National Institute for Learning Outcomes Assessment

June 2011

Down and In:

Assessment Practices at the Program Level

Peter Ewell, Karen Paulson, and Jillian Kinzie

Program Level Survey Report

learningoutcomesassessment.org

Contents

Knowing what happens at the program or department level in student learning outcomes assessment from the faculty and staff working in these programs and departments is essential for an accurate, informed portrayal of the state of the art of student learning outcomes assessment.

George D. Kuh

knowledge accountability connection self-reflection educate action understand communicate listen learn access quality innovation success ingenuit
intellect curiosity challenge create achievement connection self-reflection educate action understand communicate listen learn access quality innovatio
success ingenuity intellect curiosity challenge knowledge accountability connection understand communicate listen learn access quality innovatio
success ingenuity self-reflection educate action understand intellect knowledge accountability connection self-reflection educate action understan
communicate curiosity challenge create achievement connection self-reflection curiosity challenge create achievement connection self-reflectio
knowledge accountability connection self-reflection educate action understand communicate listen learn access quality innovation success ingenuit
intellect curiosity challenge educate innovation success ingenuity intellect curiosity challenge create achievement knowledge accountability connectio
self-reflection educate action understand communicate curiosity challenge create achievement connection self-reflection understand communicate liste
learn access quality action educate action understand communicate listen learn action understand communicate listen learn access quality innovatio

Foreword

From the Horse's Mouth

If it's straight from the horse's mouth, as the saying goes, it is information that comes from the highest authority on a subject: someone who knows a lot about the subject from being deeply involved in it. This paper presents findings about the state of the art of student learning outcomes assessment from the horse's mouth—faculty members at the department or program level who coordinate or actively gather and use evidence about student learning.

The National Institute for Learning Outcomes Assessment (NILOA) found out a lot about assessment in colleges and universities from its 2009 survey of senior academic officers.[1] The responses from provosts indicated that most institutions use many approaches to document student accomplishment and the quality of the undergraduate experience. The data also pointed to troubling shortfalls, however, in reporting assessment results to various audiences and in using the data to improve teaching and learning.

Hearing from senior academic officers was important for several reasons, not the least of which was to remind them and the rest of us about the increasingly important role that assessment is accorded in the public discourse about higher education. While we did not doubt that provosts provided us the best information available to them, we also thought it possible that their perspective might differ from what was happening "down and in the trenches," as the title of this report suggests. Discovering that deeper perspective is important for multiple reasons.

First, if the higher education enterprise is to accurately represent its progress in taking student learning seriously, knowing what faculty and staff do to measure student performance in areas where faculty have the most influence—their program or department—is essential.

Second, improvement—if it is to happen—will occur where faculty and staff have the most leverage to change how they approach teaching and learning. At some point, such change may show up in an institution-level indicator. But it can only start in the venues where faculty and staff have day-to-day contact with students—classrooms, laboratories, and studios—most of which are the province of a program or department.

Third, rank-and-file faculty—especially the opinion leaders among them—look for affirmation at the discipline level, where they judge their work as consistent with leaders in the field, both individual leaders as well as highly regarded programs and departments. Through these venues, faculty learn innovative approaches they can adapt for their own use.

---

1 *More Than You Think, Less Than We Need: Learning Outcomes Assessment in American Higher Education,* G. D. Kuh & S. O. Ikenberry. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment, 2009.

knowledge accountability connection self-reflection educate action understand communicate listen learn access quality innovation success ingenuit
intellect curiosity challenge create achievement connection self-reflection educate action understand communicate listen learn access quality innovatio
success ingenuity intellect curiosity challenge knowledge accountability connection understand communicate listen learn access quality innovatio
success ingenuity self-reflection educate action understand intellect knowledge accountability connection self-reflection educate action understan
communicate curiosity challenge create achievement connection self-reflection curiosity challenge create achievement connection self-reflectio
knowledge accountability connection self-reflection educate action understand communicate listen learn access quality innovation success ingenuit
intellect curiosity challenge educate innovation success ingenuity intellect curiosity challenge create achievement knowledge accountability connectio
self-reflection educate action understand communicate curiosity challenge create achievement connection self-reflection understand communicate liste
learn access quality action educate action understand communicate listen learn action understand communicate listen learn access quality innovatio

Foreword Continued

Knowing what happens at the program or department level in student learning outcomes assessment from the faculty and staff working in these programs and departments, then, is essential for an accurate, informed portrayal of the state of the art of student learning outcomes assessment. Equally important, this information can also point to where progress must be made to reap the rewards of gathering and using evidence to improve student and institutional performance.

Happily, this report takes us a substantial step in that direction. As with any project monitoring work at the national level, however, the picture painted here is almost certainly different in some ways today than when the data were collected—almost a year ago. Despite this caveat, Peter Ewell, Karen Paulson, and Jillian Kinzie have done us a great service by sketching the contours of an evolving set of assessment practices that—when done well—promise to both inform and improve student learning and institutional performance.

George D. Kuh
Director, National Institute for Learning Outcomes Assessment
Adjunct Professor, University of Illinois, Urbana-Champaign
Chancellor's Professor Emeritus, Indiana University

Down and In: Program-Level Assessment Practices

Abstract

Assessing the quality of undergraduate student learning continues to be a priority in U.S. postsecondary education. Although variations in outcome assessment practices have long been suspected, they have not been systematically documented. To follow up the 2009 National Institute for Learning Outcomes Assessment (NILOA) report on institutional assessment activity described by chief academic officers, NILOA surveyed program heads in the two and four-year sectors to gain a more complete picture of assessment activity at the program or department level. This report confirms the views of chief academic officers that there is considerable assessment activity at the program level. However, perceptions of program heads differ from chief academic officers in terms of the challenges that must be addressed to advance assessment on campus. The report also examines how specialized accreditation status influences the level of faculty involvement in assessment, and the differences by discipline in assessment practices and use of results. Information about the range and frequency of use of assessment practices documented in this report provides those responsible for assessment planning and implementation with information about how to take advantage of processes like program review to promote promising assessment practices. In addition, the report informs individuals responsible for implementing assessment at the program level as to what assessment practices are being used in their disciplines at other institutions.

learn access quality education action educate action understand communica... ...ion understand communicate listen learn access quality innovatio
success ingenuity intellect curiosity challenge knowledge accounta... ...access quality self-reflection curiosity challenge create achievemen
learn access quality innovation success ingenuity self-reflection ed... ...rstand intellect knowledge accountability connection self-reflectio
educate action understand knowledge accountability connection... ...ducate action understand communicate listen learn access quali
innovation success ingenuity intellect curiosity challenge connec... ...ccountability connection self-reflection educate action understan
communicate listen learn access quality innovation success ingenu... ...e achievement connection self-reflection educate action understan
communicate listen learn achievement connection self-reflection e... ...derstand communicate listen learn access quality innovation succe
ingenuity intellect access quality innovation success self-reflection... ...e create achievement connection self-reflection understand educat

Down and In

Introduction

Quality matters in American higher education—now more than ever. The knowledge and abilities that graduates take away from their higher education experience will shape their life chances. The high quality of their education can ensure a strong economy and undergird America's democratic values. Yet strengthening the quality of America's higher education outcomes has never been more challenging. At the very time when federal, state, and institutional resources are diminishing—and global competition is increasing—what can faculty members and academic leaders do to improve the quality of learning on their campuses? One key strategy is to look at how campuses are assembling and using evidence of student learning to enhance student accomplishment and institutional performance.

In 2009, the National Institute for Learning Outcomes Assessment (NILOA) took a first step toward painting a picture of the national landscape of student learning outcomes assessment by asking chief academic officers about assessment activities at their institutions. The survey asked about the institutions' tools and approaches for assessment, the motivations and purposes for assessment, and how assessment results were used. As reported in *More Than You Think, Less Than We Need* (Kuh & Ikenberry, 2009), the survey offered the first comprehensive look at institutional assessment activities in more than a decade, including the following findings:

- About three-quarters of all institutions had established a common set of learning outcomes that applied to all undergraduate students.

- A wide variety of approaches were being used to gather evidence of student learning.

- Accreditation expectations and the desire to improve were among the most powerful reasons why colleges and universities assessed the quality of student learning.

- Actually using the evidence gained through assessment initiatives to make informed decisions leading to improved quality and performance remained an unfilled promise on most campuses.

- Student learning outcomes assessment was severely undercapitalized; most assessment programs had no budget and only two or fewer staff dedicated to assessment.

- Despite their budgetary challenges, most institutions planned to continue their assessment programs.

Chief academic officers also reported more assessment activity at the program or department level than at the institution level—while at the same time indicating that the instruments and approaches used at the

What can faculty members and academic leaders do to improve the quality of learning on their campuses? One key strategy is to look at how campuses are assembling and using evidence of student learning to enhance student accomplishment and institutional performance.

institution level differed substantially from those used at the program level. For example, campus-wide assessments tended to rely on national surveys (representing indirect measures of learning); in contrast, academic programs (as reported by chief academic officers) rarely used such tools to assess outcomes and, instead, used portfolios, measures of content knowledge, rubrics, and performance assessments.

These general findings from the survey comport with a broad understanding based on decades of anecdotes and observations from campus visits and reports from the field, i.e., most of the assessment work in postsecondary institutions that will yield actionable findings and that can inform improvement in student learning tends to be at the level of academic departments and programs (Banta & Associates, 1993). In fact, a significant proportion of chief academic officers participating in the survey identified at their institutions specific program level student learning outcomes assessment activities exemplifying quality. To learn more about what actually happens in departmental and program assessment, NILOA undertook a second study and reports its findings here.

The Survey

In spring, 2010, a Web-based questionnaire was sent to program heads at randomly selected departments or programs. The department/program contacts were identified by their institution's chief academic officer as knowledgeable or responsible for student learning outcomes assessment in their selected program or department. The target population included all regionally accredited, undergraduate degree-granting, two- and four-year public, private, and for-profit institutions in the United States (n=2,719)—from which we randomly selected three to five programs per institution. The data collection concluded in fall 2010, with a 30% response rate. The range of respondents was representative of actual programs across the country—the lone exception being business, which was underrepresented. Appendix A contains more information about the survey and how it was conducted. Because of the lower-than-desired response rate, one must be cautious about making too much of the *frequency* of a particular activity for a particular type of program. The data are much more instructive in representing *relative* differences in responses across different types of programs. Some differences between two and four-year institutions were found with regard to types of assessment methods used, resources dedicated to assessment, and the influence of coordinating and governing board mandates. Results were also analyzed by institutional type to determine if there were any differences in program level assessment practices between two-year and four year colleges. Although a few marginally statistically significant differences were found, examination of effect sizes indicated that none of these differences were substantive.

To better understand student learning outcomes assessment at the department and program levels, we also asked chief academic officers to nominate faculty members and department chairs who were doing good assessment work. We followed up with requests for information to these contacts. The select snapshots featured in the sidebars of this report reflect the good work of the recommended program heads.

Augustana College (IL)

Stimulated by its accreditation self study process, the Mathematics faculty set out to specify their learning goals for students as well as ways to determine how well students were accomplishing those goals. Another important objective was to use assessment results to improve teaching and learning. As part of this effort, the faculty developed a "Proof rubric" for upper-level math courses. The faculty collect work from a series of three courses that build developmentally on the skill of "mathematical proof." Once a year, faculty score students' work using this rubric. This made it possible to identify areas where adjustments to a particular course improved student performance as well as informed discussions about curriculum redesign to better meet the needs of math majors.

Major Findings

1. At the department/program level, the primary driver in assessment activity is faculty's interest in improving their programs—followed by accreditation, both institutional and specialized.

Table 1 displays the reasons program respondents gave for undertaking their assessment efforts.

