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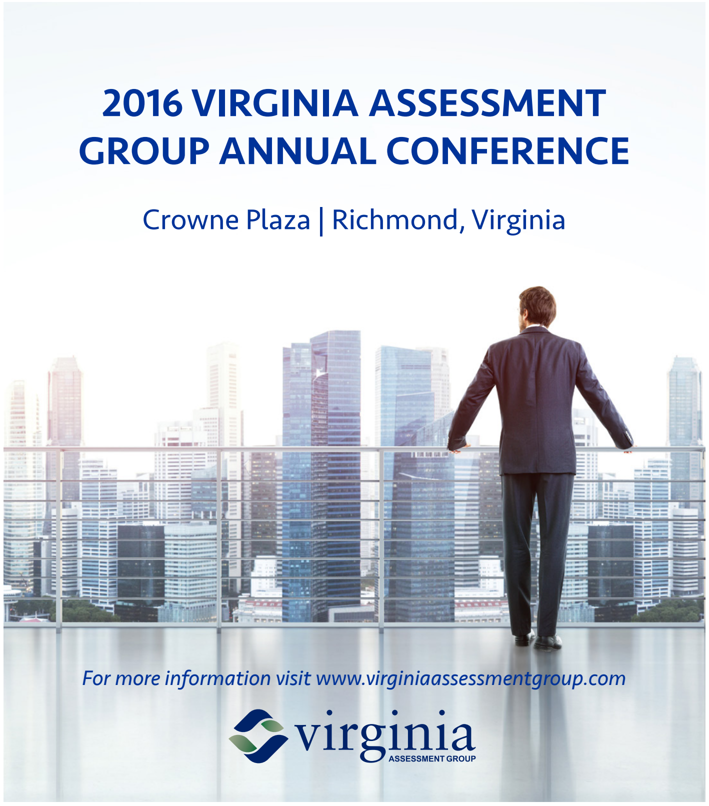

CALL FOR PAPERS

Research & Practice in Assessment is currently soliciting articles and reviews for its Summer 2016 issue. Manuscripts submitted to RPA may be related to various higher education assessment themes, and should adopt either an assessment measurement or an assessment policy/foundations framework. Contributions are accepted at any time, but submissions received by February 1 will receive consideration for the summer issue. Manuscripts must comply with the RPA Submission Guidelines and be sent electronically to: editor@rpajournal.com

RESEARCH & PRACTICE IN ASSESSMENT

The goal of *Research & Practice in Assessment* is to serve the assessment community as an online journal focusing on higher education assessment. It is dedicated to the advancement of scholarly discussion amongst researchers and practitioners in this evolving field. The journal originated from the Board of the Virginia Assessment Group, one of the oldest continuing professional higher education assessment organizations in the United States. *Research & Practice in Assessment* is a peer-reviewed publication that uses a double-blind review process. Approximately forty percent of submissions are accepted for issues that are published twice annually. *Research & Practice in Assessment* is listed in Cabell's Directory and indexed by EBSCO, ERIC, Gale, and ProQuest.

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FROM THE EDITOR

The Variety of Assessment

Faculty, student affairs educators, and higher education professionals engage in a variety of assessment efforts as evidenced through campus collaborations, conference presentations, and scholarly writing. These efforts include learning in the academic major, general education, co-curricular learning and development, assessment methods, measurement issues, and best practices in assessment. Related assessment activities are often based on one's academic discipline, current work in student development initiatives, or curiosity about student learning and development and highlight the diversity of interests across higher education.

The contributions presented in this issue of *Research & Practice in Assessment* reflect the variety found in current assessment practices. This volume provides readers with the opportunity to understand assessment from the perspectives of students, alumni, assessment professionals, student affairs educators, and faculty members. Hopefully this array of research and practice will contribute to the variety of your assessment efforts.

The Winter 2015 issue includes four peer-reviewed articles that exemplify the variety of work taking place in higher education assessment. Dumford and Miller examine the effectiveness of arts programs from the perspectives of both students and alumni noting that the passage of time can change the opinions individuals have toward their educational experiences. Smith, Good, Sanchez, and Fulcher emphasize the importance of clearly defining commonly used assessment terms. Phrases such as "use of results" and "closing the loop" are frequently used, but are not always interpreted in the same way. The authors suggest better communication will lead to better assessment practice and ultimately to improved student learning. Two articles in this issue of *Research & Practice in Assessment* focus on assessment in the co-curriculum. Ryder and Kimball propose a conceptual model of assessment that includes reflexive practice. The authors position this model at the center of student affairs work. Hoffman articulates her findings about the perceptions new student affairs professionals have toward assessment skills. These new professionals indicate the importance of developing assessment skills and describe their skills in engaging in assessment practice.

In the reviews, Prihoda comments on *Higher Education Accreditation: How It's Changing and Why It Must*, a timely review of Gaston's book that engages readers in an examination of quality assurance processes in United States higher education. Bachen reviews *Using Evidence of Student Learning to Improve Higher Education*, a look at how to position assessment as an activity that improves student learning rather than one that is required to fulfill a mandate.

This issue also includes a Notes in Brief exemplifying the importance of faculty involvement in assessment. Ellis, Marston, Lightfoot, Sexton, Byrnes, Ku, and Black describe their approach faculty professional development in assessment. The authors describe the challenges and success of developing and executing the Assessment Leadership Institute in this submission. I hope the array of contributions in this issue inspire your assessment efforts.

Regards,

Katie Busby

Tulane University

Abstract

Student surveys are often important elements of assessment in higher education, but alumni surveys can play a substantial role as well. However, little is known about how responses from these two groups compare to one another. Combining data from the Strategic National Arts Alumni Project (SNAAP) and the National Survey of Student Engagement (NSSE), this study examines self-reported college experiences and skill development of seniors and alumni who majored in the arts. Results suggest that alumni rate their overall experience higher, while students judge specific aspects of their institutional experience and their skill development more positively. Given these differences, it is recommended that institutions survey both students and alumni to achieve a more complete picture of the educational experience.

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Are those Rose-Colored Glasses You are Wearing? Student and Alumni Survey Responses

As the economy slowly emerges from the struggle of recession and funding to higher education institutions continues to be cut, there is an increasing trend for requiring colleges and universities to show measures of their effectiveness (Kuh & Ewell, 2010). Using surveys to assess skill development and the quality of collegiate experiences has become commonplace (Kuh & Ikenberry, 2009; Porter, 2004), but much of that research uses current or graduating students to collect information. In fact, the vast majority (85%) of U.S. colleges and universities use some type of national student survey in their assessment plan (Kuh, Jankowski, Ikenberry, & Kinzie, 2014). Yet students are not the only source of information that could be of use for institutions that are determined to provide evidence of their value and success. Other stakeholders can contribute relevant assessment information as well. An increasing number of institutions are turning to alumni surveys, focus groups, and interviews to gain a unique perspective on learning and other outcomes (Borden & Kernel, 2013; Kuh et al., 2014).

One important measure of institutional effectiveness is alumni success in the workplace (Cabrera, Weerts, & Zulick, 2005). Not only do those at higher education institutions have to show evidence of their effectiveness to state funding and accreditation agencies, but students are also aware that in the current economy their employment prospects may be constrained and they are concerned with getting the best return on their academic investment in the form of employability. With these things in mind, perhaps the viewpoints of alumni who are already in the field or struggling to enter their field would be even more enlightening than those of students still in their programs. However, little is known about how undergraduate student responses compare with those of alumni. Does the passage of time change the capacity of people to reflect on their learning experiences during college?

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Literature Review

In addition to the pure content knowledge gained in a student's chosen major, administrators, faculty, and staff at institutions of higher education claim to prepare their students with a multitude of skills, ranging from effective communication practices to analytical and creative thinking skills (Tait & Godfrey, 1999). Although not all skills learned in higher education settings may transfer directly to the workplace (Stasz, 2001), those at institutions must make every effort to prepare students to be suitable employees. A major function of higher education is to help students develop skills that will lead them to success in the workplace (Evers, Rush, & Berdrow, 1998; Stasz, 2001). While some acquired skills are considered discipline-specific, many "transferable skills" that will lead to workplace success, such as problem solving and effective communication, are applicable to a broad range of fields (Bradshaw, 1985; Stasz, 1997). There is a need for generic skills across multiple types of jobs, and students possessing them appear more marketable to potential employers. The Association of American Colleges and Universities has recently addressed many of these skills, including critical and creative thinking, inquiry and analysis, and written and oral communication, as essential learning outcomes for higher education, hoping to encourage deliberate progress in their development. If curriculum and programming at institutions are lacking in these areas, the employability of their graduates will decrease (Evers et al., 1998).

With these things in mind, perhaps the viewpoints of alumni who are already in the field or struggling to enter their field would be even more enlightening than those of students still in their programs.

Alumni surveys can provide direct information on career attainment, as alumni can report back to the institution not only their current job(s) and income, but how useful the skills they learned at their institution are to their current occupation and how their educational experiences may have shaped the development of these skills and competencies. Because of the need to develop such a range of different skills, many higher education institutions have begun to scrutinize whether or not they are effectively teaching these skills in their curriculum, and alumni surveys can provide this type of information. As there is increasing pressure for colleges and universities to shorten the time in which it takes students to earn their degrees, some aspects of the curriculum must be cut. Multiple perspectives on the importance of a variety of skills can help departments prioritize their required course content.

Although alumni can provide an abundance of important information, logistical issues are involved in the surveying of alumni. While student populations are considered a more captive audience with the confidence of accurate email addresses, alumni populations are less defined. Alumni surveys also often have lower response rates compared with student surveys (Smith & Bers, 1987), for a variety of reasons including outdated contact information, suspicion of money solicitation, and decreased institutional loyalty after graduation. Indeed, response rates across a variety of groups have been falling over the past decade (Atrostic, Bates, Burt, & Silberstein, 2001; Baruch, 1999; Porter, 2004). One must also be aware of the increasing demands of technology when it comes to survey research. Individuals are often encumbered with endless requests to complete online surveys, and while their internet access is virtually unlimited and enables flexibility in the location of completing surveys, taking surveys on smartphones and tablets can be additionally burdensome (Buskirk & Andrus, 2012; Lambert & Miller, 2015; Mavletova, 2013). These new issues further add to the complexity of surveying alumni.

If arts programs are to address these criticisms concerning skill development, collecting information from current students as well as alumni is an instrumental aspect of curricular modification.

Nevertheless, it is imperative that administrators at higher education institutions acquire knowledge from their alumni. Arts programs are one disciplinary area that has been under fire for a lack of preparation in skills needed for the "real world" of work, and it is often difficult to align some of the arts curriculum with rigid accountability standards that may not take into account the unique skills and experiences of arts students (Johnson, 2002). One study found that practical business and management-related skills were greatly underemphasized within arts curricula (Bauer, Viola, & Strauss, 2011), and artists themselves recognize the need for "learning on the fly" and the power of networking and similar smart career mindsets (Smilde, 2008). Conversely, there is also research to suggest that students in the arts are especially adept at certain types of skills, including incorporating verbal studio feedback into revisions of their work (Edstrom, 2008) and critical thinking and interpersonal understanding (Badcock, Pattison, & Harris, 2010). If arts programs are to address these criticisms concerning skill development, collecting information from current students as well as alumni is an instrumental aspect of curricular modification.

Furthermore, arts programs in particular have recently been under scrutiny for the career outcomes of their graduates. Data indicate that those majoring in the arts have some of the lowest income levels, especially among recent college graduates (Carnevale, Cheah, & Strohl, 2012), and arts majors are widely considered in the popular press to be "worthless" in terms of income and employment (Cantor, 2012). Institutions can combat this accusation with alumni data. In addition to simply reporting income and employment status, it may be helpful to use alumni data in expanding the definition of what a "successful" graduate looks like. Research suggests that other aspects of one's career, such as opportunities to be creative or contribute to the greater good, can provide just as much, if not more, of a rewarding experience as can the traditional measures of income and prestige (Lambert & Miller, 2013). This may be particularly pertinent in fields such as the arts or education, which are not generally associated with higher career earnings. Thus, especially when looking at the arts, alumni views of their educational experiences might shed some light on the true value of their time at their institutions. The current study compares information from an arts alumni survey and a survey of graduating seniors to explore how the views on the experiences of the two groups may differ and strengthen one another.

Thus, especially when looking at the arts, alumni views of their educational experiences might shed some light on the true value of their time at their institutions.

Research Questions

Given the need for student and alumni surveys in higher education assessment, the purpose of this study is to explore the relationship between student and alumni views. The following general research questions guided this study:

1. Are there differences in how students and alumni perceive aspects of their institutional experiences and the skills and competencies that they acquire at their institutions?
2. What are the implications of interpreting alumni reports as unbiased assessments of strengths and weakness of a program? Conversely, do alumni evaluate their institutions with "rose-colored glasses" and cast things in a positive light, or do they evaluate their education more harshly once they gain a more practical knowledge of the working world?
3. Finally, if differences between students and alumni do exist, whose report should be given precedence in making curricular or programming assessments and changes? Should institutions give more weight to student reports that have the accuracy of closeness in time to the experience, or those reports of alumni that have the advantage of pragmatic perspective and hindsight?

Methodology

To address these questions, this study used data from the Strategic National Arts Alumni Project (SNAAP) and the National Survey of Student Engagement (NSSE). SNAAP is an online annual survey of arts graduates from a broad spectrum of institutions, including independent colleges of art and design, music conservatories, and arts schools, departments, or programs at comprehensive colleges and universities. The arts are defined broadly to include a range of fields such as music, theatre, dance, design, architecture, creative writing, film, media arts, illustration, and fine arts. SNAAP surveys alumni on a wide range of content, including formal education and degrees, institutional experiences, postgraduate resources for artists, past and current career information, avocational arts engagement, income and debt, and demographic information. The 2011 SNAAP administration included over 36,000 total respondents at 66 participating institutions. Participants were sent an invitation email including a link to the survey with a unique identification number. Participants could log in to their unique link multiple times, so they were not constrained to respond to all survey questions during a single sitting. However, the unique link tracking system ensured that participants could only submit their completed survey once. The median completion time was 22 minutes.

NSSE is an annual online survey of first-year and senior students that gives a snapshot of college student experiences inside and outside of the classroom. The items on NSSE gather information on the extent to which students engage in and are exposed to educational experiences that represent good practices related to desirable college outcomes. The 2012 NSSE administration included over 285,000 respondents at 546 institutions. The median completion time for the core NSSE survey was 13 minutes. Each year, experimental item sets are appended to the end of the core NSSE survey. As part of the 2012 NSSE administration, a set of experimental items asked first-year and senior students at selected institutions about skills and experiences that matched questions on the SNAAP questionnaire.

Sample

For the purposes of this study, only data from those institutions that participated in both the 2011 SNAAP administration and the additional item set on the 2012 NSSE administration were used. SNAAP is administered in the fall, while NSSE has a spring administration. Therefore, these two data sources were collected at the closest points in time to one another, compared to other years of survey data from either project. The sample consisted of more than 222 seniors and 593 recent undergraduate alumni (graduating between 2001 and 2010) at six different four-year institutions. The seniors were selected based on reporting an arts major in one of the corresponding SNAAP arts programs of participation. The alumni cohorts of 2001 to 2010 were chosen because their experiences were closer to those of the graduating seniors, and no major curricular changes had occurred in those years at these six participating institutions. As with most survey research, females responded at a higher rate than their male counterparts. Nearly two-thirds of both the graduating senior and alumni respondents were female (72% and 61% respectively). In contrast, the race of respondents was similar to the population of these six institutions (73% white for NSSE and 70% for SNAAP), with the only exception being that Asian respondents were slightly over-represented for SNAAP respondents (5%). About one-third of the respondents were first-generation students (37% and 30%) and nearly all respondents were U.S. citizens (98% for both surveys). The response rates for the six institutions ranged from 14% to 25% for SNAAP and 27% to 51% for NSSE, with an average institutional response rate of 19% for SNAAP and 34% for NSSE.

When thinking back to their institutional experience as a whole, it may be that alumni are viewing it through rose-colored glasses.

