect four types of data from former students: vocational or professional outcomes (for example, job attainment or performance), further education (for example, transfer, degree attainment, graduate study), satisfaction and experiences with the institution after leaving, and civic or social roles (for example, political, social or community involvement). These latter three items factored together to create a "post-college" index used in regression analyses presented in section eight.

Figure 12. Extent of Data Collected on Former Students
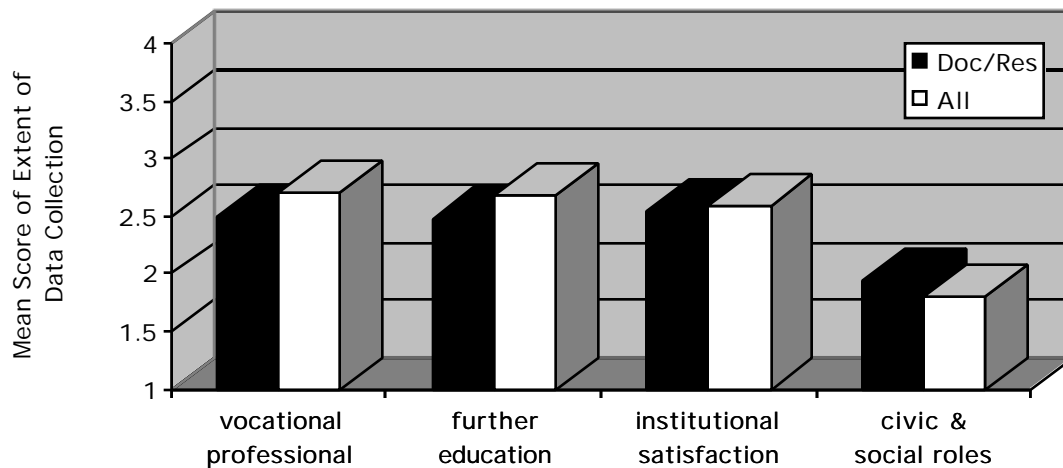
|---------------------------Post-College Index---------------------------|

1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students.

Doctoral and research institutions report moderately extensive collection of data on three dimensions of former students' performance or development. Measures of vocational outcomes, further education and satisfaction with the institution are collected from some to many of their former students (mean scores of 2.51, 2.48 and 2.54 respectively). However, they are less likely to collect data concerning former students' civic or social roles, doing so for only some students (mean score of 1.94). This lower emphasis on civic and social outcomes may reflect the evaluation criteria applied to these institutions by a variety of constituencies. Prospective students and their parents, employers, accreditors and state-level officials are more likely to evaluate doctoral and research institutions' performance on the basis of whether or not their undergraduates attain field-

related employment, are accepted for graduate or post-graduate studies, and are satisfied with their educational experiences than on undergraduates' citizenship skills and activities.

The profile of data collection from former students by doctoral and research institutions closely resembles the profile reported by respondents from all types of institutions. With the exception of civic or social roles data, doctoral and research institutions collect less extensive data from their former students but these differences are not of practical significance.

Timing of Data Collection

Researchers have stressed that it is particularly important for institutions to collect student assessment data on students at varying points in time in order to assure that students are meeting their academic goals and that the college experience is "value-added." When are doctoral and research institutions collecting student assessment data? Table 2 presents the timing of data collection efforts for each of nine measures of student performance for doctoral and research universities and all institutions. Institutional respondents told us whether they collect data for each measure at entry, during students' enrollment, and/or at exit. Respondents could choose all three of these options for each type of data.

Table 2. Institutions Collecting Cognitive, Affective, and Behavioral Student Assessment Data at Entry, While Student is Enrolled, and at Exit

	% Institutions Collecting Data		
	At Entry	While Enrolled	At Exit
Data Collected	Doc/Res All	Doc/Res All	Doc/Res All
Cognitive Data			
Basic Skills	96 97	20 21	6 8
Higher Order Skills	27 32	79 66	27 33
General Education	27 32	72 64	26 36
Major Competence	7 9	69 62	60 64
Vocational Skills	5 10	72 67	60 60
Affective and Behavioral Data			
Personal Growth	45 32	74 67	42 41
Student Involvement	14 7	73 72	59 55
Student Satisfaction	14 7	73 71	67 65
Academic Intentions	88 92	44 36	28 19

Timing of Collecting Cognitive Data

With the exception of basic skills data, most cognitive data are collected either while the student is enrolled or at exit. It is logical that most doctoral and research institutions that collect basic skills data do so at the point of entry into the institution (96%). Roughly three-quarters of doctoral and research institutions that collect data on students' higher-order cognitive skills and general education competencies do so while the student is enrolled (79% and 72% of institutions respectively). This is greater than the proportion of all institutions doing so in our study. However, only one-quarter of doctoral and research institutions assess these cognitive data at point of exit (27% and 26% respectively), a smaller proportion than reported among all institutions.

More than two-thirds of doctoral and research institutions collect data on competencies in the major and professional/vocational skills during students' enrollment (69% and 72% respectively). A large proportion report collecting these types of data from their exiting students

(60% each). At first glance, these findings suggest that doctoral and research institutions are assessing their students' major competencies and vocational skills at more than one point in time. But other analyses (not shown in Table 2) show that less than one-quarter (24%) of doctoral and research institutions are collecting major competence data from their students *both* while they are enrolled *and* at exit, and less than one-fifth (18%) do so for vocational/professional skills. The remaining institutions are collecting major competence and vocational skills data *either* while their students are still enrolled *or* at exit.

Timing of Collecting Affective and Behavioral Data

With the exception of academic intentions, most doctoral and research institutions collect affective data either during enrollment or at exit. In terms of academic intentions, it again is not surprising that students' intentions are collected at entry (88%). But these intentions are less often assessed at subsequent points during students' enrollment even though students' goals may conceivably change throughout their time at an institution. While a large proportion of institutions report collecting data on students' personal growth, involvement and satisfaction with the institution during enrollment and at exit (from 42% to 74%), only 16% of institutions report collecting personal growth data *both* while students are enrolled *and* at exit and only one-quarter report doing so for student involvement and satisfaction (23% and 28% respectively). A larger proportion of doctoral and research institutions than all institutions report collecting data on entering students' personal growth and affective development. There are no other notable differences between the timing of doctoral and research institutions' data collection efforts and those of all institutions in our study.

Student Assessment Instruments and Methods Used

Institutions engaging in student assessment efforts must select the means by which assessment data will be collected. A traditional choice is to use assessment instruments, generally in the form of objective examinations or inventories administered in a pencil and paper or computerized format. More recently, there has been growing interest in alternative methods of assessing students. These non-traditional methods tend to be more qualitative or integrative in approach — requiring students to demonstrate higher-order cognitive skills such as application or synthesis — or may use sources of information other than students themselves. Further, as the student body entering postsecondary institutions becomes more diverse through the increased enrollment of part-time, older and minority students), some scholars have suggested the need to use special assessment methods to reflect the unique characteristics, learning styles, needs and life situations of various sub-populations of students.

Student Assessment Instruments

How are institutions collecting student assessment data? Survey respondents reported whether their institution uses instruments or tests to collect any of ten types of assessment information: nine for current students (basic college-readiness skills; higher-order skills; general education competencies; competence in major field of study; vocational or professional skills; personal growth and affective development; experiences and involvement with the institution; satisfaction with the institution; and academic intentions) and one for former students (alumni satisfaction and experiences). If an instrument was used, respondents specified its source — institutionally-developed, state-provided, or commercially available. Figures 13 and 14 present information on these eleven types of assessment information collected via traditional instruments or tests for doctoral and research institutions and all institutions in our study.

Figure 13. Institutional Use of Student Assessment Instruments to Collect Cognitive Data
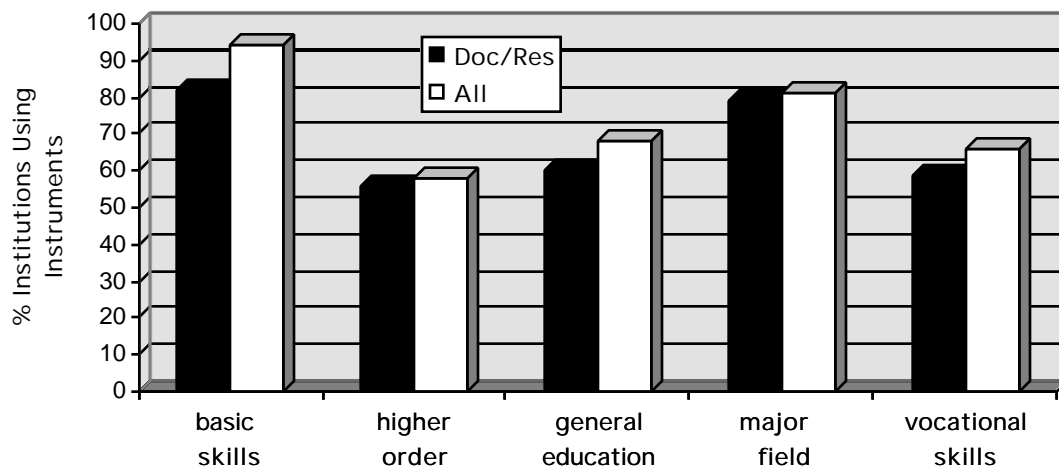
Figure 14. Institutional Use of Student Assessment Instruments to Collect Affective and Behavioral Data
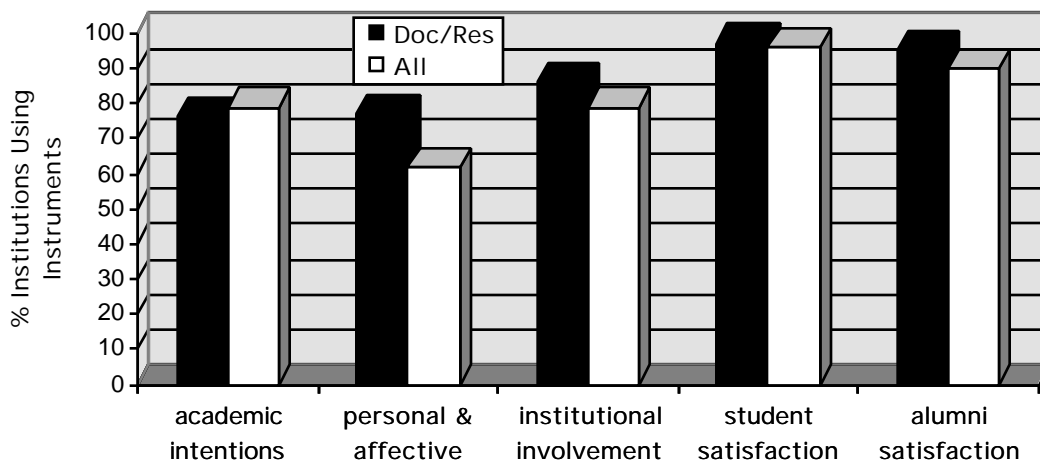
As Figures 13 and 14 show, the use of assessment instruments or tests varies with the type of assessment data being collected. Doctoral and research institutions are most likely to use instruments or inventories to collect data on alumni and student satisfaction (97% and 95% respectively), student involvement (86%), and basic college-readiness skills (82%) and least likely to use them to collect data on students' higher-order cognitive skills (56%), vocational or professional skills (59%), and general education competencies (60%).

When a test or instrument is used, it has most often been developed by the doctoral and research institution itself (data concerning the source of instruments for each type of data are available in Appendix A of this report). This is especially true for instruments measuring aspects of student performance or experiences that are specific to the institution such as alumni satisfaction, student satisfaction, student involvement with the institution, and competence in the major. In addition, doctoral and research institutions frequently use commercially-available instruments for measuring academic intentions and higher-order cognitive skills. These measures are both more

uniform across campus settings and, particularly for higher-order skills, more complex to develop. Doctoral and research universities make limited use of state-provided instruments (no more than 13% of institutions reported using a state-provided instrument for any of the types of data considered), suggesting that such instruments are not a part of state-level requirements for student assessment.

Doctoral and research universities do differ from all institutions in a few aspects of their use of assessment instruments and tests. Compared to all institutions, they make greater use of institutionally-developed instruments to collect data on students' basic college-readiness skills and personal growth and affective development; they more often use commercially-available instruments to collect data on students' academic intentions; and less often use commercially-available instruments to measure students' basic college-readiness skills.

Other Student Assessment Methods

Institutions also reported the extent to which they use each of nine alternative methods of student assessment. Table 3 presents this information for doctoral and research universities and all institutions in our study.

Table 3. Mean Scores of Extent of Use of Other Student Assessment Methods

Student Assessment Methods	Doctoral and Research (n=143)	All Institutions (n=1393)
Student-Centered		
Observations of student performance	2.12	2.26
Student portfolios or comprehensive projects	2.13	2.10
Student performance in capstone courses	2.27	2.15
Student interviews or focus groups	1.99	1.84
Externally-Oriented		
Alumni interviews or focus groups	1.96	1.90
Employer interviews or focus groups	1.84	1.87
Other		
Transcript analysis	1.92	2.16
External examination of students	2.02	2.02
Surveys or interviews with withdrawing students	2.18	2.40

1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units

Four of these options require more active participation of currently enrolled students and factored together to create a "student-centered" index of assessment methods that were used in regression analyses presented in section eight: observations of student performance, student portfolios or comprehensive projects, capstone courses, and student interviews or focus groups. None is used extensively by doctoral and research institutions. Of these four methods, doctoral and research institutions are most likely to use capstone courses (mean score of 2.27), portfolios or comprehensive projects (mean score of 2.13) and observations of student performance (mean score of 2.12)— doing so in some to most units or departments.

Two of these alternative measures rely on information from external groups or sources and factored together to create an index of "external methods" of student assessment that we used in regression analyses in section eight: alumni interviews or focus groups, and employer interviews or focus groups. Doctoral and research institutions are slightly more likely to interview or hold focus groups with alumni (mean score of 1.96) than with employers (1.84), but do not make extensive use of either method.

Three additional alternative student assessment measures were listed in our survey: transcript analysis, using external examinations, and surveying or interviewing withdrawing students. Of these three, doctoral and research institutions are most likely to survey/interview withdrawing students (2.18). They make little use of external examinations such as licensure examinations (2.02) and transcript analysis (1.92) as student assessment methods.

Compared to all institutions participating in our study, doctoral and research institutions make slightly greater use of capstone courses as an assessment method. Conversely, they make much less use of surveys or interviews with withdrawing students. Other alternative assessment methods are not used to any greater or lesser extent by doctoral and research universities compared to all institutions.

Assessment Methods for Student Sub-Populations

Do institutions use different assessment methods for specific sub-populations of their student body? Table 4 presents the percentage of doctoral and research universities and all institutions using different assessment methods for four student sub-populations: adult students, part-time students, minority students, and distance education students.

Table 4. Institutional Use of Different Assessment Methods for Different Student Sub-Populations

Student Sub-Population	% Institutions Using Different Assessment Methods	
	Doctoral and Research (n=143)	All Institutions (n=1366)
Adult students	6	10
Part-time students	5	5
Minority students	4	2
Distance education students	21	22

Most doctoral and research institutions do not use different assessment methods for specific sub-populations of undergraduate students. While one-fifth (21%) report using different methods for distance education students, a decision that may be necessitated by the type of medium used for course delivery, very few use special methods for collecting assessment data from their adult, part-time or minority students. This profile is consistent across all types of postsecondary institutions.

Student Assessment Studies and Reports

Beyond collecting descriptive data on their students' characteristics, performance or development, institutions must consider how to transform that data into useful information. Institutions that study the relationship between various aspects of students' institutional experiences and their performance will be better able to make informed decisions concerning academic and student-related policies and practices. Another consideration in data analysis is the level of aggregation at which assessment information is analyzed and reported.

Student Assessment Studies

Are institutions studying how student performance is connected to experiences with the institution? In our survey, we asked if institutions conduct studies of the relationship between students' performance and nine areas of students' institutional experiences. Table 5 identifies these areas and presents data on institutional studies for both doctoral and research institutions and all institutions in our study.

Table 5. Institutions Conducting Student Assessment Studies

Studies of Relationship Between Student Performance and the Following Experiences	% Institutions Conducting Studies	
	Doctoral and Research (n=139)	All Institutions (n=1264)
Do not study any of these relationships	22	38
Admission standards or policies	60	42
Residence arrangements	48	21
Student financial aid and/or concurrent employment	44	30
Student course-taking patterns	38	26
Extra-curricular activities	37	24
Academic advising patterns	26	26
Exposure to different instructional or teaching methods	25	21
Patterns of student-faculty interaction	25	21
Classroom, library and/or computing resources	12	17

The majority of doctoral and research institutions conduct studies of the relationship between some aspect(s) of students' institutional experiences and their performance; less than one-quarter of doctoral and research institutions (22%) do *not* conduct any of such studies. When studies are conducted by doctoral and research universities, they are most likely to examine the relationship of admissions policies (60%), residence arrangements (48%), financial aid and employment (44%), course-taking patterns (38%) and extra-curricular involvement (37%) to students' performance.

However, they are less likely to study the relationship between students' performance and aspects of students' institutional experiences that are more directly related to the teaching/learning environment such as classroom, library and computing resources (12%), interaction with faculty (25%), exposure to various teaching methods (25%) and academic advising (26%). Arguably, studies of these relationships may produce information that could have a greater impact on student performance but it is also more politically sensitive for institutions to conduct them. Or it may be that studies of this nature are primarily conducted by faculty members within their own classrooms rather than by a central committee or institutional office; such studies would not necessarily have been reported in this institutional-level instrument.

Compared to all institutions participating in our survey, doctoral and research universities are more likely to study the relationship of some aspect(s) of students' institutional experiences and performance. Doctoral and research universities are more likely to conduct six of the nine types of studies listed, with studies of academic advising, teaching methods, and academic resources being the exception. These results may reflect both the recent emphasis on undergraduate education underway in these institutions and their well-developed capacity for institutional or educational research.

Student Assessment Profiles or Reports

Finally, institutions were asked to report the levels of aggregation at which they provide profiles or reports of student assessment information. Figure 15 shows the percentage of doctoral and research universities and all institutions providing student assessment reports at each of five levels of aggregation: institution-wide; schools or colleges; academic programs or departments; special populations of students; course or groups of courses. Respondents indicated as many levels of aggregation as were applicable or could indicate that they provide no reports of student assessment information.

Figure 15. Preparation of Student Performance Reports by Level of Aggregation
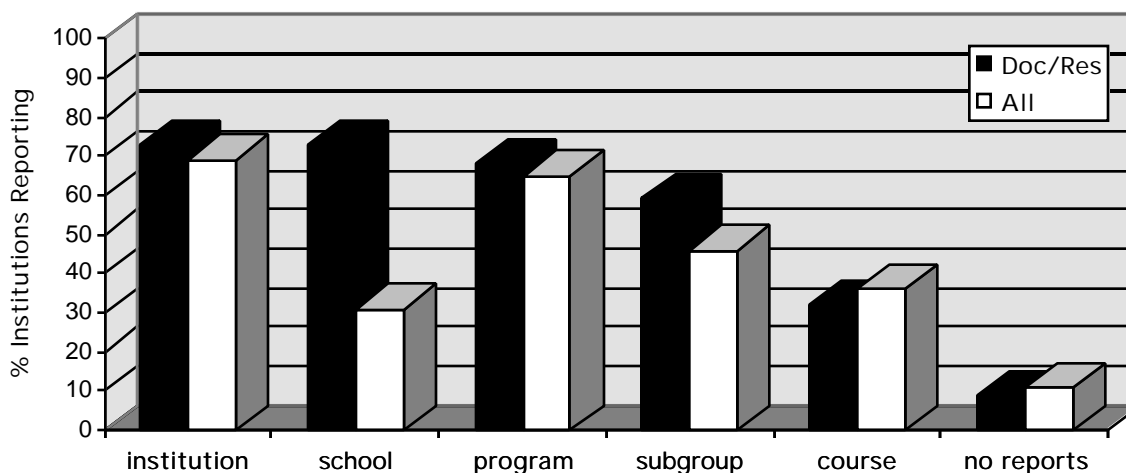
Most doctoral and research institutions provide some types of reports of student assessment results (91%). The majority provide such reports on data for the institution as a whole (73%) and for schools or colleges (73%). Slightly fewer prepare reports aggregated at the level of academic programs or departments (68%) and for specific sub-populations of students (59%). They are least likely to aggregate and report assessment information at the course level (32%).

Compared to all institutions, doctoral and research universities are much more likely to provide reports at the school or college level. This reflects the decentralized organization of this institutional type. It suggests that schools or colleges in these institutions more often have the responsibility to decide what assessment results mean and what to do with them than is the case for all postsecondary institutions. To a lesser degree, doctoral and research institutions are also more likely to provide reports on specific student sub-populations.

Summary Observations

With the exception of basic college-readiness skills, doctoral and research institutions tend to collect more extensive data on affective or behavioral measures than on cognitive measures, and from current rather than former students. This data collection profile may be partly attributable to the ease or difficulty of collecting various types of data. Measures of academic progress, academic intentions and basic skills are easier for institutions to define, quantify and collect than more complex measures such as higher-order cognitive skills and civic or social roles. Although differences are generally not large, the overall profile of data collection within doctoral and research institutions is slightly less extensive than the profile reported by respondents from all types of postsecondary institutions. Prior research suggests this may stem from a belief that the academic caliber of students at these institutions obviates the need for assessment (Jemmott & Morante, 1993).

Doctoral and research universities frequently use tests or instruments to collect assessment data. These instruments are most often developed by institutions themselves and are rarely provided by state-level officials. Overall, they make limited use of non-traditional assessment methods such as portfolios and capstone courses.

Compared to all institutions, doctoral and research institutions have a strong profile of analyzing student assessment data. However, studies are more likely to examine the influence of students' non-instructional experiences within the institution such as admissions or financial aid

policies on student performance. Studies of the relationship of students' instructional or advisement experiences to their performance are conducted comparatively less often. The majority of doctoral and research institutions provide descriptive reports of student performance — most often aggregated at the institution-wide and school or college level.

5. ORGANIZATIONAL AND ADMINISTRATIVE SUPPORT PATTERNS

Focuses on the patterns of organizational and administrative support that institutions have developed to promote student assessment on their campuses, such as their mission and purpose, institution-wide activities, leadership support, and planning and coordinating mechanisms. Many doctoral and research institutions have adopted a decentralized approach to assessment policies and planning — permitting academic units to develop their own assessment activities. Executive responsibility for planning and overseeing daily operations is primarily positioned in academic affairs. Faculty and personnel with research and evaluation expertise are involved but to a lesser extent.

An important focus of our study was to examine the patterns of organizational and administrative support institutions have developed to promote student assessment on their campuses. The assessment literature suggests that institutions will be most likely to promote internal support for assessment if they engage in assessment for internal rather than external purposes, have visible and strong leadership support for assessment, include a broad range of internal participants, particularly faculty, in making assessment-related decisions and regularly evaluate their assessment programs. It is expected that organizational and administrative support will shape the assessment approach, assessment management practices and policies, and ultimately, the institutional uses and impacts of assessment information.