Table 1: Assessment Drivers

■ Moderate Importance   ■ High Importance
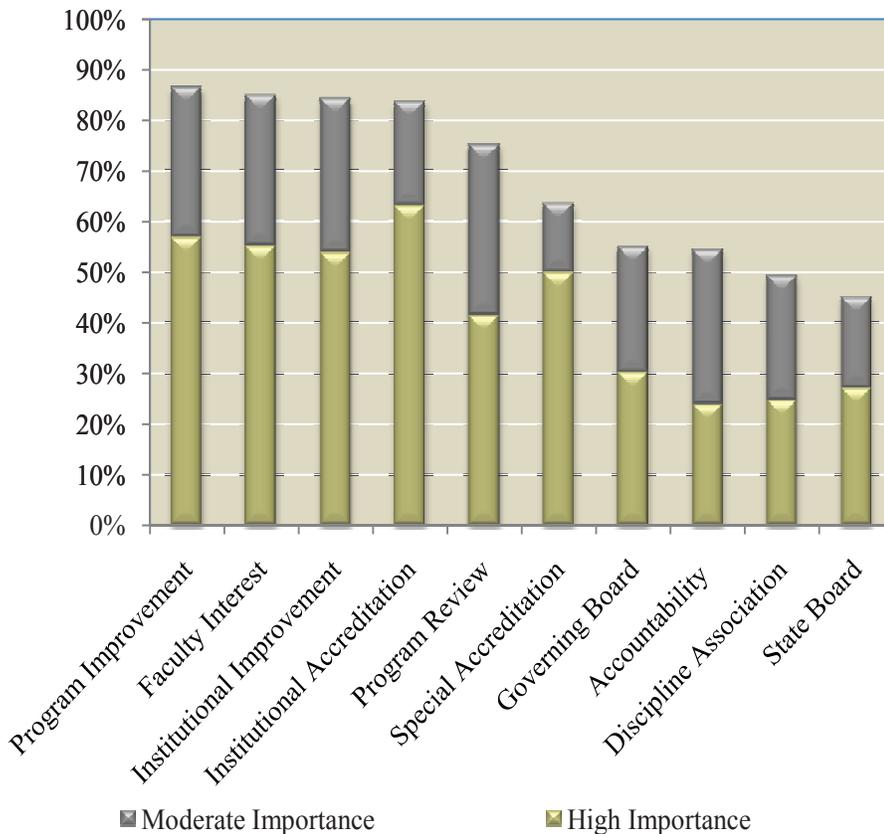
Although institutional accreditation is clearly a prominent driver, these data belie the common perception that most assessment is stimulated by forces outside the institution, such as external accountability and board mandates. Instead, faculty interest and the desire to improve programs and institutions were considered highly important by more than half of those responding, with an additional 30% saying these reasons were moderately important. The chief academic officers responding to the 2009 NILOA survey reported a similar overall pattern of assessment drivers but accorded greater importance to external factors like accreditation and accountability.

San Diego State University (CA)

Revising its mission statement prompted the Department of Religious Studies to rethink how it was assessing student learning. One decision was to focus on the methodologies of religious studies employed in three upper-division courses (Sacred Geography in East Asia, Women in the Bible, and Varieties of Religious Experience). Faculty used a four-point rubric to analyze papers and essay exam responses, such as with the Women in the Bible course where one assignment is to craft a dialogue between a feminist theologian and a clergy member about their views on how women are portrayed in the Book of Proverbs. After reviewing student performance, faculty discussed the possible reasons behind trends in responses and how to address shortcomings. Two welcome outcomes were improvement in student accomplishment from the previous year and department-wide incorporation of learning outcomes in syllabi and classroom instruction and activities.

2. *An overwhelming majority of programs have established learning outcomes goals.*

More than 8 out of 10 respondents said their programs have established an agreed-upon set of intended student learning outcomes. Another 8% indicated that they are developing such a list. Only 6% reported no efforts in this area. Taken together, the answers to this question suggest there is more assessment activity "down and in" than may be apparent by looking at only institution level measures. Only three fifths (61%) of program level respondents said common learning outcomes had been determined at the institution level, with another 11% reporting that they were being developed. In contrast, more than three quarters of the chief academic officers surveyed in 2009 reported that institutional learning goals were in place. This difference is understandable, as faculty are much more likely to be knowledgeable about what is happening in their own program than at the institution level.

3. *A diverse array of assessment methods are employed at the program level across institutions, the most frequently used being capstone experiences, rubrics, final projects, and performance assessments.*

Table 2 shows the various methods programs use to gather evidence of the achievement of learning outcomes.

Standardized generic knowledge and skills tests like the Collegiate Learning Assessment (CLA) are not widely used, as only one fifth (21%) of programs indicated that all or most of their students took them. In contrast, two thirds (68%) reported using capstone assess-ments or rubrics and more than half (58%) reported using performance assessments or final projects to measure learning.

Sierra College (CA)

The English as a Second Language (ESL) Program assesses student writing skills through exams and portfolios. ESL faculty administer writing exams and require students to create portfolios based on in-class writing assignments. The faculty use rubrics to evaluate the student work, with at least two faculty members reading and scoring the writing exam. Evidence of student accomplishment on exams and illustrated in the portfolios determine readiness for the next level of coursework. Changes resulting from this assessment plan include increased time spent writing in class and improved consistency in grading and covering course objectives.
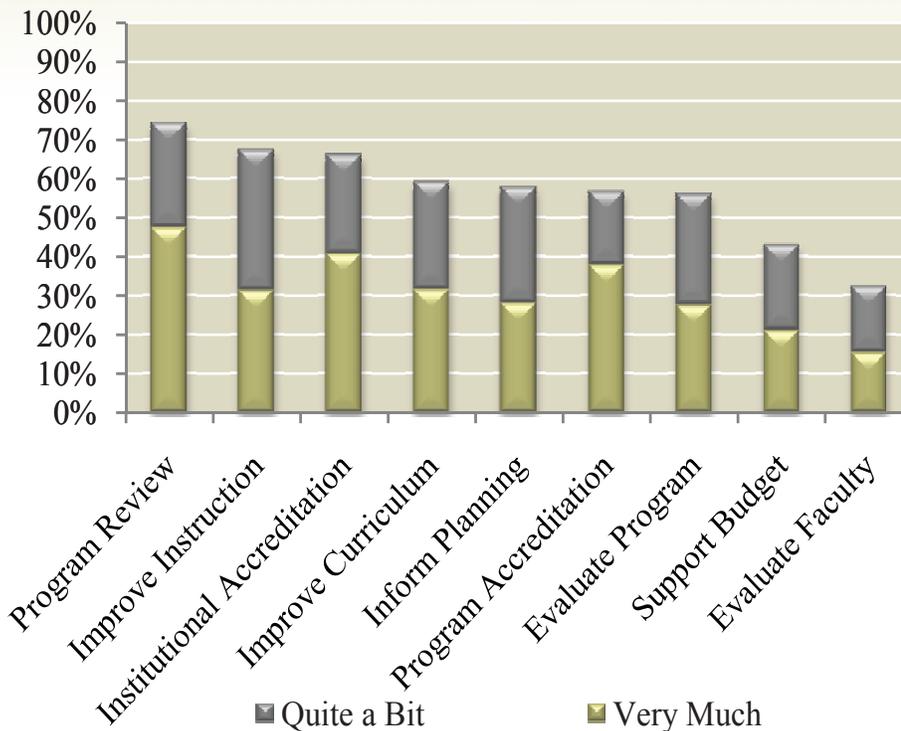
Table 2: Assessment Methods Used

Legend: ■ Most Students ■ All Students
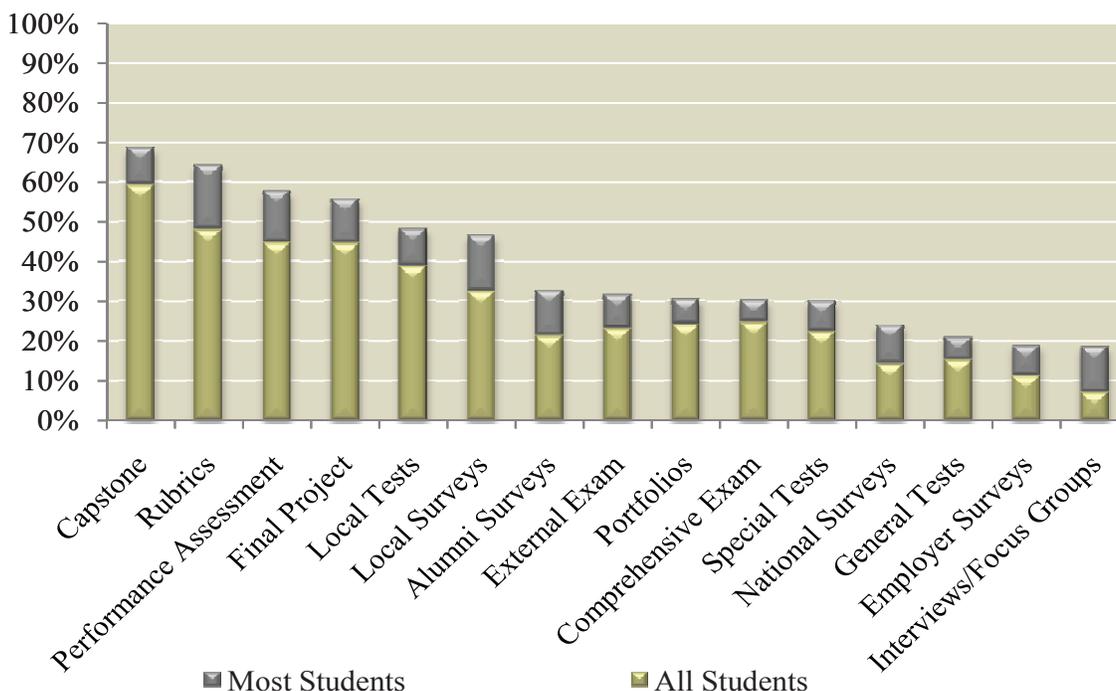
4. *The primary use of assessment results at the program level is for program review—followed by instructional improvement and institutional accreditation.*

Table 3 lists the various uses of assessment results that programs reported.

Table 3: Use of Results

Three quarters (74%) of respondents said they frequently (combining response categories "very much" and "quite a bit") used assessment results for program review—followed by 67% for instructional improvement and 66% for institutional accreditation. When asked specifically about any changes made as a result of using assessment information, 74% noted curricular changes, 47% reported changes in instructional practice, and 49% reported changing their assessment practices. Only 43% of programs, however, identified support of budget requests as a common use, with a third (32%) reporting using results to evaluate faculty performance. These latter two findings suggest that using assessment results at the program level, as expected, centers more on matters of curriculum and pedagogy than on such administrative applications as finance and personnel accountability.

5. *Few resources are dedicated to learning outcomes assessment at the program level.*

When asked about the resources currently devoted to assessment infrastructure, 15% of responding programs reported they had a full-time person dedicated to assessment, with an additional 54% reporting a

Northcentral Technical College (WI)

The Criminal Justice Department at Northcentral Technical College adopted a simulation program in response to a new Department of Justice academy requirement for law enforcement certification. The simulation puts students in the role of an officer dispatched to a call who is to respond accordingly on the scene, using the techniques and tactics covered during the two-year program. Department faculty review students' performance evaluations on the simulation. The results are then summarized and shared with the instructional staff so they can address shortfalls in student performance.

part-time person. Among these people, 63% were tenured faculty, 15% received one course equivalent in release time, and an additional 7% received more than one course equivalent in release time. Seven of ten (69%) program level respondents said they prepared an annual assessment report; 60% reported having an assessment committee. Only 6% of programs, however, reported having an established budget for assessment. These results reinforce the conclusion from the 2009 NILOA survey of chief academic officers that assessment is undercapitalized. They may also suggest that assessment of student learning outcomes is, as many faculty report, an "add on"—something faculty are expected to do without additional time or resources to support the task.

6. *Increased support for faculty in the form of stipends, release time, and professional development would help advance assessment at the program level.*

Table 4 displays what program level respondents believed would assist them in improving assessment and using assessment results for improvement.