Measures

The measures that are the focus of this study are taken from one individual item and two additional item sets. The first question asked students and alumni to give an overall rating of their institutional experience on a 4-point Likert scale ranging from *Poor* to *Excellent*. This question is on the core survey for both NSSE and SNAAP. In contrast, the next two sets were developed for SNAAP and are on the SNAAP core survey, but were added to NSSE as additional questions appearing at the end of the core NSSE survey. The second set of questions asked participants to rate their satisfaction with nine aspects of their time at the institution, including academic advising, opportunities for degree-related internships or work, instructors, sense of belonging and attachment, and opportunities to network with alumni and others. The set was on a 4-point Likert scale from *Very dissatisfied* to *Very satisfied* with an additional *Not relevant* option. For the purposes of this study, the *Not relevant* responses were removed from the data to create ordinal variables. Finally, the third question set asked about 16 different skills and competencies developed at their institution. Participants were asked, “How much did [your institution] help you acquire or develop each of the following skills and abilities?” and provided responses using a 4-point Likert scale with the end points of *Not at all* to *Very much*. The skills and competencies used included critical thinking, broad knowledge and education, creative thinking, research skills, persuasive speaking, project management skills, technological skills, artistic technique, financial and business management skills, leadership skills, networking and relationship building, and teaching skills. All skills and aspects of time at institution included in the question sets are listed in Table 1. The demographic variables of gender, race, citizenship status, and parent education were included on both survey instruments as well.

It may also be informative to borrow some concepts from cognitive psychology in a further discussion of how students and alumni rely on memory searches to respond to survey items.

Table 1
Comparison of Graduating Seniors and Alumni on Institutional Experiences and Development of Skills

	Adjusted Means[a]			
	Student	Alumni	Sig.	Effect Size (*d*)
Overall Experience	3.27	3.39	*	.17
Aspects of Time at Institution				
Opportunities to present, perform, or exhibit your work	3.30	3.29		
Opportunities to take classes outside of your major/discipline	3.12	3.25		
Instructors in classrooms, labs, and studios	3.37	3.37		
Academic advising	2.99	2.84	*	-.16
Advising about career or further education	2.80	2.44	***	-.35
Opportunities for degree-related internships or work	2.68	2.41	**	-.27
Opportunities to network with alumni and others	2.71	2.61		
Sense of belonging and attachment	3.09	3.19		
Freedom and encouragement to take risks	3.17	3.16		
Skills and Abilities				
Critical thinking and analysis of arguments and information	3.41	3.34		
Broad knowledge and education	3.30	3.30		
Listening and revising	3.49	3.44		
Creative thinking and problem solving	3.59	3.53		
Research skills	3.30	3.11	**	-.23
Clear writing	3.21	2.96	***	-.30
Persuasive speaking	2.96	2.78	*	-.21
Project management skills	3.21	3.02	*	-.21
Technological skills	3.23	3.12		
Artistic Technique	3.71	3.63		
Financial and business management skills	2.24	1.92	***	-.38
Entrepreneurial skills	2.23	1.99	**	-.27
Interpersonal relations and working collaboratively	3.18	3.17		
Leadership skills	3.05	2.88	*	-.21
Networking and relationship building	3.07	2.83	***	-.28
Teaching skills	2.86	2.73		

[a] Adjusted for gender, race, U.S. citizenship status, and first-generation status.
* $p < .05$, ** $p < .01$, *** $p < .001$

Data Analysis

Analysis of covariance (ANCOVA) was conducted to determine whether differences of reported satisfaction and skill development exist between graduating seniors and alumni. Prior to the estimation of the models, exploratory analyses were conducted testing the assumptions underlying the application of ANCOVA and all were met (Glantz & Slinker, 2001). Using SNAAP data from the previous fall also guaranteed that no NSSE respondents would be eligible for participation in SNAAP after their graduation, which would violate the independent samples assumption of the statistical analyses. The adjusted means are reported for each of the groups, along with the statistical significance of the difference between the two groups. The statistical software used (Statistical Package for the Social Sciences v20.0) automatically implements a corrected formula to account for unequal sample sizes. Next, effect sizes (standardized mean differences using Cohen's *d* for ANCOVAs, calculated by dividing the adjusted mean difference by the square root of the mean square error) were calculated to determine the magnitude of the graduating senior and alumni differences. The effect size with controls represents how much of the raw difference is left unexplained after adjusting the means for student and alumni characteristics. Control variables included gender, race, U.S. citizenship status, and first-generation status, as previous research (Pascarella & Terenzini, 2005) suggests that there are differences in student engagement and educational experiences for students based on these characteristics. Because these variables are categorical, they were dummy-coded prior to inclusion in the analyses.

Taken together, the general pattern suggested in these results is that alumni provide more positive evaluations of their institutions overall, yet more critical judgments when certain specific aspects are concerned.

Results

Comparison of the ratings of their overall institutional experience suggests that alumni give higher general appraisals than their graduating senior counterparts when evaluating their educational experience as a whole ($p < .05$, Cohen's $d = .17$). Using the adjusted means, While it is hard to determine which group has a more accurate report of the experience, important institutional information can be gained through surveying both students and alumni. Students may be better able to provide information about affective components of their experience, while alumni may be better judges of specific things needed in the workplace.

significant differences were found for three of the nine specific aspects of time at institution (academic advising, career advising, and opportunities for internships). In contrast with the overall institutional experience evaluation, these results suggest that alumni give lower specific appraisals for particular aspects (Cohen's d = -.16, d = -.35, d = -.27, respectively). Adjusted means comparisons for the amount of institutional contribution to acquired skills and competencies show a similar pattern, with alumni giving statistically significant, lower appraisals for 8 of the 16 skills (Cohen's d ranging from -.21 to -.38). The skills with significantly lower ratings were clear writing, persuasive speaking, networking and relationship building, leadership skills, research skills, project management, financial and business skills, and entrepreneurial skills. All ANCOVA results are shown in Table 1.

Discussion

When thinking back to their institutional experience as a whole, it may be that alumni are viewing it through rose-colored glasses. The arts alumni included in this study tended to rate their institutions slightly more favorably than the senior students graduating with arts majors when making universal assessments. However, when considering more nuanced aspects of their educational experiences, alumni perceptions may have a more lackluster pallor. In terms of their satisfaction with aspects of their time at the institution, post-graduation experiences in the workplace may better enable alumni to reflect on certain aspects and realize where improvements could help them in their current careers. In particular, alumni were less satisfied than graduating seniors in the areas of academic advising, career advising, and opportunities for internships or degree-related work. Applying the old adage of "hindsight is 20/20," it may be the case that as students, respondents do not realize that they need better advising or an internship until they enter the workforce and then gain a more realistic perception. This highlights the importance of surveying both students and alumni as part of an institutional assessment plan. While student surveys may be easier, in terms of a readily available population, they may not always provide the most insightful or reflective information.

In addition to this more complex understanding of satisfaction with certain aspects of their time, alumni may also learn they needed to have better developed skills only once they have gained work experience. Alumni were less satisfied than graduating seniors with their institution's contribution to their development of clear writing, persuasive speaking, networking and relationship building, leadership skills, research skills, project management, financial and business skills, and entrepreneurial skills. These results could be interpreted to mean that upon leaving the institution and entering the workforce, alumni perceptions shift in terms of some communicative and procedural skills. Writing, speaking, networking, and leadership are important aspects of communication that may be experienced differently in an applied setting, such as the workplace, in comparison to a classroom situation. Likewise, some task-based procedural skills like research, project management, finance, and entrepreneurship may also be more completely comprehended and valued once an individual transitions from student to employee. When current senior students answer that their institution has contributed "very much" to the development of a certain skill, it may be that they are referencing their development since their first year at the institution and think that they have made great strides. There is also the possibility that once alumni enter the workforce, they are referencing their skill levels in comparison with colleagues who are quite advanced in these skills resulting from years, or perhaps even decades, of actual use.

It may also be informative to borrow some concepts from cognitive psychology in a further discussion of how students and alumni rely on memory searches to respond to survey items. In responding to an item about overall satisfaction with their institution, people may use a heuristic recall strategy, which quickly scans through all associated memories, seeking the most relevant cases (Reisberg, 2012). This strategy is substantially different from an algorithmic one, which systematically evaluates all possible steps of a procedure (Davis & Palladino, 2012). When responding to the items concerning satisfaction with aspects of time and their acquisition of skills, a longer list appeared containing all of the items in the set, grouped under a common stem. For these items, respondents could work through the list a single item at a time, focusing on recall for each one before moving on to the next. This type of format may lend itself to an algorithmic approach, as opposed to the more heuristic strategy that allows an efficient recall of a more general topic area. Although the heuristic approach is more efficient, it also risks error; thus, the memories available for recall may differ between students and alumni, partially explaining the different direction of patterns for alumni and students for the different types of survey items.

Taken together, the general pattern suggested in these results is that alumni provide more positive evaluations of their institutions overall, yet more critical judgments when certain specific aspects are concerned. However, it should also be noted that in terms of the magnitude of the differences between the alumni and student responses, the effect sizes were all in the moderate to small range (Cohen, 1992). Although this is common for social science and educational research (Gonyea & Sarraf, 2009; Hayek, Gonyea, & Zhao, 2001), it is still a consideration in the interpretation of the results. The statistical significance of the comparisons is certainly important, but the practical significance of the comparisons, most of which were small to moderate is an essential component for a complete understanding of the results as well. When institutions with limited resources are considering which potential curricular and programming changes they should prioritize, those aspects with the larger effects might be the more practical areas on which to focus.

Thus, if administrators and faculty want the complete picture of what can help create the optimal institutional experiences for students and also prepare them for the workforce, gathering information from both students and alumni may be the best assessment practice in this situation.

Limitations

Although there are strengths of this study, some limitations should be noted. Given the data collection procedures and response rates, the sample may not be representative of all arts alumni and students, and caution should be made when making generalizations. It may also be the case that respondents to student surveys are different than respondents to alumni surveys, but there is evidence to suggest that despite their lower response rates, respondents to alumni surveys are just as representative as student surveys (Lambert & Miller, 2014). Furthermore, this study relied on self-reported data, which may not always be completely objective. However, most studies looking at self-reports in higher education suggest that self-reports and actual measures of constructs such as abilities are positively related (Anaya, 1999; Converse & Presser, 1989; Hayek, Carini, O'Day, & Kuh, 2002; Laing, Sawyer, & Noble, 1987; Pace, 1985; Pike, 1995) and that social desirability bias is not a substantive concern for reports of basic cognitive and academic behaviors (Miller, 2012). It should also be noted that this study design was cross-sectional rather than longitudinal, and although the students and alumni were matched for major and institution, there were still different individuals responding from each group. Additionally, the quantitative nature of the data may have missed some of the nuance and tone of student and alumni perceptions of their institutions and skill development.

Conclusion

While it is hard to determine which group has a more accurate report of the experience, important institutional information can be gained through surveying both students and alumni. Students may be better able to provide information about affective components of their experience, while alumni may be better judges of specific things needed in the workplace. Being closer in time to the experience may have the advantage in terms of memory accuracy, but temporal distance may have the advantage of reflective insight. Thus, if administrators and faculty want the complete picture of what can help create the optimal institutional experiences for students and also prepare them for the workforce, gathering information from both students and alumni may be the best assessment practice in this situation.

Future research should not only expand the topics on which student and alumni comparisons can be made, but also incorporate a longitudinal design that matches data at the respondent level. Moreover, it may be useful to incorporate matched assessment data that are not self-reported. For instance, employer feedback on the skill development of alumni or summative rubrics from faculty in required major courses may supplement the findings from alumni and student surveys. Furthermore, qualitative approaches such as focus groups and one-on-one interviews could provide an additional source of information for assessment purposes. The SNAAP survey instrument actually includes several different open-ended questions for alumni to elaborate on various topics, and institutional users often report that these quotes are very powerful in conveying the survey findings to numerous audiences. For example, when asked about how the institution could have better prepared them for their career, one alumnus in this study included a specific curricular suggestion, noting, "One thing that I really enjoyed at [my institution] was the push to pursue your own ideas, but the design program could also incorporate projects that focus on the designer/client relationship." This type of qualitative information can further enhance the value and application of the quantitative data when making program updates.

Alumni surveys may be especially important as part of assessment cycles. The responses of alumni may be used to make curricular changes, which then impact current students, who can be assessed as students and then later as alumni to determine whether or not the changes were effective. This process can also be interpreted as a means of institutional transparency, as alumni already have their degree so they have a different focus and less at stake, and institutions are willing to share their feedback, both positive and negative, in order to make upgrades. Accessing the perspectives of both students and alumni are important sources of data for improvement in higher education; therefore, surveys of both populations should be administered for the best information possible.

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Abstract

Although higher education institutions often engage in assessment practices, use of assessment results to improve student learning is rare (Blaich & Wise, 2011). We surmised that this rarity could be partially explained by unclear communication regarding what *use of results* means. The current study qualitatively investigated how assessment professionals define *use of assessment results to improve student learning* in assessment literature, assessment rubrics, and regional accreditation standards. We found that most definitions were vague and lacked detailed examples. This ambiguity may help explain why using results to make data-supported curricular or pedagogical changes and then re-assessing students to determine the effect of those changes is so uncommon in higher education. Based on our findings, we clarify what it means to *close the loop* in an effort to facilitate greater use of results to evidence improved student learning.

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Communication is Key: Unpacking "Use of Assessment Results to Improve Student Learning"

Prior to the 1980s, external stakeholders evaluated the quality of U.S. colleges based on inputs and outputs such as average entrance scores, the number of books in a library, and graduation rates (Erwin, 1991). In 1985, higher education scholar Alexander Astin suggested that talent development was an alternative, better measure of quality. Similarly, Barr and Tagg (1995) called for a greater focus on outcomes, claiming that it would be more advantageous to fund an institution based on the number of math problems students solve rather than based on the number of students who sit in a math class. Barr and Tagg reiterated that higher education systems should reflect and fulfill their responsibilities to promote student learning. In other words, the emphasis should be on how much students have learned or developed as a function of the institution—not on how many students attended class.

Today, in an era of skepticism regarding the value of education, colleges and universities would benefit from demonstrating that student learning is improving. In fact, some have suggested the importance of learning improvement by calling it the bottom line of education. And, like businesses, institutions should endeavor to optimize their [learning] bottom line (Clarke, 2002). In the late 1980s, legislators crafted policy reflecting this re-imagination of quality (Ewell, 2009). From that point forward, institutions—under federal mandate—have been assessing and reporting on student learning outcomes. The idea was as follows: If institutions carefully defined student learning outcomes and assessed them, they would be well positioned to make changes that would enhance or improve student learning.

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After 25 years of defining and assessing student learning outcomes, one would presume that many institutions could evidence improved student learning. Unfortunately, such evidence has not proliferated as quickly as the practice of assessment itself. In 1996, Trudy Banta and colleagues provided a few cases of improved student learning associated with assessment practice, but they conceded that such cases were rare. More recently, after interpreting findings from a multi-university study on assessment and learning, Kuh (2011) concluded:

> …most colleges and universities were using multiple measures to determine student learning outcomes. At the same time, relatively few schools were 'closing the loop,' or using the information in any material way to intentionally modify policy and practice. Rarer still were colleges or universities where changes in policies or practices made a positive difference in student attainment. (p. 4)

After 25 years of defining and assessing student learning outcomes, one would presume that many institutions could evidence improved student learning. Unfortunately, such evidence has not proliferated as quickly as the practice of assessment itself.

Given this state of affairs, one may ask why student learning outcomes assessment practice is so unsuccessful relative to its stated goal of improvement. A complete answer to that question is complex and beyond the scope of this study. Nevertheless, one culprit is unclear communication.

Ambiguous and Inconsistent Communication

Indeed, we have noticed that use of results is emphasized ubiquitously at assessment conferences, but it is not always clear what *use* means. For instance, we have commonly found assessment practitioners using vague terms such as *use of results*, *closing the loop*, *improvement*, *action plan*, and so forth to define *using results to evidence improved learning*. In such cases, terms are rarely explicated; meaning practitioners must subjectively interpret what these terms mean. Without clearly delineating this critical step in the assessment process, it is no wonder examples of learning improvement are so scarce. Perhaps it is time for assessment practitioners to abandon the ambiguous use of results terminology in favor of a more concrete, consistent definition of what it means to use assessment results for learning improvement.

Use of results for learning improvement has been defined as programs making a pedagogical or curricular change. However, as Fulcher, Good, Coleman, and Smith (2014) note, a change is not an improvement. Rather, use of assessment results should be defined in terms of strong evidence, from direct measures and re-assessment, supporting substantive student learning improvement due to program modifications. Fulcher and colleagues further explain that practitioners often make statements like, "We made x, y, and z improvements to the program," when they really mean, "We made x, y, and z changes." A change is an improvement only after one reassesses and actually demonstrates a positive effect on student learning.

The Need for Clearer Communication

A change is an improvement only after one reassesses and actually demonstrates a positive effect on student learning.