The ISSA instrument included questions concerning the institution-wide assessment support strategy; administrative and governance activities used to promote student assessment; leadership and faculty support for assessment; planning and coordination for assessment; and evaluation of student assessment processes. Once again, we will present information concerning the pattern of organizational and administrative support for student assessment in doctoral and research institutions and compare it to the pattern for all types of postsecondary institutions.

Institution-Wide Assessment Support Strategy

Mission Emphasis

Assessment scholars and practitioners suggest that institutions' academic mission content may symbolize the importance with which student assessment is regarded and so may influence the degree of internal support for assessment. What do the mission statements of our responding institutions tell us about their values regarding student assessment? Institutions reported whether their mission statement explicitly: a) emphasizes excellence in undergraduate education, b) identifies intended student outcomes, c) refers to student assessment as an important priority, or d) does not mention any of these. Respondents could answer "yes" to more than one mission statement component. Figure 16 displays the percentage of doctoral and research institutions and all institutions reporting each of these mission statement components.

Despite their dual emphasis on graduate and undergraduate education, the majority of doctoral and research universities report their mission statement explicitly emphasizes excellence in undergraduate education as an institutional priority (86%). However, just over one-third have mission statements that identify the educational outcomes intended for their students (37%) while only 14 percent refer to student assessment as an important institutional activity within their mission statement. Few doctoral and research institutions have none of these components in their mission statement (11%). Compared to all institutions, doctoral and research institutions are much less likely to include intended educational outcomes for students in their mission statements.

Figure 16. Institutional Mission Emphasis
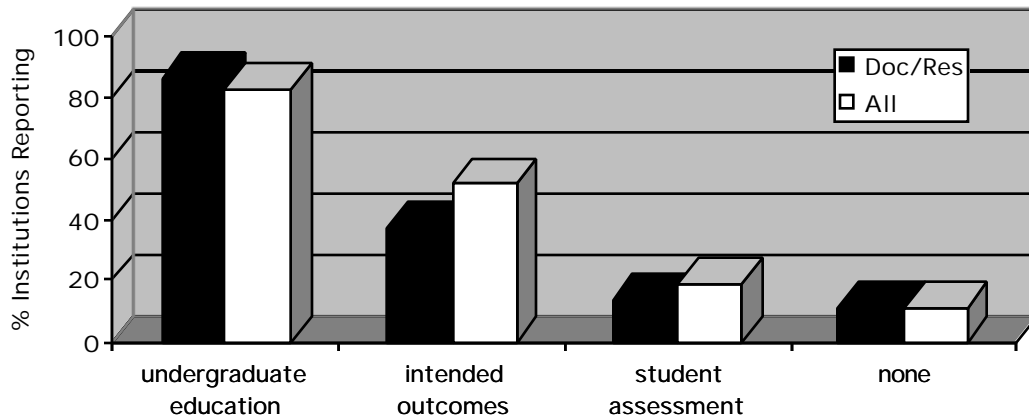
Purposes for Engaging in Student Assessment

Why are institutions engaging in student assessment? A second dimension of institution-wide assessment support strategy examined in this study is the purpose(s) underlying institutions' student assessment efforts. Scholars contend that whether assessment is primarily engaged in for internal or external purposes may influence the nature of an institution's assessment approach, degree of internal support, and assessment uses and impacts. Institutions rated the importance of six purposes for engaging in student assessment: preparing for an institutional accreditation self-study; meeting state reporting requirements; guiding internal resource allocation decisions; guiding undergraduate academic program improvement; improving the achievement of undergraduate students; and improving faculty instructional performance. The last four of these purposes were factored together to create an "internal purposes" index that we used in regression analyses in section eight. Figure 17 presents the mean scores for each student assessment purpose for doctoral and research institutions and for all institutions.

Figure 17. Purposes of Student Assessment

|----------------------------Internal Purposes----------------------------|
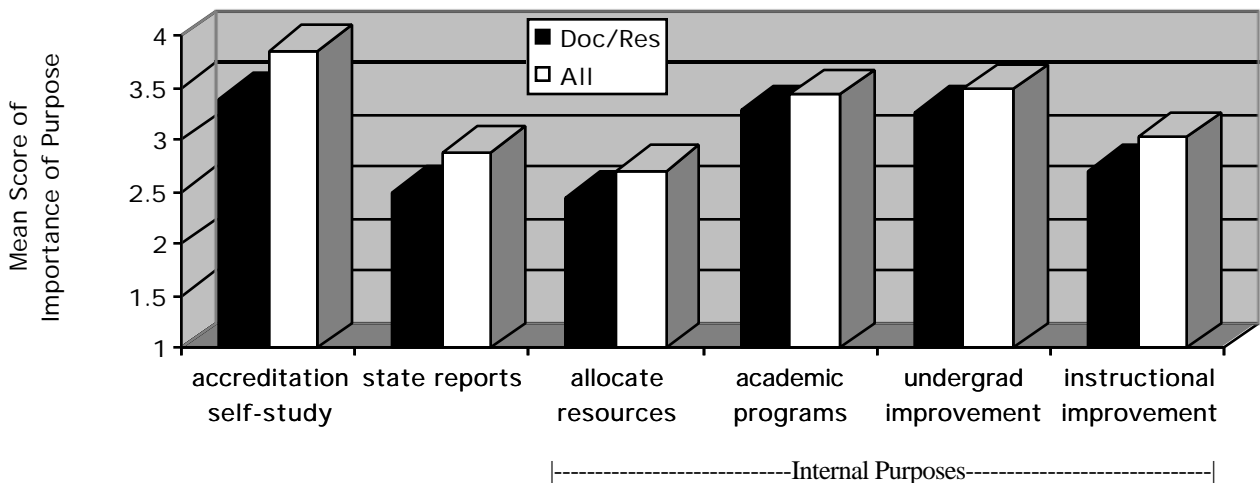
Scale: 1 = no importance; 2 = minor importance; 3 = moderate importance 4 = very important.

Doctoral and research colleges and universities rate preparing for an institutional accreditation self-study (3.39), guiding undergraduate academic program improvement (3.28), and improving the achievement of undergraduate students (3.27) as very important reasons for

engaging in student assessment. Conversely, they give the lowest importance ratings to guiding internal resource allocation decisions (2.45), meeting state reporting requirements (2.50) and improving faculty instructional performance (2.71) as student assessment purposes. These purposes are rated as being of minor to moderate importance.

These findings suggest regional accrediting associations play an important role in stimulating doctoral and research institutions' decisions to engage in student assessment. Similarly, they intend their student assessment efforts to contribute to improvements in academic program and student performance. It appears that student assessment efforts in doctoral and research institutions are more often intended for improvement purposes than to address issues of external or internal accountability.

However, compared to all institutions in our study, doctoral and research institutions accord much less importance to accreditation preparation, meeting state reporting requirements and improving faculty instruction as assessment purposes. The low importance of the first two purposes suggests these external constituencies have less influence over student assessment efforts in doctoral and research universities than is the case in other types of institutions. The relatively low importance rating given to improving faculty instruction may be attributable to the high degree of faculty autonomy in these institutions and the greater emphasis placed on research rather than teaching as a faculty role responsibility.

Institution-Wide Administrative and Governance Activities

Institutions may develop a variety of administrative activities and governance structures to promote student assessment on an institution-wide basis. How prevalent are these practices? The ISSA instrument asked whether or not institutions use any of the following administrative activities and governance structures: annual institution-wide initiatives on assessment; rewards or incentives for academic and student affairs administrators to use student assessment in their unit; incentives for academic units to use assessment information in evaluation and improvement efforts; student assessment workshops for academic and student affairs administrators; board of trustees committee that addresses student assessment; faculty governance committee that addresses student assessment issues; and student representation on student assessment committees. Figure 18 displays the percentage of doctoral and research institutions and all institutions that have introduced these activities or structures in their institutions.

Figure 18. Institution-Wide Administrative and Governance Activities Used to Promote Student Assessment
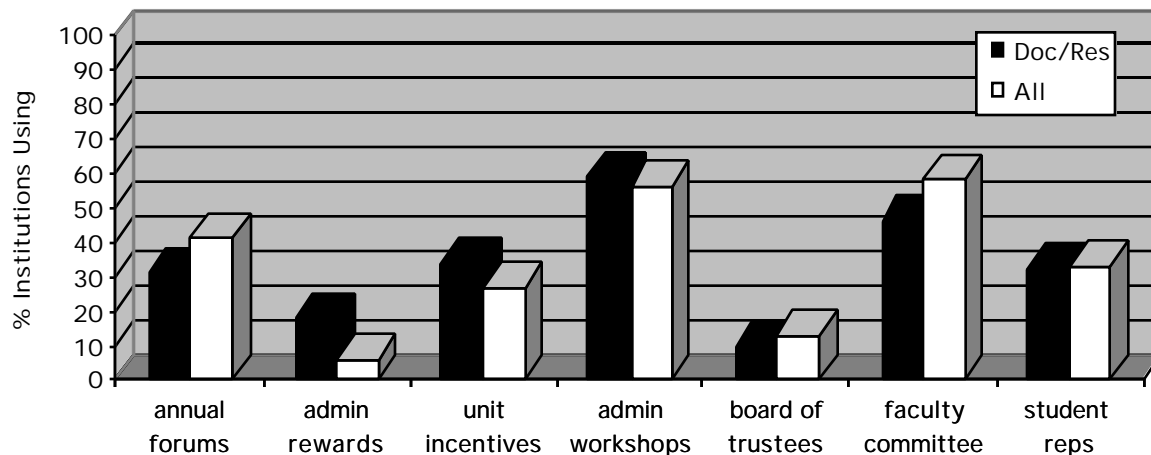
Of the various activities listed, doctoral and research institutions are most likely to provide workshops on student assessment for their academic and student affairs administrators (59%) and to have a faculty governance committee that addresses student assessment issues (46%). A smaller proportion offer incentives for academic units to use assessment information in improvement efforts (34%), include student representation on student assessment committees (32%) and have annual institution-wide initiatives on assessment (31%). Doctoral and research institutions are less likely to offer rewards or incentives to individual administrators who promote student assessment (18%) and least likely to have a board of trustees committee focused on student assessment (10%).

Relative to all institutions, doctoral and research universities are more likely to provide incentives to encourage administrators and academic units to use student assessment information. They are less likely to have institution-wide initiatives or forums on student assessment and to involve faculty in assessment governance. This suggests that student assessment is primarily an administrative responsibility rather than a faculty responsibility within these institutions.

Leadership and Faculty Support for Student Assessment

The degree to which student assessment efforts are supported internally is likely an important determinant of the extent and impact of an institution's student assessment activities. How supportive of student assessment are various internal constituencies? We asked survey respondents to rate the degree to which six internal groups support undergraduate student assessment activities: board of trustees; chief executive officer; academic affairs administrators; student affairs administrators; faculty governance; and students. Figure 19 presents the mean responses to this question for doctoral and research universities and all institutions in our study.

Figure 19. Internal Constituent Support for Student Assessment
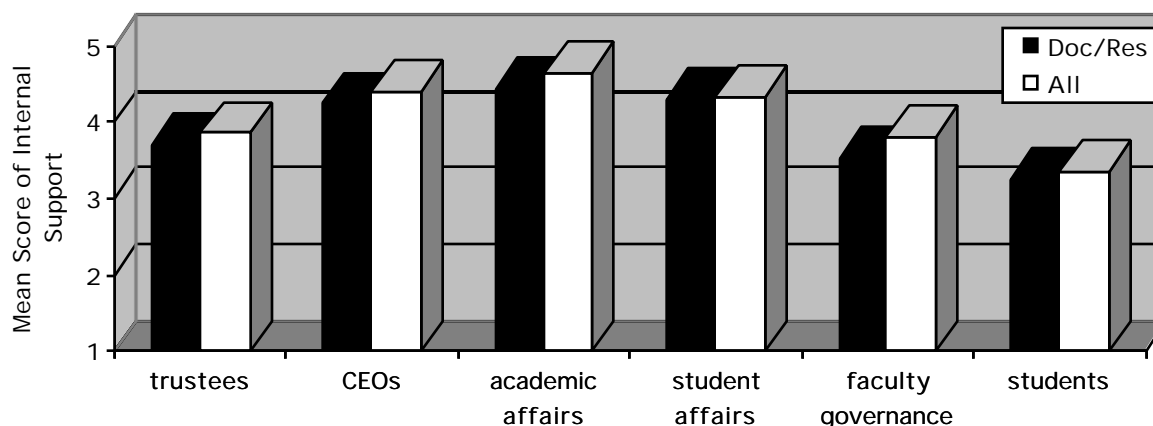
Scale: 1 = very unsupportive; 2 = somewhat unsupportive; 3 = neutral, unknown; 4 = somewhat supportive; 5 = very supportive

Doctoral and research universities have generally high levels of support for student assessment with most constituents reported as being at least somewhat supportive. Academic affairs administrators are perceived as the most supportive constituency (4.43) followed by student affairs administrators (4.29) and the chief executive officer (4.22). Boards of trustees (3.68) and faculty governance bodies (3.51) are viewed as slightly less supportive in relation to senior administrators but are still rated as supportive. Students are seen as being least supportive of student assessment with most respondents reporting their level of support as neutral or unknown (3.29). This latter finding may warrant further attention given scholars' concerns about the need to

actively promote student participation in assessment activities. In all cases, the levels of internal constituent support for assessment reported by doctoral and research universities are equivalent to those reported by all institutions in our study.

Planning and Coordinating Student Assessment

A central issue in discussions of leadership and governance for student assessment concerns the degree to which responsibility for planning and coordinating student assessment activities is centralized or decentralized within institutions. Centralized approaches that focus such responsibility on senior administrators or central offices may signal that assessment is a valued institutional activity but decentralized approaches involving an array of internal participants may do more to promote broader internal support for assessment. How do institutions plan and coordinate their assessment efforts? We asked institutional respondents about six aspects of their assessment planning and coordination process: the nature of an institutional plan or policy for student assessment; membership on an institution-wide planning group for assessment; executive responsibility for the assessment planning process; approval authority for assessment plans; operational responsibility for student assessment; and reporting patterns.

Institutional Plan or Policy for Student Assessment

We asked survey respondents which of seven types of institutional plans or policies for student assessment best described what exists at their institution: 1) formal comprehensive centralization — a formally adopted plan or policy specifying undergraduate student assessment activities for all academic programs or units; 2) formal limited centralization — a formally adopted plan or policy for undergraduate student assessment in some academic programs or units; 3) formal decentralization — a formally adopted institutional plan or policy requiring all academic units or programs to develop their own undergraduate student assessment plan; 4) formal guidance — a formally adopted institutional plan or policy identifying institution-wide activities to be conducted by a central committee or office; 5) informal encouragement — no institutional plan or policy but academic units or programs are encouraged to develop their own undergraduate student assessment activities; 6) emergent — institution is currently developing a plan or policy for undergraduate student assessment; and 7) none — institution does not have an undergraduate student assessment plan or policy. Respondents could select more than one type of plan or policy. Figure 20 presents the percentage of doctoral and research institutions and all institutions in our study using each type of assessment plan or policy.

Most doctoral and research institutions have some type of institutional plan or policy for undergraduate student assessment. Half (49%) report having a policy that requires all academic units or programs to develop their own undergraduate student assessment plan. Approximately one-third (35%) stipulate institution-wide assessment activities that are conducted by a central committee or position. About the same proportion (32%) require specific assessment activities of all their academic units or program. They make limited use of the other types of policies and plans considered in this question.

Compared to all institutions in our study, doctoral and research universities are somewhat less likely to have a formal plan or policy for student assessment. If one combines informal encouragement, emergent plans and no plans, fully 41% of doctoral and research universities have no formal assessment plan or policy. They are more likely than all institutions in our study to adopt a decentralized assessment plan or policy in which academic units and programs determine the assessment activities in which they will engage, and less likely to use a formal centralized policy that mandates particular assessment activities of all units or programs. This approach to institutional policies or plans for student assessment is consistent with the overall governance style in these larger, organizationally complex and decentralized institutions.

Figure 20. Types of Institutional Plan or Policy for Student Assessment
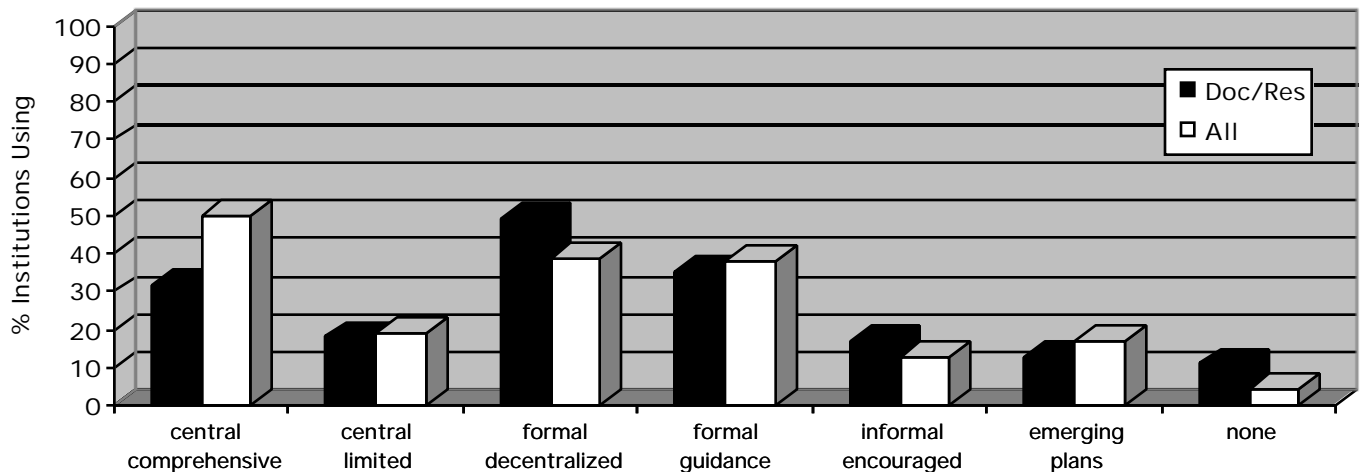
Institution-Wide Assessment Planning Group Membership

Who is involved in student assessment planning? We asked respondents whether they have an institution-wide group responsible for ongoing planning and policy setting for undergraduate assessment. Only 53% of doctoral and research universities report having such a group compared to 70% of all institutions in our study. Of those institutions with institution-wide planning groups, we asked which of the following internal constituents serves on the group: chief executive officer, academic affairs administrator or staff, student affairs administrator or staff, institutional research administrator or staff, academic review and evaluation administrator or staff, student assessment administrator or staff, faculty, and students. Respondents checked as many constituents as were applicable. Figure 21 presents the percentage of doctoral and research institutions and all institutions that responded that each constituent is a member of their assessment planning group.

Figure 21. Membership on Institution-Wide Student Assessment Planning Group*
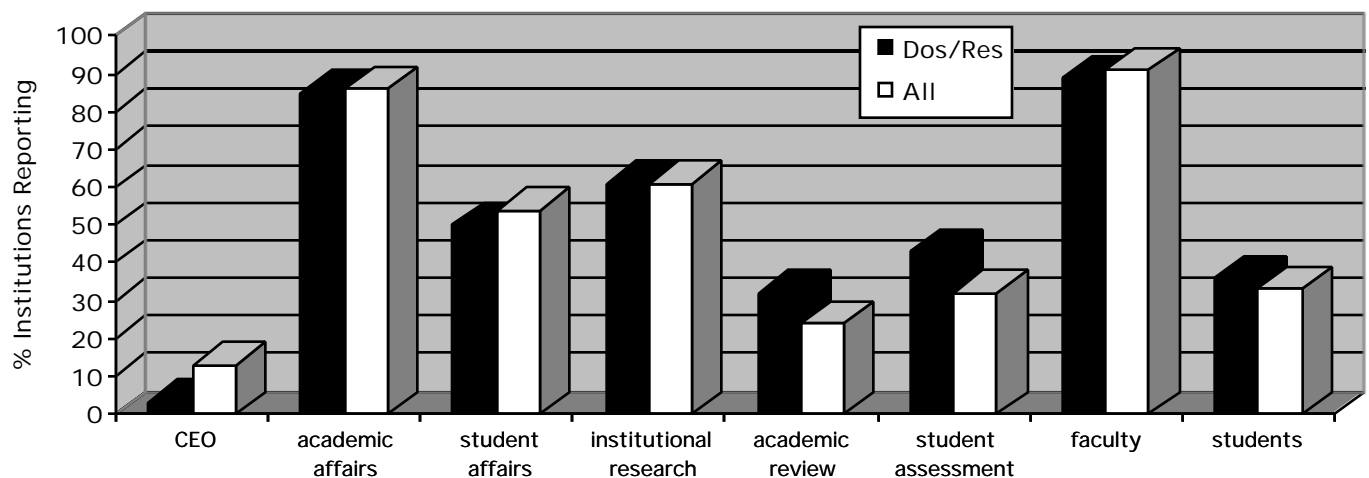
*Only institutions with an institution-wide planning group for student assessment responded to this question.

When doctoral and research universities have institution-wide planning committees for student assessment, these committees are predominantly comprised of faculty (89%) and academic affairs administrators (85%), institutional research personnel (61%) and student affairs administrators (50%). Student assessment administrators (43%), students (36%) and personnel with specific responsibilities for academic review/evaluation (32%) are represented to a lesser degree. It is least likely for the chief executive officer (3%) to be included.

Compared to all institutions in the study, doctoral and research universities are more likely to include personnel with specific responsibility for student assessment on this committee and less likely to involve the chief executive officer. Student assessment planning is primarily positioned as an academic affairs responsibility in doctoral and research institutions. Staff with specialized research and assessment expertise are also well represented.

Executive Responsibility for Assessment Planning Process

Another aspect of the governance process used for student assessment concerns where formal leadership for assessment planning is vested in an institution. We asked institutions which of the following positions has executive responsibility for or chairs the institution-wide group for student assessment planning: academic affairs administrator; student affairs administrator; institutional research officer; academic review and evaluation officer; student assessment officer; or faculty member. Figure 22 presents this information for doctoral and research institutions and all institutions.

Figure 22. Executive Responsibility for Student Assessment Planning Group*
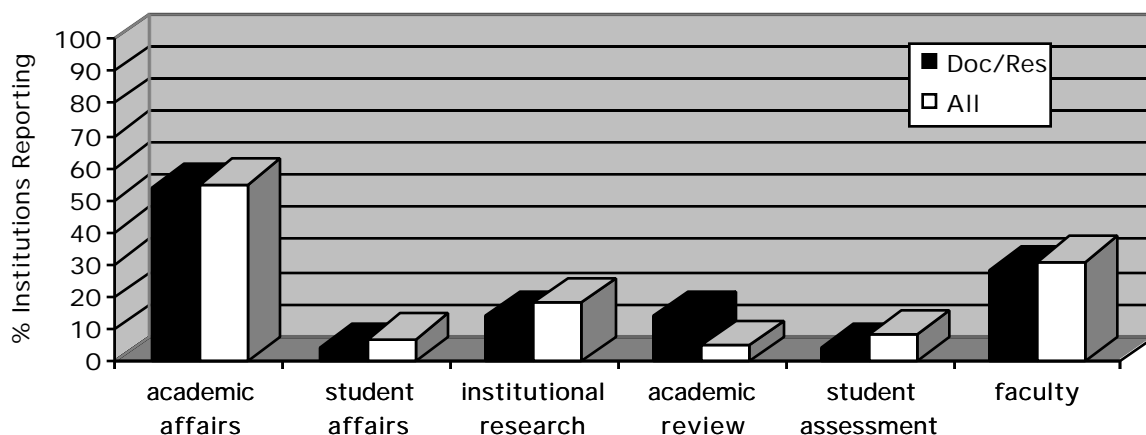
*Only institutions with an institution-wide planning group for student assessment responded to this question.