Table 4: What Would Help?
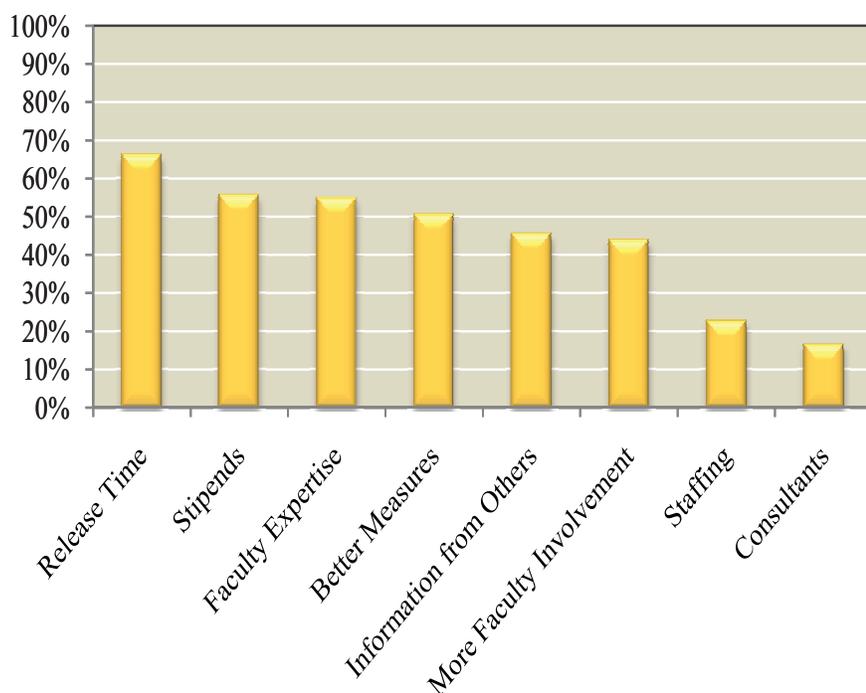
Leading the list of factors that according to respondents would advance assessment were more release time for faculty to engage in assessment (66%), more stipends to support faculty involvement (55%), and greater faculty expertise in designing and applying assessment measures (55%). Almost half of those responding said learning what other programs are doing with regard to assessment would also be helpful. Factors at the bottom of the list were more professional assessment staff (23%) and the help of external consultants (17%). Although 44% of respondents felt that greater faculty involvement would help move assessment forward, more than 60% reported that all or most of their faculty were already involved.

Northern Arizona University (AZ)

Over several years, the Psychology Department systematically examined evidence of their majors' knowledge in the field of critical thinking, and writing skills to guide curriculum development and to help determine whether students were prepared for graduate education or relevant occupations.
After finding that students in upper-division courses needed additional work in certain areas of statistics and research methods, the department used the APA's undergraduate curriculum guidelines to redesign a logical sequencing of skill development and knowledge base development. One salutary effect is that the number of students working with faculty on research doubled which enhances students' statistical knowledge and skill.

Where You Sit Influences What You See

One of NILOA's reasons for undertaking this program level survey was the possibility that the chief academic officers who completed the 2009 survey may have had a less than complete picture of the actual nature and amount of assessment going on in programs at their institutions compared with those closer to academic work. We also wondered whether there were comparable differences in perceptions regarding what types of assessment instruments were used, what was most needed to support assessment, and how (and how much) assessment results were being used. This section presents results of this analysis.

7. *Program heads differ from chief academic officers in terms of their views about the challenges that must be addressed to advance assessment on their campus.*

Table 5 shows the differences in perception between the two sets of respondents about what is most needed in assessment.

In this survey, NILOA sought to determine what assessment activity was underway at the program level, and how that information may be different than what chief academic officers portrayed in the first NILOA survey.

Table 5: What Is Needed in Assessment

Chief Academic Officers   Program Heads
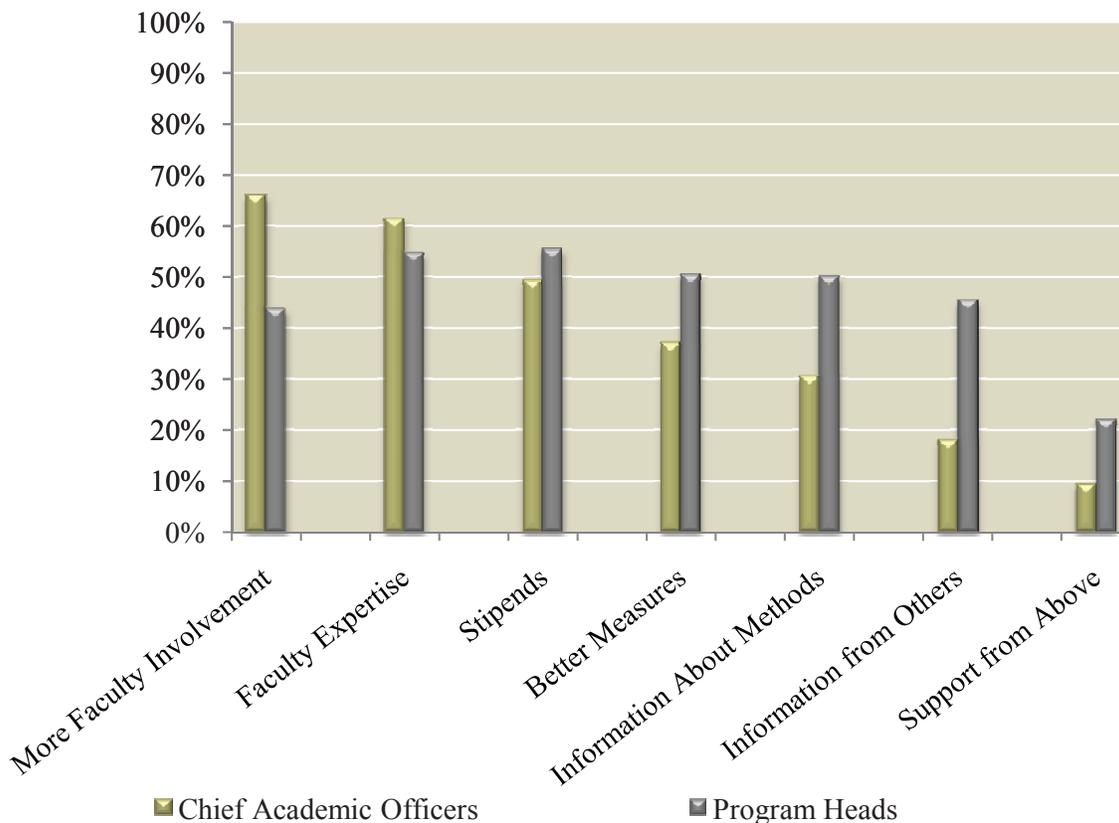
While chief academic officers as well as program level faculty indicated that more faculty expertise and resources were needed, these groups of respondents differed markedly in other important areas. For example,

two thirds (66%) of chief academic officers—compared with only 44% of program level respondents—said that more faculty involvement with assessment would advance assessment on their campus. This suggests either that faculty involvement is viewed as less of a challenge at the program level than at the institution level or that faculty are simply more involved at the program level than chief academic officers believe them to be.

Program level respondents, compared with chief academic officers, also placed a higher value on information about assessment methods and other institutions' assessment activities. For example, more than half of program level respondents—compared with only about one third of chief academic officers—said that both better assessment measures and more information about methods would help. While fewer than one fifth (18%) of chief academic officers said that knowledge about assessment experiences elsewhere would be beneficial to their institutions' assessment effort, almost half (45%) of program level respondents said so. These results suggest a serious perception gap, in which chief academic officers believe a lack of knowledge about assessment is not a major barrier on their campuses while those in the trenches think they would benefit from more knowledge about assessment.

8. *Chief academic officers, for the most part, believe more assessment of various kinds is happening on their campuses than do those at the program level.*

Table 6 lists responses in the top two response categories ("all students" and "most students") to questions about the various approaches used to gather evidence of student learning.

Table 6: Perceived Use of Various Methods

Chief Academic Officers | Program Heads
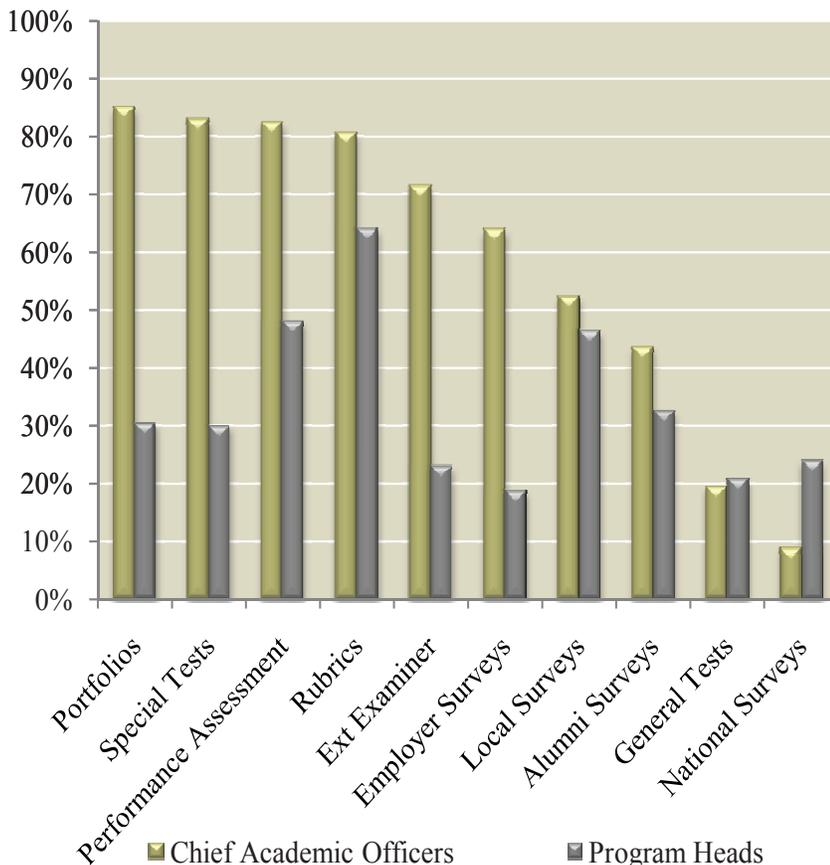
Samford University (AL)

Over the past decade, a comprehensive student learning outcome assessment approach was implemented systematically. Its organizing framework is Transformational Learning Abilities (TLAs), which emphasizes written and oral communication as well as information and quantitative literacy. Focusing on these areas of student performance prompted curricular revisions, such as the Department of Communication Studies that put in place a two-semester senior capstone featuring a fall term communication workshop requiring the integration of knowledge and experience gleaned from lower-level communication studies' courses in an applied communication project, and in the spring, the creation of an electronic portfolio to assemble and present evidence of authentic student work.

With the exception of standardized general examinations and national surveys, the perceived uses of which are similarly fairly low for both groups of respondents, chief academic officers perceive significantly more activity in more types of assessment than program heads perceive. This is especially the case for direct assessments of student learning such as specialized tests, performance assessments, external examiners, portfolios, and employer surveys. One possible explanation for this difference in perceptions is that chief academic officers may have unrealistic or uninformed understandings of what is happening across their institutions. Another, more likely, interpretation is that when academic leaders are asked about assessment on their campus, their response is based on their knowledge of a few programs using one or more of these methods. Results from NILOA focus groups of chief academic officers conducted at national meetings in 2010–11 suggest that some of the latter is occurring, in that participants reported "use" of a particular method even though only a few programs were employing it.

The Role of Specialized Accreditation

Because accreditation—both institutional and specialized/programmatic—was one of the top assessment drivers reported by chief academic officers in the 2009 NILOA survey, the topic of accreditation was of great interest in the results of the program level survey. This section of the report compares survey responses of programs accredited by specialized accrediting organizations to those of nonaccredited programs in all areas—including assessment drivers, assessment activities, and uses of assessment results.