Certainly, the ambiguous and inconsistent language used to describe use of results is crippling our ability, as assessment practitioners, to demonstrate improved student learning. We need a better way to communicate what it means to effectively close the assessment loop and to demonstrate that assessment results influenced improvements in student learning. To this end, authors, practitioners, accreditors, and other stakeholders must engage in purposeful discourse to clarify the language we use in daily conversations, at conference presentations, and in assessment resources. Furthermore, higher education professionals would benefit from having applied examples of demonstrably improving student learning at the academic program level. Such examples should be situated within contexts that are salient to higher education practitioners.

Investigating Common Definitions of Use of Results

Assessment literature and other academic resources typically describe the steps of the assessment process, including use of results (e.g., Erwin, 1991; Walvoord, 2010). Higher education professionals may seek information about use of results from multiple sources including assessment books, meta-assessment rubrics, and accreditation standards. Many assessment books are easily accessible and designed for practitioners just beginning their assessment work. At institutions where assessment practice is more mature, assessment practitioners may employ meta-assessment rubrics to measure the quality of programmatic assessment processes across an institution's programs (Fulcher & Orem, 2010). Meta-assessment rubrics typically define quality practices at each stage in the assessment cycle, including use of results. Lastly, given most practitioners must assess student learning outcomes and report the results to an accrediting organization, various regional accreditation standards are prevalent resources that describe assessment processes.

Perhaps it is time for assessment practitioners to abandon the ambiguous use of results terminology in favor of a more concrete, consistent definition of what it means to use assessment results for learning improvement.

In the current study, we reviewed a selection of assessment books, a selection of meta-assessment rubrics, and the accreditation standards for six regional accrediting organizations to determine how authors defined use of results in reference to student learning improvement. More specifically, we rated each resource using five dichotomous (i.e., yes or no) criteria:

a) directly references student learning or development;

b) general mention of "use of results," "closing the loop," "improvement," etc.;

c) mention or description of a change to curriculum;

d) mention or description of a change to pedagogy or teaching;

e) mention or description of the need to "re-assess" or determine whether "changes" contributed to actual "improvements."

In addition to the presence or absence of the five aforementioned criteria, we rated each resource in terms of *Level Specificity* and *Intervention Specificity* using a five-point scale (i.e., 0, 0.5, 1, 1.5, 2). Level Specificity referred to the degree to which use of results was defined at the program, department, or unit level. Intervention Specificity represented the degree to which each resource provided a detailed, real-life example of what is meant by use of results to improve student learning (see Figure 1).

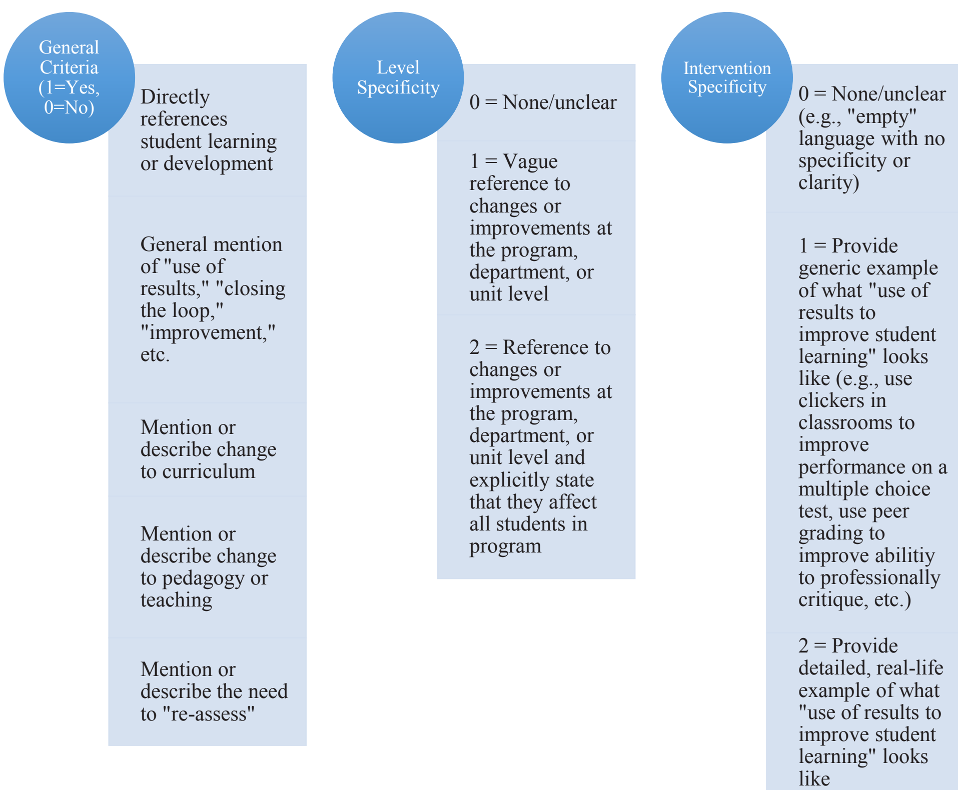


Figure 1. Criteria used to rate definitions of "use of results."

Data sources. We were interested in identifying assessment resources that an assessment novice might easily access via a limited Internet search. Thus, we initially used Google.com and Amazon.com to determine popular higher education assessment books that resulted from these searches (i.e., popular books meaning books displayed at the top of the list of search results that Google and Amazon provided). We conducted the Google.com and Amazon.com searches in October of 2013 using a non-personal, on-campus computer with a university IP address. Note, the cache was not cleared prior to conducting the search. More specifically, we searched the following terms: *higher education assessment*, *higher education assessment books,* and *student learning outcomes assessment books*.

A change is an improvement only after one reassesses and actually demonstrates a positive effect on student learning.

Our initial search yielded discipline-specific resources and a number of books focused on classroom-level assessment, in addition to a few of the most popular, general assessment books (i.e., Bresciani, Gardner, & Hickmott, 2009; Suskie, 2010; Walvoord, 2010). Because we were interested in general program assessment resources we continued our search by selecting specific assessment books based on our collective assessment expertise.

We identified 14 higher education assessment books, and then we used the Table of Contents to identify the most relevant sections of each book pertaining to the use of assessment results. Thus, it is possible that each book could detail the use of assessment results in other sections; however, our approach considered that a practitioner would likely seek information about using results in the section of the book where this issue is highlighted (i.e., there is a section in the Table of Contents dedicated to use of results). Furthermore, we acknowledge that the 14 books we reviewed represented only a subset of all available assessment resource books.

To locate meta-assessment rubrics, we attempted to access the 58 rubrics identified by Fulcher, Swain, and Orem (2012). Unfortunately, many of the web links to these rubrics were no longer active and we were only able to locate 32 of the 58 meta-assessment rubrics. Thus, the 32 rubrics represented only a subset of all possible meta-assessment rubrics used across various higher education institutions. We only evaluated institutional meta-assessment rubrics (i.e., rubrics used at an institutional level to evaluate all academic programs, which may include both pre-professional and non-professional academic programs).

In the current study, we reviewed a selection of assessment books, a selection of meta-assessment rubrics, and the accreditation standards for six regional accrediting organizations to determine how authors defined use of results in reference to student learning improvement.

The majority (78.1%) of the 32 meta-assessment rubrics came from 4-year, public institutions. Also, nearly half (43.8%) were located in the North Central Association of Colleges and Schools accreditation region. Eight of the 32 institutions were classified as small (having fewer than 5,000 students), while 12 were medium (having 5,001-15,000 students), and the remaining 12 were large (having more than 15,000 students). Of the 32 meta-assessment rubrics we were able to locate online, none came from institutions located in the New England region. Therefore, none of the institutional meta-assessment rubrics we rated are from schools accredited by the New England Association of Colleges and Schools.

Lastly, we reviewed the standards for the six regional accreditors in the United States: Middle States Commission on Higher Education (2011), North Central Association of Colleges and Schools: The Higher Learning Commission (2014), New England Association of Schools and Colleges (2011), Northwest Commission on Colleges and Universities (2010), Southern Association of Colleges and Schools Commission on Colleges (2012), and Western Association of Schools and Colleges: Senior College and University Commission (2013). For each accrediting organization, we rated the specific section of their standards that related to assessment of student learning.

Procedures. Three of the authors of this article independently evaluated the 14 selected assessment books, 32 meta-assessment rubrics, and six regional accreditation standards. These three raters have extensive doctoral training in assessment, diverse experiences rating academic program assessment reports, and collectively 23 years of assessment consultation experience. In addition, the three raters helped create the rubric used to evaluate the assessment resources; therefore, they were familiar with the rubric and how to apply the various rubric components.

Table 1 displays the percent exact agreement for the five dichotomously rated criteria prior to rater adjudication. Collapsing across all five criteria, the average percent exact agreement was weakest for the books (83%) compared to the rubrics (90%) and accreditation standards

Table 1
Percent Exact Agreement for Five Criteria Prior to Rater Adjudication

Rater	Directly references student learning or development	General mention of "use of results," "closing the loop," "improvement," etc.	Mention or describe change to curriculum	Mention or describe change to pedagogy or teaching	Mention or describe the need to "re-assess" or determine whether "changes" contributed to actual "improvements"
		Books (*N* = 14)			
1 vs. 2	100	86	71	64	93
1 vs. 3	100	86	64	71	71
2 vs. 3	100	100	79	79	79
Average % agreement	100.0	90.7	71.3	71.3	81.0
		Rubrics (*N* = 32)			
1 vs. 2	97	81	81	100	88
1 vs. 3	100	78	94	94	88
2 vs. 3	97	91	81	94	91
Average % agreement	98.0	83.3	85.3	96.0	89.0
		Accreditation Standards (*N* = 6)			
1 vs. 2	100	100	100	100	100
1 vs. 3	100	100	100	100	100
2 vs. 3	100	100	100	100	100
Average % agreement	100	100	100	100	100

**Note.* Values are percent exact agreement. That is, if Rater 1 and Rater 2 had exact agreement for 13 out of the 14 books they rated on the "Directly references student learning or development" criteria, the percent agreement would be equal to 93% or 13 divided by 14. *Average % agreement* is the average percent exact agreement calculated for each of the five criteria for each rater pair.

(100%). This is likely because the books had far more information to be evaluated than the rubrics or standards. The *mention or describe a change to curriculum* criterion had the weakest average percent exact agreement (86%) compared to the other four dichotomously rated criteria. The average percent exact agreement was 91% across all five dichotomously rated criteria and resources.

After independently rating the five dichotomous criteria, raters adjudicated any discrepancies to reach exact agreement. Raters also adjudicated discrepancies for the Level Specificity and Intervention Specificity ratings. Given Level Specificity and Intervention Specificity were rated using a five-point scale, raters adjudicated to reach agreement within 0.5 points (i.e., ratings on a given criterion from two different raters must be within 0.5 points). Specifically, if two raters provided ratings on the same criterion that differed by more than 0.5 points, then raters engaged in a discussion of this discrepancy by providing a rationale to support or explain how they rated that specific criterion. The raters continued to discuss their ratings and explanations pertaining to a given criterion until all raters could reach agreement within 0.5 points. In some cases, Rater 1 may have missed information or a specific explanation, and Rater 2 subsequently identified where it could be found within the resource. Once Rater 1 saw the information or explanation she had missed during her independent rating, she typically agreed with Rater 2 and they easily adjudicated their ratings. In other cases, two raters might have interpreted text or information within the resource differently and a discussion ensued until the two raters achieved agreement within 0.5 points.

To demonstrably improve student learning at a programmatic level, use of results should be explicitly and clearly defined in terms of the program, department, or unit level.

Because we created the rubric prior to evaluation and we had not used the rubric in previous research studies, there were exactly two instances in which we had to establish an additional adjudication rule. As described in the following paragraphs, we instated these two rules during the adjudication process after having in-depth conversations and agreement across all three raters about the rules. We aimed to achieve accurate ratings and ensure agreement on those ratings across raters. Furthermore, the two rules were mechanisms to clarify some of the language used in the rubric, not to tailor the rubric to the behaviors of the three raters. Clarifying these two aspects of the rubric during our adjudication processes was beneficial because it helped us apply the rubric in a more consistent and accurate way, and will help us do the same in future research studies. Additionally, if other faculty members want to use this rubric as part of future studies, we can use these two rules to help them understand the meaning of specific rubric criteria.

Nevertheless, meta-assessment rubrics and accreditation standards would likely be more helpful and valuable for practitioners if they included clear, explicit examples of use of results to improve student learning.

We noticed consistent disagreement between Rater 1 and Rater 2 on the Level Specificity criterion during adjudication; therefore, we created a rule to further clarify how to interpret this criterion: If the book, rubric, or accreditation standard mentioned anything that indicated the program level (e.g., unit, department) it would receive a rating of 2. During adjudication, we also realized that Raters 2 and 3 were interpreting the second criterion (general mention of "use of results," "closing the loop," "improvement," etc.) more liberally, giving credit for terms such as action plan, while Rater 1 was only giving credit for the terms explicitly listed in the criterion (i.e., use of results, closing the loop, and improvement). Therefore, we created a rule that additional terms not mentioned in the criterion, such as action plan, would receive credit for the second criterion.

We calculated Cohen's (1960) kappa to provide a more conservative estimate of inter-rater agreement. Kappa compares the agreement between two raters on a given criterion (e.g., agreement of Raters 1 and 2 on the directly references student learning or development criterion), taking into account chance agreement. The typical kappa value across all rater pairs and criteria, for all resources evaluated, was 0.486 with notable variability (i.e., values ranged from -0.148 to 1.000). The lowest kappa value was between Rater 1 and Rater 2 on the Level Specificity criterion. The kappa values for the second criterion (general mention of "use of results," "closing the loop," "improvement," etc.) were also low. These lower kappa values were expected given the disagreements noted in the previous paragraph.

After revisiting our ratings during adjudication using these two rules, we felt confident in our ratings for the Level Specificity and the General Mention criteria. We also noted that a restriction of range could explain the lower kappa values. Although the Level Specificity and Intervention Specificity criteria were rated using a five-point scale (i.e., 0, 0.5, 1, 1.5, 2), only a few resources actually received a rating of 1.5 or 2.

Findings

Five Dichotomous Criteria

Books. Twelve of the 14 books directly referenced student learning or development, and generally mentioned use of results, closing the loop, improvement, and so forth (i.e., criteria 1 and 2). However, fewer books met the third (i.e., mention or description of a change to curriculum) and fourth criteria (i.e., mention or description of a change to pedagogy or teaching). Only three of the 14 books, Bresciani et al. (2009), Suskie (2010), and Walvoord (2010), mentioned or described the need to re-assess or determine if changes based on assessment results contributed to actual improvements. Results are reported in Table 2.

Overall, the assessment books provided some of the richest examples of using results for learning improvement. However, these examples were not the focus of the chapters in which they were found; thus, they may be difficult for readers to identify and internalize.

Meta-assessment rubrics. Note, we present the results for the 32 meta-assessment rubrics in aggregate form to preserve institutions' confidentiality. It was impressive that the 32 institutions used meta-assessment rubrics because this requires mature assessment processes and adequate assessment infrastructure. Moreover, all of the meta-assessment rubrics directly referenced student learning or development, and generally mentioned use of results, closing the loop, improvement, and so forth. Approximately 38% of the rubrics defined use of results in terms of a change to curriculum, while 25% defined use of results in terms of a change to pedagogy or teaching (see Figure 2). Overall, the percentage of meta-assessment rubrics and the percentage of assessment books that mentioned the need to re-assess or determine whether changes based on assessment results contributed to actual improvements were comparable (i.e., 19% and 21%, respectively).