Executive responsibility for student assessment planning in doctoral and research institutions is most often placed in the hands of an academic affairs administrator (54%) followed by a faculty member (28%). It is less common for personnel from institutional research (14%) or academic review and evaluation (14%) to hold this position. Doctoral and research institutions rarely invest executive responsibility for assessment planning in a student affairs administrator or student assessment officer (4% each). There are few differences noted between this profile of executive responsibility for doctoral and research universities and all institutions.

Approval Authority for Student Assessment Plan

As a final aspect of governance for assessment planning, we asked institutions to identify who, among ten possible positions or groups, approves changes in their institutional plan or policy for student assessment: board of trustees; chief executive officer; chief academic affairs officer; chief student affairs officer; institutional research officer; academic review and evaluation officer; student assessment officer; student government; academic senate or other faculty committee; and faculty union. All respondents could answer this question regardless of whether or not they have an institution-wide committee for assessment planning. Respondents indicated as many positions or groups as were applicable. Less than 10 percent of doctoral and research universities report that board of trustees, student assessment, student government and faculty union personnel have approval authority for assessment planning. Figure 23 presents the results for the remaining six positions for doctoral and research universities and all institutions.

Figure 23. Approval Authority for Student Assessment Plan or Policies
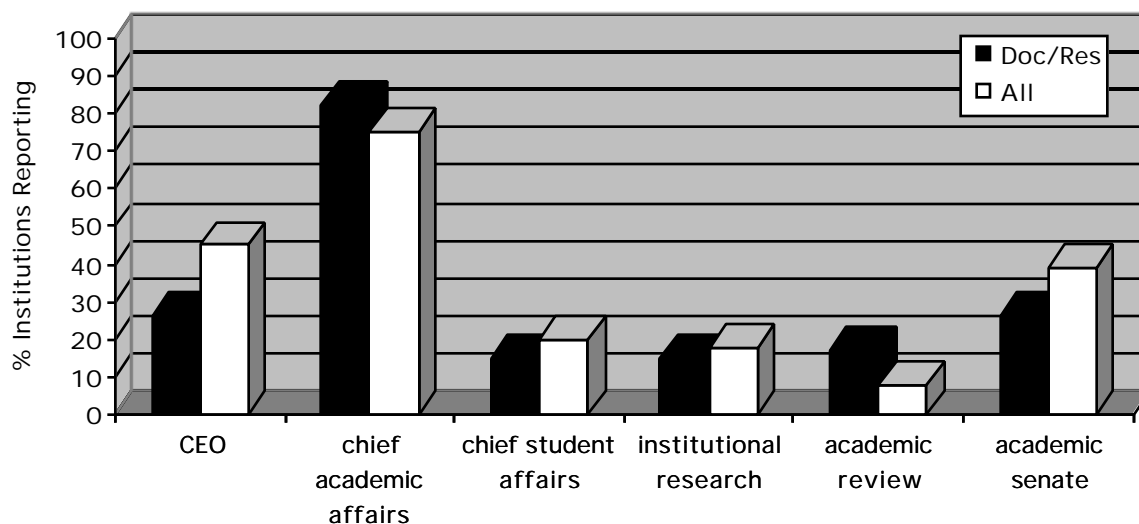
Changes to student assessment plans or policies have to be approved by multiple sources. However, doctoral and research universities most often give approval authority to the chief academic affairs officer (82%). In terms of frequency, the chief executive officer and academic senate are the internal constituencies mentioned next (26% each) followed by the chief executive officer (37%). There is less involvement of other administrative or research/evaluation positions in this aspect of assessment governance. Compared to all institutions, doctoral and research universities are less likely to include the chief executive officer and the academic senate in approving changes to the institutional assessment plan or policy.

Operational Responsibility for Day-to-Day Student Assessment Activities

Beyond the planning phase of student assessment, institutions must decide where to place responsibility for overseeing their day-to-day undergraduate student assessment activities such as instrument development, data collection, analysis and reporting. Where have institutions placed operational responsibility for student assessment? We asked institutions which of six positions or offices has responsibility for their day-to-day student assessment activities: academic affairs administrator; student affairs administrator; institutional research officer; academic review and evaluation officer; student assessment officer; and faculty member(s). Institutions checked as many positions/offices as applied. Figure 24 presents the results for doctoral and research institutions and all institutions.

Figure 24. Operating Responsibility for Day-to-Day Student Assessment Activities
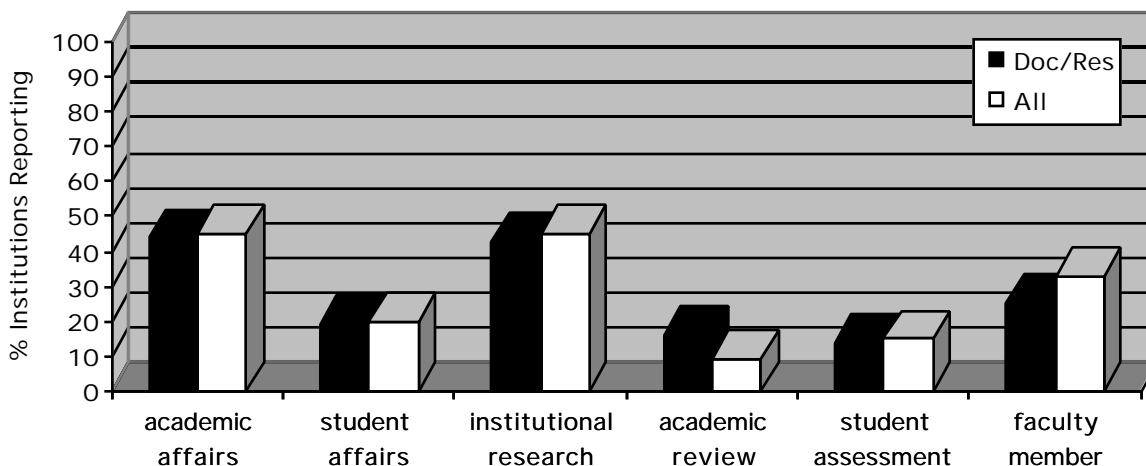
Doctoral and research universities are equally likely to place responsibility for their day-to-day student assessment activities with an academic affairs administrator (44%) or institutional research personnel (43%). This responsibility is less frequently given to faculty members (25%). Conversely, doctoral and research universities seldom place a student affairs administrator (19%), academic review/evaluation officer (16%) or student assessment officer (14%) in charge of its day-to-day assessment activities. There are no major differences in the assignment of operational responsibility for student assessment within doctoral and research universities and all institutions.

Reporting Relationship of Individual with Operating Responsibility for Student Assessment

Finally, institutions were asked to whom the individual with day-to-day operating responsibility for student assessment reports. Survey respondents selected from the following five offices: chief executive officer; chief academic officer; chief student affairs officer; institutional research officer; and academic review and evaluation officer. Figure 25 presents the responses from doctoral and research institutions and all institutions in our study.

In the majority of doctoral and research institutions (68%), the individual with operational responsibility for student assessment reports to the chief academic officer. Less than 10 percent of doctoral and research institutions have the operational manager for student assessment report to any of the other administrative or research/evaluation positions listed. Compared to all institutions in our study, doctoral and research universities are more likely to have the operational manager for assessment report to the chief academic officer and less often, to the chief executive officer.

Evaluating the Student Assessment Process

The student assessment literature insists upon the importance of institutions regularly evaluating their assessment processes. Consequently, our survey inquired whether institutions have evaluated their student assessment plan or process and if so, what elements of their plan or process have been reviewed.

Figure 25. Reporting Relationship of Individual with Operating Responsibility for Student Assessment Activities
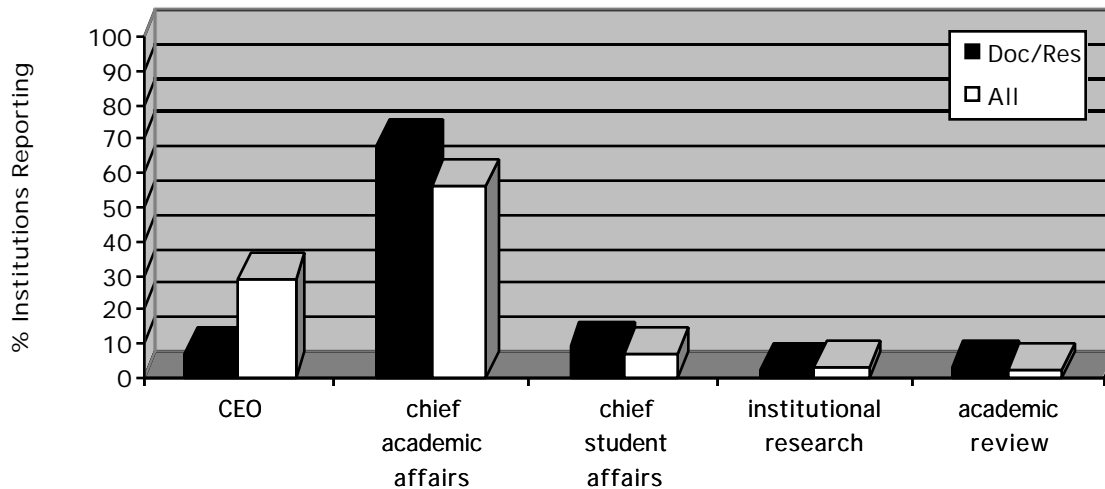
Status of Evaluation of Student Assessment Plan or Process

Institutions were asked whether they have conducted a formal evaluation, an informal evaluation, are currently developing a plan for an evaluation, or are not planning to evaluate their assessment process. The results for doctoral and research institutions and all institutions are depicted in Figure 26.

Figure 26. Status of Student Assessment Evaluation
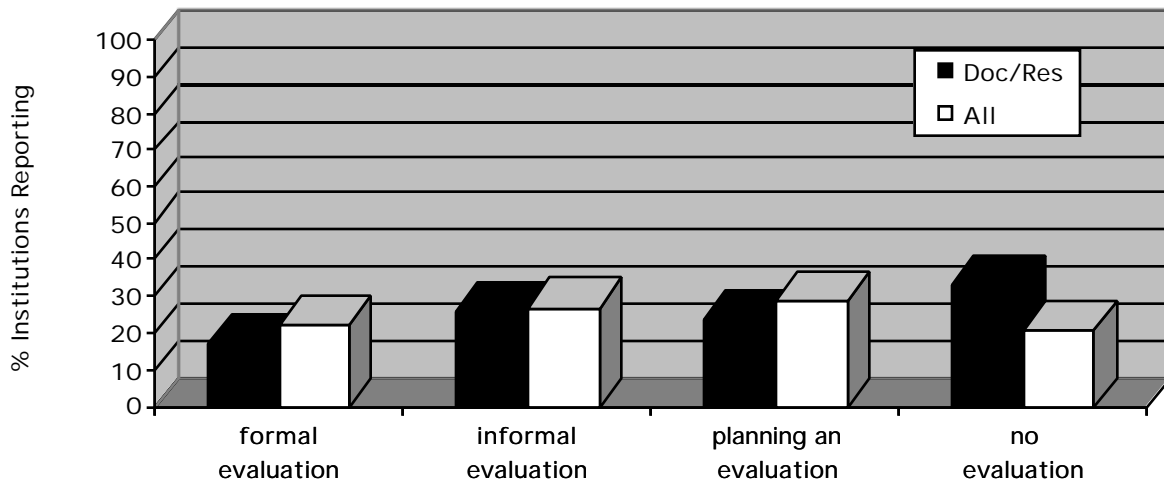
Doctoral and research institutions who have evaluated their assessment process have more often done so informally (26%) than formally (17%). One-quarter are developing evaluation plans (24%). However, doctoral and research universities are more likely than all institutions to be neither evaluating nor planning to evaluate their assessment process (33% of doctoral/research institutions versus 21% of all institutions). The low incidence of actual evaluation and evaluation planning may be partly attributable to the newness of assessment activities among all

postsecondary institutions. It does mean that the majority of doctoral and research universities do not know how well their assessment processes are functioning.

Elements of Student Assessment Evaluation

Those institutions that had formally or informally evaluated their student assessment process were asked which of eight elements were reviewed as part of the evaluation: student assessment plans and policies; structure and responsibility for student assessment; achievement of intended objectives for student assessment; reliability and validity of assessment instruments and methods; quality of data analysis; use of assessment information in institutional decision-making; problems encountered while conducting assessment; and the costs and benefits of student assessment. Results of this question for doctoral and research institutions and all institutions are presented in Figure 27.

Figure 27. Elements of Student Assessment Evaluation
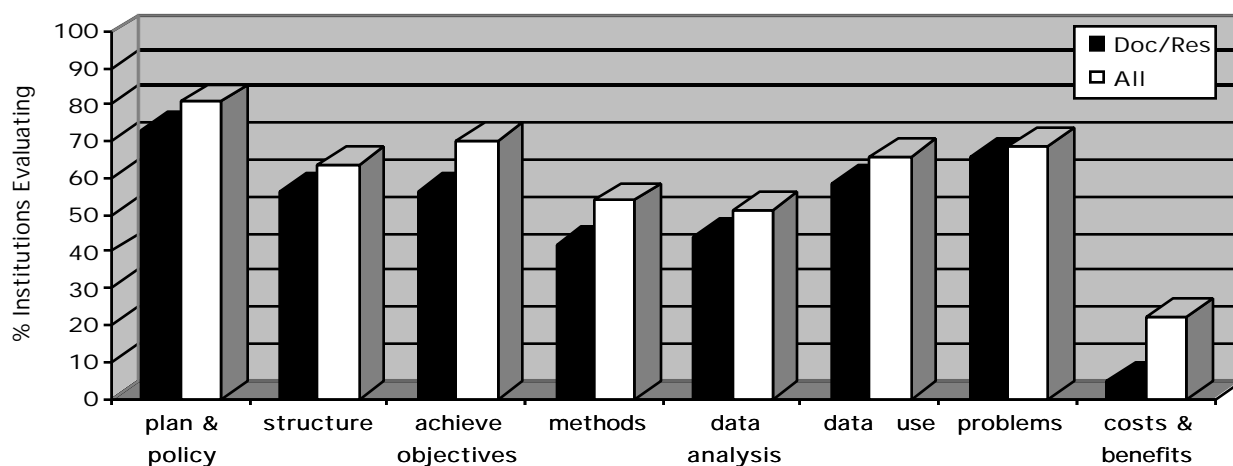
When evaluating their student assessment process, doctoral and research institutions most often focus on the assessment plan itself (73%). A large proportion consider administrative or managerial elements such as problems encountered while conducting assessment (66%), the use of assessment information in institutional decision making (59%), the structure and responsibility for assessment (56%), the achievement of intended objectives (56%), as well as technical aspects of assessment such as instrument reliability and validity (42%) and data analysis quality (44%). Institutions rarely evaluate the comparative costs and benefits of student assessment (5%). Compared to all institutions, doctoral and research institutions are less likely to evaluate whether the assessment process has achieved its intended objectives, assessment instruments or methods, and costs and benefits of assessment.

Summary Observations

The preceding sections have examined various aspects of doctoral and research institutions' organizational and administrative support for student assessment. The overall pattern reveals a student assessment support strategy that is more internally than externally focused in its orientation and a leadership and governance approach that is quite decentralized in nature. Evaluation efforts appear to be still emerging.

The mission statements of doctoral and research universities prioritize undergraduate education although few make explicit mention of assessing student performance or intended

educational outcomes. With the exception of improving faculty instruction, survey responses from doctoral and research institutions suggest their student assessment efforts are more often intended to address internal than external purposes. Although preparing for an institutional accreditation self-study is rated as a very important assessment purpose, doctoral and research universities accord less importance to accreditation and state requirements as assessment purposes than do all institutions.

Considering their use of administrative and governance activities, doctoral and research universities rely on professional development opportunities and, to a lesser extent, offer incentives or rewards as a means of encouraging administrative involvement in student assessment. Faculty and student involvement is promoted through inclusion in governance structures for assessment, although the former occurs to a lesser degree in these institutions than in all institutions. Internal leadership support for student assessment is generally perceived as high. Senior administrators are viewed as the internal constituency most supportive of student assessment, followed by trustees and faculty.

Compared to all institutions in our study, doctoral and research institutions are more likely to take a decentralized approach to assessment plans and policies. This is reflected in the form of institutional policy for student assessment that typically exists — requiring some form of student assessment activity of all academic units but permitting units to develop their own assessment plans and activities. Planning and coordinating responsibility for student assessment is chiefly situated in academic affairs rather than in the chief executive or student affairs offices. Faculty are moderately well represented in all aspects of the student assessment planning process — most often serving on an institution-wide planning group, but less often holding executive responsibility for this group or approving changes in the assessment plan or policy. Oversight of day-to-day student assessment activities is most often assigned to an academic affairs administrator or institutional research personnel, with faculty members less frequently given this responsibility. The individual with operational responsibility most often reports to the chief academic officer.

Evaluation of the student assessment plan and process is not yet a well-developed practice in postsecondary institutions. This is particularly so for doctoral and research universities. Fully one-third of these institutions have neither evaluated nor are planning to evaluate their assessment process. However, most elements of a good evaluation are considered by doctoral and research universities that have formally or informally evaluated their student assessment process.

6. ASSESSMENT MANAGEMENT PRACTICES AND POLICIES

Reports on the existence of specific institutional practices and policies designed to promote student assessment management. Doctoral and research institutions prefer unobtrusive practices and policies such as distributing assessment results and providing access to student performance information, to more obtrusive practices and policies such as using student assessment information in making either budget allocation or faculty evaluation and reward decisions. Compared to all institutions, they make less extensive use of assessment management practices and policies.

A fourth domain in our conceptual framework is that of assessment management practices and policies that provide mechanisms for managing the student assessment process and direct the ways in which student assessment information is used throughout the institution. Assessment management practices and policies are suggested in the literature as powerful means through which institutions can support student assessment and encourage the use of collected assessment information. Conceptual dimensions of assessment management practices and policies such as their comprehensiveness, consistency, and the extent to which they are employed within an institution are expected to influence internal support for student assessment and the likelihood of achieving institutional impacts from assessment information.

Our survey asked about specific institutional practices and policies promoting student assessment management. These items were factor analyzed to create nine comprehensive indices. In this chapter we will present results of these assessment management practice and policy indices rather than of individual items.

Practices for Managing Student Assessment

What kinds of practices do institutions develop to manage and promote their student assessment process? We asked respondents about the existence of a variety of specific institutional practices used to manage the student assessment process in four areas: academic resource allocation, student information systems, internal access to student assessment information, and distribution of assessment reports and studies. Scores for institutions for all specific practices in these four sections are presented in Appendix A. We used factor analysis to reduce these responses to indices of management practices in these four areas. Detailed information on these indices is provided in Appendix B. Briefly, the four indices are:

1. Academic Budget Decisions: whether the institution's academic budget process compares academic units on student performance indicators and allocates resources competitively among them; or rewards them for improvement based on student performance indicators.

2. Computer Support: whether the institution has a computerized student information system which includes student performance indicators; tracks students from application through graduation; and is integrated with faculty, curricular and financial databases.

3. Access to Student Assessment Information: whether assessment information for individual students is available to institutional research, assessment or evaluation professionals; senior academic administrators; department chairs or academic program administrators; student affairs professionals; and faculty advisors.

4. Distribution of Assessment Reports: whether assessment reports are regularly distributed to students, faculty, academic administrators, student affairs professionals, employers, and the general public.

Figure 28 presents mean scores for each of these four indices. Each was originally measured on a different scale. For the purposes of comparison, we have translated each index to a scale of zero to five. Therefore, we can determine which of these practices is more prevalent in doctoral and research institutions and all institutions in our study. Frequencies for specific items included in each index are taken from Appendix A.

Figure 28. Extent of Institutional Use of Assessment Management Practices
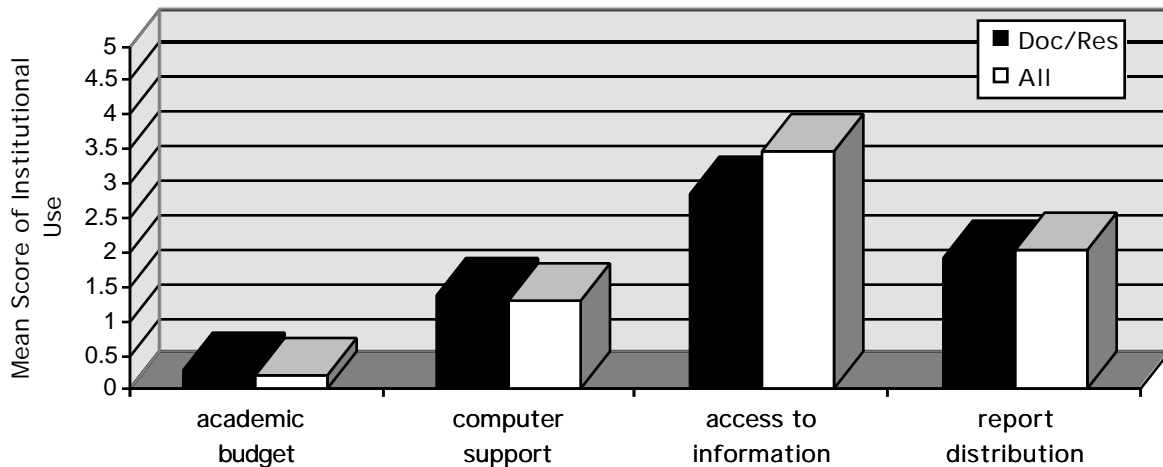
Scale: 0 = institution used no practices in index; 5 = institution used all practices in index

Of these four indices of assessment management practices, doctoral and research institutions are most likely to provide access to assessment information to a number of internal constituents (mean index score of 2.86). For example, one of the items comprising this index is whether this information is accessible to institutional researchers: 69% of doctoral and research institutions in our study report that it is. Moderately high proportions of doctoral and research universities (55% to 62%) report that student assessment information is available to a variety of academic personnel. There is one exception to this pattern of internal access: less than half (44%) of doctoral and research institutions grant such information access to student affairs professionals. Although providing internal access to student assessment information is the most prevalent of the four management practices reported by doctoral and research institutions, they are less likely to provide such access than are all institutions in our study.