9. *As in institution level assessment practices, accreditation is a major driver in program level assessment—especially for accredited programs.*

When asked what factors were most important as stimuli for their assessment programs, respondents from accredited programs were significantly more likely than respondents from nonaccredited programs to report that specialized accreditation was of high or moderate importance (87% vs. 56%). Institutional accreditation also appeared to be a major influence in the differences between these two groups of respondents (92% vs. 74%). Similar differences also existed, however, between respondents representing accredited programs and those representing non-accredited programs in terms of meeting expectations of state boards and governing/coordinating boards (62% vs. 48%), legislative mandates (46% vs. 32%), and general accountability (61% vs. 48%). These findings suggest that the role of programmatic accreditation is not only direct and specific in affecting program level perceptions and actions but that it also may carry with it a "halo effect" of broader impact across a variety of assessment activities and perceptions.

10. *Accredited programs engage in more assessment activities but do not necessarily dedicate more resources to assessment than nonaccredited programs.*

Table 7 presents assessment activity indices for accredited and nonaccredited programs as well as for all programs. The overall activity index was determined by assigning points to each response category for each type of assessment method covered by the survey (for example, if the top category was chosen for a given item, a 5 would be awarded); then, calculating the sum of the resulting values across all items. Table 8 presents various aspects of assessment infrastructure by accreditation status.

Avila University (MO)

Led by its Curriculum Committee, the School of Nursing faculty developed four program-specific outcomes that meet Commission on Collegiate Nursing Education (CCNE) standards and also parallel the outcomes expected of all students at the institution. A combination of tools and approaches are used to assess student accomplishment, including NSSE and a locally-developed senior survey, rubrics, internship preceptor evaluations, and the National Council Licensure Examination for Registered Nurses (NCLEX-RN). For example, to assess Nursing majors use of effective and facilitative communication techniques to deliver evidence-based client centered care, faculty evaluate an oral presentation and a position paper in the senior year. Student performance on the position paper prompted the introduction of an exercise in required courses earlier in the program to encourage students to begin thinking about possible topics that senior nursing students might pursue.

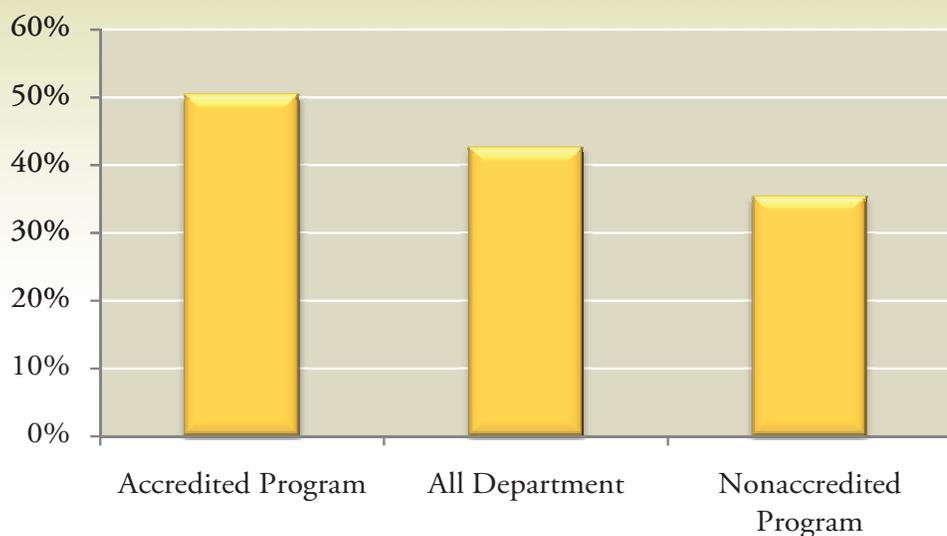Table 7: Assessment Methods:
Overall Use Index by Accredited Status

Accredited programs engage in more assessment activities but do not necessarily dedicate more resources to assessment than nonaccredited programs.

Table 8: Infrastructure for Assessment by Program Accreditation Status

■ Accredited   ■ Nonaccredited
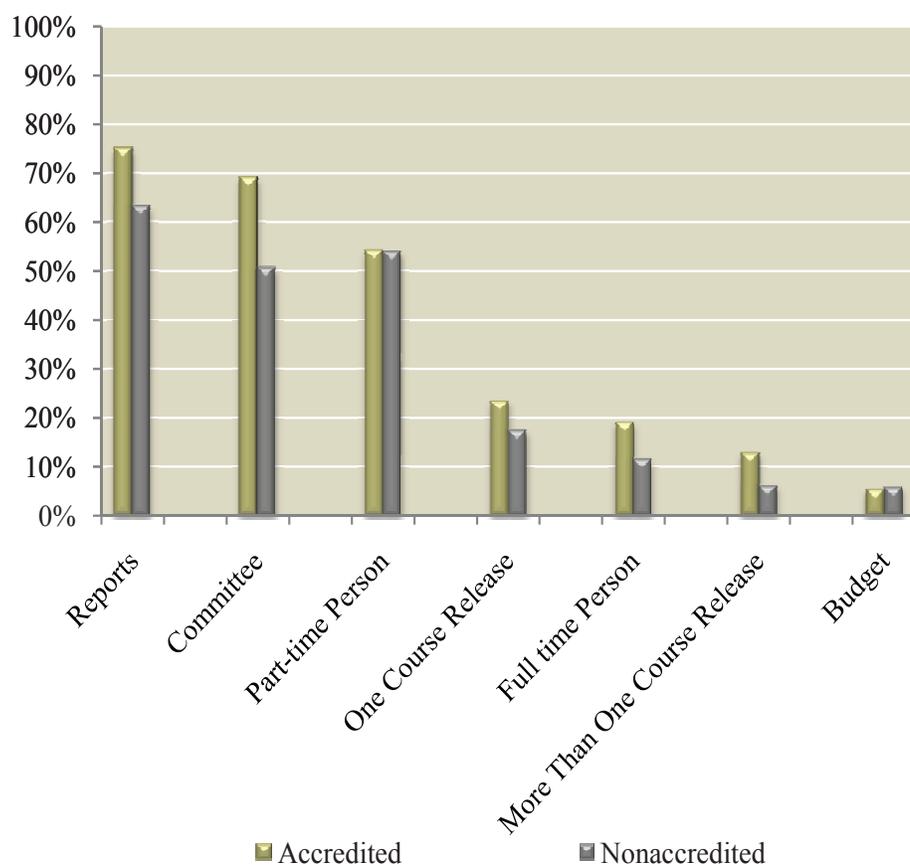
Among the programs responding to the survey, accredited programs reported doing much more assessment than did nonaccredited programs, but accredited programs were only somewhat more likely than nonaccredited programs to report investing in assessment infrastructure. About 20% of the accredited programs reported having a full-time assessment position, twice as many as among the responding nonaccredited programs, but the proportions of all programs with such a posi-

tion were small and about the same percentages of both accredited and nonaccredited programs had a part-time assessment position. Among both accredited and nonaccredited programs with an assessment position, the person assigned to that position was overwhelmingly likely to be a tenure-track faculty member. Somewhat larger percentages of accredited programs than nonaccredited programs provided course releases to their designated assessment person, but fewer than half of even the accredited programs granted any course releases at all. While clear majorities of nonaccredited programs reported having an assessment committee and preparing formal assessment reports, accredited programs were significantly more likely to report these characteristics. Only a very small percentage of both accredited and nonaccredited programs reported having an assessment budget.

11. Accredited programs report higher levels of faculty involvement in assessment than nonaccredited programs.

The most noteworthy difference found between accredited and nonaccredited programs was faculty involvement. Among accredited programs, 41% reported that "all" of their faculty were involved, while 35% reported that "most" of their faculty were involved. For nonaccredited programs, the percentage in each of these categories of faculty involvement was 23%.

12. Accredited programs report more use of assessment results of all kinds than nonaccredited programs.

Table 9 presents findings on the uses of assessment results broken down by program accreditation status, combining the top two response categories ("very much" and "quite a bit") for each application.

Specialized accredited programs such as education, engineering, and nursing reported higher levels of assessment activity.

Table 9: Uses of Assessment Results by Program Accreditation Status

Accredited   Nonaccredited
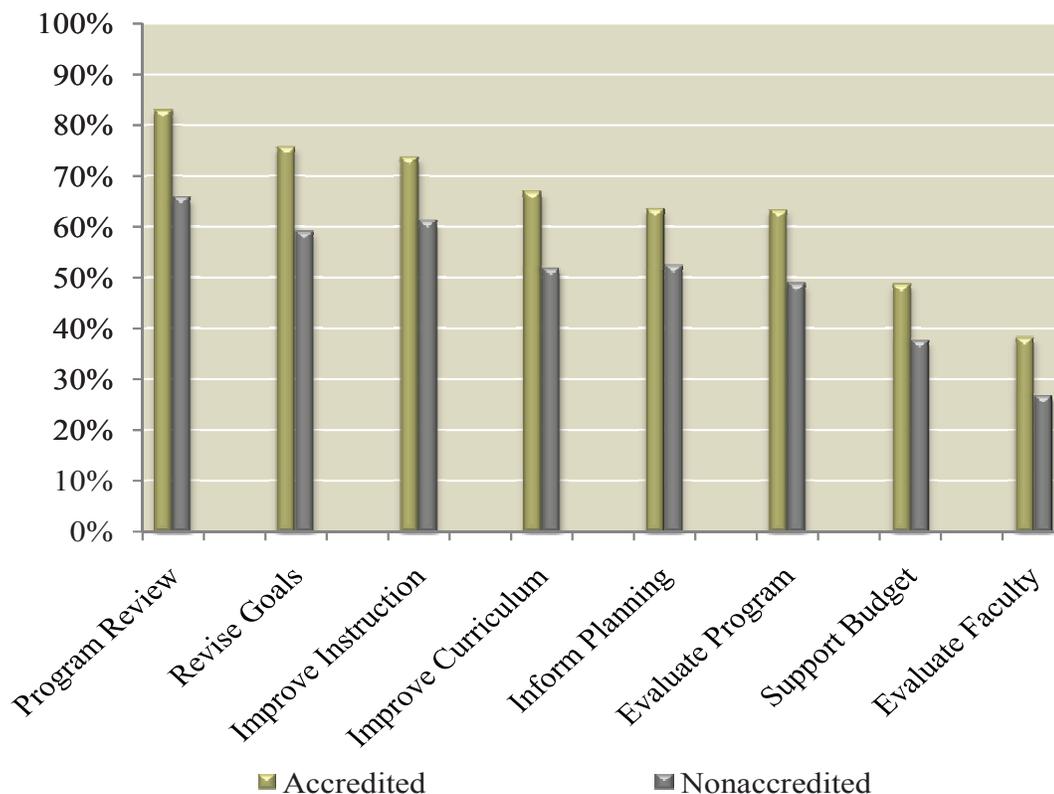
The proportion of program level respondents reporting substantial use of assessment data for every named function was more than 10% higher for accredited programs than for nonaccredited programs. This difference was somewhat expected because specialized accreditors, like their institutional counterparts, look beyond the presence and quality of assessment activities to emphasize the use of results. However, this does not completely explain similar gaps in areas less related to accreditation like program review and budget request support. Once again, the "halo effect" of accreditation seems to pervade all areas of departmental perceptions and activities with regard to assessment.

Disciplinary Differences

A third major area of variation with respect to assessment is evident across the many disciplines in which a given institution offers academic programs. Disciplinary differences affect why programs do assessment, how much of it they do, and how they use the results—differences that in part may be affected by whether or not the program is accredited. However, differences in how programs undertake assessment—the particular types of instruments and evidence-gathering approaches they use—are more likely the product of the differences among disciplinary cultures.

13. *Although differences exist among disciplines in terms of the amount of assessment activity, the most notable variations are in the types of assessment methods they use.*

Table 10 displays the overall volume of assessment activity across broad discipline groupings as described in previous sections.[2]

Disciplinary differences affect why programs do assessment, how much of it they do, and how they use the results— differences that in part may be affected by whether or not the program is accredited.