Table 2
Presence of the Five Criteria Used to Define "Use of Results" in Assessment Books

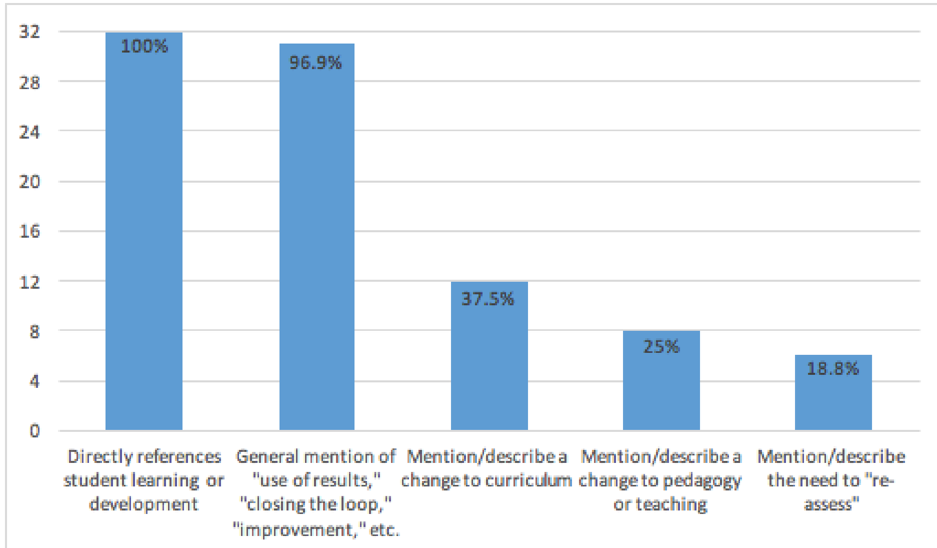
Book Author (Publication Date)	Directly references student learning or development	General mention of "use of results," "closing the loop," "improvement", etc.	Mention or describe change to curriculum	Mention or describe change to pedagogy or teaching	Mention or describe the need to "re-assess" or check to determine whether "changes" contributed to actual "improvements"
Allen (2004)	X	X	X	X	
Banta, Lund, Black, & Oblander (1996)	X	X	X	X	
Bresciani, Gardner, & Hickmott (2009)	X	X	X	X	X
Brown & Knight (1994)	X	X	X	X	
Erwin (1991)	X	X			
Huba & Freed (2000)	X	X	X	X	
Messick (1999)	X	X		X	
Middaugh (2009)	X	X		X	
Palomba & Banta (1999)	X	X	X	X	
Schuh (2009)	X				
Schuh & Upcraft (2001)	X	X			
Suskie (2010)	X	X	X	X	X
Walvoord (2010)	X	X	X	X	X
Weiss (1998)		X	X	X	

**Note*. X indicates the presence of the criterion (i.e., an X represents a rating of 1 for "Yes, the criterion was met").

Figure 3 displays the number of meta-assessment rubrics (categorized according to regional accrediting organization) that met the third, fourth, and fifth criteria for defining use of results. A larger number of meta-assessment rubrics from institutions accredited by the Middle States Commission on Higher Education (MSCHE) met the fourth and fifth criteria compared to rubrics from institutions accredited by other regional accreditation organizations. However, similar to the findings for the assessment books, the fifth criterion (the need to re-assess) was the least frequently satisfied criterion for the meta-assessment rubrics.

Interestingly, none of the regional standards defined use of results in terms of the need to re-assess or determine whether changes based on assessment results contributed to actual learning improvements.

Accreditation standards. As shown in Table 3, 100% of the regional accreditation standards directly referenced student learning or development, and generally mentioned use of results, closing the loop, improvement, and so forth. Only one of the regional accreditation standards (WASC) defined use of results in terms of a change to curriculum and a change to pedagogy or teaching. Interestingly, none of the regional standards defined use of results in terms of the need to re-assess or determine whether changes based on assessment results contributed to actual learning improvements.



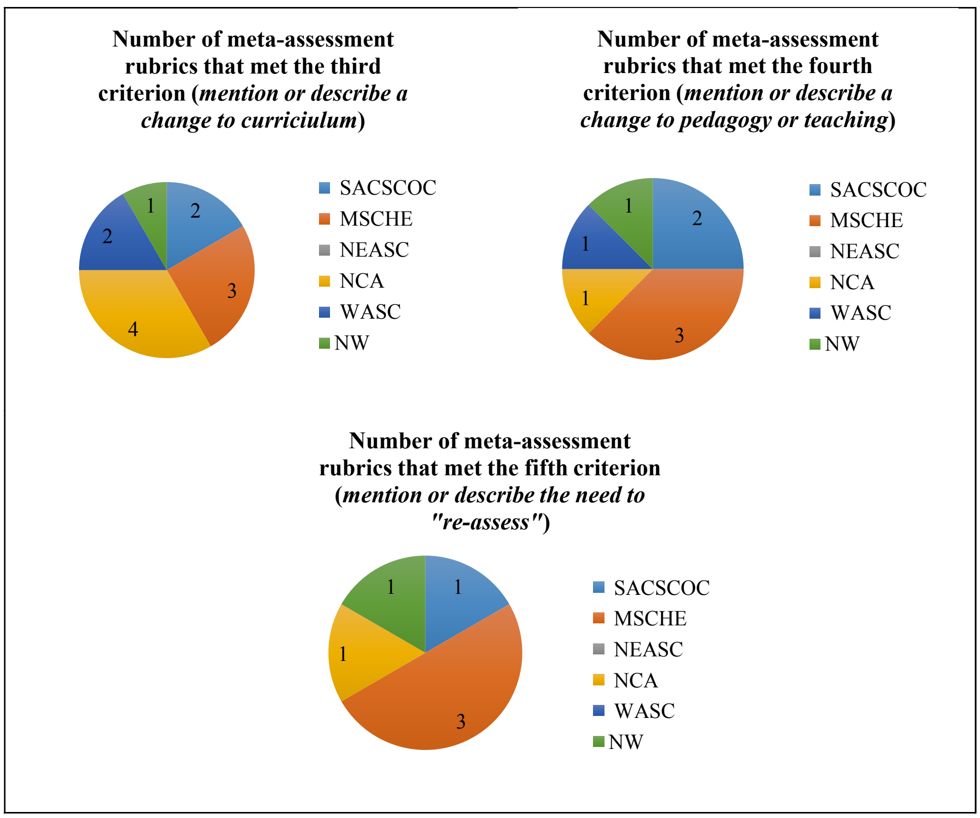


Figure 3. Number of meta-assessment rubrics that met the third, fourth, and fifth criteria for defining "use of results" categorized according to accrediting organization.

Level Specificity

To demonstrably improve student learning at a programmatic level, use of results should be explicitly and clearly defined in terms of the program, department, or unit level. Moreover, curricular or pedagogical modifications should affect every student completing the program (Fulcher et al., 2014). Thus, in addition to the presence or absence of the five criteria for defining use of results, we investigated the degree to which use of results was defined at the program, department, or unit level (Level Specificity).

Table 3
Presence of the Five Criteria Used to Define "Use of Results" in Regional Accreditation Standards

Regional Accreditor	Directly references student learning or development	General mention of "use of results," "closing the loop," "improvement," etc.	Mention or describe a change to curriculum	Mention or describe a change to pedagogy or teaching	Mention or describe the need to "re-assess" or check to determine whether "changes" contributed to actual "improvements"
MSCHE	X	X		X	
NCA	X	X			
NEASC	X	X			
NW	X	X			
SACSCOC	X	X			
WASC	X	X	X	X	

**Note*. X indicates the presence of the criteria (i.e., an X represents a rating of 1 for "Yes, the criteria was met"). MSCHE = Middle States Commission on Higher Education, NCA = North Central Association of Colleges and Schools: The Higher Learning Commission, NEASC = New England Association of Schools and Colleges, NW = Northwest Commission on Colleges and Universities, SACSCOC = Southern Association of Colleges and Schools Commission on Colleges, WASC = Western Association of Schools and Colleges: Senior College and University Commission.

Level Specificity was evaluated using a five-point scale (0, 0.5, 1, 1.5, 2). The resources might not articulate any level when defining use of results to make changes or improvements. Or, it could be unclear what level is implicated in the definition (i.e., 0 = *None/unclear*). When defining use of results, the resources could vaguely reference the program level (i.e., 1 = *vague reference to changes or improvements at the program, department, or unit level*). However, an exemplary definition of use of results explicitly references changes or improvements that affect all students in a given program (i.e., 2 = *reference to changes or improvements at the program, department, or unit level and explicitly state that they affect all students in a program*). The meta-assessment rubrics received the highest ratings for Level Specificity compared to the books and accreditation standards (see Table 4). The accreditation standards were least clear about referencing use of results to make changes or improvements at the program level.

After reviewing and rating various assessment resources in search of exemplary definitions of use of results, we found that all had shortcomings in reference to evidencing learning improvement.

Table 4
Average Adjudicated "Level Specificity" Ratings for Books, Rubrics, and Standards

	Average Adjudicated Rating
Books (*N* = 14)	0.86
Meta-assessment Rubrics (*N* = 32)	1.00
Accreditation Standards (*N* = 6)	0.60

**Note.* Ratings on a five-point scale ranging from 0 to 2, with half points possible (i.e., 0, 0.5, 1, 1.5, 2). 0 = *None/unclear;* 1 = *vague reference to changes or improvements at the program, department, or unit level;* 2 = *reference to changes or improvements at the program, department, or unit level and explicitly state that they affect all students in a program.*

Intervention Specificity

In addition to defining use of results in terms of making changes or improvements at the program level, exemplary definitions should include an example. Research suggests that learning by example can facilitate conceptual understanding (Atkinson, Derry, Renkl, & Wortham, 2000; Bourne, Goldstein, & Link, 1964). Therefore, we investigated the degree to which resources provided an example of use of results to improve student learning (Intervention Specificity).

By situating use of results to improve student learning at the forefront of assessment practice, higher education professionals will likely experience greater buy-in to the assessment process and foster greater efforts to use assessment results in a meaningful way.

Intervention Specificity was evaluated using a five-point scale (0, 0.5, 1, 1.5, 2). That is, the resource may have provided no examples of using results to improve student learning or an example(s) that is vague or lacking sufficient detail (i.e., 0 = *None/unclear*; *"empty" language with no specificity or clarity*). Alternatively, the resources could have provided a generic example of what use of results to improve student learning means (*i.e.,* 1 = *generic example; use clickers in classrooms to improve performance on a multiple choice test, use peer grading of capstone portfolios to improve ability to professionally critique, etc.*). Additionally, resources could have provided a detailed example of what use of results to improve student learning means (i.e., 2 = *detailed example; references assessment, modifications to pedagogy or curriculum, and re-assessment to determine whether modifications actually improved student learning*).

The assessment books had the highest ratings for Intervention Specificity compared to the meta-assessment rubrics and accreditation standards (see Table 5). Certainly, books might have a slight advantage in the Intervention Specificity category because books have more space to include examples of using assessment results to improve student learning. Nevertheless, meta-assessment rubrics and accreditation standards would likely be more helpful and valuable for practitioners if they included clear, explicit examples of use of results to improve student learning.

Table 5
Average Adjudicated "Intervention Specificity" Ratings for Books, Rubrics, and Standards

	Average Adjudicated Rating
Books (*N* = 14)	0.57
Meta-assessment Rubrics (*N* = 32)	0.08
Accreditation Standards (*N* = 6)	0.00

*Note. Ratings on a five-point scale ranging from 0 to 2, with half points possible (i.e., 0, 0.5, 1, 1.5, 2). *0 = None/unclear; "empty" language with no specificity or clarity; 1 = generic example; use of clickers in classrooms to improve performance on a multiple choice test, use peer grading of capstone portfolios to improve ability to professionally critique, etc.; and 2 = detailed example; references assessment, modifications to pedagogy or curriculum, and re-assessment to determine whether modifications actually improved student learning.*

Discussion

Overall, the resources available to assessment practitioners did not clearly explicate use of results. However, we identified a few resources that had good definitions of use of results. These resources received some of the highest ratings across the five dichotomous criteria, as well as the Level Specificity and Intervention Specificity criteria.

Good Definitions of Use of Results

Assessment books. Banta, Lund, Black and Oblander's (1996) *Assessment in Practice: Putting Principles to Work on College Campuses* was the only resource that received our highest rating (2 = *detailed example; references assessment, modifications to pedagogy or curriculum, and re-assessment to determine whether modifications actually improved student learning*) for Intervention Specificity. Banta and colleagues (1996) described examples from several institutions that provide "concrete evidence" of improved student learning (p. 343). Their examples included re-assessment as part of using results to evidence improved student learning. However, Banta and colleagues did not explicitly convey that re-assessment is part of how they defined use of results.

Barbara Walvoord's (2010) *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*, and Linda Suskie's (2010) *Assessing Student Learning: A Common Sense Guide* also received some of the highest ratings. Unlike many of the other resources, Walvoord described the need to follow-up or re-assess student learning after taking action. Furthermore, Walvoord's definition of using results appropriately differentiated classroom assessment from program-level assessment. Suskie's book received high ratings because she included general examples of what it means to use assessment results for improvement. These examples included re-assessing to verify that changes were indeed improvements. Suskie also discussed the importance of using results for pedagogical professional development among faculty and creating curricular coherence.

Overall, the assessment books provided some of the richest examples of using results for learning improvement. However, these examples were not the focus of the chapters in which they were found; thus, they may be difficult for readers to identify and internalize.

Until use of results is consistently communicated and understood, innovation in assessment practice and the ability to demonstrate improved student learning will likely stagnate.

Meta-assessment rubrics. The meta-assessment rubric for Washington State University received the highest rating because it provided an example of assessing, making curricular or pedagogical modifications, and following-up to evaluate the results of those modifications. Gallaudet University and University of South Florida's meta-assessment rubrics also received high ratings because they contextualized use of results as changes to curricula and pedagogy, and noted the need to re-assess. Although space is limited on rubrics, these institutions have done well to use rubrics that explain use of results in greater detail, going above and beyond the most basic, first two criteria (*a direct reference to student learning or development*; and *a general mention of "use of results," "closing the loop," "improvement," etc*.).

Accreditation standards. None of the regional accreditation standards mentioned or described the need to re-assess or determine whether changes based on assessment results actually contributed to improvements in student learning. Furthermore, not one provided tangible examples, within the standards themselves, of what it means to use results. To be fair, some accreditors include additional information in more recent documentation. For example, in addition to information provided in the standards, the Southern Association of Colleges and Schools Commission on Colleges (2014) and Middle States Commission on Higher Education (2015) provide several guidelines and publications regarding accreditation, some of which detail student learning improvement. Yet, the standards themselves offer little guidance; more detail could be included without unduly lengthening them.

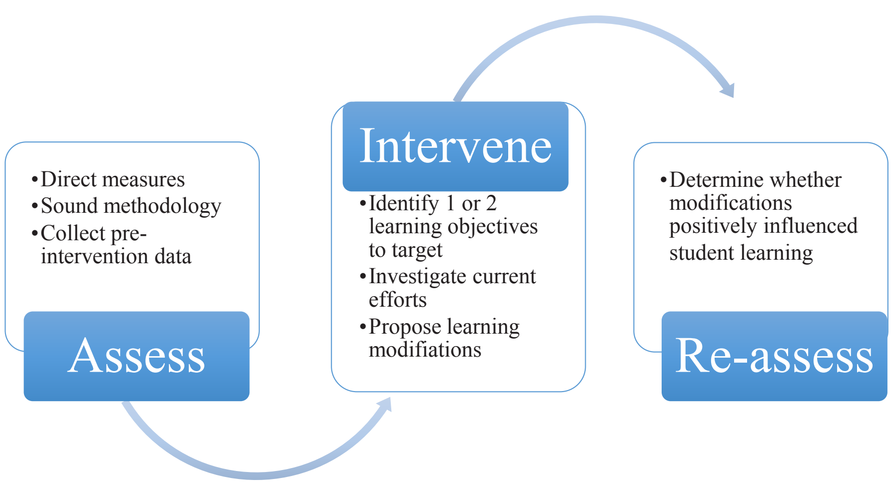


Figure 4. Exemplary definition of "use of results."

Although some regional accreditors provide more detailed information about using results via additional documentation or publications, none of standards stated that re-assessment was a necessary part of using results to evidence learning improvement. Those involved with crafting regional accreditation standards were probably cognizant about the role of re-assessment. However, adding re-assessment as an accreditation requirement might have overwhelmed institutions that were still in the beginning or intermediate stages of their assessment practice.

After reviewing and rating various assessment resources in search of exemplary definitions of use of results, we found that all had shortcomings in reference to evidencing learning improvement.

Exemplary Definition of Use of Results to Improve Student Learning

After reviewing and rating various assessment resources in search of exemplary definitions of use of results, we found that all had shortcomings in reference to evidencing learning improvement. However, Fulcher et al. (2014) communicated a clear, consistent, and comprehensive definition of using results to improve student learning. A visual representation of this definition is provided in Figure 4. Unlike other resources, this resource is entirely dedicated to unpacking the term use of results. In this paper, Fulcher and colleagues defined use of assessment results to improve student learning as a program, department, or unit that:

1. **Assessed** using sound instruments that tightly align with programmatic student learning objectives and directly measure student learning;
2. **Intervened** by making evidenced-based curricular and/or pedagogical modifications at the program level;
3. **RE-assessed** using the same instrumentation; and
4. Found that student learning actually improved compared to pre-intervention assessment results.

According to Fulcher and colleagues' (2014) definition, using assessment results to improve student learning occurs "when a re-assessment suggests greater learning proficiency than did the initial assessment" (p. 5). Use of results is defined in terms of changes to curricula, pedagogy, and teaching. Moreover, the necessity to re-assess is explicitly described and incorporated into this definition of using assessment results for learning improvement. Most importantly, this definition of use of results includes a hypothetical example of an academic program that used assessment results to demonstrate improvement in students' oral communication skills. Thus, readers have a tangible example, concretizing and demystifying what use of results means.