The next most frequent student assessment management practice is distributing student assessment reports to six internal and external constituents (mean index score of 1.9). Doctoral and research institutions are most likely to regularly distribute assessment reports to academic administrators (85%) and, to a lesser extent, student affairs professionals (57%) and faculty (50%). Very few regularly distribute such reports to students (18%), employers (6%) or the general public (13%). Compared to all institutions, doctoral and research universities are less likely to distribute assessment reports to faculty (50% of doctoral/research universities versus 67% of all institutions).

In comparison to the above practices, doctoral and research institutions have limited information system capabilities for student assessment (mean index score of 1.37). One of the

items in this index is whether the institution has a student information system that tracks students from application through to graduation: only half (50%) of doctoral and research institutions in our study have such a system. Even fewer (27%) have a computerized information system which includes student performance indicators and almost no doctoral and research universities (6%) have a student assessment information system that is integrated with other institutional databases. Doctoral and research institutions do not report significantly different information system capabilities than all institutions in our study.

Using student assessment information in the budget process to compare and reward academic units is almost a non-existent practice (mean index score of .29). Virtually no doctoral and research universities use student performance indicators as the basis for competitively allocating resources among academic units (1%) or rewarding academic units for performance improvement (5%). Doctoral and research institutions do not differ appreciably from all institutions in their use of these resource allocation practices.

Policies Supporting and Promoting the Use of Student Assessment

While the previous section focused on practices used to manage student assessment, this section focuses on the policies used to both support student assessment and guide how the resulting data are incorporated into other institutional processes. We asked survey respondents about the extent to which they have developed a variety of specific institutional policies to support and promote student assessment in five areas: student involvement in assessment; professional development for faculty and academic affairs administrators; training for student affairs personnel; faculty evaluation and rewards; and academic planning and review processes. Scores for institutions for all specific policies are presented in Appendix A. Factor analysis produced five indices of student assessment policies. Detailed information on these indices is provided in Appendix B. Briefly, these five indices are:

1. Student Involvement: extent to which the institution requires students to participate in student assessment activities, provides students with information on the purpose and uses of student assessment, and provides individual feedback regarding student performance results.

2. Professional Development: extent to which the institution provides funds for faculty to attend assessment conferences, faculty workshops or consultative services on student assessment, assistance to faculty to improve use of student assessment, and workshops/seminars for academic administrators on assessment.

3. Student Affairs Training: extent to which the institution requires student affairs staff to receive training on assessment and provides student assessment workshops for student affairs administrators.

4. Faculty Evaluation: extent to which the institution considers evidence of student performance in faculty evaluation for promotion; incorporates evidence of student performance into faculty evaluation for salary and merit; considers faculty scholarship on assessment in promotion, tenure or salary reviews; considers faculty participation in assessment in promotion, tenure or salary reviews; and recognizes faculty for effective use of assessment.

5. Academic Planning and Review: extent to which the institution incorporates student performance data into academic department or undergraduate program planning or review; general education or core curriculum review; course-level review and development; and review and planning for student academic support services.

These indices summarize the extent to which these policies exist at institutions based on a five point scale: 1 = not done at all; 2 = done in a few departments; 3 = done in some departments;

4 = done in many departments; 5 = done in most departments. Figure 29 presents the mean scores for these five indices for doctoral and research institutions and all institutions in our study. Mean scores for items within each index are taken from Appendix A.

Figure 29. Extent of Institutional Use of Assessment Management Policies
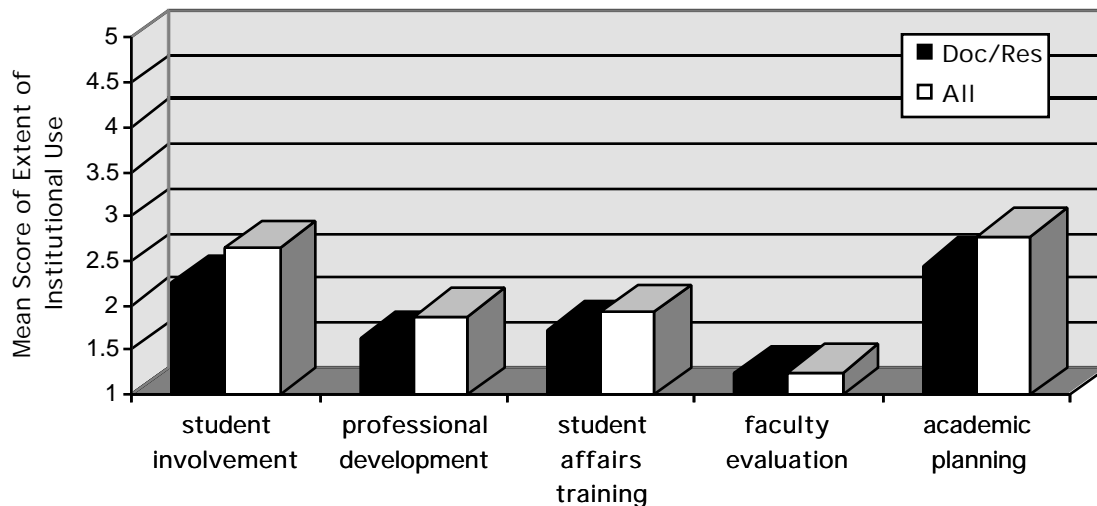
1=not done at all; 2=done in a few depts; 3=done in some depts; 4=done in many depts; 5=done in most depts.

Of the five indices of student assessment policies presented in Figure 29, doctoral and research institutions are most likely to incorporate student assessment data into academic planning and review processes (mean index score of 2.45). They make fairly extensive use of student assessment data in planning and review processes for academic departments or undergraduate programs (mean item score of 3.33) and general education or core curriculum (mean item score of 3.10) — doing so in some to many departments. They make slightly less use of this information in processes for reviewing and planning courses (mean item score of 2.92) and student academic support services (mean item score of 2.77). Compared to all institutions in our study, doctoral and research institutions are not as likely to use assessment information in the academic planning and review processes.

Doctoral and research institutions make moderate use of policies encouraging student involvement in assessment activities (mean index score of 2.26). Institutional scores for specific policies comprising this index reveal that, on average, some to many departments require students to participate in assessment activities (mean item score of 3.15) and provide students with information regarding the purposes and uses of student assessment (mean item score of 3.11). A few to some departments provide students with individual feedback regarding their assessment results (mean item score of 2.62) but only a few departments provide incentives as a means of encouraging student involvement in assessment activities (mean item score of 1.85). Doctoral and research institutions make less extensive use of policies promoting student involvement in assessment than do all institutions in our study.

Doctoral and research institutions are less likely to have policies on professional development for student assessment. A few departments provide assessment-related professional development for student affairs staff or administrators (mean index score of 1.73). Policies regarding professional development for faculty and academic administrators are even less prevalent (mean index score of 1.63). A few to some departments offer workshops or seminars on using student assessment information to their faculty (mean item score of 2.65) and academic

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administrators (mean item score of 2.23) or provide funds for faculty to attend assessment conferences (mean item score of 2.37). They are less likely to encourage faculty use of assessment information by providing assistance such as paid leaves or course reduction (mean item score of 1.88) or to require faculty to receive training on student assessment (1.66). Compared to all institutions, doctoral and research institutions make less extensive use of professional development policies to support their student assessment efforts.

Many departments within doctoral and research institutions report that they encourage their faculty to assess student learning in classes (mean item score of 3.35). However, respondents report that a few departments consider evidence of student performance in decisions concerning faculty evaluation for promotion (mean item score of 1.74) or annual salary and merit increases (mean item score of 1.69). They are slightly more likely to consider faculty scholarship on assessment (mean item score of 2.10) and participation in assessment (mean item score of 1.79) in evaluation decisions. A few departments publicly recognize faculty members who have made effective use of student assessment (mean item score of 1.48) or consider experience in student assessment when hiring faculty (mean item score of 1.42). But on the whole, like all institutions in our survey, doctoral and research universities do not link faculty evaluation and reward policies to student assessment (mean index score of 1.23).

Summary Observations

In the previous section we concluded that patterns of organizational and administrative support for student assessment are decentralized within doctoral and research institutions, more often directed toward addressing internal than external purposes, and that responsibility and coordination for student assessment is typically positioned within academic affairs. Findings regarding the use of assessment management practices and policies are consistent with these patterns.

Most doctoral and research institutions permit institutional researchers and a variety of academic personnel access to assessment information on individual students. Conceivably, providing this information access should assist faculty and academic administrators in advising or intervening with students as appropriate. Such access is less often extended to student affairs personnel. Assessment information distribution is most often intended for internal rather than external purposes, and more often for academic administrators than for other internal constituencies. While half of doctoral and research institutions can track their students from entry to graduation, comparatively fewer have merged assessment data within their information systems or can integrate assessment data with other institutional databases. This may constrain the ability of doctoral and research institutions to systematically analyze student assessment data and, especially, to examine how student performance is related to aspects of students' educational experiences. There is very little use of student assessment information in determining resource allocations among academic units.

Doctoral and research institutions use student assessment information in academic planning and review processes but less often incorporate this information in planning for academic support services. Some departments have policies intended to encourage student involvement in assessment activities. While many departments report that they encourage their faculty members to assess student learning in their classes, few provide professional development support for student assessment and even fewer include assessment-related criteria within their faculty evaluation and reward policies.

Like all institutions in our study, doctoral and research universities rely on unobtrusive practices and policies to promote student assessment. That is, they are more likely to provide access to student assessment information and to use this information in academic planning than

they are to adopt more contentious policies such as evaluating and rewarding academic programs or faculty members on the basis of assessment-related indicators.

Compared to all institutions, doctoral and research universities make less extensive use of assessment management practices and policies. This is consistent with our finding in the previous section that doctoral and research universities generally adopt a decentralized approach to organizing and administering student assessment. While some departments may establish specific practices or policies to promote student assessment, it is uncommon for these universities to enact such practices and policies throughout the institution.

7. USES AND IMPACTS OF STUDENT ASSESSMENT

Explores two important questions regarding how institutions use student assessment information in decision-making and the impact it has on institutions. Doctoral and research institutions are not using student assessment information to any great degree in making academic decisions and report that student assessment has had little impact on either their internal processes or their external relationships.

As noted in our introduction, effective student assessment processes contribute to improvements in institutional and student performance. Consequently, two important questions in our research are: 1) how have institutions used student assessment information and 2) what impact has student assessment information had on institutions?

From the literature we identified and focused on two critical dimensions: the use of student assessment information in academic decision making, and the internal and external impacts on the institution that have resulted from student assessment. Our survey included ten academic decisions and fourteen institutional impacts. Survey respondents used a four-point scale to indicate the extent to which student assessment information had influenced these academic decisions in the institution (1 = no action or influence unknown; 2 = action taken, data not influential; 3 = action taken, data somewhat influential; and 4 = action taken, data very influential). Survey respondents also used a four-point scale to indicate the impact that student assessment information has had on the internal and external items indicating institutional performance (1 = not monitored, do not know; 2 = monitored, negative impact; 3 = monitored, no known impact; 4 = monitored, positive impact). Institutions' scores for each use and impact item are presented in Appendix A and details of the indices are presented in Appendix B. Factor analysis clustered these individual items into five indices of assessment uses and impacts, two reflecting assessment information uses in academic decisions and three reflecting impacts of student assessment on the institution. Briefly, the five indices are:

1. Educational Decisions: the extent to which student assessment information has been used to revise undergraduate academic mission or goals; design or reorganize academic programs or majors; design or reorganize student affairs units; allocate resources to academic units; modify student assessment plans, policies, or processes; modify general education curriculum; modify student out-of-class learning experiences; create or modify distance learning initiatives; modify teaching methods; and modify student academic support services.

2. Faculty Decisions: the extent to which student assessment information has been used to decide faculty promotion and tenure; and faculty salary increases or rewards.

3. Faculty Impacts: whether student assessment information has stimulated campus discussions of undergraduate education; contributed to faculty satisfaction; contributed to faculty interest in teaching; and led to changes in teaching methods used.

4. Student Impacts: whether student assessment information has affected students' satisfaction; retention or graduation rates; grade performance; and achievement on external examinations.

5. External Impacts: whether student assessment information has affected student application or acceptance rates; allocation of state funding; evaluation from regional accreditation agency; private fund-raising results; success on grant applications; communications with external constituents; and institutional reputation or image.

Figure 30 presents the means for these five indices for doctoral and research institutions and all institutions. Mean scores for individual items comprising each index are taken from Appendix A.

Figure 30. Institutional Uses and Impacts of Student Assessment Information
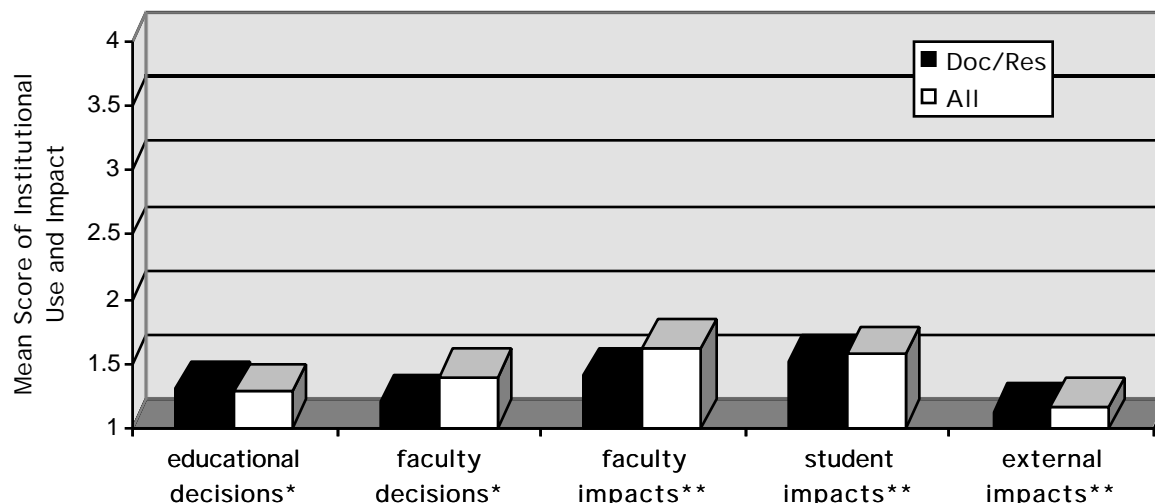
*Use scale: 1=no action or influence unknown, 2=action taken, data not influential; 3=action taken, data somewhat influential; 4=action taken, data very influential.
**Impact scale: 1=not monitored, do not know; 2=monitored, negative impact; 3=monitored, no known impact; 4=monitored, positive impact.

Uses in Academic Decisions

As Figure 30 shows, student assessment information has had limited influence on educational decisions (mean index score of 1.30) within doctoral and research institutions and even less on faculty-related decisions (mean index score of 1.20). A comparison of institutions' mean scores for specific items comprising each of these indices provides more detail about the uses made of assessment information.

Concerning individual items within the educational decisions index, doctoral and research universities have most often used student assessment information to revise student academic support services (mean item score of 2.62) and student assessment plans or processes (mean item score of 2.41), to design or reorganize academic programs or majors (mean item score of 2.35) and to modify teaching methods (mean item score of 2.34) and general education curriculum (mean item score of 2.30). These mean scores indicate assessment information has been somewhat influential in these decisions. Student assessment information is least likely to have influenced decisions concerning distance learning initiatives (mean item score of 1.58), resource allocation to academic units (mean item score of 1.62), and the undergraduate academic mission (mean item score of 1.70).

More than two-thirds of respondents from doctoral and research institutions are unaware of the influence of assessment information on decisions concerning faculty promotion and tenure (72%) and faculty salary increases or rewards (72%), the individual items comprising the faculty decisions index. For the most part, doctoral and research institutions report that student assessment information has had no influence on decisions regarding faculty promotion and tenure (mean item score of 1.34) or faculty salary increases or rewards (mean item score of 1.33).

Compared to all institutions, doctoral and research institutions report less influence of student assessment information on educational decisions and faculty decisions although differences are not large. Overall, assessment information appears to have had limited influence on institutional decision making.

Institutional Impacts

Figure 30 also displays the mean score for student assessment impacts on institutions' faculty, students and external relationships. Doctoral and research institutions are slightly more likely to report student assessment information has affected indicators of faculty (mean index score of 1.41) and student (mean index score of 1.51) performance than external indicators of institutional performance (mean index score of 1.13). Again, a comparison of institutions' mean scores for specific items comprising these three indices provides more detail about the impact of student assessment information.

Within the faculty impacts index, doctoral and research institutions are most likely to attribute changes in faculty teaching methods (mean item score of 2.29) and more frequent discussions of undergraduate education (mean item score of 2.13) to student assessment information. They have more often documented positive impacts from assessment information on student retention or graduation rates (mean score of 2.04) than on student satisfaction (mean item score of 1.93), performance on external examinations (mean item score of 1.85) or grades (mean item score of 1.80).

Institutions are least likely to report that student assessment has had an impact on external measures of institutional performance. With one exception, mean scores of individual items comprising this index indicate that most doctoral and research institutions have not monitored external impacts of their student assessment efforts (mean item scores range from 1.42 to 1.76). The exception to this pattern concerns regional accreditation evaluations: doctoral and research universities are more likely to report a positive impact from student assessment information on this indicator (mean item score of 2.50) than any other individual measure of external performance considered in the survey.

Overall, as the mean scores presented in Figure 30 clearly show, most institutions participating in our study, doctoral and research universities and all institutions alike, have not monitored the impact of student assessment on internal and external indicators of institutional performance. Doctoral and research institutions do not differ appreciably from all institutions in our study in their reports of student assessment impacts.

Summary Observations

To date, doctoral and research institutions have made limited use of student assessment information for academic decisions. Many respondents are unaware of whether assessment information has been influential or not in shaping institutional decisions. When used, assessment information is more likely to inform educational decisions concerning academic and assessment planning than decisions regarding faculty evaluation and rewards.

Similarly, very few institutions have monitored the impact of student assessment information on faculty and student performance and even fewer have done so for external indicators of institutional performance. When monitoring has been undertaken, doctoral and research institutions most often report assessment information has affected regional accreditation evaluations, led to changes in teaching methods used by faculty and stimulated discussions of undergraduate education. These findings indicate that student assessment has not yet become entrenched in doctoral and research institutions.

8. KEY RELATIONSHIPS

Institutional factors, such as conducting assessment for internal improvement purposes, and external factors such as state requirements and regional accreditation membership influence the type and extent of student assessment data collected by doctoral and research institutions. Institutions are more likely to report using student assessment information in academic decisions if they make extensive use of a variety of assessment management practices and policies to promote their assessment efforts, conduct studies of collected assessment data and use institution-wide support strategies. A number of institutional choices and activities are also strong determinants of achieving positive impacts from assessment information. Doctoral and Research institutions that analyze collected assessment data, sponsor institution-wide administrative and governance activities and use assessment management practices and policies to support assessment efforts report greater impacts from student assessment on faculty and student performance and external relationships. Private institutions are less likely to use or be impacted by assessment information. External forces have little influence on assessment uses and impacts.

In the previous sections we have examined external influences, institutional approaches, organizational and administrative support, management practices and policies, and institutional uses and impacts related to student assessment. But even more important is understanding how these domains influence the likelihood that student assessment will make a difference in institutional performance. That is, *which* external influences, institutional approaches to assessment, organizational and administrative support patterns, and assessment management practices and policies are most likely to promote the use and positive impacts of student assessment information?

In this section, we examine three key relationships. First, we discuss how external influences — the state and regional accrediting agencies — influence an institution's approach to student assessment. Then we examine how external influences and institutional characteristics, approaches, support patterns, and management practices and polices affect an institution's use of student assessment data. Finally, we examine how these domains lead to positive institutional impacts from student assessment. The analyses in this section use the indices discussed in previous sections. For detailed information on the indices, please refer to Appendix B.

External and Internal Influences on Student Assessment Approaches

Are external forces more influential than internal forces in determining how doctoral and research institutions approach student assessment? We used three multiple regression models to compare the influences of state characteristics related to student assessment, regional accreditation membership, and institution-wide support patterns for student assessment on the extent of an institution's use of three approaches to student assessment: cognitive assessment (the extent to which data are collected on measures of students' cognitive performance); affective assessment (the extent to which data are collected on measures of students' affective development or performance); and post-college assessment (the extent to which data are collected on measures of students' post-enrollment performance). In these three models, the predictor variables stem from three domains: state assessment approach, accrediting region, and institution-wide support. The predictor variables are shown in Table 6 and defined in detail in Appendix B. These analysis were restricted to public comprehensive institutions.

Predictors of Cognitive Assessment

Which of the variables has the most influence on whether a doctoral and research institution will assess students' cognitive abilities? The first two columns of Table 6 show how institutional, state and regional accrediting influences are related to the extent to which these institutions collect data on students' cognitive performance. This model predicted a moderate proportion of the variance in institutions' collection of cognitive data, accounting for 22% of the variance.

Table 6. The Influence of Institution-Wide Support, State Assessment Approach, and Accrediting Region on the Extent of Institutional Approach to Student Assessment for Public Doctoral and Research Institutions

	Extent of Institutional Approach					
	Cognitive Assessment		Affective Assessment		Post-College Assessment	
	Beta	R^2	Beta	R^2	Beta	R^2
R^2	**.22****		**.21****		**.06***	
Institution-Wide Support						
Mission emphasis						
Administrative & governance activities			.24*	.06		
Administrator & faculty support						
Conduct for internal improvement	.24*	.06	.29**	.11	.25*	.06
Conduct for state						
Conduct for accreditation						
State Assessment Approach						
Authority structure						
Form of state assessment initiative			.21*	.04		
Common indicators/outcomes	-.25**	.06				
Accrediting Region						
Middle States						
North Central	.24*	.10				
New England						
Northwest***						
Southern						
Western						

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

Only three strong predictors emerged, one each from the domains of institutional, state and accreditation variables considered in this model. Of these, regional accreditation membership is the strongest influence. Institutions in the North Central accrediting region are more likely to assess students' cognitive abilities than institutions belonging to the other accrediting regions (accounts for 10% of the variance). This relationship may reflect variations in the length of time different accrediting regions have included student assessment criteria within their reporting requirements for institutions as well as differences in the specific emphases of those criteria.

Doctoral and research universities that view internal institutional improvement as an important purpose for conducting student assessment collect the most extensive cognitive data (accounts for 6% of the variance). This finding lends support to the importance of engaging in student assessment for internal purposes as a means of promoting assessment efforts.

Finally, doctoral and research universities with state mandates requiring the use of common student assessment indicators across institutions report less extensive collection of cognitive data (accounts for 6% of the variance). Interpretation of this relationship is speculative. One possibility is that state-level agents often do not require indicators related to cognitive competencies, hence institutions do not focus their efforts on collecting these data.

Predictors of Affective Assessment

The middle two columns of Table 6 show the relationship of variables in the institutional, state and regional accrediting domains to the extent to which doctoral and research institutions collect data on students' affective development. The variables in this model work reasonably well as predictors of affective assessment: the total model explains 21% of the variance in affective assessment efforts among doctoral and research institutions. Once again, only three variables are statistically significant predictors in this model.