Table 10: Overall Use Index by Discipline
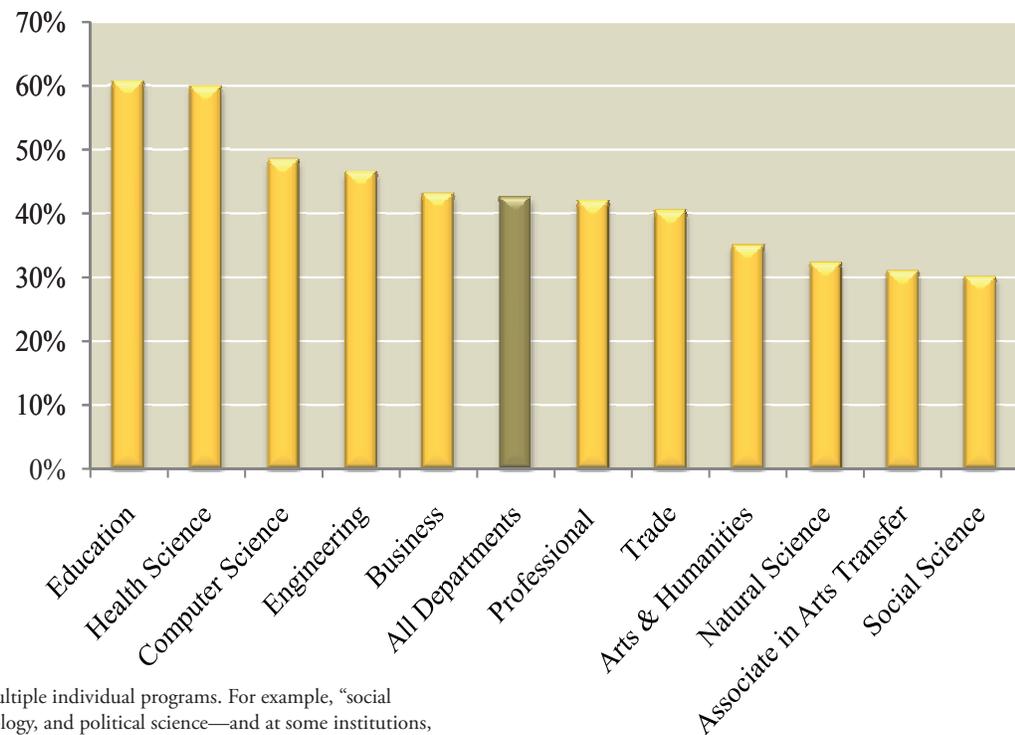
2 These discipline groupings frequently cut across multiple individual programs. For example, "social sciences" would typically include sociology, anthropology, and political science—and at some institutions, psychology and economics. Too few cases were available, however, to allow disaggregation by individual disciplines, but the culture of individual programs with respect to assessment in most cases does not differ very much within these broad disciplinary groupings. There are, to be sure, exceptions here. For example, chemistry is distinctive among the natural sciences for having developed a family of standardized content examinations through its disciplinary association. The particular disciplinary groupings employed in this study are based on those established by the National Center for Education Statistics in its Integrated Postsecondary Education Data System (IPEDS).

Levels of assessment activity in the most active disciplinary groupings (education and health sciences) are almost twice those typical of the least active (associate of arts transfer program,[3] natural sciences, and social sciences). To some extent, these results are likely due to specialized accreditation, which surely has a substantial influence on assessment practices in education and health sciences. But engineering and business[4] are also accredited disciplines and, although they exhibit higher levels of activity than the traditional arts and sciences exhibit, they are not among the most active.

Much more variation across discipline groups is apparent with regard to the kinds of assessment methods used. For example, 84% of departments in education and 53% of programs in health sciences report that "all" or "most" of their students take standardized examinations, compared to 27% in the social sciences and 13% in arts and humanities. Differences of this magnitude were not as apparent with more commonly used assessment methods. For example, 56% of arts and humanites departments and 52% of social sciences departments reported using performance assessments, not far from the 60% reported by both engineering and computer science departments. Similar figures of more than 50% use by traditional arts and science disciplines occurred for culminating projects and demonstrations and the use of rubrics on student work, although the use of such methods by accredited disciplines like education and health sciences far exceeded these levels. Indeed, more than two thirds of traditional arts and science disciplines reported using capstone courses—about the same levels as those reported by accredited disciplines. Some disciplines, moreover, appeared to employ "signature" assessment approaches. For example, 75% of education programs reported that "all" or "most" of their students completed portfolios, with the next most frequent being health sciences at 41%, professional at 38%, arts and humanities at 35%, and computer science at 33%. All the rest of the disciplines were well below 30%.

Survey use was not widely reported at the program level. Only one field, education, reported that more than 30% of its students used national surveys. Only about 45% of disciplines reported using local surveys overall, with only two (engineering and health sciences) reporting as many as two thirds of their students were surveyed using this method. Alumni surveys were reportedly used by about two thirds of those reporting in health sciences and just below half in education and engineering, but with much less frequency in other disciplines. Student focus groups were reported to be used well below 30% for all disciplines, with most below 20%. Finally, only health sciences reported substantial use of employer surveys (60%), with all the rest of the disciplines below 35%. Focus groups with alumni or employers were only reported in trivial numbers.

Some differences across discipline groups discussed above may be a function of the assessment technology these disciplines employ. Readers interested in levels of use for every discipline group with respect to every assessment method should consult the tables in Appendix B.

Assessment at the program level is complicated, requiring more nuanced attention as well as more focused resources to enhance student accomplishment and program performance.

---

3 The associate of arts (AA) degree offers a course of study equal to the first two years of a bachelor's degree and is considered a "transfer degree" that fulfills GE requirements.
4 This may be a result of the fact that business programs are underrepresented among survey responses.

14. Disciplines invest similarly in assessment infrastructure.

Variations across programs with regard to resources devoted to assessment were discernible but not as substantial as might have been expected. Most programs had a position responsible for assessment (either full- or part-time), ranging from a high of 78% of programs in business to a low of 59% in computer science. Similar proportions of disciplines provided one or more course releases for those undertaking such assignments, ranging from a high of 38% in business to a low of 12% in natural sciences. More than half of all programs also reported that all or most of their faculty were involved in the assessment process, ranging from a high of 73% in health sciences to a low of 56% in associate of arts transfer programs. The differences that were apparent varied roughly by specialized accreditation status, but these reported high levels of faculty involvement across all programs suggest that the assessment of student learning has become a common activity for faculty across all programs.

15. The drivers in assessment vary by discipline.

Eight of ten (79%) education programs and 73% of health sciences programs reported national calls for accountability as a major driver in assessment in their programs, while fewer than half did so in arts and humanities, natural sciences, and social sciences. Similar patterns were apparent for governing and state board mandates and, as expected, for specialized accreditation. Smaller differences were reported across disciplines for assessment drivers having to do with internal institutional processes and operations, and all of these were accorded fairly high response percentages. For example, about two thirds of all discipline groups cited program review as a stimulus for assessment (ranging from a high of 90% for health sciences to a low of 62% for engineering)— together with program commitment to improve (ranging from a high of 93% for health sciences to a low of 82% for social sciences), and faculty/staff interest (ranging from a high of 95% for education to a low of 78% for arts and humanities).[5]

16. Disciplines vary with respect to how much they use the results of assessment as well as the nature of the uses.

Major differences among the disciplines are also apparent with respect to the uses programs make of assessment results, which may be another reflection of the "halo effect" of specialized accreditation. For example, programs reporting using results for program review ranged from a high of 90% for education to a low of 63% for social sciences, those using results for improving curriculum from a high of 81% for health sciences to a low of 45% for computer science, those using results for improving instruction from a high of 88% for health sciences to a low of 55% for natural sciences, and those using results for informing program planning from a high of 80% for health sciences to a low of 43% for computer science. Similarly, accredited programs tended to report more changes made in curriculum (ranging from a high of 87% in engineering to a low of 61% in computer science), changes in teaching practice (ranging from a high of 61% in health sciences to a low of 23% in computer

Major differences among the disciplines are also apparent with respect to the uses programs make of assessment results, which may be another reflection of the "halo effect" of specialized accreditation.

---

5 Trade programs rated this item at 50% but with so few cases that the response is probably not credible. Responses from trade programs are excluded from comparison in subsequent paragraphs for the same reason.

science), and changes in assessment practice (ranging from a high of 67% in social sciences to a low of 31% in computer science).

17. Little variation exists across disciplines as to what would advance the program's assessment efforts.

Results regarding what would be helpful to program assessment efforts were generally similar across disciplines, with additional support for faculty involved in assessment in terms of release time and stipends topping the list. The lone exception to this observation was with respect to better tests or measures. Two thirds (68%) of business programs pointed to the need for better measures in contrast to only a third (31%) of education programs.

Conclusions and Implications

Even though the 2009 NILOA survey report title, *More Than You Think, Less Than We Need*, was about institution level assessment activity, the observation contained in that title also applies to this program level study's findings. While considerable activity is underway across academic programs—including the employment of a wide variety of assessment techniques, substantial faculty involvement, and a promising pattern of using results for curricular and program improvement—assessment at the program level is complicated, requiring more nuanced attention as well as more focused resources to enhance student accomplishment and program performance. The findings point to five conclusions.

First, a nontrivial perception gap exists between those who are doing assessment at the program level and chief academic officers. The former say they need more information about what is happening in programs like theirs at other institutions while many academic leaders think otherwise. Taken as a whole, this difference in perceptions about assessment activities between individuals at the department or program level and chief academic officers confirmed the wisdom of taking the pulse, through our survey, of what was happening at the department level. The difference in perceptions also confirmed the "more than you think" conclusion of the 2009 NILOA survey by indicating more faculty involvement in assessment than is frequently believed. By suggesting that those doing the work at the department level could use more substantive information about assessment techniques and experiences elsewhere, these results might induce chief academic officers to take another look at what their programs need to succeed. The perception gap between program level assessment coordinators and chief academic officers further suggests that more emphasis in assessment ought to be placed on developing and disseminating appropriate assessment methods for the different academic disciplines. It also suggests that NILOA and similar entities engaged in knowledge-building around learning outcomes assessment should produce and publish more program level case studies. The program level examples sprinkled throughout this report illustrate the variety of approaches used in program level assessment.

In addition, the perception of what would be helpful at the program level and the observation about disciplinary differences in assessment methods and use also suggest a role for disciplinary associations in the effort to advance the assessment of student learning outcomes. Disciplinary associations may be the appropriate venues to disseminate

Considerable activity is underway across academic programs - including the employment of a wide variety of assessment techniques, substantial faculty involvement, and a promising pattern of using results for curricular and program improvement.

information about assessment measures and methods and to exchange examples of assessment experiences in programs across institutions.

Second, student learning assessment at the institution and program level is undercapitalized. Programs rely on assessment committees made up of faculty and staff to conduct an array of assessment activities, with virtually no budget and rarely with support such as course release time. Although assessment should become a standard practice in a scholarly approach to improving teaching and learning, performing this important work without some support is an unfair burden on program chairs and faculty. Innovative approaches to supporting faculty and program level assessment activities include modest stipends to help faculty develop course embedded assessment and redesigned department assessment activities such as capstone assignments and rubrics to share across department chairs and chief academic officers.

Third, the patterns of assessment practice and the uses of assessment results vary across programs by their status with respect to specialized accreditation. This is probably not surprising, given that specialized accreditors specify standards and requirements for student learning outcomes and evidence of educational effectiveness. Yet, at the same time, it is reassuring that accreditation status is less influential among program level respondents than are intrinsic reasons for doing assessment—like program improvement or faculty interest.

Fourth, program respondents cite improvements in curriculum and pedagogy as well as faculty interest as among the most important drivers of assessment in their programs. More case studies of individual programs engaged in assessment and more attention to how different disciplines conceptualize and undertake the task of assessing student learning outcomes would contribute greatly to what we now know. Moreover, in the spirit of assessment for improvement, it is important to document the specific changes that assessment efforts help influence.

Fifth, differences in assessment practices are consistent with differences in typical research methods and modes of inquiry across disciplines. For example, few programs in the arts and humanities or social sciences use standardized examinations while in professional programs like education and health their use is widespread.