Implications for Practice

Furthermore, we believe that clearly communicating use of results for programs at the onset can foster a sense of excitement that is rarely observed by focusing on logistical or procedural assessment details.

Often, assessment is performed in an effort to improve student learning. Unfortunately, assessment practitioners and program stakeholders rarely translate assessment results into action. It is even rarer for practitioners and stakeholders to re-assess students' learning to determine the effectiveness of actions taken in response to assessment findings (i.e., did changes or modifications actually improve student learning?). The current study investigated how use of results is communicated. We identified several areas of inconsistency and vagueness. That is, we demonstrated that authors, practitioners, and accrediting organizations use a variety of expressions and terms to define use of results. Unfortunately, few described closing the loop clearly, consistently, and comprehensively. Also, we noted that authors, practitioners, and accrediting organizations typically do not devote as much time and detail to describing use of results as they do on other aspects of the assessment cycle. To be fair, quality assessment must precede use of results; thus, it is understandable that some practitioners are focused on the brass tacks of assessment (i.e., the essential logistical and procedural details of the assessment process). However, it is imperative to clearly define and conceptualize use of results so that use can be realized after quality assessment is achieved.

Furthermore, we believe that clearly communicating use of results for programs at the onset can foster a sense of excitement that is rarely observed by focusing on logistical or procedural assessment details. By situating use of results to improve student learning at the forefront of assessment practice, higher education professionals will likely experience greater buy-in to the assessment process and foster greater efforts to use assessment results in a meaningful way. We recognize that many institutions are already well along in their assessment work. We encourage assessment professionals at such institutions to re-focus their work by hosting professional development events (e.g., workshops, roundtables, presentations, etc.) for faculty members that present a clearer definition of use of results and concrete examples of what it means to use results for student learning improvement. Such events could highlight how previous work fits into this overall goal, while also helping faculty develop a more profound understanding of what it means to use assessment results to improve student learning. Until use of results is consistently communicated and understood, innovation in assessment practice and the ability to demonstrate improved student learning will likely stagnate.

As we communicate what use of results means, we hope that higher education will move one step closer to evidencing improved student learning.

We identified specific definitions that we hope will foster a better understanding of what it means to use assessment results for learning improvement, while also facilitating clearer, more consistent conversations among practitioners and stakeholders. As we communicate what use of results means, we hope that higher education will move one step closer to evidencing improved student learning.

AUTHOR'S NOTE: Since this article was submitted for publication, Megan Rodgers Good earned her Ph.D. in Assessment and Measurement from James Madison University, and accepted a full-time position as the Director of Academic Assessment at Auburn University. In addition, Elizabeth Hawk Sanchez earned her M.A. in Writing, Rhetoric, & Technical Communication from James Madison University.

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Abstract

Assessment to improve student learning and program effectiveness is an essential skill for student affairs practitioners. Empirical findings from a content analysis of the Professional Competency Areas for Student Affairs Practitioners (ACPA & NASPA, 2010) shed important light on reflexivity as a foundational aspect of assessment. Based on these findings, we present a conceptual model that positions assessment and reflexivity at the center of student affairs practice and offer concrete recommendations for reflexive student affairs assessment.

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Assessment as Reflexive Practice: A Grounded Model for Making Evidence-Based Decisions in Student Affairs

Assessment is ubiquitous in student affairs work. Skilled practitioners use it daily to improve student learning and program effectiveness and, on many campuses, full-time directors of student affairs assessment oversee a seemingly endless cycle of local data collection, nationally normed survey administration, and interpretation of available evidence. Regional and national student affairs organizations frequently offer workshops and full conferences on assessment. Professional organizations also guide this work. For example, the Council for the Advancement of Standards in Higher Education (2012) provides standards for training and conducting assessment, and the 2010 ACPA/NASPA *Professional Competency Areas for Student Affairs Practitioners* (hereafter: Joint Statement) included assessment as a key expected skill. The end result is that student affairs practitioners are frequently told of assessment's importance and increasingly expected to engage in assessment as part of their work.

Despite its ubiquity, student affairs assessment is complex. It has a long history, originating no later than the commitment to continuous improvement ensconced in *The Student Personnel Point of View of 1949* (Schuh & Gansemer-Topf, 2010). It was not until after the 1980s, however, when governments and accrediting bodies demanded evidence of college outcomes (Birnbaum, 2000; Bowman, 2013; Wall, Hursh, & Rodgers, 2014) and institutions began to tie resource allocation to those outcomes (Middaugh, 2010) that current conceptions of student affairs assessment began to coalesce. Thereafter, a number of foundational statements and publications (e.g., ACPA, 1996; Blimling, Whitt, & Associates, 1999), reaffirmed student learning as the core mission of student affairs and articulated the central role of assessment for demonstrating and improving student learning and program effectiveness. As assessment has emerged as an institutional priority, practical and scholarly publications have also described its transformative potential for student affairs divisions (e.g., Maki, 2010; Schuh & Upcraft, 2001). Notably, this literature also highlights assessment both as a tool for better understanding the experience of individual students and for evaluating programmatic impact.

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In addition to confusion regarding its purpose, many student affairs professionals view assessment as a burdensome task detracting from their service to students. Literature suggests that the major reason for this sentiment is the perceived cost—in both time and money—associated with well-conducted assessment efforts (Lopez, 2004; Schuh & Associates, 2009; Slevin, 2001). Further, higher education provides an exceptionally data rich environment, and many student affairs professionals find delineating the boundaries of data collection difficult (Thille et al., 2014). Compounding these issues, when done poorly, assessment can legitimately represent a significant distraction or meaningless busywork (Birnbaum, 2000). This ambivalence may diminish the benefits of assessment on many campuses.

In short, student affairs professionals are socialized to believe that assessment has the potential to alter practice for the better, but encounters with haphazard assessment efforts generate some skepticism.

In short, student affairs professionals are socialized to believe that assessment has the potential to alter practice for the better, but encounters with haphazard assessment efforts generate some skepticism. To better understand this problem, we examined the Joint Statement (ACPA & NASPA, 2010) to determine how assessment was described and the implications of that description for practice. We selected the Joint Statement because its production brought together leading scholars and practitioners from widely divergent institutional types, career stages, and functional areas. The document also sought to establish a baseline of knowledge for the profession and therefore can be taken as a generic statement of what assessment means within student affairs. More specifically, we explored answers to two questions: (a) How and when is assessment invoked explicitly? and (b) How and when is assessment invoked implicitly? In our discussion of findings, we developed a conceptual model that accounts for the connections among the answers to these research questions.

Design and Methods

Our study design employed techniques drawn from qualitative content analysis (Schreier, 2012) in concert with the epistemological assumptions and analytic strategies common to constructivist approaches to grounded theory (Charmaz, 2014). Content analysis utilizes both qualitative and quantitative techniques to reduce the complexity of textual data and discern meaning from the text(s) (Schreier, 2012). We adopted a summative content analysis approach (Hsieh & Shannon, 2005) since we had access to a comprehensive, complete data source from which we hoped to discover latent socio-communicative patterns and used numerical frequency only insofar as it was useful to reveal areas for further analysis (Morgan, 1993). Given its emphasis on latent meaning, qualitative content analysis is fundamentally consistent with grounded theory, which is a systematic process of analytic induction based on recurrent patterns in data selected for study (Glaser, 1992; Glaser & Strauss, 1967). Our grounded theory approach utilizes a constructivist orientation to qualitative data analysis (Charmaz, 2014). We therefore began the study knowing that there were two key ideas that we hoped to explore in greater depth: (a) assessment and (b) student affairs practice. These ideas served as sensitizing constructs for our analysis (Bowen, 2008). As our study progressed, we quickly determined that reflexivity should also serve as a sensitizing construct and added it as a component of our analytic framework.

That widespread sharing and the selection of the Joint Statement, a document intended to represent a professional consensus, as the focus of our analysis provides a limited assurance that our findings have some measure of generalizability within the student affairs profession.

We conducted our study in seven phases: (1) we separately read the Joint Statement and identified all of the competencies where assessment was directly or indirectly described; (2) we determined which of these identified competencies met our shared definition for assessment; (3) for all of those competencies where we disagreed, we had an extended conversation wherein the cases for and against inclusion were made and then continued the conversation until we achieved consensus; (4) we then subjected the competencies identified in this way to a constant comparative analytic process wherein we examined each individual competency relative to all other competencies and to an emergent coding frame; (5) we produced axial codes—assessment and learning, assessment and program evaluation, assessment as praxis, and the utility of assessment—of competencies with similar meanings; (6) we developed themes, which we describe in our findings section below, by seeking underlying theoretical relationships among our axial codes; and (7) we constructed a grounded conceptual model, which is presented in our discussion below, that contextualizes these themes relative to one another and to the larger literature base on assessment and student affairs practice.

As with any qualitative work, concerns regarding credibility and generalizability are present. To enhance credibility, we provide thick excerpts from the textual evidence we used in our analysis and provide our axial code counts in an appendix to this article (Weber, 1990). We have also shared preliminary and final findings with colleagues in settings ranging from informal conversations to formal presentations to large conference audiences in order to be certain that our findings achieve face credibility (Lincoln & Guba, 1985). That widespread sharing and the selection of the Joint Statement, a document intended to represent a professional consensus, as the focus of our analysis provides a limited assurance that our findings have some measure of generalizability within the student affairs profession. However, as Maxwell (1992) has noted, generalizability in qualitative research is based on the utility of research results in interpreting similar situations and not the representativeness of the design. Consequently, the conceptual coherence of the grounded theoretical model that we present below is the best criterion for assessing the quality of this study.

Sensitizing Constructs

Over time, scholarly and practical literature has introduced new purposes and uses for assessment resulting in a wide-ranging, additive definition of assessment work in student affairs.

As noted above, we began this study with two sensitizing constructs: assessment and student affairs practice. We briefly summarize key literature related to both. In the case of assessment, we focus on key definitional issues and motivations to assess. For student affairs practice, we focus on the development of professional identity. During the course of the study, our analysis also revealed reflexivity to be a latent concept guiding our discussions. As such, we added it to the sensitizing constructs we employed formally and review the term's usage within student affairs.

Assessment in Student Affairs

While maintaining a focus on continuous improvement (Blimling et al., 1999), the student affairs profession uses the term assessment ambiguously. Over time, scholarly and practical literature has introduced new purposes and uses for assessment resulting in a wide-ranging, additive definition of assessment work in student affairs. Earlier practices, many still in use today, included tracking usage and gauging satisfaction with services or facilities, comingling assessment with evaluation in response to accountability and budgetary concerns as well as institutional planning needs (Middaugh, 2010; Upcraft & Schuh, 1996). Later, more sophisticated methods were introduced to document contributions to student learning (Schuh & Gansemer-Topf, 2010), such as assessing students' engagement in "high-impact" social and educational activities (e.g., Kuh, 2008), and contemporary efforts emphasize the need for direct measures of skills or competencies developed through participation in student affairs programs (e.g., Banta & Palomba, 2014; Bresciani, Gardner, & Hickmott, 2009). Consequently, what counts as assessment may vary widely among functional areas (e.g., housing, recreational sports, leadership), especially depending on whether data are needed to aid continuous improvement of student learning, program effectiveness, or both. Applying assessment across the spectrum of student affairs functions in partnership with professionals possessing different levels of skill or comfort with doing assessment work (Schuh & Gansemer-Topf, 2010) has necessarily generated a number of measures and processes that must remain relatively simple and which further complicate offering a concise definition of student affairs assessment.

Consequently, what counts as assessment may vary widely among functional areas (e.g., housing, recreational sports, leadership), especially depending on whether data are needed to aid continuous improvement of student learning, program effectiveness, or both.

However, while the specifics vary, most descriptions of the assessment process share similar elements. Conceptual models present these common elements of assessment as part of a cycle of improvement oriented activities (Maki, 2010; Suskie, 2004). The cyclical model begins by identifying what will be assessed and defining the purpose or measures for assessment, such as a set of learning outcomes or standards of professional practice. The next step in the cycle is gathering data related to these measures. Interpretation of these data guides decisions about what is working well and what changes might yield improvement. Improvements to the object of the assessment are implemented before interest in understanding the effects of these changes restarts the process. A standard conceptual model of assessment is presented in Figure 1.

As demonstrated in this model, each step is inextricably linked to the steps that precede and follow it. Maki (2010) expanded this conceptualization by including a rotating arrow design that clarified the potentially recursive nature of assessment wherein one might

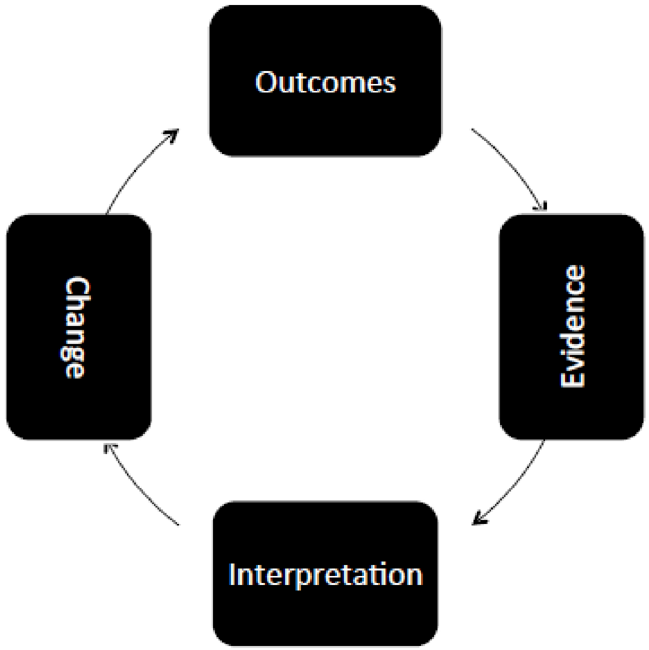

Figure 1. Standard conceptual model of assessment.

need to return to an earlier step as new perspectives emerged. This design demonstrates the importance of practitioner judgment in executing assessment activities and further highlights the need for a reflexive model.

Most models also acknowledge the importance of distinguishing between formative and summative assessment (Banta & Palomba, 2014). Summative assessments help determine if an activity or program should be expanded, consolidated, suspended, or terminated (Schuh & Associates, 2009). In contrast, formative assessments assist in making incremental, ongoing improvements and are more readily aligned with student affairs practitioners' responsibilities for improving student learning and program effectiveness and their desires to improve upon their current practices (Banta & Palomba, 2014; Schuh & Associates, 2009). Results are used to determine changes in procedures, realign educational activities with desired outcomes, or adjust deployment of resources to improve results (Schuh & Associates, 2009). Essentially, an assessment process is formative when it will be followed by future iterations, and summative when it will not. In either case, however, the purpose of the assessment is improvement. The capacity to foster improvement of student learning and program effectiveness has established assessment as central to "good practice" in student affairs (Blimling et al., 1999, p. 206) and a key skill for all student affairs professionals (ACPA & NASPA, 2010; Waple, 2006).

Further, persistent accountability demands and funding pressures have elevated the importance of assessment skills for student affairs practitioners. While the conflation of assessment results and evaluative decisions has been critiqued as a drift away from the true purpose of assessment, political realities mean assessment results will be used for both formative and summative purposes. Assessment of program effectiveness often impacts the allocation of increasingly scarce fiscal resources and institutional planning (Middaugh, 2010). Institutions have responded by purposefully assessing gains in knowledge from classroom-based learning, as well as changes in attitudes, values, and psychosocial development that may occur across students' college experiences (Bresciani et al., 2009). However, student affairs professionals have not been as quick to address these challenges in a way that demonstrates the key role they play in promoting student learning and success (Bowman, 2013) —sometimes, as noted above, viewing assessment as detracting from direct service to students. Nonetheless, assessment can be used to both improve and demonstrate the need for student support (Culp, 2012).

Student Affairs Practice

The work of student affairs professionals is traceable to the disciplinary role played by early college presidents and tutors in fostering residential community (Geiger, 2015). The profession itself evolved gradually as these roles grew in complexity to the point where they could not be maintained in tandem with other administrative and teaching responsibilities (Caple, 1998). Among the very earliest positions that can be definitively associated with current student affairs roles were the dean of men and women (Nidiffer, 1999). As these positions became increasingly stable, systematic academic training for those in or aspiring to such roles was introduced and a formal body of knowledge grew to be associated with the profession (Caple, 1998). However, from very early on in the scholarship of student affairs problems have been raised with underlying epistemological and ontological assumptions of this work (Bloland, Stamatakos, & Rogers, 1994; Love, 2012). Further, the field—unlike true professions— continues to have low barriers to entry and to struggle to articulate its broader importance. As a result, the field has repeatedly produced documents designed to assert its legitimacy and articulate the essential knowledge of the profession (Evans & Reason, 2001).