The two strongest predictors come from the domain of institution-wide support. Doctoral and research institutions that conduct assessment for internal improvement purposes are likely to collect more extensive affective data than those for whom this is a less important reason for engaging in assessment (accounts for 11% of variance). The number of institution-wide administrative and governance activities used to promote student assessment is also positively related to collecting affective data (accounts for 6% of the variance).

One state-related variable operates as a strong predictor. The strength of the state-level assessment initiative is positively related to collecting affective data (accounts for 6% of the variance). That is, doctoral and research universities in states whose assessment initiatives are guided by statute *and* policy, or by statute only collect more extensive affective data than those with state-level assessment initiatives in the form of policy only or with no state plan for assessment. This suggests that for these institutions the authority of the state-level initiative does influence their assessment efforts.

Predictors of Post-College Assessment

The final two columns of Table 6 show the relationship of variables in the institutional, state and regional accrediting domains to the extent to which doctoral and research institutions collect data from their former students (post-college assessment). The variables in this model do not work well as predictors of post-college assessment: the model explains only 6% of the variance in these assessment efforts among doctoral and research universities. Only one variable operates as a significant predictor. Conducting assessment for internal improvement is predictive of the extent to which doctoral and research institutions collect post-college data.

The poor ability of this model to predict institutions' collection of post-college assessment data is partly attributable to our earlier finding that few doctoral and research institutions have mounted extensive efforts to collect these data. This finding also suggests that institutions' decisions to collect post-college data from their students are influenced by variables not included in this model.

Institution-wide support strategies, in particular, conducting assessment for internal improvement, are strong predictors in all three student assessment approach models. This suggests that institutions themselves can influence the extent to which they collect various types of

assessment data. Characteristics of state-level initiatives for student assessment are also related to the extensiveness of data collection efforts. Doctoral and research institutions are distinctive among institutional types in this respect. This observed relationship between state variables and institutional data collection is somewhat unexpected, both in terms of previous research suggesting that doctoral and research institutions are unresponsive to state-level efforts (Jemmott, 1992/1993; Ory & Parker, 1989; Scott, 1991) and findings reported earlier in this report (for example, that state requirements are a comparatively unimportant source of influence on their decisions to engage in student assessment). Finally, regional accreditation membership figures prominently as an influence in collecting cognitive but not affective or post-college data.

Influences on Using Assessment Information in Academic Decisions

How do doctoral and research institutions effectively promote and support the use of student assessment information in academic decision making? Within the domain of academic decision making, we created two indices reflecting the use of student assessment information: educational decision making and faculty decision making (these indices are described in detail in Appendix B and section seven). We used multiple regression to examine the influence of external forces, institutional size, institutional approach to student assessment, institution-wide support, and assessment management practices and policies on using student assessment information in educational and faculty decisions. The predictor variables in this model are defined in detail in Appendix B. Table 7 presents the results of these regression models for doctoral and research institutions.

Influences on the Use of Assessment Information in Educational Decisions

The educational decisions model works very well for doctoral and research universities, explaining almost half (47%) of the variance in the influence of student assessment data on educational decisions. Significant predictor variables come from the four institutional domains: institutional characteristics, approach to assessment, institution-wide support, and assessment management practices and policies.

Of these, the domain of assessment management practices and policies contributes the strongest influences. The extent to which doctoral and research institutions have policies providing professional development on student assessment for faculty and academic administrators has the strongest relationship to using assessment data in educational decisions (accounts for 19% of variance) followed by policies linking student assessment to faculty evaluation and rewards (accounts for 11% of variance), and policies encouraging student involvement in assessment activities (accounts for 3% of variance). As findings in section six showed, doctoral and research institutions report moderately extensive use of student involvement policies, but made comparatively little use of policies for professional development and rarely considered assessment-related criteria in faculty evaluation decisions. The use of these assessment management policies and of assessment information in educational decisions are both indicative of a strong internal commitment to student assessment.

One variable from the assessment approach domain functions as a very strong predictor. The number of studies conducted of the relationship of student performance to institutional experiences is positively related to using assessment data to make educational decisions (accounts for 7% of variance). This is a logical relationship; conducting such studies should provide institutions with relevant data to consider in decisions concerning academic planning, instructional practices and academic support services — all decisions reflected within the educational decisions index.

Table 7. The Influence of External Factors, Institutional Context, Institutional Approach, Institution-Wide Support, and Management Practices and Policies on Using Student Assessment Information in Educational and Faculty Decisions for Doctoral and Research Institutions

	Educational Decisions Beta	R^2	Faculty Decisions Beta	R^2
Adjusted R^2	.47**		.04**	
External Influences				
Middle States accrediting region				
North Central accrediting region				
New England accrediting region				
Southern accrediting region				
Western accrediting region				
State initiative for student assessment				
State approach to student assessment				
Accrediting influence				
Institutional Context				
Control (1 = public, 2 = private)	-.15*	.02		
Enrollment				
Institutional Approach to Student Assessment				
Cognitive assessment				
Affective assessment				
Post-college assessment				
Number of instruments				
Student-centered methods				
External methods				
Total assessment studies	.22**	.07		
Institution-Wide Support for Student Assessment				
Mission emphasis	-.16*	.02		
Conduct for internal improvement	.16*	.02		
Conduct for state				
Conduct for accreditation				
Administrative & governance activities				
Administrator & faculty support	.14*	.02		
Formal centralized policy				
Institution-wide planning group				
Conducted evaluation of assessment process				
Assessment Management Practices and Policies				
Academic budget decisions				
Computer support				
Access to information				
Distribution of reports				
Student involvement	.17*	.03	.21*	.04
Professional development	.28**	.19		
Student affairs training				
Faculty evaluation[1]	.26**	.11	n/inc	
Academic planning and review[2]	n/inc			

*$p < .05$; **$p < .01$
[1]The factor "faculty evaluation" was not entered into the regression model predicting use of student assessment information in faculty decisions as many of the items comprising these two factors were similar.
[2]The factor "academic planning and review" was not entered into the regression model predicting use of student assessment information in educational decisions as many of the items comprising these two factors were similar.

Three institution-wide support variables are predictive of using assessment information in educational decisions; each accounts for 2% of the variance in educational decision uses. Conducting student assessment for internal improvement purposes and the perceived degree of administrator and faculty support for student assessment are positively related to using assessment information in educational decisions. Conversely, having an emphasis on undergraduate education and student assessment in the academic mission is negatively associated with this use. The relationships among the positive predictors in this domain and using assessment information in educational decisions are straightforward. Doctoral and research institutions that engage in assessment with the intent of improving institutional performance, and those that have the support of faculty and administrators for assessment, are more likely to use assessment information to shape academic decision making. Since this research focused on undergraduate student assessment, information collected from these assessment efforts may have little effect on these primarily graduate education-oriented institutions' internal decisions. This may explain the negative relationship between mission emphasis and educational decision uses of assessment information.

Finally, private doctoral and research institutions do not use assessment information in educational decisions to the same extent as their public counterparts (accounts for 2% of the variance). No external influence variables are significant predictors of educational decisions, suggesting that this use of assessment information is primarily determined by internal influences.

Influences on the Use of Assessment Information in Faculty Decisions

The use of assessment information in faculty decisions was not well explained by this model. Only one index emerged as a statistically significant predictor. The extent of policies encouraging student involvement in assessment activities accounted for 4% of the variance in this outcome measure. This result is not surprising, given that doctoral and research institutions rarely use student assessment information to make decisions concerning faculty promotion, tenure, salary or merit increases (refer to section seven).

Influences of Student Assessment Information on Internal and External Institutional Performance

How does the use of student assessment information affect various internal and external institutional performance dimensions? In our survey, doctoral and research institutions reported whether, and the extent to which, student assessment has affected various aspects of faculty and student performance and relationships with their external environment (these indices are described in Appendix B and section seven). Using factor analysis, we created two indices of internal impacts from assessment: faculty impacts and student impacts. All of the items in the external impact section of the survey factored into one "external impact" index. We used multiple regression to examine the relationship of external forces, institutional approach to student assessment, institution-wide support patterns, and assessment management practices and policies to institutional impacts of student assessment information. We ran separate regression models for each of the three impacts. The predictor variables in these models are defined in detail in Appendix B. Table 8 presents the results of the three regression models for doctoral and research institutions.

Predictors of Faculty Impacts

What variables predict whether a doctoral or research university's student assessment efforts will have an impact on its faculty members' attitudes and activities? The first two columns of Table 8 show statistically significant predictors of faculty impacts. Five variables, all from domains of institutional variables, explained 34% of the variance in achieving faculty impacts from student assessment, the best fit for this model among all types of institutions.

Table 8. The Influence of External Factors, Institutional Context, Institutional Approach, Institution-Wide Support, and Management Practices and Policies on Faculty, Student, and External Impacts for Doctoral and Research Institutions

	Faculty Impacts		Student Impacts		External Impacts	
	Beta	R^2	Beta	R^2	Beta	R^2
Adjusted R^2	**.34**		**.36**		**.26**	
Adjusted R² sig	.34**		.36**		.26**	
External Influences						
Middle States accrediting region						
North Central accrediting region						
New England accrediting region						
Southern accrediting region						
Western accrediting region						
State initiative for student assessment						
State approach to student assessment						
Accrediting influence						
Institutional Context						
Control (1 = public, 2 = private)	-.15*	.05	-.20**	.03	-.23**	.05
Enrollment						
Institutional Approach to Student Assessment						
Cognitive assessment						
Affective assessment						
Post-college assessment	.17*	.05				
Number of instruments						
Student-centered methods						
External methods						
Total assessment studies					.35**	.16
Institution-Wide Support for Student Assessment						
Mission emphasis						
Conduct for internal improvement						
Conduct for state						
Conduct for accreditation						
Administrative & governance activities	.26**	.12	.20**	.03		
Administrator & faculty support						
Formal centralized policy						
Institution-wide planning group						
Conducted evaluation of assessment process						
Assessment Management Practices and Policies						
Budget decisions						
Computer support						
Access to information			.18*	.03		
Distribution of reports	.19*	.06	.16*	.05		
Student involvement						
Professional development	.25**	.07				
Student affairs training						
Faculty evaluation			.42**	.22	.25**	.05
Academic planning and review						

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

Four variables/indices were strong positive predictors of faculty impacts. The strongest of these was from the institution-wide support domain — the number of institution-wide administrative and governance activities undertaken to promote student assessment (explains 12% of the variance). For faculty, these activities may signal the degree to which institutional leaders support and value undergraduate student assessment.

Two assessment management practices and policies are also important determinants of whether an institution's assessment activities will affect its faculty. Doctoral and research institutions that offer professional development on student assessment to their faculty and academic administrators, and that distribute summary reports of assessment information to a wide array of internal and external personnel are more likely to report their assessment activities have impacted faculty (respectively account for 7% and 6% of variance).

One assessment approach variable positively predicts whether faculty impacts will result from assessment information: the extent to which the institution collects assessment data from former students (accounts for 5% of variance). These data may provide faculty with important information concerning the relevance of their curricula or the effectiveness of various teaching practices and learning experiences employed.

Conversely, being a private rather than a public doctoral and research institution is the only significant negative predictor of positive faculty impacts from student assessment (accounts for 5% of the variance). This suggests that faculty within private institutions are less responsive to information stemming from student assessment efforts.

Predictors of Student Impacts

What variables predict whether a doctoral or research university's student assessment efforts will have an impact on the performance of its students? The middle two columns of Table 8 suggest that institutional choices and activities from the domains of institutional characteristics, assessment approach, and assessment management practices and policies influence the likelihood of achieving student impacts from assessment. This model works quite well, explaining 36% of the variance in student impacts of student assessment.

The domain of assessment management practices and policies contributes the strongest and most predictors of student impacts from assessment. The strongest of these is using assessment-related criteria in faculty evaluation policies (explains 22% of the variance). This finding underlines the potential importance of this management policy as a lever to enhance assessment information uses and impacts within doctoral and research institutions. Other significant predictors are the breadth of distribution of assessment reports (explains 5% of the variance) and provision of internal access to assessment information (explains 3% of the variance).

From the approach domain, the number of institution-wide administrative and governance activities used to promote assessment is positively associated with achieving student impacts from assessment information (accounts for 3% of the variance). As noted in the discussion of faculty impacts above, these activities may provide an important signal of the importance that institutional leaders accord to student assessment.

And again, being a privately controlled institution is the only significant negative predictor of student impacts (accounts for 3% of the variance). Private doctoral and research institutions are not subject to the same degree of scrutiny from state officials as public institutions. Thus they may feel less pressure to monitor student impacts of their assessment efforts.

Predictors of External Impacts

Lastly, what variables predict whether a doctoral or research institution's student assessment efforts will have an impact on its relationships with the external environment? The final two columns of Table 8 show the statistically significant predictors of external impacts. Only three statistically significant predictors emerge in this model, but together, they account for 26% of the variance in achieving external impacts from student assessment.

The strongest predictor comes from the domain of institutional approach to assessment. Doctoral and research institutions that conduct studies of the relationship between students' performance to their experiences with the institution are likely to report that their assessment activities have impacted their external relationships (explains 16% of variance). This finding reinforces the view of assessment scholars that institutions must do more than simply collect assessment data if student assessment is to promote institutional improvement. Doctoral and research universities that conduct such studies will be more aware of changes in student performance and of the institution's role in facilitating student performance. Presumably, these institutions will be better able to report positive findings regarding student performance to their external constituencies.

One assessment management policy is significantly predictive of achieving external impacts from student assessment. The extent to which assessment-related criteria are used in faculty evaluation and reward policies accounts for 5% of the variance in external impacts. The existence of such policies may demonstrate an institution's commitment to undergraduate teaching and assessment, with subsequent positive effects on external indicators of performance such as state funding allocation, student applications, and institutional reputation.

And once again, being a privately controlled doctoral or research university is a negative predictor of external impacts from assessment information. Compared to their public counterparts, private doctoral and research institutions often enjoy higher institutional prestige, make less use of state funds, and are able to be more selective in their admissions processes. This may account for the negative association between private institutional control and positive external impacts from assessment.

Summary Observations

External forces do influence doctoral and research institutions' approaches to student assessment. Membership within specific accrediting regions is associated with varying levels of engagement in collecting cognitive data. And doctoral and research universities are unique among types of postsecondary institutions in terms of the relationships observed between the form and content of state-level assessment initiatives policies and the type and extent of assessment data these institutions collect. But institutional choices and activities are also influential. One internal strategy is particularly important in determining the extent of student data collected: conducting assessment for internal improvement purposes.

If doctoral and research institutions are to benefit from engaging in student assessment, they should not only be collecting student data but also using these data to make academic decisions. Institutions that use student assessment data for academic planning, instructional development and other educational decisions tend to commit to their assessment process—evidenced by the strategies of studying the relationship between student performance and institutional experiences, engaging in student assessment for internal purposes, and achieving a positive degree of support for assessment from administrators and faculty. These institutions also make more extensive use of assessment management practices and policies to support their assessment efforts; most notably, policies that provide professional development for faculty and academic administrators, link assessment-related criteria with faculty evaluation decisions, and

encourage student involvement in assessment. Doctoral and research institutions rarely use assessment information in faculty-related decisions; we can say little about the predictors of this assessment use. External factors do not play a significant role in either of these uses of assessment data.

If engaging in student assessment is truly making a difference in doctoral and research institutions, they should report that it is having an impact on their internal performance and external relations. A number of institutional choices and efforts are strong predictors of achieving impacts from assessment information. Overall, the domain of assessment management practices and policies wields the most influence on achieving impacts from assessment information. Doctoral and research institutions may increase the likelihood of achieving positive impacts on their faculty, students, and relationships with external constituencies if they include assessment-related criteria in decisions concerning faculty evaluation and rewards, widely distribute summary reports of assessment information, offer professional development on assessment to faculty and academic administrators, and provide broad internal access to assessment information. These findings support the views of scholars such as Ewell (1984, 1987a, 1987b, 1987c, 1988a, 1988b, 1997) and Banta (Banta & Associates, 1993; Banta et al., 1996) who assert that management practices and policies are powerful institutional levers for promoting the impact of student assessment in colleges and universities. Doctoral and research institutions reporting positive impacts from assessment conduct studies of the relationship between student performance and various aspects of their institutional experiences, demonstrate leadership support for student assessment by enacting institution-wide activities to promote assessment, and collect more extensive data on the post-enrollment performance of former students.

One consistently negative predictor of achieving positive impacts from assessment information must be noted. Private doctoral and research institutions are less likely to monitor whether, and how, assessment information has affected the performance of their faculty and students, and their relationship with external constituents. In addition, no variables related to state-level assessment initiatives or regional accreditation membership appear to significantly influence assessment impacts. Together, these findings emphasize the need for administrators and faculty leaders *within* doctoral and research institutions to develop strategies and take actions that promote internal engagement in undergraduate student assessment. Efforts that are initiated from outside the institution are likely to be less effective at encouraging these institutions to use information gained from assessment efforts to improve student and institutional performance.

9. EXECUTIVE SUMMARY: RESEARCH RESULTS AND RECOMMENDATIONS

Recommendations for doctoral and research institutions based on the results of our research are outlined in this section. This study and monograph highlight the importance of viewing student assessment from a critical institutional perspective and underscore three important realities: 1) for student assessment to enhance student, faculty, academic, and institutional performance, it has to be viewed as an institutional process, not just a series of student assessment activities; 2) a great deal of organizational, administrative, and academic activity is or can be invested in initiating, managing, and using student assessment; and 3) a systematic look at those institutional activities can enhance an institution's ability to plan for and use student assessment effectively.

Student Assessment: A Critical Institutional Perspective

The intent of our study and this monograph is to highlight the importance of viewing student assessment from a critical institutional perspective and to underscore three important realities: 1) for student assessment to enhance student, faculty, academic, and institutional performance, it has to be viewed as more than just a series of student assessment activities; 2) a great deal of organizational, administrative, and academic activity is or can be invested in initiating, managing, and using student assessment; and 3) a systematic look at those institutional activities can enhance an institution's ability to use student assessment effectively.

The data reported in this survey provide a national profile of what doctoral and research institutions are currently doing to support and promote the use of student assessment. This evidence provides insight into the activities institutions are doing extensively, those which merit greater attention, and those which make a difference in improving institutional performance. We begin with a summary of our research findings and recommendations concerning specific assessment activities conducted within research and doctoral universities. Then we discuss how doctoral and research institutions can use the Institutional Support for Student Assessment (ISSA) inventory and the Framework for Institutional Support for Student Assessment (Figure 1 of this monograph) as a guide for examining their student assessment process and functions. We conclude by suggesting that the results of the national survey used in conjunction with institutional self-examination can serve as the basis for redesigning or planning a student assessment process which can enhance an institution's academic performance.

Student Assessment in Doctoral and Research Institutions: Results and Recommendations from the National Survey

Institutions that have committed resources to assessing the development and performance of their undergraduate students assessment activities should be able to use the student assessment data they collect in organizational decision-making and to document impacts from their assessment activities. Doctoral and research institutions that are engaging in undergraduate student assessment, but do not feel that they are profiting from the process as much as they could be, may want to adopt the strategies of institutions that have reported using and being positively impacted by assessment information. Our research has demonstrated that most doctoral and research institutions have made only limited use of student assessment data and given little attention to monitoring impacts from assessment. However, they are subject to external demands for assessment and have adopted a wide variety of student assessment approach measures, institution-wide activities supporting student assessment, and assessment management practices and policies. Our research shows that external influences do play some role in encouraging institutions to conduct and use student assessment, but there is much that institutions themselves can do to initiate, support and

benefit from their undergraduate student assessment efforts. Our research identified strategies from the domains of student assessment approach, institution-wide support for student assessment, and assessment management practices and policies that are associated with doctoral and research institutions reaping greater institutional uses and impacts from undergraduate student assessment. Greater uses and impacts mean that not only the institution as a whole benefits, but that faculty and students benefit as well. In the following sections, we highlight the student assessment activities that doctoral and research institutions are currently engaging in to a great extent, the activities that they may want to augment, and the activities that are critical to enhancing the use of student assessment data in academic decisions leading to positive institutional impacts.

Student Assessment Uses and Impacts

      If institutions are benefiting from their student assessment process, they should report that they are using the resulting assessment data in academic decisions and that the use of these data has a positive impact on both internal processes and performance and the institution's relationship with external constituents. In this section, we describe the extent to which doctoral and research institutions are using collected student assessment data and the extent to which these data have had an impact on the institution. Suggestions for increasing institutional uses and impacts of student assessment are outlined in the following sections.

      <u>Uses of Student Assessment Information</u>. Most doctoral and research universities are not using student assessment data to make decisions about educational processes or faculty issues. In fact, respondents from these institutions report the least influence of assessment information on institutional decision-making of all types of institutions in our study. Our research did not attempt to discern why institutions are not making more extensive use of these data. Perhaps institutional decision-makers do not have sufficient data to inform such academic decisions. This may be particularly so if assessment data collection focuses on student inputs (for example, basic college-readiness skills or academic intentions of entering students) or outputs (for example, graduation or employment rates of exiting students) without attempting to measure changes in student performance or development, or without examining the relationship between student performance or development and facets of their experiences within the institution (for example, course-taking patterns, financial aid, advising policies). Assessment data use may also be limited if institutions have not created a formal mechanism for incorporating this data in decision-making processes. Doctoral and research institutions that are collecting student assessment data but are not using these data in institutional decision making should examine why this is the case. For example, is the type of data being collected not useful for informing decisions? Are there concerns about data quality? Is assessment data not easily accessible or not widely distributed to decision makers? Raising questions of this nature will assist institutions in understanding how they may increase the use of assessment information in academic decision making.

      <u>Impacts of Student Assessment Information</u>. Similarly, doctoral and research institutions report very minimal institutional impacts from their student assessment data. We found that most institutions are simply not monitoring whether assessment information has had an impact. Of all institutional performance indicators considered in our survey, doctoral and research institutions are most likely to attribute favorable evaluations from their regional accreditation agency, changes in the teaching methods used by their faculty, and increased discussions of undergraduate education to student assessment information. Some institutions have documented assessment-related increases in student retention and graduation rates, and student satisfaction. Doctoral and research institutions have least often monitored the impact of assessment on student grades and external examination performance or on other dimensions of their relationships with external constituents such as state or private sector funding, student application and acceptance rates, and institutional reputation. Monitoring impacts is important if an institution is to evaluate the effectiveness of its student assessment efforts. As a first step, the institution must select the indicators of institutional and student performance it wants to monitor as well as the evidence it will use to measure these

indicators. Which specific aspects of performance will be monitored, and the type of evidence used, will vary according to the institution's academic mission and its goals for student assessment.

Regardless of the specific uses and impacts an institution may hope to achieve through student assessment, the remainder of this report suggests institutional responses to external influences, approaches to assessment, and organizational and administrative practices and policies that may promote institutional uses and impacts of student assessment data.

External Influences

External influences, such as state and accreditation requirements, can be strong motivators for institutions to engage in or increase their student assessment efforts. In addition, a variety of postsecondary organizations and external funding sources offer support for institutions' assessment programs. This section describes the nature of these influences on doctoral and research institutions and provides suggestions for deriving the most benefit from these external relationships.