While we have still only scratched the surface of what we need to know about assessment practices among programs at our colleges and universities, by going below the institution level—"down and in"—to investigate what is happening at the program level, this study has painted a more accurate, nuanced picture than previously available of assessment practice as performed by faculty and administrators close to the work. The variations that the results of this study show across disciplines in assessment practices and engagement with assessment have long been suspected, but, until now, have not been systematically documented. With knowledge in hand about the shape and magnitude of these variations, those responsible for assessment planning and implementation will know better how to proceed in processes like program review and individuals responsible for implementing assessment at the program level will have a better idea of what their colleagues in similar disciplines are doing elsewhere.

The variations that the results of this study show across disciplines in assessment practices and engagement with assessment have long been suspected, but, until now, have not been systematically documented.

References

Kuh, G., & Ikenberry, S. (2009, October). *More than you think, less than we need: Learning outcomes assessment in American higher education*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment. Retrieved from: http://www.learningoutcomesassessment.org/NILOAsurveyresults09.htm

Banta, T. W., & Associates. (1993). *Making a difference: Outcomes of a decade of assessment in higher education.* San Francisco, CA: Jossey-Bass.

Appendix A: Methodology

This study of program level assessment activities demanded a complex research design and sampling strategy to ensure representativeness. The survey had to be conducted in two stages. In the first stage, the chief academic officers of all accredited postsecondary institutions offering undergraduate degrees in the U.S. (2,719 institutions) were sent a request that they supply contact information for several specified department or program chairs that had been randomly selected for their institution. For baccalaureate-granting institutions, four programs were specified; for two-year institutions, two programs plus the AA transfer program (if present) were specified. In the second stage, NILOA used the contact information provided to invite these individuals to complete a questionnaire.[1]

NILOA stipulated the particular programs to be surveyed at each institution in order to head off the likelihood that academic officers would simply select their best examples. NILOA staff used data from the Integrated Postsecondary Education Data System (IPEDS) to determine the distribution of bachelor's and associate's degrees granted by two-digit Classification of Instructional Program (CIP) code across all four-year and two-year institutions. This enabled NILOA to systematically assign specific CIPs to institutions to constitute a representative sampling plan. To ensure that reasonably familiar nomenclature was used when requesting contact information from the academic officers, staff used the major codes employed by the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CCSSE).

Collecting information through a two-stage process required an extensive data collection period. The first requests to chief academic officers for academic program chair contact information were sent in mid-March 2010, and academic program chairs were invited to complete the questionnaire on a rolling basis as soon as their contact information was received. After sending multiple reminders to chief academic officers for contact information and to program chairs to complete the questionnaire, the survey was concluded in October 2010. A total of 982 usable responses were obtained, representing 30% of the programs contacted. This relatively low response rate is understandable given the complexity of the survey's implementation but, as shown in Table 1, the mix of respondents is broadly representative of the actual mix of programs in both the two and four-year sectors across the country as a whole—with the exception of business, which is underrepresented. Nevertheless, results should be treated with caution with respect to making point estimates of the actual frequency of a particular activity for a particular type of program. These results are much more useful in showing relative differences in responses across different types of programs.

Table 1: Population size and sample size by percent public/private/for-profit.

Program	Nation	Sample
Arts & Humanities	13.9%	14.9%
Business	18.1%	11.8%
Computer	3.2%	3.1%
Education	7.5%	9.2%
Engineering	5.0%	5.8%
Health Science	10.5%	13.6%
AA Transfer	8.4%	7.6%
Natural Sciences	11.1%	14.8%
Professional	8.6%	9.7%
Social Science	8.1%	8.2%
Trade	2.0%	1.3%
Total	100.0%	100.0%

---

1 The survey instrument can be downloaded from http://learningoutcomesassessment.org/documents/NILOA10_PaperQ.pdf

REASONS FOR DOING ASSESSMENT	High Importance	Moderate Importance	Top 2 Ratings
National Calls for Accountability			
Arts & Humanities	12.0%	34.5%	46.5%
Business	26.7%	29.3%	56.0%
Computer Science	6.9%	41.4%	48.3%
Education	33.3%	45.6%	78.9%
Engineering	22.8%	22.8%	45.6%
Health Sciences	43.9%	29.5%	73.4%
Liberal Arts	26.4%	38.9%	65.3%
Natural Sciences	13.0%	24.6%	37.6%
Professional	27.5%	26.3%	53.8%
Social Sciences	18.5%	21.0%	39.5%
Trade	15.4%	23.1%	38.5%
All Departments	23.9%	30.6%	54.5%
Governing Board Mandate			
Arts & Humanities	19.9%	24.1%	44.0%
Business	24.1%	26.7%	50.8%
Computer Science	10.7%	46.4%	57.1%
Education	41.1%	24.4%	65.5%
Engineering	38.6%	15.8%	54.4%
Health Sciences	54.9%	21.1%	76.0%
Liberal Arts	23.6%	33.3%	56.9%
Natural Sciences	23.2%	21.7%	44.9%
Professional	30.4%	27.2%	57.6%
Social Sciences	21.0%	22.2%	43.2%
Trade	38.5%	30.8%	69.3%
All Departments	30.2%	24.8%	55.0%
State Board Mandate			
Arts & Humanities	16.4%	20.7%	37.1%
Business	18.1%	19.0%	37.1%
Computer Science	28.6%	7.1%	35.7%
Education	60.0%	17.8%	77.8%
Engineering	29.8%	17.5%	47.3%
Health Sciences	54.1%	15.0%	69.1%
Liberal Arts	23.6%	25.0%	48.6%
Natural Sciences	16.8%	12.4%	29.2%
Professional	24.2%	17.6%	41.8%
Social Sciences	7.5%	16.2%	23.7%
Trade	15.4%	23.1%	38.5%
All Departments	27.1%	18.0%	45.1%

Institutional Accreditation

Arts & Humanities	49.3%	27.1%	76.4%
Business	63.5%	18.3%	81.8%
Computer Science	48.3%	31.0%	79.3%
Education	77.8%	18.9%	96.7%
Engineering	78.9%	12.3%	91.2%
Health Sciences	79.7%	13.5%	93.2%
Liberal Arts	69.9%	19.2%	89.1%
Natural Sciences	52.5%	23.7%	76.2%
Professional	58.7%	23.9%	82.6%
Social Sciences	55.6%	18.5%	74.1%
Trade	53.8%	30.8%	84.6%
All Departments	63.1%	20.6%	83.7%

Specialized Accreditation

Arts & Humanities	36.6%	20.4%	57.0%
Business	54.8%	15.7%	70.5%
Computer Science	37.9%	20.7%	58.6%
Education	76.4%	13.5%	89.9%
Engineering	66.1%	14.3%	80.4%
Health Sciences	87.2%	8.3%	95.5%
Liberal Arts	28.2%	9.9%	38.1%
Natural Sciences	27.3%	10.8%	38.1%
Professional	54.9%	18.7%	73.6%
Social Sciences	19.8%	6.2%	26.0%
Trade	53.8%	25.0%	78.8%
All Departments	49.9%	13.7%	63.6%

Professional or Disciplinary Association

Arts & Humanities	21.3%	22.7%	44.0%
Business	27.6%	23.3%	50.9%
Computer Science	10.7%	35.7%	46.4%
Education	31.1%	34.4%	65.5%
Engineering	21.4%	32.1%	53.5%
Health Sciences	50.4%	22.6%	73.0%
Liberal Arts	7.1%	20.0%	27.1%
Natural Sciences	14.0%	16.9%	30.9%
Professional	29.7%	29.7%	59.4%
Social Sciences	11.4%	24.1%	35.5%
Trade	23.1%	30.8%	53.9%
All Departments	24.7%	24.7%	49.4%

Program Review

Arts & Humanities	35.5%	36.9%	72.4%
Business	38.8%	33.6%	72.4%
Computer Science	37.9%	41.4%	79.3%
Education	44.3%	37.5%	81.8%
Engineering	33.9%	28.6%	62.5%
Health Sciences	57.6%	31.8%	89.4%
Liberal Arts	40.3%	40.3%	80.6%
Natural Sciences	38.1%	33.1%	71.2%
Professional	42.4%	32.6%	75.0%
Social Sciences	40.0%	25.0%	65.0%
Trade	30.8%	38.5%	69.3%
All Departments	41.4%	33.8%	75.2%

Program Commitment to Improve

Arts & Humanities	58.9%	24.1%	83.0%
Business	57.8%	29.3%	87.1%
Computer Science	51.7%	37.9%	89.6%
Education	53.3%	38.9%	92.2%
Engineering	50.9%	34.5%	85.4%
Health Sciences	68.7%	23.9%	92.6%
Liberal Arts	58.3%	25.0%	83.3%
Natural Sciences	45.3%	39.6%	84.9%
Professional	62.4%	23.7%	86.1%
Social Sciences	57.0%	25.3%	82.3%
Trade	38.5%	38.5%	77.0%
All Departments	56.8%	29.7%	86.5%

Institutional Commitment to Improve

Arts & Humanities	54.5%	28.0%	82.5%
Business	55.2%	29.3%	84.5%
Computer Science	48.3%	37.9%	86.2%
Education	52.8%	40.4%	93.2%
Engineering	63.2%	22.8%	86.0%
Health Sciences	30.3%	57.6%	87.9%
Liberal Arts	54.2%	33.3%	87.5%
Natural Sciences	42.3%	35.8%	78.1%
Professional	60.2%	23.7%	83.9%
Social Sciences	53.8%	25.0%	78.8%
Trade	46.2%	30.8%	77.0%
All Departments	53.8%	30.5%	84.3%

Faculty/Staff Interest

Arts & Humanities	51.6%	26.2%	77.8%
Business	57.8%	26.7%	84.5%
Computer Science	44.0%	48.0%	92.0%
Education	68.4%	26.6%	95.0%
Engineering	60.0%	20.0%	80.0%
Health Sciences	75.7%	18.9%	94.6%
Liberal Arts	47.7%	33.8%	81.5%
Natural Sciences	36.1%	44.3%	80.4%
Professional	58.3%	29.2%	87.5%
Social Sciences	50.0%	34.3%	84.3%
Trade	37.5%	12.5%	50.0%
All Departments	55.1%	29.8%	84.9%

INSTRUMENTS USED

Professional Licensure Exams (aka "General Tests")	All Students	Most Students	Top 2 Ratings
Arts & Humanities	0.7%	4.2%	4.9%
Business	0.0%	0.9%	0.9%
Computer Science	6.7%	0.0%	6.7%
Education	52.8%	13.5%	66.3%
Engineering	5.3%	14.0%	19.3%
Health Sciences	62.9%	9.8%	72.7%
Liberal Arts	0.0%	2.7%	2.7%
Natural Sciences	0.0%	3.5%	3.5%
Professional	6.4%	6.4%	12.8%
Social Sciences	1.3%	0.0%	1.3%
Trade	30.8%	15.4%	46.2%
All Departments	15.2%	5.7%	20.9%

Standardized Content Exams (aka "Special Tests")			
Arts & Humanities	9.0%	4.2%	13.2%
Business	27.8%	11.3%	39.1%
Computer Science	0.0%	0.0%	0.0%
Education	67.4%	15.7%	83.1%
Engineering	0.0%	5.3%	5.3%
Health Sciences	44.7%	8.8%	53.5%
Liberal Arts	0.0%	2.8%	2.8%
Natural Sciences	18.2%	9.8%	28.0%
Professional	7.5%	7.5%	15.0%
Social Sciences	18.8%	7.5%	26.3%
Trade	27.3%	0.0%	27.3%
All Departments	22.3%	7.7%	30.0%

Locally Developed Content Exams (aka "Local Tests")

Arts & Humanities	24.8%	9.0%	33.8%
Business	37.5%	14.3%	51.8%
Computer Science	46.4%	14.3%	60.7%
Education	36.7%	8.9%	45.6%
Engineering	49.1%	1.8%	50.9%
Health Sciences	67.2%	3.1%	70.3%
Liberal Arts	32.4%	20.3%	52.7%
Natural Sciences	33.1%	6.5%	39.6%
Professional	28.4%	13.7%	42.1%
Social Sciences	33.8%	5.2%	39.0%
Trade	69.2%	15.4%	84.6%
All Departments	38.8%	9.3%	48.1%