Further, persistent accountability demands and funding pressures have elevated the importance of assessment skills for student affairs practitioners. While the conflation of assessment results and evaluative decisions has been critiqued as a drift away from the true purpose of assessment, political realities mean assessment results will be used for both formative and summative purposes.

In the midst of this uncertainty regarding the soundness of its professional foundations, the major student affairs professional organizations—ACPA - College Student Educators International (ACPA) and NASPA - Student Affairs Administrators in Higher Education (NASPA)— charged a group of leading scholars and practitioners with articulating "the broad professional knowledge, skills, and, in some cases, attitudes expected of student affairs professionals regardless of their area of specialization or positional role within the field" (2010, p. 3). The *Professional Competency Areas for Student Affairs Practitioners* were the result of lengthy discussions and reviews of literature. The Joint Statement established a "basic list of outcomes under each competency area regardless of how they entered the profession" in addition to higher-level competencies that might serve as inspirations for specialization (p. 3). More specifically, the Joint Statement proposed three competency levels—basic, intermediate, and advanced—across ten different areas—Advising and Helping; Assessment, Evaluation, and Research; Equity, Diversity, and Inclusion; Ethical Professional Practice; History, Philosophy, and Values; Human and Organizational Resources; Law, Policy, and Governance; Leadership; Personal Foundations; and Student Learning and Development.

Reflexivity in Student Affairs Practice

A long tradition of student affairs scholarship has advocated the importance of reflexivity in student affairs practice (Baxter Magolda & Magolda, 2011; Bensimon, 2007). As has been shown elsewhere, the application of theory to problems of practice is one of the defining characteristics—and challenges—of student affairs practice (Reason & Kimball, 2012). The Joint Statement spoke to this impulse by suggesting the need for "naturally occurring reflection processes within one's everyday work" and the use of "theory-to-practice models to inform individual or unit practice" (pp. 25-26). This sort of reflection is a necessary but not sufficient condition for the development of reflexive practice. In his classic work on reflexive practice, Schön (1983) advanced two related definitions for reflexivity: reflection-in-action and reflection-on-action. According to Schön, reflection-in-action occurs as an experience is underway and allows a person to make mid-course corrections to their plan of action and understanding of the experience. In contrast, reflection-on-action always follows the completion of an experience. Whereas reflection-in-action can be reflexive for mindful practitioners, reflection-on-action requires a more sustained commitment to the thoughtful consideration of intention, impact, and learning. Therefore, reflection-on-action becomes a form of reflexive practice.

Whereas reflection-in-action can be reflexive for mindful practitioners, reflection-on-action requires a more sustained commitment to the thoughtful consideration of intention, impact, and learning. Therefore, reflection-on-action becomes a form of reflexive practice.

Reflexivity promotes mindfulness and intentionality through sustained attention to how student affairs professionals' values, beliefs, and assumptions influence practice. As defined by Bolton (2010), reflexivity is the use of "strategies to question our own attitudes, thought processes, values, assumptions, prejudices and habitual actions, to strive to understand our complex roles in relation to others" (p. 13). It is a reciprocal process that asks practitioners to consider the relationship between their beliefs, experiences, the environment, and others. To assist with this complex reflexive work, models such as case analysis (Stage & Dannells, 2000) and structured writing (Bolton, 2010) have been advanced in the literature. Significantly, we have previously explored the role of reflexivity in student affairs both together (Kimball & Ryder, 2014) and separately (Reason & Kimball, 2012), given our familiarity with this work, these models structure much of our thinking about reflexivity and require a brief summary.

Responding to the need for reflexivity in student affairs practice, Reason and Kimball (2012) proposed a theory-to-practice model that utilized a series of feedback loops to allow for adjustments in theory application. A version of that model is included in Figure 2.

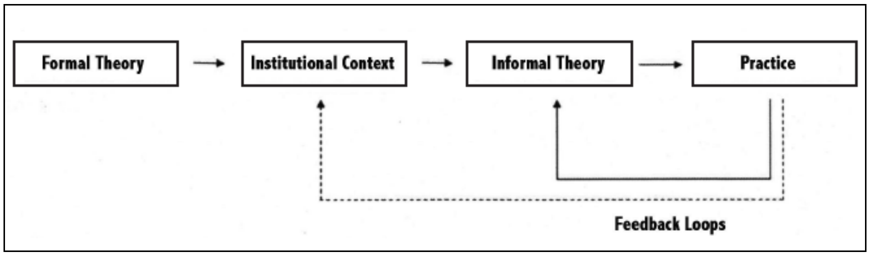

Figure 2. Theory-to-Practice Model (Reason & Kimball, 2012).

According to their work, a structured approach to theoretically informed interventions enhances the effectiveness of student affairs practice. More specifically, Reason and Kimball suggested that when developing programs or planning interventions student affairs professionals should (a) systematically consider and adopt relevant scholarly knowledge [which they call formal theory]; (b) generate a nuanced understanding of their work environment and the student populations with whom they work [institutional context]; (c) parse, and if necessary reconstruct, selected formal theories to better fit the environment within which the theory will be applied using their own experiences as a guide [informal theory]; (d) and adopt intentional developmental interventions that are consistent with their understanding of formal theory, institutional context, and informal theory [practice]. While these components of the theory-to-practice model were presented linearly, Reason and Kimball also demonstrated the recursive nature of their model by indicating that student affairs professionals should use lessons learned in the course of their daily work to refine their own thinking [reflexive practice feedback loop] and to refine their understanding of the institutional context—including the goals and objectives of specific programs [assessment feedback loop].

Reflexivity promotes mindfulness and intentionality through sustained attention to how student affairs professionals' values, beliefs, and assumptions influence practice.

In contrast to the linear model proposed by Reason and Kimball (2012), Kimball and Ryder (2014) have argued that the natural state of student affairs practice is changing and that models for promoting reflexivity must take this into account. Instead, the process model proposed by Kimball and Ryder for the use of history as a tool for reflexive practice assumed that often reflection-in-action and reflection-on-action occurred with little-to-no demarcation from practice or one another. Represented in Figure 3, Kimball and Ryder's model captured the messiness of reflexive practice.

In essence, Kimball and Ryder demonstrated that practice, reflexivity, and planned change could function as concurrent, mutually reinforcing processes wherein they become an organic part of a holistic student affairs practice.

Findings

In this section, we summarize key findings from our qualitative content analysis of the Joint Statement, which form the basis of the grounded conceptual model presented in our discussion. More specifically, our analysis demonstrates that the Joint Statement describes assessment in three distinct ways: as reflexive, contextual, and functional. While the environment-specific nature and task-orientation of assessment are well documented (e.g., Stevens, 2014; Wall et al., 2014), findings regarding assessment and reflexivity are a unique contribution of this paper. Furthermore, our analysis of these findings demonstrates that these attributes of assessment are interdependent and mutually reinforcing; that is, the operational details of doing assessment are inseparable from the context in which assessment occurs and the reflexive orientation of the practitioner undertaking said assessment.

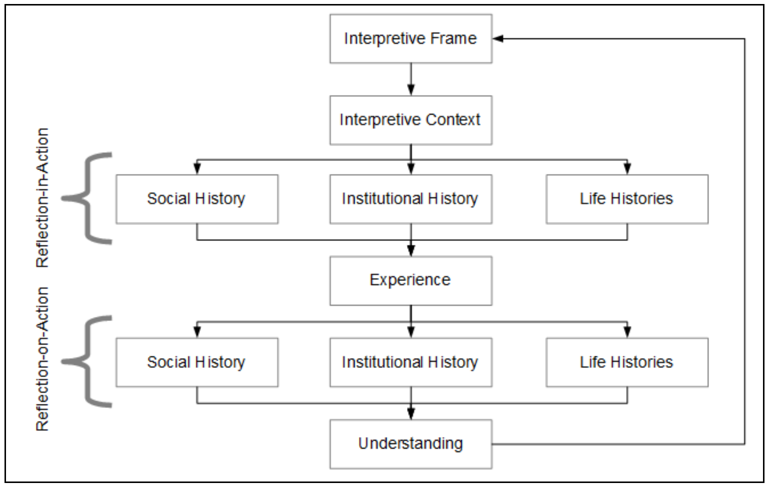

Figure 3. A model for the use of history as a reflexive tool (Kimball & Ryder, 2014).

Assessment is Reflexive

As a theme, the underlying thinking regarding the reflexive nature of assessment is most closely connected with the axial code "assessment as praxis." However, examples of the role of reflexivity are drawn from the "assessment and learning" and "assessment and evaluation" axial codes as well. Broadly, the Joint Statement claims that a reflexive, contextual understanding is a precondition for the full use of assessment results. This reflexivity serves as the foundation for communication and decision-making leading to concrete organizational changes.

At the most basic level, student affairs professionals should be able to "explain to students and colleagues the relationship of AER [Assessment, Evaluation, and Research] processes to learning outcomes and goals" (ACPA & NASPA, 2010, p. 8). That communication served as the foundation for an intermediate level of practice wherein assessment foregrounded institutional decision-making via processes that were "sustainable, rigorous, as unobtrusive as possible, and technologically current" (ACPA & NASPA, 2010, p. 8). In essence, the Joint Statement (2010) argued for an unceasing assessment process that would produce better decisions. To that end, student affairs professionals were also admonished to "facilitate the prioritization of decisions and resources to implement those decisions that are informed by AER activities" (ACPA & NASPA, 2010, p. 9). The clear message from the Joint Statement was that assessment is an ongoing process informed by context and resulting in organizational change.

The clear message from the Joint Statement was that assessment is an ongoing process informed by context and resulting in organizational change.

As presented in AER, assessment was still a discrete and separable task of student affairs work. Only in the way that assessment was described—both explicitly and implicitly—in other parts of the Joint Statement did it become clear that reflexive assessment practice is inextricably linked to reflexive student affairs practice and therefore does not represent a separate competency at all. Our examination also included language from other parts of the Joint Statement. This analysis demonstrated assessment's integral relationship to other areas of student affairs practice and further, that even when assessment was not directly invoked, student affairs practice would be strengthened through its systematic, reflexive use. In addition to its sustained treatment in AER, six additional competencies specified the key role of assessment: Advising and Helping; Equity, Diversity, and Inclusion; Human and Organizational Resources; Leadership; Personal Foundations; and Student Learning and Development. When the importance of assessment was overtly noted, its outcomes typically fell into one of two categories: increased awareness of self and colleagues, and increased understanding of the impact of interventions of practice on individuals and groups of students.

A basic element of Personal Foundations encapsulated the importance of assessment when it highlighted the need to use "ongoing feedback" to "craft a realistic, summative self-appraisal of one's strengths and limitations" (ACPA & NASPA, 2010, p. 24). Other competencies elaborated on this idea by connecting self-awareness with group performance. For example, Equity, Diversity, and Inclusion (EDI) emphasized the need to "assess and address one's own awareness of EDI, and articulate one's own differences and similarities with others" while Advising and Helping indicated that a student affairs professional's knowledge of her own "individual professional development needs" could serve as the foundation for "group assessment of organizational needs" (ACPA & NASPA, 2010, pp. 10, 6). Finally, both Leadership and Human and Organizational Resources clearly connected individual and group assessment with organizational change—noting respectively that assessment is based on "a culture that advocates the appropriate and effective use of feedback systems . . . for improving individual leadership and team performance" and that "professional development initiatives that regularly assess the strength and weakness of professionals" provide an opportunity for growth (ACPA & NASPA, 2010, pp. 18, 23).

Similarly across other competencies, the verbs employed to convey the work of student affairs professionals demonstrated the vital role that reflexive assessment could play in ongoing work.

Similarly across other competencies, the verbs employed to convey the work of student affairs professionals demonstrated the vital role that reflexive assessment could play in ongoing work. While a full lexical analysis would go beyond the scope of this paper, even brief examples make clear assessment's role. For Human and Organizational Resources, key verbs included identify, demonstrate, implement, forecast, interpret, determine, evaluate, anticipate, and align (ACPA & NASPA, 2010). In addition to repeated instances of these words, the Leadership competency added "compare, critique, and apply" as well as "plan and organize" (pp. 22-23). Finally, Personal Foundations added "recognize" and "analyze" (pp. 24-25), while Student Learning and Development contributed "design" and "utilize" (pp. 26-27).

Assessment is Contextual

This description placed the competency squarely within assessment's tradition of continuous, data-informed improvement outlined above in deliberate contrast to definitions of evaluation that privilege measurement and valuation as well as research methods based on the production of original knowledge derived via scientific principles.

The thematic finding regarding the importance of context in assessment hinges on axial codes related to its role in praxis and its utility. Returning once again to AER, assessment was consistently defined in terms of reflexive practice with an associated skillset that emphasized the translation of findings into contextually appropriate actions. For example, at the basic level of competence, student affairs practitioners were encouraged to "identify the political and educational sensitivity of raw and partially processed data and AER results" and to "align program and learning outcomes with organization goals and values" (ACPA & NASPA, 2010, p. 8). At higher levels of competence, the role of contextual understanding and sensitivity became more important still. Intermediate practitioners were expected to think about "the appropriate design(s) to use in AER efforts based on critical questions, necessary data, and intended audience(s)," while the most advanced practitioners were expected to acknowledge and advocate for the view that assessment is "central to professional practice" (ACPA & NASPA, 2010, pp. 8-9).

In other competencies, this same commitment to assessment can be seen in both individual and group outcomes. In Advising and Helping, advanced practitioners were expected to "assess responses to counseling interventions" (ACPA & NASPA, 2010, p. 7). Likewise, basic level competency in Equity, Diversity, and Inclusion required "assessing progress towards successful integration of these individuals into the campus environment" (p. 10). The Joint Statement also offered a clear focus on program-level outcomes, which was established as a key prerequisite for Leadership and was infused into other competencies. For example, in Human and Organizational Resources, advanced practitioners were encouraged to "participate in developing, implementing, and assessing the effectiveness of the campus crisis management program" (p. 19). Meanwhile, Student Learning and Development consistently created a tripartite link between planning, practice, and assessment—noting that skilled student affairs practitioners "create and assess learning outcomes to evaluate progress toward fulfilling the mission of the department, the division, and the institution"; "teach, train, and practice in such a way that utilizes the assessment of learning outcomes to inform future practice"; and "evaluate and assess the effectiveness of learning and teaching opportunities" (pp. 26-27).

In both cases it would doubtless be possible to engage in high quality student affairs practice without undertaking systematic assessment, but by incorporating reflexive assessment into regular practice, the impact of any intervention would be demonstrated more clearly and likely enhanced in successive applications.

Only Ethical Professional Practice; History, Philosophy, and Values; and Law, Policy, and Governance did not explicitly mention assessment as critical to successful operationalization of the competency. However, when we expanded our inclusion criteria to include specific parts of the competencies where assessment may be implied, our analysis also supported the contention that assessment is inextricable from otherwise competent student affairs work. For example, within History, Philosophy, and Values, student affairs professionals were encouraged to "actively apply historical lessons to one's future practice" (ACPA & NASPA, 2010, p. 17). Elsewhere, Kimball and Ryder (2014) have demonstrated that this idea actually calls for the reflexive use of historical lessons to reframe student affairs practice—a model closely akin to traditional definitions of assessment where interpretations of evidence inform changes to practice. Likewise, those fulfilling the Ethical Professional Practice competency were told to "identify and seek to resolve areas of incongruence between personal, institutional, and professional ethical standards" (ACPA & NASPA, 2010, p. 13). Though it is certainly possible that this process could take place with only a standard definition of reflexivity to serve as guide, the level of rigor imparted by a systematic assessment process seems desirable for such a weighty task. Finally, within Law, Policy, and Governance, student affairs professionals were encouraged both to "use data appropriately to guide the analysis and creation of policy" and to "implement best practices of the profession to advance one's institution with respect to access, affordability, accountability, and quality" (p. 21). Both of these objectives are best pursued within a framework that emphasizes cyclical re-evaluation of a policy intervention's impacts.

Assessment is Functional

Our findings from the axial codes concerning assessment's relationship to learning and to evaluation reveal the Joint Statement's description of assessment as a discrete set of task-oriented behaviors. AER is placed alongside touchstones of the student affairs profession like Advising and Helping; Equity, Diversity, and Inclusion; and Student Learning and Development. As stated in the description for the AER competency:

> The [AER competency] focuses on the ability to use, design, conduct, and critique qualitative and quantitative AER analyses; to manage organizations using AER processes and the results obtained from them; and to shape the political and ethical climate surrounding AER processes and uses on campus. (ACPA & NASPA, 2010, p. 8)

This description placed the competency squarely within assessment's tradition of continuous, data-informed improvement outlined above in deliberate contrast to definitions of evaluation that privilege measurement and valuation as well as research methods based on the production of original knowledge derived via scientific principles.