State Influences. Half of the doctoral and research institutions that responded to our survey are under the purview of a state mandate for student assessment. Three-quarters of these institutions report that they worked together with state officials to develop the details of the state-level assessment plan. It follows that one-quarter of institutions were not involved in this development. Our research suggests that where such opportunities exist, institutions should try to participate in such planning at the state level. State-level assessment mandates that are jointly developed by institutional and state officials have a greater potential to be fair, practical, and ultimately beneficial to institutions. Doctoral and research institutions with state assessment plans permitting them to develop and report their own student assessment indicators collect more extensive assessment data than institutions with state plans mandating the use of common student assessment indicators across institutions. Further, our research shows that the importance institutions accord to meeting state reporting requirements as a purpose for engaging in student assessment is *not* significantly related to how extensively institutions collect assessment data, how much they use that data for decision-making, or how much they achieve positive impacts from using assessment data. Said differently, institutions that conduct student assessment solely to satisfy state requirements are not likely to reap internal or external benefits from assessment. Doctoral and research institutions that must commit resources to student assessment because of state requirements are advised to also use these efforts for internal improvement purposes.

Accreditation Influences. The majority of doctoral and research institutions have completed a regional accreditation review requiring undergraduate student assessment. While these institutions are less likely than other types to report accreditation requirements influenced them to initiate student assessment efforts, most doctoral and research institutions credit these requirements with increasing their involvement in assessing students. Regional accreditation associations have some direct influence on institutions' student assessment activities. For example, doctoral and research institutions in the North Central accrediting region collect more cognitive assessment data than institutions belonging to other accrediting regions. However, institutional membership in a specific regional accreditation association is not significantly related to either using or achieving impacts from student assessment data. Institutions should be cognizant of the influence of their accrediting regions and must, of course, respond to their requirements for assessment. But doctoral and research institutions should also bear in mind that if responding to accreditation requirements is the only major purpose for engaging in student assessment activities, these activities will not be likely to have an impact on how extensively institutions collect assessment data, how much they use that data for decision-making, or how much they achieve positive impacts from using assessment data. Accreditation requirements notwithstanding, institutions that want to maximize assessment information uses and impacts are advised to make certain that the

improvement of institutional performance (for example, improving academic programs and student achievement) is an important purpose underlying their assessment efforts.

Other External Influences. In addition to state and regional accreditation requirements, there are other external resources doctoral and research institutions should consider when engaging in student assessment activities. Many doctoral and research institutions have made use of conferences and publications on student assessment provided by professional associations and, to a slightly lesser extent, regional accreditation associations. Although a variety of external agencies and programs offer grants to improve or support institutions' assessment practices, the majority of doctoral and research institutions have not received such grants. Doctoral and research institutions interested in augmenting their assessment efforts may want to explore these opportunities for external support.

Institutional Approach to Student Assessment.

Institutional approach to student assessment refers to institutional decisions regarding the collection and analysis of student assessment information. Dimensions along which assessment approaches can be differentiated include: the type and extent of student assessment data collected; the methods used to collect assessment data; and the analyses conducted and reported for collected data. This section summarizes doctoral and research institutions' approaches to student assessment and offers recommendations for adopting assessment approaches that will lead to uses and impacts of student assessment information.

Type and Extent. Most doctoral and research universities emphasize the collection of data on certain types of cognitive, affective and behavioral data from their currently-enrolled students such as academic progress, basic college-readiness skills, academic intentions, satisfaction, and experiences and involvement with the institution. These data are most often collected at one point in time during students' enrollment and provide static measures of students' basic abilities, satisfaction and movement through the educational process that may be sufficient to satisfy accountability requirements. However, they provide institutions with less information concerning how their students are learning and changing while in college. Doctoral and research institutions collect less extensive information on their current students' higher-order cognitive competencies, vocational and professional skills, general education and major field competencies, and personal growth and affective development, and collect comparatively less extensive data from their formerly-enrolled students, particularly regarding their civic and social roles. Collecting these types of data, at more than one point in time, would provide doctoral and research institutions with more substantive data concerning students' cognitive, affective and behavioral development. In addition, our research shows that the more assessment data institutions collect from formerly-enrolled students, the more likely their faculty are to be positively affected by assessment information. If they are to achieve maximum benefit from assessment efforts, doctoral and research institutions should review the type and extent of assessment data being collected and, where needed, broaden and deepen these collection efforts.

Assessment Methods. Our survey results show doctoral and research institutions tend to use tests and other written instruments to collect assessment data. These tests and inventories are most often developed by institutions themselves, which may enhance their acceptance and use within the institution. Some units or departments make use of less traditional assessment methods such as capstone courses, portfolios of student work, observations of student performance, and surveys or interviews with withdrawing students. Institutions should encourage even greater use of these alternative methods of collecting student assessment data within their departments. These alternative methods allow the assessment of higher-order skills such as application of facts, synthesis, and evaluation. They also tend to promote faculty involvement in assessment through their participation in designing one, administering their method, and interpreting the data collected through them.

Assessment Studies. Although student learning and development are affected by students' internal motivation and abilities and by circumstances external to the institution, a variety of institutional factors can also influence how students perform, such as the availability of academic support resources, time spent with faculty outside of the classroom, kinds of teaching methods used, and interventions from advisors or counselors. Compared to other types of institutions, doctoral and research institutions have a strong profile of conducting such studies; more than three-quarters of doctoral and research institutions in our study do so. Most often these studies examine the relationship of non-academic policies and practices (for example, admissions standards, residence arrangement, financial aid and extra-curricular activities) to students' academic performance. Doctoral and research institutions are less likely to examine the connection between the specific dimensions of the teaching/learning environment (for example, exposure to specific teaching methods, interaction with faculty) and student performance. The number of studies conducted by institutions is a strong predictor of using assessment information to make educational decisions and of achieving positive external impacts from assessment information. Clearly, institutions that are not already doing so should commit resources to such studies if they want their assessment activities to produce useful information and positive results. Those doctoral and research institutions that do already conduct some studies of the influences on student performance are advised to evaluate whether these analyses include aspects of the teaching/learning environment.

Institution-Wide Assessment Support Strategy

Doctoral and research institutions have used a variety of organizational and administrative support strategies to support their student assessment efforts such as including student assessment within the academic mission; determining the main purposes for which the institution is engaging in assessment; sponsoring institution-wide activities to promote involvement in and support for assessment; adopting an institutional plan or policy for student assessment; establishing processes and structures for planning and coordinating assessment; and evaluating the assessment process. This section summarizes the institution-wide support strategies adopted by doctoral and research institutions and offers recommendations regarding specific aspects of support strategy that enhance the likelihood of achieving institutional benefits from student assessment information.

Mission Emphasis. One way to determine the degree of support for an activity within an institution is to examine whether the activity is mentioned in its mission statement. While most doctoral and research institutions emphasize excellence in undergraduate education as part of their mission statements, less than one-third mention educational outcomes intended for their students and fewer still cite the importance of student assessment as an institutional activity. Our research shows that doctoral and research institutions that have included an emphasis on undergraduate education and student assessment in their academic mission statements are slightly less likely to use assessment information in educational decisions. Clearly, the inclusion of these emphases within the academic mission is not, in itself, enough to promote internal support for assessment. Institutions that have incorporated statements regarding the importance of undergraduate education and assessment in their mission statement but are not extensively engaged in assessment or using collected assessment data are advised to review the possible reasons for this inconsistency. What other organizational and administrative practices or policies been developed to encourage internal engagement in assessment efforts? Have assessment processes been formally linked with institutional processes for decision making? The following sections review practices and policies that can promote greater support for and use of assessment.

Assessment Purposes. Similarly, support for assessment can be examined by considering an institution's purpose for engaging in student assessment. Doctoral and research institutions report that improving undergraduate education and preparing for institutional accreditation are both important purposes for engaging in assessment, although they accord less importance to meeting

external mandates from state officials and regional accreditors than do other types of institutions. Our research found that the purpose for which assessment is being conducted is significantly related to the institution's approach to assessment and using assessment information. Doctoral and research institutions that report promoting internal improvement is an important purpose underlying their assessment efforts are more likely to collect extensive assessment date and to use assessment information for institutional decisions. Conversely, engaging in student assessment to meet state and regional accreditation requirements is not a significant predictor of assessment approach, uses or impacts. Therefore, if doctoral and research institutions want to benefit from their student assessment activities, they should examine their purposes for engaging in student assessment and be clear that these go beyond meeting external demands.

Institution-Wide Activities. Another measure of support for student assessment is the number of institution-wide administrative and governance activities used to promote student assessment. Many doctoral and research institution respondents report that they offer workshops on student assessment for academic and student affairs administrators and have a faculty governance committee that addresses assessment issues. Roughly one-third hold institution-wide initiatives on assessment, provide incentives or rewards to encourage academic units to engage in student assessment, and include student representatives on assessment committees. They rarely offer incentives or rewards to individual administrators who promote student assessment or involve trustees assessment committees. Doctoral and research institutions should review the nature and number of institution-wide activities used to promote internal involvement in and support for assessment, and where indicated, include additional avenues. Not only does offering such activities demonstrate leadership support for assessment, but our research found that offering a greater number of administrative and governance activities to promote assessment is a significant predictor of the extensiveness of these institutions' data collection efforts and of documenting positive impacts on faculty and student from assessment.

Administrator and Faculty Support. Our survey also asked how supportive various internal constituents were of student assessment. While doctoral and research institutions report moderately high levels of support for all internal constituencies considered, senior administrators — the chief executive officer, academic affairs and student affairs administrators — are perceived as comparatively more supportive of assessment than boards of trustees, faculty and students. The perceived degree of administrator and faculty support is positively related to the influence of assessment information on educational decisions within doctoral and research institutions. It is advisable for institutions to periodically measure the degree of internal support for assessment among internal constituent groups as a useful means to gauge the effectiveness of efforts to promote assessment and to encourage more extensive use of assessment information in institutional decision making.

Institutional Plans and Policies for Assessment. The types of plans and policies institutions develop for assessing students are also indicative of their support for student assessment. Most doctoral and research institutions have some type of institutional plan or policy for undergraduate student assessment in place. They are more likely to adopt a decentralized policy in which academic units or programs are expected to assess students but determine for themselves the specific form assessment activities will take than a centralized policy in which specific assessment activities are required of all units or programs. However, compared to all institutions in our study, doctoral and research universities are less likely to have a formal assessment plan or policy of any type. The absence of an assessment policy may signal to internal constituents that the institution does not consider student assessment a priority. Accordingly, doctoral and research institutions that do not have an institutional plan or policy for student assessment should consider some form of policy. Our findings suggest that a decentralized assessment policy is most consistent with the overall governance style of these often large and organizationally complex institutions.

Planning and Coordinating Assessment. Only half of doctoral and research institutions in our study have some type of institution-wide planning group for student assessment. When such planning groups exist, they are most often staffed by faculty, academic administrators, institutional researchers and student affairs administrators. Executive responsibility for planning student assessment is usually positioned within academic affairs, while oversight of day-to-day assessment activities is most often assigned to academic affairs or institutional research personnel. It seems that planning and coordinating student assessment is mainly the responsibility of academic administrators within many doctoral and research institutions. Faculty, student affairs personnel and students are comparatively less involved. Conceivably, involving these constituencies in planning assessment activities would increase their understanding of the purposes of assessment and encourage their participation in assessment activities. Doctoral and research institutions are encouraged to review and reconsider their internal patterns of structuring and involving various groups in planning and coordinating assessment efforts.

Evaluation of Assessment Process. Whether an institution has evaluated its assessment approach is also an indication of the importance it accords to student assessment as an institutional activity. More than half of the doctoral and research institutions responding to our survey have not evaluated their assessment approach and one-third indicate having no plans to do so. All institutions should consider evaluating their assessment plans, policies and processes in order to determine whether their efforts are meeting their intended objectives and whether the effort being expended to assess students is benefiting the institution.

Assessment Management Practices

Assessment management practices refer to specific practices intentionally devised by institutions to manage their student assessment efforts. Four specific areas of practice were identified as potential influences on student assessment: academic resource allocation, student information systems, internal access to student information, and distribution of assessment reports and studies. This section summarizes the assessment management practices used by doctoral and research institutions and provides suggestions regarding practices that maximize institutional uses and impacts of student assessment information.

Academic Budget. Doctoral and research institutions rarely allocate resources to academic units based on indicators of their student assessment activities or results. Assessment scholars contend that linking assessment information or efforts to budgetary decision making processes in the institution is a powerful means of establishing an effective student assessment program. Developing or augmenting a linkage between academic resource allocation and assessment-related performance indicators may provide a clear message regarding the importance placed on student assessment by leaders within doctoral and research institutions.

Computer Support. Doctoral and research institutions report having limited information system capabilities for student assessment. Only half have a student information system that can track students from application through graduation. Even fewer have a system that includes student performance indicators or that is integrated with other institutional databases. Along with improving the management of student assessment data, creating relational databases in which student assessment information can be linked to other institutional data would facilitate conducting analyses of the relationship between students' performance and their experiences within the institution. As discussed above, conducting studies of this nature is a strong predictor of using and achieving positive impacts from assessment information. Doctoral and research institutions should examine the capabilities of their information system for student assessment.

Access to Assessment Information. Most doctoral and research institutions do provide a variety of internal constituents with access to assessment information on individual students — particularly institutional research personnel, academic administrators and faculty advisors.

Providing such access makes it easier for internal personnel to intervene with or give feedback to students regarding their performance. We found that providing internal access to assessment information on individual students is a significant predictor of achieving positive impacts from assessment on indicators of student performance. This information is less often accessible to student affairs professionals. Doctoral and research institutions may wish to review this practice.

Assessment Report Distribution. Distributing reports that summarize assessment information and studies is also an important assessment management practice. Doctoral and research institutions that distribute assessment reports to a wide array of internal and external constituents are more likely to report positive faculty and student impacts from assessment information. Report distribution helps to ensure that internal and external personnel are kept well informed of the institution's assessment efforts, student performance and institutional improvement strategies. While most doctoral and research institutions regularly distribute assessment reports to traditional internal constituents such as academic administrators, faculty, and student affairs professionals, very few provide these reports to students, the general public or employers. Doctoral and research institutions are advised to examine their patterns of assessment report distribution.

Assessment Management Policies

Assessment management policies refer to institutional policies devised to both support student assessment and to direct the use of student assessment information. Five content dimensions of assessment management policies were examined: student involvement in assessment; professional development on assessment for faculty and academic administrators; training in assessment for student affairs personnel; faculty evaluation and rewards; and academic planning and review processes. This section summarizes the assessment management policies used by doctoral and research institutions and provides suggestions regarding policies that maximize institutional uses and impacts of student assessment information.

Student Involvement. Doctoral and research institutions report that many of their departments require students to participate in assessment activities and provide students with information regarding the purposes of these activities, but few provide students with feedback on their assessment results or incentives for participation. Policies encouraging student involvement in assessment activities are an important mechanism for promoting internal engagement in assessment. Obviously, collecting useful student assessment information depends in large part upon the willingness of students to be involved in assessment activities. Providing explanations of the purpose of assessment activities and individual feedback to students regarding student performance should enhance students' motivation to participate. Further, our research shows that doctoral and research institutions that have developed more extensive policies on student involvement make significantly greater use of assessment information in educational and faculty-related decisions. If student involvement policies do not exist or do so only within a few departments, doctoral and research institutions should consider extending the breadth of these policies.

Professional Development. Doctoral and research institutions offer professional development on student assessment to their faculty and academic administrators. However, they offer less extensive policies of this nature than do other types of institutions. These policies are more likely to involve activities that do not significantly affect time in the classroom (for example, funds to attend assessment conferences or workshops on assessment) than those that involve greater expenditure of administrative and faculty time (for example, paid leaves or course reduction to develop or improve assessment practices). While understandable from a fiscal perspective, this emphasis on providing professional development support of shorter duration may not provide faculty with adequate time to learn about or develop new assessment techniques. Offering a variety of professional development opportunities should increase the level of faculty and administrative

involvement in and support for student assessment. Our research found doctoral and research institutions that offer more extensive professional development on assessment to their faculty and academic administrators are more likely to use assessment information in educational decisions (for example, designing or revising academic programs, curriculum or support services) and to report that assessment information has had a positive impact on faculty. Doctoral and research institutions should review and consider increasing the array of professional development opportunities on student assessment being offered to their academic personnel.

Student Affairs Training. When planning professional development opportunities for student assessment, doctoral and research institutions should not neglect their student affairs staff and administrators. Given their frequent contact with students, these personnel can play an important role in planning assessment activities and interpreting how assessment data should shape institutional policies concerning students. Yet, on the whole, doctoral and research institutions provide only limited training on assessment to their student affairs personnel, doing so in only a few departments. This policy area deserves further examination and diagnosis.

Faculty Evaluation and Rewards. Many doctoral and research institutions say they encourage their faculty to assess student learning, but it is rare for departments to have policies that include assessment-related criteria in faculty evaluation and reward decisions. Although the wisdom of this linkage has been debated in the assessment literature, doctoral and research institutions that do include assessment-related criteria in their faculty evaluation and reward processes are also more likely to use assessment information in making educational decisions and also more often report positive impacts from assessment on their students and relationships with external constituents. Institutions may understandably be reluctant to tie faculty evaluation and rewards to assessment results or indicators of student performance, but there are many other options to consider. For example, institutions can include criteria concerning faculty scholarship in assessment, evidence of using assessment to improve teaching and learning, or participating in student assessment groups or committees. Given the traditional primacy of research and scholarship activities in determining faculty rewards in doctoral and research institutions, developing policies that link faculty participation in student assessment activities to promotion and salary decisions may offer an especially powerful means by which these institutions can encourage faculty to use assessment to improve teaching and learning.

Academic Planning and Review. Doctoral and research institutions make fairly extensive use of student assessment information in their academic planning and review processes, particularly those processes involving the review of academic departments, programs, or curriculum. Institutions that incorporate assessment data in academic planning and review processes do not leave the use of assessment information to chance and thus may be more likely to reap positive impacts from their assessment information. Doctoral and research institutions are encouraged to build in formal linkages between the collection and analysis of student assessment data with specific academic planning, review and decision making processes.

Inventorying the Institutional Student Assessment Process

Regardless of an institution's history of and support for student assessment, it is important for an institution to take stock of what it is currently doing. The Institutional Framework, presented in section two (Figure 1 of this monograph) provides an institutional perspective for such an examination. The ISSA inventory in Appendix A provides a useful quasi-objective instrument for identifying the specific dimensions and activities associated with the student assessment process.

Institutions are encouraged to identify a team of faculty and administrators most knowledgeable about and involved with student assessment to examine their institution's activities on all the dimensions in the ISSA inventory. While most items are objective (for example, which types of measures are being used and how extensively), the actual pattern on campus may not be

widely known. Other items are more subjective (for example, the institution's purpose for engaging in student assessment) and can provide the basis for good discussion.

This inventory of the institutional student assessment process then can be compared with national data for doctoral and research institutions which were presented in Appendix A and summarized in the previous sections of this monograph. This inventorying and comparison process may highlight activities, practices, and policies not currently used; identify areas needing greater attention; or focus on inconsistencies in patterns of activity (for example, inconsistencies between stated purposes for student assessment and actual uses of student assessment data in academic decisions).

For institutions with an extensive history of involvement with student assessment, such an inventory may serve as a useful basis for identifying new activities to be undertaken, for improving the existing activities and processes, for identifying issues or controversies that need to be addressed, or for redesigning processes that may not be worth the current expenditure of effort and resources. For institutions with less experience with student assessment, the inventory may identify existing activities on which to build or help focus attention in the institution on the importance of student assessment in improving institutional performance. In either case, the inventory and self-evaluation process should help both to focus faculty and administrative attention on the importance of viewing student assessment as an institutional process and to deal with it more systematically — linking the various domains of assessment activity with institutional improvement.

Planning for Student Assessment

Student assessment in most higher education institutions has emerged, often sporadically, over the past decade due to the need to respond to an accreditation self study, a new state mandate, an academic administrator who promoted it, a faculty group who embraced it for their unit, or an institutional researcher or program review officer who was engaged in studies of student performance. While according to the data in this report, some institutions are beginning to develop a plan or policy for student assessment or have created a group for this purpose, there is little evidence of systematic planning that links student assessment to the external context and to internal institutional governance and management patterns; that develops organizational and administrative activities, practices, and policies to support it; and then uses collected assessment data for academic decisions and monitors their impact. Clearly there are significant institutional differences and complex issues to be addressed if student assessment is to have positive effects. These deserve some systematic, planned attention. The results of an institutional inventory can provide the basis for such an effort.

While we do not advocate a cookbook or standardized approach to planning for student assessment (each institution needs to design its own planning approach to reflect its own governance and leadership styles and traditions), the Institutional Framework (Figure I in section two) and the institutional inventory provide a useful basis for redesigning or planning a student assessment process. Using that self-assessment, the following are planning issues that need to be addressed:

External Influences

1. What is the nature of our state assessment process? How is it formulated and what are its requirements/implications for us?

2. What are the accreditation requirements for our institutional and key professional accreditation bodies?

3. What do some of our primary external constituents expect of our graduates?

4. What are external sources of support (educational, financial, technical) for our student assessment efforts?

Institution-Wide Support Patterns

1. What emphasis is placed on student assessment in our mission statement? What are the intended purposes of our institution's assessment efforts?

2. What institution-wide administrative, governance, and academic activities support student assessment? Who are key leadership support groups and how are they involved?

3. What is the nature of our institution-wide plan or policy for student assessment? The role and membership of a coordinating or planning body? And the pattern of authority and responsibility for administering the process?

4. Is the student assessment process to be evaluated? By whom? Using what criteria?

Approaches to Student Assessment

1. Should we have an institution-wide or decentralized (by academic unit) approach to student assessment?

2. What types of measures are to be used? How widely? At what points in time?

3. What types of instruments and methods are appropriate? What technical or professional support does that require?

4. What studies of the influence of students' educationally-related experiences on their performance are to be conducted? What reports of student performance are to be prepared and distributed?

Assessment Management Practices and Policies

1. What assessment management practices exist to guide student assessment? (for example, resource allocation practices, information systems, data access practices, and report distribution practices)

2. What institutional policies promote the use of student assessment? (for example, policies on student involvement, professional development, student affairs training, faculty evaluation, and academic planning)

Uses and Impacts of Student Assessment

1. How will we assure the use of student assessment information in educationally- and faculty-related academic decisions?

2. How will we monitor the impact of student assessment on our students, faculty, academic and instructional patterns, and on our external relationships?

While planning for student assessment may not resolve all of these questions, they should be addressed as should issues of the balance between the effort and resources required to maintain the institution's student assessment process and the educational and institutional benefits derived

from assessment. When planning is combined with inventorying, these two processes can become a powerful mechanism for understanding and improving institutional student assessment endeavors. Inventorying existing student assessment processes is a first step toward understanding the nature and extent of an institution's student assessment activities. This can be followed by a planning process that considers the recommendations for doctoral and research universities that were presented in this section. Using a systematic planning approach should increase the likelihood that student assessment will contribute to improved institutional performance.