Performance Assessments

Arts & Humanities	43.2%	13.0%	56.2%
Business	35.7%	24.3%	60.0%
Computer Science	40.0%	20.0%	60.0%
Education	65.9%	10.2%	76.1%
Engineering	49.1%	10.5%	59.6%
Health Sciences	73.9%	6.0%	79.9%
Liberal Arts	14.7%	17.3%	32.0%
Natural Sciences	25.9%	11.9%	37.8%
Professional	53.2%	7.4%	60.6%
Social Sciences	38.0%	13.9%	51.9%
Trade	46.2%	15.4%	61.6%
All Departments	44.7%	12.9%	57.6%

External Assessors (aka "External Exam")

Arts & Humanities	8.2%	6.8%	15.0%
Business	7.9%	10.2%	18.1%
Computer Science	20.0%	6.7%	26.7%
Education	68.1%	7.9%	76.0%
Engineering	22.8%	12.9%	35.7%
Health Sciences	59.0%	9.2%	68.2%
Liberal Arts	1.3%	5.3%	6.6%
Natural Sciences	4.9%	7.6%	12.5%
Professional	32.6%	13.7%	46.3%
Social Sciences	11.2%	7.5%	18.7%
Trade	30.8%	0.0%	30.8%
All Departments	23.1%	8.5%	31.6%

Capstone Course

Arts & Humanities	59.6%	8.2%	67.8%
Business	62.9%	19.0%	81.9%
Computer Science	66.7%	6.7%	73.4%
Education	71.9%	10.1%	82.0%
Engineering	80.7%	7.0%	87.7%
Health Sciences	55.6%	6.0%	61.6%
Liberal Arts	12.0%	9.3%	21.3%
Natural Sciences	56.2%	11.1%	67.3%
Professional	65.3%	5.3%	70.6%
Social Sciences	70.9%	6.3%	77.2%
Trade	38.5%	7.7%	46.2%
All Departments	59.1%	9.4%	68.5%

Comprehensive Exam

Arts & Humanities	13.1%	7.6%	20.7%
Business	28.7%	6.1%	34.8%
Computer Science	34.5%	10.3%	44.8%
Education	20.5%	3.4%	23.9%
Engineering	26.3%	5.3%	31.6%
Health Sciences	60.4%	6.7%	67.1%
Liberal Arts	6.7%	9.3%	16.0%
Natural Sciences	20.4%	2.8%	23.2%
Professional	14.7%	4.2%	18.9%
Social Sciences	12.7%	2.5%	15.2%
Trade	46.2%	0.0%	46.2%
All Departments	24.7%	5.5%	30.2%

Culminating Project/Demonstration (aka "Final Project")

Arts & Humanities	47.6%	10.3%	57.9%
Business	36.8%	14.9%	51.7%
Computer Science	56.7%	16.7%	73.4%
Education	58.9%	14.4%	73.3%
Engineering	64.9%	10.5%	75.4%
Health Sciences	51.5%	9.7%	61.2%
Liberal Arts	10.7%	12.0%	22.7%
Natural Sciences	35.4%	11.1%	46.5%
Professional	53.2%	5.3%	58.5%
Social Sciences	42.5%	8.8%	51.3%
Trade	30.8%	15.4%	46.2%
All Departments	44.5%	11.1%	55.6%

Rubrics on Student Work

Arts & Humanities	46.2%	13.1%	59.3%
Business	42.2%	19.8%	62.0%
Computer Science	56.7%	13.3%	70.0%
Education	76.4%	11.2%	87.6%
Engineering	49.1%	14.0%	63.1%
Health Sciences	69.2%	12.0%	81.2%
Liberal Arts	17.3%	22.7%	40.0%
Natural Sciences	28.7%	20.3%	49.0%
Professional	60.0%	17.9%	77.9%
Social Sciences	40.5%	16.5%	57.0%
Trade	23.1%	15.4%	38.5%
All Departments	47.9%	16.2%	64.1%

Portfolios

Arts & Humanities	29.0%	6.2%	35.2%
Business	8.8%	4.4%	13.2%
Computer Science	26.7%	6.7%	33.4%
Education	62.9%	12.4%	75.3%
Engineering	19.3%	7.0%	26.3%
Health Sciences	37.6%	3.8%	41.4%
Liberal Arts	8.1%	6.8%	14.9%
Natural Sciences	8.3%	2.8%	11.1%
Professional	27.4%	10.5%	37.9%
Social Sciences	16.2%	5.0%	21.2%
Trade	7.7%	15.4%	23.1%
All Departments	24.2%	6.3%	30.5%

National Surveys

Arts & Humanities	16.4%	5.5%	21.9%
Business	9.6%	14.8%	24.4%
Computer Science	17.2%	3.4%	20.6%
Education	19.1%	11.2%	30.3%
Engineering	8.8%	10.5%	19.3%
Health Sciences	6.0%	21.8%	27.8%
Liberal Arts	20.0%	8.0%	28.0%
Natural Sciences	12.8%	8.5%	21.3%
Professional	13.8%	2.1%	15.9%
Social Sciences	8.6%	18.5%	27.1%
Trade	7.7%	7.7%	15.4%
All Departments	14.2%	9.8%	24.0%

Locally-Developed Surveys (aka "Local Surveys")

Arts & Humanities	25.5%	10.3%	35.8%
Business	22.8%	24.6%	47.4%
Computer Science	44.8%	10.3%	55.1%
Education	38.2%	16.9%	55.1%
Engineering	53.6%	8.9%	62.5%
Health Sciences	55.6%	11.3%	66.9%
Liberal Arts	12.0%	16.0%	28.0%
Natural Sciences	24.6%	15.5%	40.1%
Professional	33.7%	8.4%	42.1%
Social Sciences	27.5%	13.8%	41.3%
Trade	23.1%	23.1%	46.2%
All Departments	32.4%	14.1%	46.5%

Student Interviews/Focus Groups (aka "Interviews/Focus Groups")

Arts & Humanities	11.0%	8.2%	19.2%
Business	5.3%	3.5%	8.8%
Computer Science	6.9%	6.9%	13.8%
Education	17.8%	5.6%	23.4%
Engineering	17.5%	8.8%	26.3%
Health Sciences	19.1%	9.9%	29.0%
Liberal Arts	1.3%	2.7%	4.0%
Natural Sciences	9.2%	5.7%	14.9%
Professional	13.8%	8.5%	22.3%
Social Sciences	7.8%	11.4%	19.2%
Trade	15.4%	7.7%	23.1%
All Departments	11.4%	7.1%	18.5%

Alumni Surveys

Arts & Humanities	11.0%	2.8%	13.8%
Business	14.8%	16.5%	31.3%
Computer Science	16.7%	6.7%	23.4%
Education	31.1%	16.7%	47.8%
Engineering	24.6%	21.1%	45.7%
Health Sciences	48.5%	16.7%	65.2%
Liberal Arts	5.5%	6.8%	12.3%
Natural Sciences	14.8%	7.0%	21.8%
Professional	25.3%	12.1%	37.4%
Social Sciences	15.0%	10.0%	25.0%
Trade	16.7%	8.3%	25.0%
All Departments	21.3%	11.3%	32.6%

Alumni Interviews/Focus Groups   [Trivial Numbers]

Employer Surveys

Arts & Humanities	1.4%	2.7%	4.1%
Business	7.0%	7.9%	14.9%
Computer Science	10.3%	13.8%	24.1%
Education	20.2%	14.6%	34.8%
Engineering	12.3%	17.5%	29.8%
Health Sciences	42.0%	17.6%	59.6%
Liberal Arts	2.7%	1.3%	4.0%
Natural Sciences	3.5%	0.7%	4.2%
Professional	8.8%	6.6%	15.4%
Social Sciences	0.0%	2.5%	2.5%
Trade	0.0%	8.3%	8.3%
All Departments	11.2%	7.6%	18.8%

Employer Focus Groups   [trivial numbers]

Institution Assessments Broken Down   [Too Many Unknowns]

Institution Surveys Broken Down   [Too Many Unknowns]

USES OF ASSESSMENT RESULTS

Programmatic Accreditation	Very Much	Quite a Bit	Top 2 Categories
Arts & Humanities	27.1%	24.5%	51.6%
Business	38.8%	22.4%	61.2%
Computer Science	31.0%	20.7%	51.7%
Education	60.0%	24.4%	84.4%
Engineering	71.9%	10.5%	82.4%
Health Sciences	74.6%	12.7%	87.3%
Liberal Arts	8.1%	27.0%	35.1%
Natural Sciences	14.3%	18.6%	32.9%
Professional	38.3%	16.0%	54.3%
Social Sciences	22.5%	10.0%	32.5%
Trade	46.2%	15.4%	61.6%
All Departments	37.7%	18.9%	56.6%

Institutional Accreditation

Arts & Humanities	31.0%	26.1%	57.1%
Business	46.6%	24.1%	70.7%
Computer Science	37.9%	37.9%	75.8%
Education	57.3%	30.3%	87.6%
Engineering	51.8%	14.3%	66.1%
Health Sciences	63.9%	21.1%	85.0%
Liberal Arts	29.3%	32.0%	61.3%
Natural Sciences	19.4%	28.8%	48.2%
Professional	39.8%	21.5%	61.3%
Social Sciences	35.0%	21.2%	56.2%
Trade	30.8%	38.5%	69.3%
All Departments	40.6%	25.4%	66.0%

Program Review

Arts & Humanities	35.5%	34.8%	70.3%
Business	48.3%	29.3%	77.6%
Computer Science	44.8%	37.9%	82.7%
Education	64.0%	25.8%	89.8%
Engineering	56.1%	21.1%	77.2%
Health Sciences	73.7%	15.0%	88.7%
Liberal Arts	21.6%	32.4%	54.0%
Natural Sciences	31.4%	31.4%	62.8%
Professional	54.9%	23.1%	78.0%
Social Sciences	41.6%	22.8%	64.4%
Trade	41.7%	25.0%	66.7%
All Departments	47.2%	27.0%	74.2%

Improving Curriculum

Arts & Humanities	26.4%	26.4%	52.8%
Business	33.9%	27.0%	60.9%
Computer Science	27.6%	17.2%	44.8%
Education	44.4%	28.9%	73.3%
Engineering	36.8%	28.1%	64.9%
Health Sciences	51.5%	29.1%	80.6%
Liberal Arts	18.7%	30.7%	49.4%
Natural Sciences	15.5%	31.0%	46.5%
Professional	33.0%	23.4%	56.4%
Social Sciences	27.2%	27.2%	54.4%
Trade	23.1%	23.1%	46.2%
All Departments	31.5%	27.6%	59.1%

Improving Instruction

Arts & Humanities	25.9%	35.7%	61.6%
Business	29.6%	40.9%	70.5%
Computer Science	24.1%	37.9%	62.0%
Education	41.1%	34.4%	75.5%
Engineering	35.7%	33.9%	69.6%
Health Sciences	50.4%	37.6%	88.0%
Liberal Arts	18.7%	37.3%	56.0%
Natural Sciences	16.3%	38.3%	54.6%
Professional	41.9%	34.4%	76.3%
Social Sciences	25.9%	28.4%	54.3%
Trade	23.1%	30.8%	53.9%
All Departments	31.2%	36.1%	67.3%

Evaluating Faculty/Staff Performance

Arts & Humanities	11.1%	17.4%	28.5%
Business	19.0%	12.9%	31.9%
Computer Science	6.9%	10.3%	17.2%
Education	20.5%	21.6%	42.1%
Engineering	19.3%	14.0%	33.3%
Health Sciences	27.6%	28.4%	56.0%
Liberal Arts	13.3%	10.7%	24.0%
Natural Sciences	7.0%	13.4%	20.4%
Professional	14.9%	21.3%	36.2%
Social Sciences	11.1%	9.9%	21.0%
Trade	7.7%	15.4%	23.1%
All Departments	15.4%	17.0%	32.4%