Furthermore, our model demonstrates that reflexive practice and assessment are inseparable by depicting reflexive practice as a prerequisite for good assessment work.

Furthermore, the need for reflexive assessment was also documented by competencies that already include a discussion of more traditional examples of assessment. For instance, within the Advising and Helping competency, student affairs professionals were warned of the need to "identify patterns of behavior that signal mental health concerns" (ACPA & NASPA, 2010, p. 7). As noted above, this form of pattern recognition is consistent with the organic approach to assessment frequently advocated for student affairs professionals. The Joint Statement also echoed the need to "identify systemic barriers to equality and inclusiveness and then advocate for and implement means of dismantling them" established by the Equity, Diversity, and Inclusion competency (p. 12). In both cases it would doubtless be possible to engage in high quality student affairs practice without undertaking systematic assessment, but by incorporating reflexive assessment into regular practice, the impact of any intervention would be demonstrated more clearly and likely enhanced in successive applications.

A Model for Reflexive Assessment Practice

The Joint Statement positions assessment as integral to contemporary student affairs practice and, in its description of the associated skillset, establishes assessment as simultaneously functional, contextual, and reflexive. Our review of the literature above finds elements of each of these themes but also acknowledges that assessment does not always realize its potentially transformative impact on individual campuses. In response, we propose

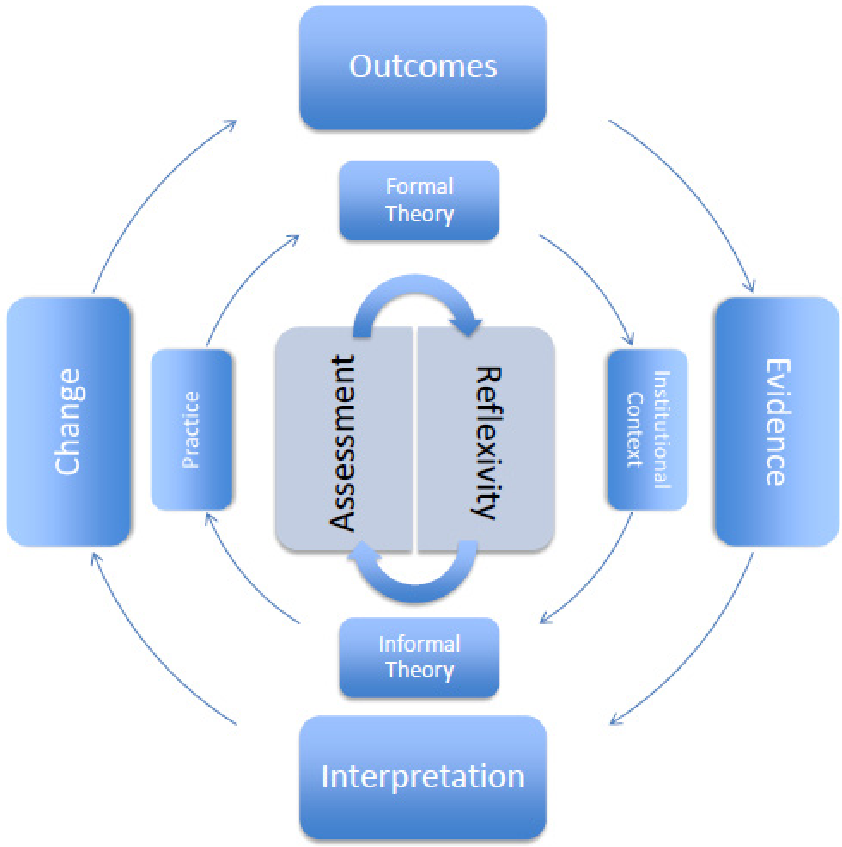

Figure 4. A model for the use of assessment as a reflexive tool.

a new model of reflexive assessment practice that integrates theory-driven interventions and systematic assessment with the judgment of a skilled student affairs professional. To do so, we distinguish between formal assessment, which involves highly structured assessment practices undertaken in addition or parallel to ongoing student affairs work, and reflexive assessment, which emerges organically from practice.

In the model shown in Figure 4, we include both the standard assessment cycle we described previously and the theory-to-practice model advanced by Reason and Kimball (2012) as concentric circles around a reflexive assessment process. This model thus emphasizes the extent to which formal assessment and theory-to-practice conversions are mutually reinforcing processes with similar elements. At the level of outcomes and informal theory, the student affairs professional considers issues of intended design. Evidence and institutional context begin to uncover the extent to which design decisions fit within a particular work environment before interpretation of evidence and consideration of informal theory ask the student affairs professional to make a decision. Finally, at the level of change and practice, concrete action occurs.

In response, we propose a new model of reflexive assessment practice that integrates theory-driven interventions and systematic assessment with the judgment of a skilled student affairs professional.

In this conceptualization, each of the formal assessment steps can be seen as informing the corresponding theory-to-practice stages. An understanding of desired and past outcomes can help a student affairs practitioner better select appropriate formal theories; the ongoing collection and analysis of evidence is the best way to understand the institutional context; interpretation of past assessment results can be a critical element of good informal theories and a way of eliminating undesirable implicit theories, which Bensimon (2007) defined as an unexamined set of assumptions or stereotypes; and the relative successes of past changes in practice can help inform present plans. This framing works, however, only by holding both theory-to-practice and formal assessment processes to be concurrent with one another and a holistic part of a reflexive student affairs practice. Consequently, we anchor our model with the central process of reflexivity-informed assessment.

Notably, the model that we describe here clarifies the Reason and Kimball (2012) model by elaborating the way in which the assessment feedback loop can easily be implemented concurrently with newly planned programs or interventions—regardless of the intentionality or intended permanence of the new activity. Furthermore, our model demonstrates that reflexive practice and assessment are inseparable by depicting reflexive practice as a prerequisite for good assessment work. In so doing, it also makes it clear that assessment is the logical, formalized extension of reflexive practice. In contrast, Reason and Kimball described a linear process with several feedback loops, which might reflect the reality of theory-to-practice conversions in student affairs but may also understate the connection between assessment and reflexivity. We suggest that the idealized image of student affairs practice should instead be a recursive loop wherein both reflexivity and assessment inform the understanding of outcomes before closing the loop back to formal theory. As a result of this argument, understandings of both formal theory and informal theory development are the result of ongoing reappraisal based on continuous, rigorous assessment. Consequently, our model closely resembles existing models of assessment synthesized with recent thinking on theory-to-practice conversions.

We propose that assessment, reflexivity, and practice are part of the same continuum and that rigorous assessment can help us to better understand our own values, beliefs, and assumptions; institutional context; and the students with whom we work.

Implications

From the discussion above, it should be clear that we believe both reflexivity and assessment are necessary skills for student affairs practitioners. We also think they work better in tandem and the place for that dynamic pairing is at the core of student affairs practice. We propose that assessment, reflexivity, and practice are part of the same continuum and that rigorous assessment can help us to better understand our own values, beliefs, and assumptions; institutional context; and the students with whom we work. We now provide a series of recommendations for using our model as part of ongoing reflexive assessment practice in student affairs.

Make Doing the Basis for Teaching Assessment

Our description of reflexive assessment as a type of skill is deliberate: as a skill, it must be learned, rehearsed, and exercised to feel like a natural part of a holistic student affairs practice. Consequently, student affairs graduate preparation programs should include a course that not only teaches students how to do assessment, but infuse that teaching with concrete experience—both in assessment and in student affairs practice. Traditional courses usually include information on the purposes and principles of assessment, including designing an assessment plan and collecting and interpreting data, as well information on accreditation and ethical and political challenges. Such courses should also require students to apply their learning by doing assessment in the context of work environments that they already understand well. Hands-on learning enhances students' abilities to make connections between assessment and day-to-day student affairs practice and dispel myths that assessment is overly complicated. Moreover, learning assessment by working through the process teaches reflexive practice by encouraging course corrections through mindfulness of what is working and what is not (reflection-in-action) and seeing the benefits of improvements made using assessment results (reflection-on-action; Schön, 1983).

Making reflexive assessment routine requires slight recalibration of our ongoing conversations about assessment and student affairs practice.

Build Assessment on a Foundation of Reflexivity

The core of a good reflexive assessment process is the commitment to better understand oneself and one's work environment in order to improve. The instinctive curiosity of most educators to distinguish between intention and results can overcome inertia that could stifle an assessment project before it begins (Jonson, Guetterman, & Thompson, 2014). While we agree with this thinking, we believe a truly reflexive assessment practice goes further: by situating innate curiosity at the core of assessment work rather than at the periphery and acknowledging the connection to the sense of self throughout both training in assessment and the ongoing practice of assessment. We noted that the Joint Statement recommends assessment not only to improve student learning and student affairs practice, but also as a means to better understand and continuously improve upon practitioners' individual and collective strengths and limitations. Reflexive assessment then emerges from specific core values of student affairs work —learning and continuous improvement—and can thus help to satisfy the need for ethical assessment practice as well (Stevens, 2014; Wall et al., 2014).

Make Reflexive Assessment Routine

Unless it becomes habitual to work and thinking about work, reflexive assessment may only be episodically reflective. Perhaps the most routine element of student affairs work is having too much work to do, yet sustained mindfulness and reflexivity can enhance work outcomes through more intentional theory-to-practice conversions and deepen personal meaning-making amidst the busyness of work (e.g., Baxter-Magolda & Magolda, 2011; Bensimon, 2007; Reason & Kimball, 2012). Making reflexive assessment routine requires slight recalibration of our ongoing conversations about assessment and student affairs practice. For example, time constraints often reduce supervision and professional development in student affairs to recapitulation of duties or give-and-take about the challenges of being overworked and under-resourced. Since they represent reality, these conversations are inevitable, but they leave little room for a traditional conceptualization of assessment. It would be quite easy, however, to include a regular discussion of reflexive assessment by asking questions such as: What were your goals? Based on your experience, how might they need to change? What are you learning from your experiences? What will you do differently moving forward? How did the experience affect your underlying thinking about students and about yourself? Answering those questions does not require the sort of data collection and analysis that characterizes formal assessment, but it does require thoughtful and systematic reflection of the sort that reflexive assessment can deliver.

In fact, our model holds that reflexive practice is a prerequisite for good assessment work and further that assessment is the logical, formalized extension of reflexive practice.

Integrate Reflexive Assessment across the Student Affairs Division

Having read many assessment plans, all too often they consist solely of a series of functional responsibilities and associated outcome measures. No doubt these plans are helpful, but our analysis of the Joint Statement revealed many espoused competencies and commitments that would benefit from integrating reflexive assessment across student affairs divisions. For example, eliminating structural barriers and cultivating inclusive campus climates to support Equity, Diversity, and Inclusion would benefit from ongoing awareness, observation and reflection to adapt behaviors and practices toward these goals. Continuous improvement of student learning and program effectiveness requires habitually inquiring how department- and division-level activities align to and support institution-level mission and outcomes (e.g., Blimling et al., 1999; Schuh & Upcraft, 2001). Reflexive assessment may be achieved division-wide by blending formal activities as part of the assessment plan with data from a disparate range of sources (e.g., supervision, informal judgments of skilled practitioners, student feedback on social media) and guided by a broad based commitment to reflexivity. Once the full range of available information about the topics of interest is conceptualized, an integrative approach to reflexive assessment requires clear communication of the information and processes for aggregating and sharing new understandings across the division.

Standard models of assessment focus on the rigorous, systematic application of assessment to problems of practice; in contrast, our model suggests that assessment should be seen as a seamless part of what we already do.

Conclusion

Our study's empirical findings reveal the importance of context and reflexivity in the successful completion of tasks typically associated with student affairs assessment. Based on these findings, we propose a model for reflexive assessment based on Reason and Kimball's (2012) theory-to-practice model. Notably, however, our grounded model expands on this past work by acknowledging the lack of linearity inherent in student affairs work. In fact, our model holds that reflexive practice is a prerequisite for good assessment work and further that assessment is the logical, formalized extension of reflexive practice. In contrast, Reason and Kimball described a linear process with several messy feedback loops, which might reflect the reality of theory-to-practice conversions in student affairs but may also serve to understate the connection between assessment and reflexivity. We suggest ideal student affairs practice should instead be a recursive loop wherein both reflexivity and assessment inform ongoing understanding.

While assessment is often utilized for understanding our contributions to student learning and improving program effectiveness, we seldom pause to consider its reflexive nature. Our model links assessment with reflexivity to improve daily student affairs practice by capitalizing on the innate desire of student affairs professionals to do good work. Standard models of assessment focus on the rigorous, systematic application of assessment to problems of practice; in contrast, our model suggests that assessment should be seen as a seamless part of what we already do. By supporting a continuous cycle of reflexive student affairs practice, our model builds on a long tradition of work within student affairs that emphasizes the connection between the values, beliefs, and assumptions of student affairs professionals and the impacts that they have on students (Baxter Magolda & Magolda, 2011; Bensimon, 2007; Schön, 1983).

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Appendix

Table 1
Coding Frequencies by Competency Level and Axial Code

Competency	Frequency by Level			Frequency of Axial Code			
	Basic	Intermediate	Advanced	Learning	Evaluation	Praxis	Utility
Advising & Helping	2	2	2	3	1	3	2
Assessment, Evaluation, & Research	4	3	4	4	7	4	4
Equity, Diversity, and Inclusion	1	5	6	3	6	6	4
Ethical Professional Practice	2	3	2	1	2	5	1
History, Philosophy, & Values	0	1	1	0	0	2	2
Human & Organizational Resources	1	7	12	2	12	7	9
Law, Policy, & Governance	0	2	0	0	2	0	2
Leadership	7	3	4	0	7	9	5
Personal Foundations	4	4	3	1	0	11	2
Student Learning & Development	3	5	3	8	3	4	3

Abstract

The landscape of assessment in higher education in the United States is changing; stakeholders are calling for an increased level of accountability with evidence of the impact on student learning becoming a pervasive expectation. Student affairs professionals are not exempt from this responsibility; they must be prepared to assess and articulate how their work contributes to the student learning experience. But do student affairs professionals think assessment is an important skill to possess and do they have the skills necessary to conduct assessment? This study collected data from new student affairs professionals on a web-based survey to understand their perceptions about assessment. Specifically, the researcher asked about new student affairs professionals' perceptions of the importance of assessment, proficiency in conducting assessment, and the delivery methods most helpful to learn assessment skills. Generally, new professionals rated assessment as important but their proficiency across the assessments skills was much lower. Graduate programs and conferences were reported as most helpful for learning assessment.

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Perceptions of Assessment Competency among New Student Affairs Professionals

Creating a culture of evidence and weaving assessment into practice increasingly became an expectation of student affairs professionals throughout the United States (Culp, 2012). Assessment of student affairs functional areas drives the process of program improvement and allows student affairs professionals to evaluate the degree to which a program is achieving its purpose. Student affairs professionals also conduct assessment for accountability; stakeholders (including current and prospective students and state, federal and accreditation agencies) expect to see evidence of a variety of outcomes from student affairs programs including student satisfaction, retention, and attendance (Eckel & King, 2004). The demand for student affairs professionals to provide evidence of their contribution to the undergraduate learning experience is pervasive (Upcraft & Schuh, 2002).

Student affairs professionals must possess the ability to assess their programs and ultimately to articulate the overall contributions their programs make to the undergraduate learning experience. For this study, the researcher examined new student affairs professionals' perceptions about the importance of assessment skills in their first professional position and their proficiency in conducting assessment. Additionally, the researcher identified the delivery methods new professionals found most helpful to learn assessment skills and those they are most likely to use in the future.

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History of Assessment in Higher Education and Student Affairs

Interest in assessment of higher education increased in the 1970s and became a trend in higher education practice. Prior to the 1970s, the public trusted that higher education did what it claimed—educating students to become contributing members of society (Middaugh, 2010). A shift toward a greater need for accountability occurred in the 1980s (Banta, 2002; Suskie 2009). Upcraft and Schuh (2000) described five contributing factors that led to this transition, first noting that many graduates did not possess needed skills for the workplace. Various reports, including, *A Nation at Risk*, supported this concern (United States National Commission on Excellence in Education, 1983), which declared that the US education system produced citizens who were illiterate and lacked technology skills. Second, higher education costs increased and grant and loan programs decreased, which led individuals to carefully evaluate the value of their education. Third, with greater student-to-faculty ratios and decreased academic advising, concern about the quality of education grew and led to the "total quality" movements. Fourth, as diversity on campus increased, so did the gap in access and equity; the public wanted to know why individuals from underrepresented populations persisted at lower rates than those from majority groups. Finally, accrediting agencies began mandating universities assess learning outcomes, which meant that institutions had to respond if they wanted accreditation (Upcraft & Schuh, 2000).