APPENDICES

Inventory of Institutional Support for Student Assessment for Doctoral and Research Institutions

Inventory of Institutional Support for Student Assessment for Doctoral and Research Institutions

For The Research Program on
Institutional Support for Student Assessment

NCPI - Project 5.2
University of Michigan
Ann Arbor, Michigan 48109-1259

An Introduction to the ISSA

The *Institutional Support for Student Assessment Inventory* (ISSA) was developed as part of a national research program examining the *Organizational and Administrative Support for Student Assessment* for the National Center for Postsecondary Improvement (NCPI). The ISSA is designed as an institutional inventory of the organizational and administrative practices that have been designed and implemented to support the use of *student assessment* on your campus.

Institutional Support Practices are those organized activities, policies, and procedures that your institution has intentionally designed to enhance the practice of student assessment. *Student Assessment refers to those activities focused on measuring dimensions of student performance other than traditional end of course grading*.

This national survey is designed to identify institutional support practices for undergraduate student assessment. The project also examines the factors influencing the adoption of various support practices and how those practices enhance the impact of student assessment for institutional improvement.

We understand that being selected for this survey will require a commitment of time to complete and we appreciate your involvement. This instrument is also intended as an institutional self-assessment inventory to facilitate examination of your institution's own organizational and administrative practices which support student assessment. We encourage each institution to use the survey in this manner. You will receive a summary report of survey responses to all compare with your own institutional profile.

Completing the ISSA

The main purpose is to obtain a profile of your institution's current approach to undergraduate student assessment and its support practices. The inventory may be completed by one individual or group of individuals who are most familiar with the patterns of undergraduate student assessment on your campus. It should take less than one hour to complete.

- Please keep in mind that the questions refer to *undergraduate education* at your institution.
- Respond to each item in the questionnaire to the best of your knowledge.

The questionnaire is coded to allow follow up only. Individual institutions will not be identified in any analyses or reports.

Return the completed questionnaire in the enclosed return envelope. Any questions concerning the survey can be addressed to the following:

National Center for Postsecondary Improvement Project 5.2
School of Education
University of Michigan
610 E. University, Room 2339
Ann Arbor, MI 48109-1259
Phone: 734-647-2464
Fax: 734-936-2741
Email: ncpi.proj52@umich.edu

Marvin W. Peterson, Project Director

I. Institutional Approach to Student Assessment

A.   Type, Extent and Timing of Student Assessment

We are interested in your institution's routine practices of collecting different types of undergraduate student performance data, the extent to which they are collected, and when they are collected. For each of the following content types of undergraduate student performance data:

1)   indicate the extent to which each type is collected
2)   for each type of data collected, check whether it is collected at entry, during enrollment, at exit, or a combination of these data collection points.

Type	Extent				Timing		
Currently Enrolled Students	Not Collected	Collected for some students	Collected for many students	Collected for all students	Collected at entry	Collected while enrolled	Collected at exit
		(circle one number for each item)				(check all that apply for each item)	
	1	2	3	4			
		D/R	All				
1. Student academic intentions or expectations		**3.11**	3.25		___	___	___
2. Basic college-readiness skills (reading, writing, mathematics, etc.)		**3.16**	3.44		___	___	___
3. Higher-order skills (critical thinking, problem solving)		**1.98**	2.10		___	___	___
4. General education competencies		**2.42**	2.55		___	___	___
5. Competence in major field of study (discipline- or program-specific knowledge)		**2.53**	2.60		___	___	___
6. Vocational or professional skills		**1.96**	2.11		___	___	___
7. Personal growth and affective development (values, attitudes, social development, etc.)		**2.43***	2.12		___	___	___
8. Student experiences and involvement with institution		**2.69**	2.57		___	___	___
9. Student satisfaction with institution		**2.84**	2.96		___	___	___
10. Student academic progress (retention, graduation rates)		**3.91**	3.76				
Former Students							
11. Vocational or professional outcomes (career goals, job attainment or performance)		**2.51**	2.72				
12. Further education (transfer, degree attainment, graduate study)		**2.48**	2.69				
13. Civic or social roles (political, social or community involvement)		**1.94**	1.80				
14. Satisfaction and experiences with institution after leaving		**2.54**	2.63				

B. Student Assessment Instruments

Does your institution employ institutionally or externally developed instruments or tests for the following types of undergraduate student assessment information? (circle all that apply for each item):

Source of Instrument

Content of Instrument	Not used 1	Institutionally developed 2	State provided 3	Commercially available 4
1. Student plans, goals, or expectations	**D/R: 24%**	**50%**	**3%**	**45%***
	All: 21%	51%	4%	32%
2. Basic college-readiness skills (reading, writing, mathematics, etc.)	**D/R: 18%***	**52%***	**13%**	**43%***
	All: 6%	38%	11%	67%
3. Higher-order skills (critical thinking, problem solving)	**D/R: 44%**	**36%**	**3%**	**32%**
	All: 42%	29%	2%	32%
4. General education competencies	**D/R: 40%**	**40%**	**6%**	**25%**
	All: 32%	40%	5%	33%
5. Competence in major field of study (discipline- or program-specific knowledge)	**D/R: 21%**	**69%**	**7%**	**39%**
	All: 19%	64%	12%	39%
6. Vocational or professional skills (excluding licensure exams)	**D/R: 41%**	**44%**	**10%**	**29%**
	All: 34%	43%	14%	25%
7. Personal growth and affective development (values, attitudes, social development, etc.)	**D/R: 23%***	**57%***	**3%**	**35%**
	All: 38%	39%	2%	30%
8. Student effort, experiences or involvement with institution	**D/R: 14%**	**69%**	**6%**	**29%**
	All: 21%	60%	4%	24%
9. Student satisfaction with institution	**D/R: 3%**	**76%**	**10%**	**36%**
	All: 4%	73%	8%	35%
10. Alumni satisfaction and experiences	**D/R: 5%**	**84%**	**8%**	**21%**
	All: 10%	78%	8%	15%

C.   Other Student Assessment Methods

To what extent does your institution use the following methods to collect undergraduate student assessment information? (circle one number for each item):

Other Student Assessment Methods	Not used 1	Used in some units 2	Used in most units 3	Used in all units 4
		D/R	All	
1. Observations of student performance (simulations, demonstrations, lab)		**2.12**	2.26	
2. Student portfolios or comprehensive projects		**2.13**	2.10	
3. Student performance in capstone courses		**2.27**	2.15	
4. Student interviews or focus groups		**1.99**	1.84	
5. Transcript analysis		**1.92**	2.16	
6. External examination of students (licensure exams, external reviewers)		**2.02**	2.02	
7. Special surveys of or interviews with withdrawing students		**2.18**	2.40	
8. Alumni interviews or focus groups		**1.96**	1.90	
9. Employer interviews or focus groups		**1.84**	1.87	

D.   Student Sub-Populations

Does your institution use different assessment methods for the following sub-populations of undergraduate students? (check one for each item):

		Different		Same as Other Students
		D/R	All	
1.	Adult students	**6%**	10%	_____
2.	Part-time students	**5%**	5%	_____
3.	Minority students	**4%**	2%	_____
4.	Distance education students	**21%**	22%	_____

"Unit" refers to academic areas such as departments, divisions, schools, or colleges.

E. Student Assessment Studies

Does your institution conduct studies of the *relationship between* the following experiences and students' performance (check all that apply):

	D/R	All
1. Student course-taking patterns	**38%***	26%
2. Exposure to different instructional or teaching methods	**25%**	21%
3. Patterns of student-faculty interaction	**25%***	14%
4. Extra-curricular activities	**37%***	24%
5. Residence arrangements	**48%***	21%
6. Student financial aid and/or concurrent employment	**44%***	30%
7. Admission standards or policies	**60%***	42%
8. Academic advising patterns	**26%**	26%
9. Classroom, library and/or computing resources	**12%**	17%
10. Do not study the relationship betw. the above experiences & student performance	**22%***	38%

F. Student Performance Profiles or Reports

Does your institution provide profiles or reports of appropriate student performance information at the following levels of aggregation (check all that apply):

	D/R	All
1. Institution wide	**73%**	69%
2. Schools or colleges	**73%***	31%
3. Academic programs or departments	**68%**	65%
4. Special populations or subgroups/students	**59%***	46%
5. By course or groups of courses	**32%**	36%
6. Do not provide any reports	**9%**	11%

II. Institutional Support for Student Assessment

A.   Institutional Emphasis

1.   Your institutional mission statement explicitly (check all that apply):

	D/R	All
a. emphasizes excellence in undergraduate education as an institutional priority	**86%**	82%
b. identifies the educational outcomes intended for your students	**37%***	52%
c. refers to student assessment as an important institutional activity	**14%**	19%
d. does not explicitly mention any of the above	**11%**	11%

2.   For how many years has your institution engaged in student assessment? _____

B.   Purpose of Student Assessment

The following are often intended purposes of an institution's undergraduate student assessment process. Please rate the importance of each for your institution. (circle one number for each item):

Purpose	No Importance 1	Minor Importance 2	Moderate Importance 3	Very Important 4
		D/R	All	
1. Preparing institutional self-study for accreditation		**3.39***	3.86	
2. Meeting state reporting requirements		**2.50***	2.89	
3. Guiding internal resource allocation decisions		**2.45**	2.71	
4. Guiding undergraduate academic program improvement		**3.28**	3.43	
5. Improving the achievement of undergraduate students		**3.27**	3.48	
6. Improving faculty instructional performance		**2.71***	3.02	
7. Other (briefly describe): _____				

C.   Administrative and Governance Activities

Institutions have introduced a variety of administrative or governance activities that address or promote student assessment. Does your institution engage in any of the following activities? (check all that apply):

		D/R	All
1.	Annual presidential or other institution-wide initiatives, forums or seminars on assessment	**31%***	41%
2.	Rewards or incentives for academic and student affairs administrators who promote use of student assessment in their unit	**18%**	6%
3.	Incentives for academic units to use student assessment information in their evaluation and improvement efforts	**34%**	27%
4.	Student assessment workshops for academic and student affairs administrators	**59%**	56%
5.	Board of trustees committee that addresses student assessment	**10%**	13%
6.	Faculty governance committee that addresses student assessment issues	**46%***	58%
7.	Student representation on student assessment committees	**32%**	33%

D. Support for Student Assessment

Use the scale below to rate the degree to which various groups within your institution support undergraduate student assessment activities (circle one number for each item):

	Very Unsupportive 1	Somewhat Unsupportive 2	Neutral, Unknown 3	Supportive 4	Very Supportive 5
			D/R	ALL	
1. Board of trustees			**3.68**	3.84	
2. Chief executive officer			**4.22**	4.41	
3. Academic affairs administrators			**4.43**	4.64	
4. Student affairs administrators			**4.29**	4.33	
5. Faculty governance			**3.51**	3.80	
6. Students			**3.24**	3.33	

E. Planning and Coordinating Student Assessment

1. Which of the following best describes your institution's *plan or policy* for undergraduate student assessment? Your institution (check all that apply):

		D/R	All
a.	has a formally adopted institutional plan or policy requiring specified undergraduate student assessment activities of all academic units or programs	**32%***	50%
b.	has a formally adopted plan or policy for undergraduate student assessment in some academic units or program areas (e.g. general education or academic majors)	**18%**	19%
c.	has a formally adopted institutional plan or policy requiring all academic units or programs to develop their own undergraduate student assessment plan	**49%***	39%
d.	has a formally adopted institutional plan or policy stipulating institution-wide activities to be conducted by a central committee, office, or officer	**35%**	38%
e.	has no formal plan or policy but academic units or programs are encouraged to conduct their own undergraduate student assessment activities	**17%**	13%
f.	is currently developing a plan or policy for undergraduate student assessment	**13%**	17%
g.	does not have an undergraduate student assessment plan or policy (SKIP TO E-6)	**11%**	4%

2. Is there an *institution-wide group* (committee, task force, etc.) that is primarily responsible for *ongoing planning and policy setting* for undergraduate student assessment? (check one):

		D/R	All
a.	yes	**53%***	70%
b.	no (SKIP TO QUESTION E-5)		

3.   If yes, who serves on this group? (check <u>all</u> that apply):

		D/R	All
a.	Chief executive officer	**3%**	13%
b.	Academic affairs administrator(s)/staff	**85%**	86%
c.	Student affairs administrator(s)/staff	**50%**	54%
d.	Institutional research administrator(s)/staff	**61%**	61%
e.	Academic review and evaluation administrator(s)/staff	**32%**	24%
f.	Student assessment administrator(s)/staff	**43%***	32%
g.	Faculty	**89%**	91%
h.	Students	**36%**	33%
i.	Other _____	**10%**	12%

4.   Who has *executive responsibility* for or who *chairs* the institution-wide group responsible for the ongoing planning or policy-setting process for undergraduate student assessment? (check <u>all</u> that apply):

		D/R	All
a.	Academic affairs administrator	**54%**	55%
b.	Student affairs administrator	**4%**	7%
c.	Institutional research officer	**14%**	18%
d.	Academic review and evaluation officer	**14%**	5%
e.	Student assessment officer (if separate)	**4%**	8%
f.	Faculty member	**28%**	31%
g.	Other _____	**14%**	11%

5.   Who *approves* any changes in your institution's plan or policies for undergraduate student assessment? (check <u>all</u> that apply):

		D/R	All
a.	Board of trustees	**8%**	17%
b.	Chief executive officer	**26%***	45%
c.	Chief academic affairs officer	**82%**	75%
d.	Chief student affairs officer	**15%**	20%
e.	Institutional research officer	**15%**	18%
f.	Academic review and evaluation officer	**17%**	8%
g.	Student assessment officer	**8%**	10%
j.	Student government	**0.8%**	1%
h.	Academic senate or other faculty committee(s)	**26%***	39%
i.	Faculty union	**0.8%***	4%
k.	Other _____	**5%**	14%

6. Who has *operational* responsibility for your institution's day-to-day undergraduate student assessment activities (e.g., instrument development, data collection, analysis, and reporting)? (check all that apply):

		D/R	All
a.	Academic affairs administrator	**44%**	45%
b.	Student affairs administrator	**19%**	20%
c.	Institutional research officer	**43%**	45%
d.	Academic review and evaluation officer	**16%**	9%
e.	Student assessment officer	**14%**	15%
f.	Faculty member(s)	**25%**	33%
g.	Other _____	**15%**	13%
h.	No one (SKIP TO QUESTION E8)	**5%**	3%

7. To whom does the individual with operational responsibility for day-to-day student assessment activities directly report? (check one):

		D/R	All
a.	Chief executive officer	**7%***	29%
b.	Chief academic officer	**68%***	56%
c.	Chief student affairs officer	**9%**	7%
d.	Institutional research officer	**2%**	3%
e.	Academic review and evaluation officer	**3%**	2%
f.	Other _____	**15%**	10%

8. Is there an office which provides faculty consultation in using student assessment for instructional improvement or curriculum development? (check one):

		D/R	All
a.	yes	**58%***	47%
b.	no	**42%***	53%

9. If yes, what is the name of the office?_____

F.   Evaluating Your Institution's Student Assessment Plan or Process

1. Has your institution evaluated its undergraduate student assessment process? (check one):

		D/R	All
a.	yes, with a formal evaluation	**17%**	22%
b.	yes, with an informal evaluation	**26%**	27%
c.	currently developing evaluation plans (SKIP TO SECTION III)	**24%**	29%
d.	not currently evaluating or planning to evaluate assessment process (SKIP TO SECTION)	**33%***	21%

2. In evaluating your institution's student assessment process, which of the following elements of that process were reviewed? (check all that apply):

		D/R	All
a.	your student assessment plan and policies	**73%**	81%
b.	the structure and responsibility for student assessment	**56%**	64%
c.	achievement of your institution's intended objectives for stud. assessment	**56%***	70%
d.	reliability and validity of student assessment instruments and methods	**42%***	54%
e.	quality of data analysis	**44%**	51%
f.	use of student assessment information in institutional decision-making	**59%**	66%
g.	the problems encountered while conducting student assessment activities	**66%**	69%
h.	comparison of the costs and benefits of student assessment	**5%***	22%

III. External Influences on Institutional Student Assessment Activities

A. State Role (FOR STATE-FUNDED INSTITUTIONS ONLY; ALL OTHERS SKIP TO QUESTION III. B-1)

1. Was your state's plan/requirement for student assessment primarily developed (check one)):

	D/R	All
a. by state-level officials	**13%**	16%
b. through joint consultation between state officials and institutional representatives	**36%**	39%
c. no statewide plan or requirement for student assessment exists (SKIP TO III. B-1)	**51%**	46%

2. State requirements for student assessment (check all that apply):

		D/R	All
a.	were an important reason for your institution to initiate undergraduate student assessment	**43%**	45%
b.	have increased your institution's involvement in undergraduate student assessment	**61%**	62%
c.	have not been a factor in your institution's undergraduate student assessment activities	**22%**	22%
d.	have been a negative influence on your institution's undergraduate student assessment activities	**6%**	4%

3. Your state's reporting requirements include (check all that apply):

		D/R	All
a.	evidence that a student assessment plan is in place	**61%**	68%
b.	measurement of state-mandated student performance indicators	**60%**	64%
c.	institutionally-devised student performance indicators	**61%***	49%
d.	evidence of institutional use of student assessment information	**39%***	52%

4. How has your state higher education agency reviewed or evaluated your institution's undergraduate student assessment plan or process <u>after</u> it was implemented? (check <u>all</u> that apply):

		D/R	All
a.	reviewed by state officials	**38%**	42%
b.	reviewed using external reviewers	**14%**	16%
c.	required an institutional self-review	**17%**	24%
d.	no post hoc review has occurred (SKIP TO QUESTION B-1)	**56%***	44%

5. The state review of your institution's undergraduate student assessment plan or process included (check <u>all</u> that apply):

		D/R	All
a.	review of your institution's student assessment process itself	**66%**	67%
b.	comparison of your institution's student performance record with your past performance	**51%**	44%
c.	comparison of your institution's student performance record with peer institutions	**34%**	36%
d.	comparison of your institution's student performance record with institutions in your state	**54%***	38%
e.	other (briefly describe) _____	**6%**	10%

B. Regional Accrediting Role in Student Assessment

1. Has your institution gone through a regional self study accreditation review which required undergraduate student assessment? (check <u>one</u>):

		D/R	All
a.	yes	**78%**	80%
b.	no	**22%**	29%

2. Regional accreditation agency requirements for undergraduate student assessment (check <u>all</u> that apply):

		D/R	All
a.	were an important reason for your institution to initiate undergraduate student assessment	**50%***	64%
b.	have increased your institution's involvement in undergraduate student assessment	**77%**	79%
c.	have not been a factor in your institution's undergraduate student assessment activities	**18%**	12%
d.	have had a negative influence on your institution's undergraduate student assessment activities	**0.7%**	0.9%

3. Your institution's regional accreditation agency requires (check <u>all</u> that apply):

		D/R	All
a.	evidence that a student assessment plan or process is in place	**83%**	90%
b.	intended institutional uses of student assessment information	**68%**	73%
c.	results of student assessment	**60%**	66%
d.	evidence of actual institutional use of student assessment information	**70%**	77%
e.	unfamiliar with regional accreditation requirements for student assessment	**9%**	5%

C. External Sources of Support for Assessment

1. Has your institution received external grants to improve undergraduate student assessment practices from any of the following? (check <u>all</u> that apply):

		D/R	All
a.	FIPSE	**10%**	6%
b.	other federal agencies (please identify): _____	**5%**	7%
c.	a state incentive program	**7%**	7%
d.	private foundations or corporate sources (please identify): _____	**11%**	6%
e.	no known external grants received	**74%**	79%

2. Has your institution used any of the following student assessment services offered by the following postsecondary organizations? (check <u>all</u> services that apply for each type of organization):

Student Assessment Service Used

Type of Postsecondary Organization	Not used or not available	Consultation services	Assessment conferences	Training workshops	Publications or research reports
a. Professional associations (Institutional, disciplinary, or administrative)	**D/R:24%** All: 29%	**17%** 13%	**62%*** 51%	**38%** 32%	**63%*** 51%
b. Regional accrediting association	**D/R:37%** All: 30%	**14%** 19%	**31%*** 41%	**28%** 32%	**40%** 45%
c. State-level agency	**D/R:68%*** All: 54%	**10%** 14%	**19%** 26%	**15%** 22%	**16%** 22%
d. Consortium of institutions	**D/R:56%** All: 53%	**14%** 13%	**29%** 30%	**11%** 18%	**25%** 20%

IV. Academic Management Policies and Practices for Student Assessment

Institutions have a wide array of formally organized policies, activities, and procedures intended to enhance or support the collection and use of undergraduate student assessment information. The following policies and practices have been identified in many institutions.

FOR QUESTIONS A THROUGH D, INDICATE WHETHER THE FOLLOWING POLICIES OR PRACTICES EXIST AT YOUR INSTITUTION.

A. Resource Allocation for Student Assessment (check <u>all</u> that apply):

	D/R	All
1. An explicit operating budget allocation is made to support student assessment.	**39%***	49%
2. An academic budget process that considers student performance indicators in resource allocation to academic units.	**21%**	23%
3. An academic budget process that compares academic units on student performance indicators and allocates resources competitively.	**1%**	2%
4. An academic budget process that rewards academic units for improvement based on their own past student performance indicators.	**5%**	3%

B. Student Assessment Information System (check <u>all</u> that apply):

	D/R	All
1. Key student assessment activities have been scheduled into the academic calendar.	**43%***	57%
2. A computerized student information system which includes student performance indicators.	**27%**	28%
3. Student information system tracks individual students from application through graduation.	**50%**	42%
4. Student assessment database integrated with faculty, curricular, & financial databases.	**6%**	10%

C. Access to Individual Student Assessment Information (check <u>all</u> that apply):

Student assessment information on individual students is available to:

	D/R	All
1. Institutional research, assessment or evaluation professionals	**69%**	76%
2. Senior academic administrators	**55%***	72%
3. Department chairs or academic program administrators	**62%***	73%
4. Student affairs professionals	**44%***	58%
5. Faculty advisors	**56%***	66%

D. Distribution of Student Assessment Reports and Studies (check <u>all</u> that apply):

Student assessment reports and studies or appropriate summaries are regularly distributed to:

	D/R	All
1. Students	**18%**	19%
2. Faculty	**50%***	67%
3. Academic administrators	**85%**	86%
4. Student affairs professionals	**57%**	58%
5. Employers	**6%**	5%
6. The general public	**13%**	8%

FOR QUESTIONS E THROUGH H, USE THE FOLLOWING SCALE TO INDICATE THE EXTENT TO WHICH EACH OF THE FOLLOWING POLICIES AND PRACTICES EXIST AT YOUR INSTITUTION (Circle <u>one</u> number for each item).