Evaluating Program Performance

Arts & Humanities	20.8%	34.0%	54.8%
Business	27.8%	27.0%	54.8%
Computer Science	13.8%	27.6%	41.4%
Education	42.0%	30.7%	72.7%
Engineering	28.6%	23.2%	51.8%
Health Sciences	47.8%	32.8%	80.6%
Liberal Arts	14.7%	13.3%	28.0%
Natural Sciences	10.6%	31.2%	41.8%
Professional	34.4%	29.0%	63.4%
Social Sciences	28.8%	22.5%	51.3%
Trade	15.4%	30.8%	46.2%
All Departments	27.5%	28.4%	55.9%

Informing Program Planning

Arts & Humanities	21.5%	34.7%	56.2%
Business	32.2%	26.1%	58.3%
Computer Science	14.3%	28.6%	42.9%
Education	46.1%	27.0%	73.1%
Engineering	28.1%	24.6%	52.7%
Health Sciences	45.5%	34.1%	79.6%
Liberal Arts	17.6%	24.3%	41.9%
Natural Sciences	8.5%	37.6%	46.1%
Professional	36.6%	25.1%	61.7%
Social Sciences	25.9%	29.6%	55.5%
Trade	15.4%	15.4%	30.8%
All Departments	28.0%	29.8%	57.8%

Supporting Budget Requests

Arts & Humanities	16.9%	18.3%	35.2%
Business	18.1%	19.8%	37.9%
Computer Science	13.8%	13.8%	27.6%
Education	24.4%	23.3%	47.7%
Engineering	30.4%	23.2%	53.6%
Health Sciences	37.6%	27.1%	64.7%
Liberal Arts	12.0%	22.7%	34.7%
Natural Sciences	10.1%	19.4%	29.5%
Professional	30.9%	26.6%	57.5%
Social Sciences	17.3%	16.0%	33.3%
Trade	30.8%	30.8%	61.6%
All Departments	21.1%	22.0%	43.1%

CHANGES MADE

Curriculum

Arts & Humanities	79.7%
Business	70.1%
Computer Science	61.5%
Education	76.1%
Engineering	87.0%
Health Sciences	76.9%
Liberal Arts	55.6%
Natural Sciences	66.7%
Professional	78.7%
Social Sciences	83.3%
Trade	22.2%
All Departments	73.6%

Teaching Practice

Arts & Humanities	43.9%
Business	40.2%
Computer Science	23.1%
Education	53.5%
Engineering	41.3%
Health Sciences	60.7%
Liberal Arts	55.6%
Natural Sciences	40.0%
Professional	60.0%
Social Sciences	35.2%
Trade	22.2%
All Departments	47.0%

Assessment Practice

Arts & Humanities	44.7%
Business	47.4%
Computer Science	30.8%
Education	63.4%
Engineering	50.0%
Health Sciences	47.9%
Liberal Arts	48.1%
Natural Sciences	41.9%
Professional	52.0%
Social Sciences	66.7%
Trade	22.2%
All Departments	48.9%

STAFFING AND RESOURCES

Assessment Personnel	Full-time	Part-time	Any Position
Arts & Humanities	11.9%	50.3%	62.2%
Business	14.7%	62.9%	77.6%
Computer Science	20.7%	37.9%	58.6%
Education	16.7%	57.8%	74.5%
Engineering	17.5%	57.9%	75.4%
Health Sciences	26.1%	47.9%	74.0%
Liberal Arts	20.3%	48.6%	68.9%
Natural Sciences	8.6%	58.3%	66.9%
Professional	12.9%	58.1%	71.0%
Social Sciences	8.6%	56.8%	65.4%
Trade	23.1%	23.1%	46.2%
All Departments	15.4%	54.2%	69.6%

Staff Background	Tenured	Not Tenured	
Arts & Humanities	75.3%	16.9%	
Business	55.9%	21.5%	
Computer Science	47.1%	29.4%	
Education	48.5%	23.5%	
Engineering	65.1%	16.3%	
Health Sciences	54.0%	17.0%	
Liberal Arts	57.7%	13.5%	
Natural Sciences	74.5%	14.9%	
Professional	67.6%	17.6%	
Social Sciences	76.5%	11.8%	
Trade	33.3%	50.0%	
All Departments	63.0%	17.9%	

Course Release	One Course	More than One	Any Course Release
Arts & Humanities	14.0%	5.6%	19.6%
Business	25.0%	7.8%	32.8%
Computer Science	16.7%	3.3%	20.0%
Education	16.7%	14.4%	31.1%
Engineering	21.0%	10.5%	31.5%
Health Sciences	12.7%	9.7%	22.4%
Liberal Arts	16.2%	9.5%	25.7%
Natural Sciences	11.4%	0.7%	12.1%
Professional	7.4%	6.4%	13.8%
Social Sciences	12.3%	2.5%	14.8%
Trade	7.7%	0.0%	7.7%
All Departments	14.8%	6.8%	21.6%

Assessment Infrastructure	Committee	Reports
Arts & Humanities	52.8%	63.2%
Business	69.0%	75.9%
Computer Science	46.4%	58.6%
Education	65.6%	74.4%
Engineering	68.4%	66.7%
Health Sciences	67.9%	87.1%
Liberal Arts	66.2%	63.0%
Natural Sciences	47.5%	58.6%
Professional	58.7%	68.8%
Social Sciences	53.1%	66.7%
Trade	61.5%	46.2%
All Departments	59.7%	69.0%

Faculty Involvement	All	Most	Top 2 Categories
Arts & Humanities	36.8%	21.5%	58.3%
Business	35.7%	23.5%	59.2%
Computer Science	44.8%	10.3%	55.1%
Education	41.1%	27.8%	68.9%
Engineering	51.8%	23.2%	75.0%
Health Sciences	54.1%	18.8%	72.9%
Liberal Arts	16.4%	39.7%	56.1%
Natural Sciences	22.9%	20.0%	42.9%
Professional	40.9%	23.7%	64.6%
Social Sciences	38.3%	22.2%	60.5%
Trade	53.8%	7.7%	61.5%
All Departments	37.7%	23.0%	60.7%

WHAT WOULD BE HELPFUL?

More Faculty Release Time (aka "Release Time")	Checked
Arts & Humanities	61.8%
Business	59.5%
Computer Science	70.0%
Education	73.3%
Engineering	68.4%
Health Sciences	67.9%
Liberal Arts	66.2%
Natural Sciences	68.6%
Professional	61.7%
Social Sciences	71.6%
Trade	46.2%
All Departments	66.0%

Additional Stipends (aka "Stipends")	
Arts & Humanities	56.9%
Business	44.0%
Computer Science	70.0%
Education	60.0%
Engineering	56.0%
Health Sciences	50.0%
Liberal Arts	58.1%
Natural Sciences	59.3%
Professional	52.1%
Social Sciences	60.5%
Trade	69.2%
All Departments	55.5%

Full-Time Assessment Position (aka "Staffing")

Arts & Humanities	18.1%
Business	23.3%
Computer Science	20.0%
Education	34.4%
Engineering	22.8%
Health Sciences	23.1%
Liberal Arts	35.1%
Natural Sciences	13.6%
Professional	22.3%
Social Sciences	21.0%
Trade	30.8%
All Departments	22.7%

External Consultants (aka "Consultants")

Arts & Humanities	19.4%
Business	14.7%
Computer Science	13.3%
Education	15.6%
Engineering	17.5%
Health Sciences	15.7%
Liberal Arts	20.3%
Natural Sciences	16.4%
Professional	13.8%
Social Sciences	19.8%
Trade	7.7%
All Departments	16.6%

More Faculty Involvement

Arts & Humanities	47.9%
Business	43.1%
Computer Science	46.7%
Education	35.6%
Engineering	38.6%
Health Sciences	41.8%
Liberal Arts	70.3%
Natural Sciences	36.4%
Professional	45.7%
Social Sciences	37.0%
Trade	53.8%
All Departments	43.8%

Better Tests or Measures

Arts & Humanities	43.8%
Business	68.1%
Computer Science	56.7%
Education	31.1%
Engineering	47.4%
Health Sciences	43.3%
Liberal Arts	56.8%
Natural Sciences	58.6%
Professional	48.9%
Social Sciences	53.1%
Trade	46.2%
All Departments	50.5%

Information from Other Programs (aka "Info from Others")

Arts & Humanities	53.5%
Business	44.8%
Computer Science	56.7%
Education	41.1%
Engineering	38.6%
Health Sciences	38.8%
Liberal Arts	39.2%
Natural Sciences	52.9%
Professional	46.8%
Social Sciences	44.4%
Trade	23.1%
All Departments	45.5%

Faculty Expertise in Methodology (aka "Faculty Expertise")

Arts & Humanities	51.4%
Business	51.7%
Computer Science	70.0%
Education	44.4%
Engineering	50.9%
Health Sciences	56.7%
Liberal Arts	70.3%
Natural Sciences	60.0%
Professional	58.5%
Social Sciences	42.0%
Trade	61.5%
All Departments	54.8%

NILOA National Advisory Panel

Trudy W. Banta
Professor
Indiana University-Purdue University Indianapolis

Douglas C. Bennett
President
Earlham College

Robert M. Berdahl
President
Association of American Universities

Molly Corbett Broad
President
American Council on Education

Judith Eaton
President
Council for Higher Education Accreditation

Richard Ekman
President
Council of Independent Colleges

Joni Finney
Practice Professor
University of Pennsylvania

Vice President, National Center for Public Policy and Higher Education

Susan Johnston
Executive Vice President
Association of Governing Boards

Paul Lingenfelter
President
State Higher Education Executive Officers

George Mehaffy
Vice President
Academic Leadership and Change
American Association of State Colleges and Universities

Margaret Miller
Professor
University of Virginia

Charlene Nunley
Program Director
Doctoral Program in Community College Policy and Administration
University of Maryland University College

Randy Swing
Executive Director
Association for Institutional Research

Carol Geary Schneider
President
Association of American Colleges and Universities

David Shulenburger
Senior Fellow
Association of Public and Land-Grant Universities

Belle Wheelan
President
Southern Association of Colleges and Schools

George Wright
President
Prairie View A&M University

Ex-Officio Members

Peter Ewell
Vice President
National Center for Higher Education Management Systems

Stanley Ikenberry
President Emeritus and Regent Professor
University of Illinois

George Kuh
Director, National Institute for Learning Outcomes Assessment
Adjunct Professor, University of Illinois
Indiana University Chancellor's Professor Emeritus

National Institute for Learning Outcomes Assessment (NILOA) Mission

NILOA's primary objective is to discover and disseminate ways that academic programs and institutions can productively use assessment data internally to inform and strengthen undergraduate education, and externally to communicate with policy makers, families and other stakeholders.

About NILOA

- The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008.
- NILOA is co-located at the University of Illinois and Indiana University.
- The NILOA website went live on February 11, 2009.
  www.learningoutcomesassessment.org
- One of the co-principal NILOA investigators, George Kuh, founded the National Survey for Student Engagement (NSSE).
- The other co-principal investigator for NILOA, Stanley Ikenberry, was president of the University of Illinois from 1979 to 1995 and 2009 to 2010. He also served as president of the American Council of Education from 1996 to 2001.
- Peter Ewell joined NILOA as a senior scholar in November 2009.

NILOA Staff

NATIONAL INSTITUTE FOR LEARNING OUTCOMES ASSESSMENT

Stanley Ikenberry, *Co-Principal Investigator*

George Kuh, *Co-Principal Investigator*

Peter Ewell, *Senior Scholar*

Staci Provezis, *Project Manager*

Jillian Kinzie, *Associate Research Scientist*

Gianina Baker, *Research Assistant*

Natasha Jankowski, *Research Assistant*

Gloria Jea, *Research Assistant*

NILOA Sponsors

Carnegie Corporation of New York

Lumina Foundation for Education

The Teagle Foundation

National Institute for Learning Outcomes Assessment

For more information, please contact:

National Institute for Learning Outcomes Assessment (NILOA)
University of Illinois at Urbana-Champaign
340 Education Building
Champaign, IL 61820

learningoutcomesassessment.org
sprovez2@illinois.edu
Fax: 217.244.3378
Phone: 217.244.2155