E. Student Policies on Student Assessment	Not done at all 1	Done in a few depts. 2	Done in some depts. 3	Done in many depts. 4	Done in most depts. 5
	D/R		All		
1. Students are required to participate in student assessment activities	**3.15***		3.77		
2. Incentives are provided to encourage students to participate in student assessment activities	**1.85**		1.87		
3. Information regarding the purpose and uses of student assessment is provided to students	**3.11***		3.52		
4. Students are provided with individual feedback regarding their own student performance results	**2.62***		3.21		

F. Professional Development

	D/R	All
1. Faculty are required to learn about or receive training on student assessment	**1.66***	2.47
2. Funds for faculty to attend or present at professional conferences on student assessment are available	**2.37***	3.08
3. Workshops, seminars, or consultative services for faculty on the use of student assessment in course design or instruction are offered	**2.65**	2.90
4. Assistance for faculty in the form of paid leaves, stipends, mini grants or course reduction to improve use of student assessment is provided	**1.88**	2.00
5. Workshops and seminars for department chairs, deans, and other academic administrators to improve use of student assessment in their unit is provided	**2.23***	2.55
6. Student affairs staff are required to learn about or receive training related to student assessment	**1.98**	2.22
7. Student assessment workshops for student affairs administrators are provided	**2.01**	2.22

G. Faculty Evaluation and Rewards

	D/R	All
1. Faculty evaluation for promotion considers evidence of student performance in their classes (not just student teaching evaluation)	**1.74**	1.84
2. Faculty evaluation for annual salary and merit increases incorporates evidence of student performance	**1.69**	1.56
3. Faculty scholarship on or innovative uses of student assessment is considered in promotion, tenure, or salary reviews	**2.10**	2.01
4. Faculty willingness to use or to participate in student assessment activities is considered in faculty promotion, tenure, or salary reviews	**1.79**	1.99
5. Faculty receive public recognition or awards for innovative or effective use of student assessment	**1.48**	1.58
6. Faculty hiring process considers experience or skill in student assessment	**1.42**	1.68
7. Faculty are encouraged to assess student learning in their classes	**3.35***	3.99

H. Academic Planning and Review	Not done at all 1	Done in a few depts. 2	Done in some depts. 3	Done in many depts. 4	Done in most depts. 5

Your institution incorporates student performance data into the following processes:

	D/R	All
1. Academic department or undergraduate program planning or review	**3.33***	3.67
2. General education or core curriculum review	**3.10***	3.55
3. Course-level review and development	**2.92***	3.36
4. Review and planning for student academic support services	**2.77***	3.09

V. Impacts of Student Assessment

A. Decision Making

To what extent has the use of information available from your undergraduate student assessment process influenced the following actions? (circle <u>one</u> number for each item):

Institutional Actions	No action or influence unknown 1	Action taken, data not influential 2	Action taken, data somewhat influential 3	Action taken, data very influential 4

	D/R	All
1. Revising your undergraduate academic mission or goals	**1.70***	2.06
2. Designing or reorganizing academic programs or majors	**2.35**	2.54
3. Designing or reorganizing student affairs units	**1.96**	1.91
4. Allocating resources to academic units	**1.62**	1.81
5. Modifying student assessment plans, policies, or processes	**2.41**	2.61
6. Deciding faculty promotion and tenure	**1.34**	1.46
7. Deciding faculty salary increases or rewards (release time, travel funds, etc.)	**1.33**	1.39
8. Revising or modifying general education curriculum	**2.30**	2.47
9. Creating or modifying student out- of-class learning experiences (e.g. internships, service learning)	**2.10**	2.14
10. Creating or modifying distance learning initiatives	**1.58**	1.72
11. Modifying instructional or teaching methods	**2.34**	2.47
12. Modifying student academic support services (e.g. advising, tutoring)	**2.62**	2.56

B. Institutional Impacts

Have you monitored the following institutional indicators and been able to document the impact of student assessment information on them? (circle <u>one</u> number for each item):

Internal Impacts	Not monitored, do not know	Monitored, negative impact	Monitored, no known impact	Monitored, positive impact
	1	2	3	4

	D/R	All
1. Affected campus discussions of undergraduate education	**2.13**	2.28
2. Contributed to faculty satisfaction	**1.41**	1.69
3. Contributed to faculty interest in teaching	**1.67**	1.88
4. Led to changes in instructional or teaching methods used	**2.29**	2.45
5. Contributed to student satisfaction	**1.93**	2.03
6. Affected student retention or graduation rates	**2.04**	2.20
7. Affected student grade performance	**1.80**	1.95
8. Affected student achievement on external examinations (e.g. professional licensure, GRE)	**1.85**	1.97

External Impacts

	D/R	All
9. Affected student applications or student acceptance rates	**1.48**	1.48
10. Affected allocation or share of state funding	**1.62**	1.46
11. Affected evaluation from regional accreditation agency	**2.50**	2.55
12. Affected private fund-raising results	**1.42**	1.42
13. Affected success on grant applications	**1.48**	1.65
14. Affected communication with external constituents	**1.76**	1.75
15. Affected institutional reputation or image	**1.72**	1.94

Note: * denotes difference greater than or equal to .3 or 10% from average of all institutions.

VI.   Further Studies - Optional

This page will be removed from the questionnaire before it is processed and completion of it is optional. However, we would like to know more about your institution's experience with student assessment and we would like to be able to respond to you personally with a follow up report.

Within the next year several institutions will be invited to participate in a more intensive study of the impacts of their student assessment practices and policies. Would you be interested in participating in a case study?

—   yes
—   possibly
—   no

If you are interested, we would appreciate any additional information regarding your student assessment practices that you believe would be of interest to other institutions. If you believe your approach to student assessment or its impacts are unusual, please describe it briefly (or enclose a report you think captures your experience).

_____

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Please provide your name and address if you are interested in receiving a personal summary report of this survey.

Name: _____

Title: _____

Institution: _____

Address: _____

              _____

              _____

Phone: _____

E-Mail: _____

Thank you for taking the time to complete this instrument.

Construction and Content of Variables

Variable	**Definition**

Institutional Characteristics

Enrollment — Single item. Reflects number of students enrolled in institution. Data from 1995 Integrated Postsecondary Education Data System (IPEDS).

Control — Single item. (1 = public; 0 = private). Data from IPEDS.

Institutional type — Four dummy-coded single items. Reflects the institution's Carnegie type. (Associate of Arts, Baccalaureate, Doctoral, and Research. Master's institutions was the omitted category.) Data from IPEDS.

External Influences on Student Assessment

State initiative — Single item. Reflects 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). Data from SAS.

State approach — Single item. Reflects whether states mandate common indicators and outcomes (1 = no indicators or outcomes; 2 = institutional specific; 3 = common for some; 4 = common for all). Data from SAS.

Accrediting association — Five dummy-coded single items. Reflects the institution's regional accreditation association membership (Middle States; North Central; New England; Southern; Western. Northwest region was the omitted region). Data from IPEDS.

Development of state plan — Single item. (III A 1) Reflects how state plan for student assessment was primarily developed (1 = state; 2 = joint consultation between state and institution; 3 = no state plan or requirement).

State influence — Four single items. (III A 2 a-d) Reflect the influence of state requirements on the institutions assessment activities: a = important reason to initiate student assessment; b = increased institution's involvement in assessment; c = have not been a factor in assessment activities; d = have been negative influence on assessment activities (1 = yes; 0 = no).

State reporting requirements — Four single items. (III A 3 a-d) Reflect the state's reporting requirements: a = evidence that assessment plan is in place; b = measurement of state mandated indicators; c = use of institutionally devised indicators; d = evidence of institutional use of assessment information (1 = yes; 0 = no).

State review methods — Four single items. (III A 4 a-d) Reflect the method used by state to review the institutions assessment activities: a = reviewed by state officials; b = reviewed using external reviewers; c = required institutional self-review; d = no review occurred (1 = yes; 0 = no).

State review criteria — Five single items. (III A 5 a-e) Reflect the processes included in the state review of the institutions assessment activities: a = review of institutions process itself; b = compare student performance record with past record; c = compare student performance record with peer institutions; d = compare student performance record with other in state; e = other (1 = yes; 0 = no).

Variable	**Definition**
Accrediting influence	Four single items. (III B 2 a-d) Reflect the influence of regional accreditation agency requirements on the institutions assessment activities: a = important reason to initiate student assessment; b = increased institution's involvement in assessment; c = have not been a factor in assessment activities; d = have been negative influence on assessment activities (1 = yes; 0 = no).
Accrediting reporting requirements	Five single items. (III B 3 a-e) Reflect the regional accreditation agency reporting requirements: a = evidence that assessment plan is in place; b = intended uses of assessment information; c = results of assessment; d = evidence of actual institutional use of assessment information; e = unfamiliar with regional accreditation requirements (1 = yes; 0 = no).
External sources of support	Five single items. (III C 1 a-e) Reflect the sources of support received to improve student assessment practices: a = FIPSE; b = other federal agencies; c = state incentive program; d = private foundation or corporate source; e = no known external grants (1 = yes; 0 = no).
Use of external services	Four single items. (III C 2 a-d) Reflect the use of services offered by each of the following type of postsecondary organization: a = professional associations; b = regional accrediting association; c = state-level agency; d = consortium of institutions. Respondents could choose from the following services offered by each organization: organization not used or not available; consultation services; assessment conferences; training workshops; publications or research reports (1 = used; 0 = not used).

Institutional Approach to Student Assessment

Academic intentions	Single item. (I A 1) Reflects extent to which institutions collect data on current student's academic intentions or expectations (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students).
Basic college-readiness skills	Single item. (I A 2) Reflects extent to which institutions collect data on current student's college-readiness skills (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students).
Cognitive assessment	Four item factorially-derived scale. (I A 3-6) Reflects the extent to which institutions collect data on current students' cognitive performance: competence in major field; general education competencies; higher-order cognitive skills; vocational or professional skills (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students). Cronbach alpha = .71.
Affective assessment	Three item factorially-derived scale. (I A 7-9) Reflects the extent to which institutions collect data on current students' affective development and satisfaction: experiences and involvement with institution; satisfaction with institution; personal growth and affective development (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students). Cronbach alpha = .68.
Academic progress	Single item. (I A 10) Reflects extent to which institutions collect data on current student's academic progress (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students).

Variable	**Definition**
Post-college assessment	Three item factorially-derived scale. (I A 11,12,14) Reflects the extent to which institutions collect data from former students: vocational or professional outcomes; further education; satisfaction and experiences with institution after leaving (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students). Cronbach alpha = .83.
Civic/social roles	Single item. (I A 13) Reflects extent to which institutions collect data on former student's civic or social roles in the community (1 = not collected; 2 = collected for some students; 3 = collected for many students; 4 = collected for all students).
Timing of data collection	Nine item additive index. (I A 1-9) Reflects when institutions collect data (1 = not collected; 2 = collected at one point in time; 3 = collected at entry and while enrolled, or while enrolled and at exit; 4 = collected at entry and at exit; 5 = collected at entry, while enrolled, and at exit).
Number of instruments	Nine item additive index. (I B 1-9) Reflects student assessment instruments (institutionally developed, state provided, and commercially available) used by institution to collect ten types of assessment information: student plans or expectations; basic college-readiness skills; higher-order cognitive skills; general education competencies; competence in major; vocational or professional skills; personal growth and affective development; experiences or involvement with institution; satisfaction with institution (1 = instrument used; 0 = instrument not used).
Student-centered methods	Four item factorially-derived scale. (I C 1-4) Reflects the extent to which institutions use innovative or nontraditional assessment methods: performance in capstone courses; portfolios or comprehensive projects; observations of student performance; individual interviews or focus groups (1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units). Cronbach alpha = .61.
External methods	Two item factorially-derived scale. (I C 8-9) Reflects the extent to which institutions use assessment methods that data from external constituencies: employer interviews or focus groups; alumni interviews or focus groups (1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units). Cronbach alpha = .63.
Transcript analysis	Single item. (I C 5) Reflects extent to which institutions use transcript analysis to collect student assessment information (1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units).
External examination	Single item. (I C 6) Reflects extent to which institutions use external examinations to collect student assessment information (1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units).
Interviews of withdrawing students	Single item. (I C 7) Reflects extent to which institutions use interviews with withdrawing students to collect student assessment information (1 = not used; 2 = used in some units; 3 = used in most units; 4 = used in all units).

Variable	**Definition**
Student sub-populations	Four single items. (I D 1-4) Reflect the use of different assessment methods for the following different student populations: a = adult students; b = part-time students; c = minority students; d = distance education students (1 = different method; 2 = same method).
Number of studies	Nine item additive index. (I E 1-9) Reflects the number of studies institutions conduct on the relationship between aspects of students' institutional experiences and performance: course-taking patterns; exposure to different teaching methods; patterns of student-faculty interaction; extra-curricular activities; residence arrangements; financial aid and/or employment; admission standards or policies; academic advising patterns; classroom, library and/or computing resources (1 = conduct study; 0 = do not conduct study).
Number of reports	Five item additive index. (I F 1-5) Reflects the levels of aggregation at which student assessment data are provided as reports: institution-wide; schools or colleges; academic programs or departments; special populations or subgroups of students; by course or groups of courses (1 = report provided; 0 = report not provided).

Organizational and Administrative Support Patterns

Mission emphasis	Three item additive index. (II A 1 a-c) Reflects institutions' mission statement emphasis on undergraduate education and its assessment: emphasizes excellence in undergraduate education; identifies educational outcomes intended for students; refers to student assessment as important activity (1 = yes; 0 = no).
Internal purposes	Four item factorially-derived score. (II B 3-6) Reflects the importance of internal institutional purposes for undertaking student assessment: guiding undergraduate academic program improvement; improving achievement of undergraduate students; improving faculty instructional performance; guiding resource allocation decisions (1 = no importance; 2 = minor importance; 3 = moderate importance; 4 = very important). Cronbach alpha = .79.
Accreditation purposes	Single item. (II B 1) Reflects importance of preparing for institutional accreditation self-study as a purpose for undertaking student assessment (1 = no importance; 2 = minor importance; 3 = moderate importance; 4 = very important).
State purposes	Single item. (II B 2) Reflects importance of meeting state reporting requirements as a purpose for undertaking student assessment (1 = no importance; 2 = minor importance; 3 = moderate importance; 4 = very important).
Administrative and governance activities	Seven item additive index. (II C 1-7) Reflects the number of administrative or governance activities used by institutions to promote student assessment: annual institution-wide assessment forums or seminars; rewards or incentives for administrators promoting use of assessment in unit; 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 (1 = yes; 0 = no).

Variable	Definition
Variable	**Definition**
Administrative and faculty support	Four item additive index. (II D 2-5) Reflects the degree to which chief executive officer, academic and student affairs administrators, and faculty support student assessment (1 = very unsupportive; 2 = somewhat unsupportive; 3 = neutral or unknown; 4 = somewhat supportive; 5 = very supportive).
Type of plan or policy	Seven single items. (II E 1 a-g) Reflects the institutions plan or policy for student assessment: a = formally adopted plan or policy requiring assessment activities for <u>all</u> academic units; b = formally adopted plan or policy requiring assessment activities for <u>some</u> academic units; c = formally adopted plan or policy requiring <u>all</u> academic units to develop their own assessment plan; d = formally adopted plan or policy stipulating institution-wide activities to be conducted by central committee, office, or officer; e = has no formal plan or policy but academic units are encouraged to conduct their own assessment activities; f = is currently developing plan or policy; g = does not have an assessment plan or policy (1 = yes; 0 = no).
Formal centralized policy	Single item. (II E 1 a) Reflects institution has formal institutional plan or policy requiring specified student assessment activities of all academic units or programs (1 = yes; 0 = no).
Institution-wide planning group	Single item. (II E 2) Reflects institution has institution-wide group for student assessment planning and policy setting (1 = yes; 0 = no).
Breadth of assessment planning group	Nine item additive index. (II E 3 a-i) Reflects the number of internal members included in the institution's assessment planning group: chief executive officer; academic affairs administrator(s)/staff; student affairs administrator(s)/staff; institutional research administrator(s)/staff; academic review and evaluation administrator(s) /staff; student assessment administrator(s)/staff; faculty; students; other.
Responsibility for planning group	Seven single items. (II E 4 a-g) Reflect the internal members who have executive responsibility for the institution-wide group responsible for planning or policy-setting for assessment: a = academic affairs administrator; b = student affairs administrator; c = institutional research officer; d = academic review and evaluation officer; e = student assessment officer; f = faculty member; g = other (1 = yes; 0 = no).
Approval authority	Eleven single items. (II E 5 a-k) Reflect the internal members who approve any changes to institutions assessment plan or policy: a = board of trustees; b = chief executive officer; c = chief academic affairs officer; d = chief student affairs officer; e = institutional research officer; f = academic review and evaluation officer; g = student assessment officer; h = student government; i = academic senate or other faculty committees; j = faculty union; k = other (1 = yes; 0 = no).
Operating responsibility	Eight single items. (II E 6 a-h) Reflect the internal members who have operational responsibility for the institution's day-to-day assessment activities: a = academic affairs administrator; b = student affairs administrator; c = institutional research officer; d = academic review and evaluation officer; e = student assessment officer; f = faculty member; g = other; h = no one (1 = yes; 0 = no).

Variable	**Definition**
Reporting relationship	Six single items. (II E 7 a-f) Reflect the individual to whom person with day-to-day responsibility reports: a = chief executive officer; b = chief academic affairs officer; c = chief student affairs officer; d = institutional research officer; e = academic review and evaluation officer; f = other (1 = yes; 0 = no).
Conducted evaluation	Single item. (II F 1 a-d) Reflects if institution has formally or informally evaluated its student assessment process (1 = yes; 0 = no).
Evaluations elements	Eight single items. (II F 2 a-h) Reflect the elements that were reviewed during the institutions assessment evaluation: a = student assessment plan or policies; b = structure and responsibility for assessment; c = achievement of intended objectives; d = reliability and validity of instruments and methods; e = quality of data analysis; f = use of information in institutional decision-making; g = problems encountered; h = comparison of costs and benefits (1 = yes; 0 = no).

Assessment Management Policies and Practices

Budget decisions	Two item additive index. (IV A 3-4) Reflects formal use of assessment information in the budget process: to competitively allocate resources among academic units; to reward academic units for improvement (1 = yes; 0 = no).
Computer support	Three item additive index. (IV B 2-4) Reflects institutional capacity to collect and manage student assessment information: computerized student information system includes student performance indicators; student information system tracks individual students; student assessment database integrated with other institutional databases (1 = yes; 0 = no).
Access to information	Five item additive index. (IV C 1-5) Reflects internal accessibility of assessment information on individual students by: institutional research or assessment professionals; senior academic administrators; department chairs or academic program administrators; student affairs professionals; faculty advisors (1 = yes; 0 = no).
Distribution of reports	Six item additive index. (IV D 1-6) Reflects the number of constituent groups to whom student assessment reports are regularly distributed: students; faculty; academic administrators; student affairs professionals; employers; general public (1 = yes; 0 = no).
Student involvement	Three item factorially-derived scale. (IV E 1,3,4) Reflects the extent to which institutions have policies or practices to promote student involvement in assessment activities: inform students about assessment purposes and uses; require students to participate in assessment activities; provide students with individual feedback on assessment results (1 = not done at all; 2 = done in a few departments; 3 = done in some departments; 4 = done in many departments; 5 = done in most departments). Cronbach alpha = .69.

Variable	Definition
Professional development	Four item factorially-derived scale. (IV F 2-5) Reflects existence of professional development policies or practices on student assessment for faculty and academic administrators: provide funds for faculty to attend or present at assessment conferences; offer student assessment workshops or consultation for faculty; provide assistance (e.g., paid leaves, stipends, course reduction) to improve faculty use of student assessment; provide student assessment workshops for academic administrators (1 = not done at all; 2 = done in a few departments; 3 = done in some departments; 4 = done in many departments; 5 = done in most departments). Cronbach alpha = .77.
Student affairs training	Two item factorially-derived scale. (IV F 6-7) Reflects existence of professional development policies or practices on student assessment for student affairs personnel: require assessment training for student affairs staff; provide student assessment workshops for student affairs administrators (1 = not done at all; 2 = done in a few departments; 3 = done in some departments; 4 = done in many departments; 5 = done in most departments). Cronbach alpha = .84.
Faculty evaluation	Five item factorially-derived scale. (IV G 1-5) Reflects existence of faculty evaluation and reward policies and practices related to student assessment: promotion evaluation considers evidence of student performance; salary evaluation considers evidence of student performance; promotion, tenure or salary reviews consider faculty participation in student assessment; promotion, tenure or salary reviews consider scholarship on assessment; public recognition or awards for faculty use of student assessment (1 = not done at all; 2 = done in a few departments; 3 = done in some departments; 4 = done in many departments; 5 = done in most departments). Cronbach alpha = .77.
Academic planning and review	Four item factorially-derived scale. (IV H 1-4) Reflects the incorporation of student assessment data into academic planning and review processes for: academic departments or undergraduate programs; general education or core curriculum; courses; student academic support services (1 = not done at all; 2 = done in a few departments; 3 = done in some departments; 4 = done in many departments; 5 = done in most departments). Cronbach alpha = .84.

Institutional Uses of Student Assessment

Educational decisions	Ten item factorially-derived scale. (V A 1-5, 8-12) Reflects the influence of student assessment information in educational decisions: revision of undergraduate academic mission or goals; designing or reorganizing academic programs or majors; designing or reorganizing student affairs units; allocating resources to academic units; modifying student assessment plans, policies, or processes; revising or modifying general education curriculum; creating or modifying student out-of-class learning experiences; creating or modifying distance learning initiatives; modifying instructional or teaching methods; modifying student academic support services (1 = no action or influence known; 2 = action taken, data not influential; 3 = action taken, data somewhat influential; 4 = action taken, data very influential), Cronbach alpha = .83.

Variable	**Definition**
Faculty decisions	Two item factorially-derived scale. (V A 6-7) Reflects the influence of student assessment information in faculty decisions: deciding faculty promotion and tenure; deciding faculty salary increases or rewards (1 = no action or influence known; 2 = action taken, data not influential; 3 = action taken, data somewhat influential; 4 = action taken, data very influential). Cronbach alpha = .79.

Institutional Impacts of Student Assessment

Faculty impacts	Four item factorially-derived scale. (V B 1-4) Reflects student assessment impacts on faculty: affected campus discussions of undergraduate education; contributed to faculty satisfaction; contributed to faculty interest in teaching; led to changes in teaching methods used (1 = not monitored, do not know; 2 = monitored, negative impact; 3 = monitored, no known impact; 4 = monitored, positive impact). Cronbach alpha = .79.
Student impacts	Four item factorially-derived scale. (V B 5-8) Reflects student assessment impacts on students: contributed to student satisfaction; affected student retention or graduation rates; affected student grade performance; affected student achievement on external examinations (1 = not monitored, do not know; 2 = monitored, negative impact; 3 = monitored, no known impact; 4 = monitored, positive impact). Cronbach alpha = .82.
External impacts	Seven item factorially-derived scale. (V B 9-15) Reflects student assessment impacts on external constituents: affected student applications or acceptance rates; affected allocation or share of state funding; affected evaluation from regional accrediting agency; affected private fund-raising results; affected success on grant applications; affected communications with external constituents; affected institutional reputation or image (1 = not monitored, do not know; 2 = monitored, negative impact; 3 = monitored, no known impact; 4 = monitored, positive impact). Cronbach alpha = .82.

[1] 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)

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