Student affairs professionals must possess the ability to assess their programs and ultimately to articulate the overall contributions their programs make to the undergraduate learning experience.

The growing assessment movement also directly impacted student affairs professionals who had to ensure they were providing high quality programs in a cost-effective manner. Through the 1980s and early 1990s, student affairs professionals began assessing the use of services, student needs, student satisfaction, campus environments, and student cultures (Upcraft & Schuh, 2002). Beginning in the late 1990s, student affairs professionals recognized the importance of being able to demonstrate their program's contribution to the overall educational mission of the institution and broadened their assessment practices to focus on student learning outcomes (Middaugh, 2010). Few researchers have focused solely on assessment competency among student affairs professionals; the majority of existing studies only include assessment as one of many skills studied. However, data from those existing studies reveal important information about student affairs professionals' perceptions of the importance of assessment and their competency for conducting assessment.

Related Evidence

Evidence indicating student affairs professionals in varying positions view assessment as an important competency aligns with the perception that the importance of assessment is growing (Burkard, Cole, Ott, & Stoflet, 2005; Green, 2008; Hyman, 1988; Young & Coldwell, 1993). Although research shows that student affairs professionals believe assessment is important, studies also indicate many student affairs professionals may not actually be conducting assessment. Green, Jones, and Aloi (2008) found that even within a division of student affairs with a "high-quality" assessment program, only half of the respondents were highly committed to assessment. Doyle (2004) found similar results, reporting that the principle (from *Principles of Good Practice for Student Affairs*) related to assessment was the least incorporated of the seven principles in student affairs divisions' practice. Further, in two national studies, a majority of Chief Student Affairs Officers reported that their divisions did not engage in assessment practices (Lane, 1998; Woodard, Hyman, von Destinon, & Jamison, 1991).

While student affairs professionals believe assessment is important, many are not using assessment in their practice and evidence exists to support assertions that student affairs professionals are not consistently conducting assessment. Scholars cite fear of assessment and lack of expertise among student affairs professionals as reasons why assessment is not being practiced more (Clune-Kneuer, 2014, Cooper & Saunders, 2000; Renn & Jessup-Anger, 2008; Upcraft & Schuh, 2000). Lack of commitment from leadership, lack of time, money, and fear of results are other reasons assessment is not widely conducted (Upcraft & Schuh, 2000).

While student affairs professionals believe assessment is important, many are not using assessment in their practice and evidence exists to support assertions that student affairs professionals are not consistently conducting assessment.

Researchers found that both early career and more experienced student affairs professionals perceive they lack proficiency in assessment or need development in this area (Cilente et al., 2007; Cuyet, Longwell-Grice, & Molina, 2009; Harms, 2001; Herdlien, 2004; Hyman, 1983; Lane, 1998; Renn & Jessup-Anger, 2008; Robertson, 1999). In addition, 44% of full-time student affairs professionals with a role dedicated to assessment reported needing a basic assessment overview (Henning & Elling, 2008). Conversely, some student affairs professionals report a good proficiency in assessment (Wall, Kawakyu-O'Connor, Zelna & Elling, 2009). It is unclear why the findings of this study are different as the published study contained only minimal information about the sample and research design.

Since many student affairs professionals lack the skills necessary to conduct assessment, one is led to consider student affairs professionals' graduate preparation. In spite of the Council for the Advancement of Standards (CAS) standards promoting assessment as an outcome of graduate preparation programs, evidence suggests that assessment courses are often not required in graduate preparation programs, including those ranked highly by *US News and World Report*. Researchers found student affairs professionals at various levels of the organization feel that graduate preparation programs lack appropriate assessment training or note that development of assessment competency was lower than many other skill areas (Cuyet et al., 2009; Herdlien, 2004; Hyman, 1983). Many student affairs professionals also perceive assessment should be integrated into the curriculum of student affairs-related graduate programs (Herdlein, 2004; Kuk, Cobb, & Forrest, 2008; Roberts, 2003; Young & Coldwell, 1993).

Purpose of the Study

Existing studies have primarily examined assessment among other student affairs competencies and have found there is room for student affairs professionals to increase their assessment proficiency, but none of these studies have focused on the development of the assessment competency alone within student affairs graduate programs.

Assessment skills are necessary for student affairs professionals to ensure the delivery of cost-effective, high-quality programs that meet the needs of their students. More importantly, as partners in the educational process, along with academic affairs administrators and faculty, student affairs professionals must be able to demonstrate the effectiveness of their programs in achieving student learning outcomes. Faculty, staff, and administrators believe assessment is an important competency for student affairs professionals (Burkard et al., 2005; Green, 2008; Hyman, 1988; Young & Coldwell, 1993). Existing studies have primarily examined assessment among other student affairs competencies and have found there is room for student affairs professionals to increase their assessment proficiency, but none of these studies have focused on the development of the assessment competency alone within student affairs graduate programs. Focusing specifically on assessment in this study provided a clearer understanding of student affairs professionals' perceptions of specific assessment competencies to be developed. Therefore, this research fills a gap in existing literature and seeks to inform both the curricula of preparation programs and professional development programs.

Since assessment is currently in high demand, it was necessary to conduct a broad, descriptive study of assessment competencies because little is known about assessment in student affairs practice in general. The researcher answered the following questions:

1. What assessment skills, if any, do new student affairs professionals perceive are most important for success in their first professional position?
2. How proficient do new student affairs professionals perceive they are at each assessment skill?
3. What delivery methods do new student affairs professionals perceive were most helpful for new professionals to learn assessment skills (i.e., assistantship in graduate program, course(s) on assessment in graduate program, workshops at a national conference, etc.)?

Methods

This study used an online survey to collect data from new professionals. New professionals are individuals who have worked in a full time position in student affairs for one to five years. Administered through ACPA-College Student Educators International (ACPA), the study was approved by the Institutional Review Board at the researcher's institution and by ACPA's Director of Educational Programs and Publications.

Instrumentation

Individuals were directed to an online survey consisting of a series of questions about assessment competences adapted from ACPA's Assessment Skills and Knowledge (ASK) Standards (2006). To create the survey, the researcher analyzed the skills in the 13 ASK Standard categories to avoid duplication and ensure mutually exclusive categories. As a result, the categories were refined, leaving skills distributed among eight assessment categories. A critical systematic review (Fowler, 2013) was conducted whereby an assessment expert reviewed the instrument. The instrument was piloted with student affairs professionals who represent similar characteristics of the actual population sampled. Pilot participants were asked to complete the survey independently and were asked open-ended questions about the survey. Changes from the review and pilot were made as needed.

The eight areas of assessment included in the instrument were: assessment design, learning and development outcomes, quantitative measures and analysis, qualitative measures and analysis, benchmarking, departmental review and evaluation, ethics and politics, and assessment education. Participants rated the importance of and their competency at each skill (see Figure 1 for sample questions). The survey concluded with questions about the delivery methods participants found most useful for learning assessment (with questions focused on the graduate preparation program) and how they would prefer to develop assessment skills in the future.

ASSESSMENT DESIGN

	How important do you feel the following assessment skills are to your performance in your position as a new professional?					How proficient are you at performing the following assessment skills?			
	Not Important	Moderately Important	Important	Very Important	Don't Know What it is	Not at all proficient	Moderately Proficient	Proficient	Very Proficient
1. Creating an assessment plan	○	○	○	○	○	○	○	○	○
2. Identifying contextual/institutional factors that shape the need for assessment (e.g. accreditation, financial pressures, etc.)	○	○	○	○	○	○	○	○	○

Figure1. Sample items included on the questionnaire.

Population and Sample

Although ACPA's data management system reported more than 3,400 members with one to five years in the profession, the system was only able to provide a contact list for 1,057 members who self-identified as "entry-level" when they registered or renewed their membership. After an initial low response rate, a reminder email was sent, followed by an invitation to all members of the Standing Committee for Graduate Students and New Professionals (SCGSNP). The total number of individuals who received the invitation to participate in the study is unknown. The lack of a centralized listserv of new professionals creates difficulty to generalize findings to the population of new professionals.

A total of 327 student affairs professionals completed the survey; however, 22 of the respondents with six or more years of experience were eliminated from analysis and 25 incomplete responses were deleted. A total of 280 or respondents were used for data analysis representing 26% of the individuals who indicated "entry-level" when registering for ACPA. However, a response rate cannot be computed since the total number of individuals who received the invitation is unknown. Table 1 provides further detail about the sample.

Analysis and Findings

Data gathered from the survey were loaded into the SPSS statistical software program and descriptive statistics were utilized to analyze the data from this survey. The researcher computed frequency counts to answer all research questions; to understand which assessment skills new professionals felt were most important, how proficient they believe they are at conducting assessment, and what delivery methods student affairs professionals found most useful for learning assessment and would most likely use in the future.

Most Important Assessment Skills for Success in the First Professional Position

Respondents rated the importance of each assessment skill using a 5-point Likert scale (1 = *not important*, 2 = *moderately important*, 3 = *important*, 4 = *very important*, 5 = *don't know what it is*). At least 50% of respondents rated every skill as *very important*. All learning and development outcomes skills were rated among the top ten most important

Table 1
Description of Sample

Time in Profession	Percentage of Respondents
Less than 1 Year	23.9
1 Year	10.7
2 Years	27.1
3 Years	20.4
4 Years	9.6
5 Years	8.2
Master's Degree	**Percentage of Respondents**
Yes	88.2
No	11.8
Length of Time Since Graduation	**Percentage of Respondents (with Master's Degree)**
Less than One Year Ago	27.9
1-2 Years Ago	39.3
3-4 Years Ago	25.9
5 or More Years Ago	6.9
Type of Graduate Program	**Percentage of Respondents (with Master's Degrees)**
Higher and postsecondary education, college student personnel, student development, or related	91.5
Other	8.5
Enrolled in Master's Program	**Percentage of Respondents (without Master's Degrees)**
Yes	78.8
No	21.2

Table 2
Most to Least Important Assessment Skills Distributed Across All Skill Areas

Skill Area	**Skills**	Not Important	Moderately Important	Important	Very Important	Don't Know What It Is	Missing
Departmental Review and Evaluation	Using assessment results to improve programs and practice	2.8%	9.3%	16.6%	71.3%	0.4%	11.40%
Learning and Development Outcomes	Creating learning outcomes that support the University, division, and department mission	2.7%	9.7%	24.1%	63.4%	0.7%	7.50%
Assessment Design	Using assessment results in the context of strategic planning, budgeting, and decision-making	5.4%	10.8%	20.8%	63.1%	1.8%	5.40%
Ethics and Politics	Maintaining confidentiality or anonymity when producing assessment reports	7.2%	11.0%	19.0%	62.9%	2.9%	12.50%
Learning and Development Outcomes	Creating learning outcomes that are developmentally appropriate	3.1%	8.2%	27.3%	61.3%	1.1%	7.50%
Learning and Development Outcomes	Articulating measurable student learning outcomes	3.9%	7.4%	28.7%	60.1%	0.4%	7.50%
Learning and Development Outcomes	Determining what learning outcomes should be achieved from a program/activity/event	2.7%	9.3%	28.3%	59.7%	0.4%	7.50%
Learning and Development Outcomes	Gathering evidence of program impact on learning outcomes	3.5%	7.5%	30.3%	58.7%	1.8%	7.50%
Departmental Review and Evaluation	Evaluating the degree to which the assessed programs foster learning	4.1%	11.4%	27.6%	56.9%	0.4%	11.80%
Quantitative Measures and Analysis	Creating surveys with effective wording and in a format appropriate for sample population	5.5%	11.0%	28.3%	55.1%	0.4%	8.90%
Assessment Design	Identifying types of data needed for assessment (e.g. needs, demographics, satisfaction, outcomes, climate, benchmarking, etc.)	4.2%	11.6%	29.3%	54.8%	1.8%	5.70%

Table 2 (continued)
Most to Least Important Assessment Skills Distributed Across All Skill Areas

Skill Area	Skills	Not Important	Moderately Important	Important	Very Important	Don't Know What It Is	Missing
Assessment Design	Choosing appropriate methods of data collection	4.2%	11.5%	30.3%	54.0%	1.1%	5.70%
Ethics and Politics	Identifying and addressing ethical issues in assessment	9.8%	15.1%	24.5%	50.6%	0.7%	11.80%
Ethics and Politics	Developing reports that effectively communicate assessment results given the audience and stakeholder's sophistication	9.3%	12.1%	27.9%	50.6%	0.4%	11.40%
Departmental Review and Evaluation	Developing a comprehensive departmental review plan that incorporates a variety of assessment types (e.g., satisfaction studies, outcomes assessment, benchmarking).	9.4%	13.9%	27.5%	49.2%	0.7%	12.10%
Assessment Design	Identifying, recognizing, and overcoming barriers to assessment	5.3%	13.3%	32.6%	48.9%	1.1%	4.60%
Assessment Education	Working with educators across the institution to create programs that have shared learning outcomes	7.4%	14.8%	30.3%	47.5%	0.7%	12/1%
Assessment Education	Educating others about the goals, needs, and techniques of assessment	7.8%	15.2%	30.7%	46.3%	0.7%	12.1%
Departmental Review and Evaluation	Distinguishing between statistical and practical significance of assessment results	9.1%	13.6%	31.4%	45.9%	2.1%	11.40%
Assessment Design	Identifying contextual/institutional factors that shape the need for assessment (e.g. accreditation, financial pressures, etc.)	11.4%	12.9%	32.6%	43.2%	1.1%	4.60%
Ethics and Politics	Identifying political issues related to the assessment project and developing plans that will minimize potential challenges and negative consequences within the institutional environment	9.1%	18.2%	30.6%	42.1%	1.8%	11.80%
Quantitative Measures and Analysis	Selecting appropriate sampling techniques (random, stratified, cluster, systematic) and sample size for survey	15.1%	15.9%	27.1%	41.8%	0.7%	9.60%

Table 2 (continued)
Most to Least Important Assessment Skills Distributed Across All Skill Areas

Skill Area	Skills	Not Important	Moderately Important	Important	Very Important	Don't Know What It Is	Missing
Qualitative Measures and Analysis	Determining when interviews, focus groups, document analysis or other data collection techniques are appropriate	7.5%	16.3%	34.5%	41.7%	0.4%	9.60%
Assessment Design	Creating an assessment plan	9.8%	15.5%	33.7%	40.9%	0.7%	5.0%
Ethics and Politics	Understanding the role of an Institutional Review Board (IRB) or human subjects committee on campus	16.2%	15.4%	27.8%	40.7%	2.1%	11.80%
Quantitative Measures and Analysis	Developing rubrics for evaluation of assessment methods	7.9%	15.5%	36.1%	40.5%	0.7%	9.30%
Departmental Review and Evaluation	Using CAS (Council for the Advancement of Standards) Standards and other standards to regularly review and improve programs	11.3%	15.8%	32.9%	40.0%	2.1%	12.10%
Qualitative Measures and Analysis	Establishing standards of rigor, trustworthiness, and authenticity using qualitative methods	11.0%	17.5%	32.1%	39.4%	1.8%	10.40%
Benchmarking	Using benchmarking for strategic planning	9.8%	19.7%	31.6%	38.9%	2.1%	10.7%
Quantitative Measures and Analysis	Analyzing and interpreting quantitative data using the appropriate statistical techniques	17.7%	13.7%	30.1%	38.6%	1.1%	10.00%
Qualitative Measures and Analysis	Analyzing data using techniques of analysis appropriate to qualitative methods	9.5%	16.7%	38.5%	35.3%	0.4%	9.60%
Benchmarking	Identifying and determining benefits of participating in national, regional, and local benchmarking studies	9.8%	23.3%	31.8%	35.1%	2.1%	10.4%
Quantitative Measures and Analysis	Using software to perform analysis of quantitative measures (e.g., SPSS)	23.3%	18.9%	27.3%	30.5%	1.4%	9.60%
Qualitative Measures and Analysis	Using software to perform analysis of qualitative data	25.9%	21.1%	28.7%	24.3%	0.7%	9.60%

This result indicates that a majority (52.1%-82.1%) of new professionals did not experience or learn assessment through administrative exchange programs, training videos, site visits with other institutions, teleconferences, assessment-specific conferences, or online learning experiences.

skills and the four data analysis skills were among the five skills rated as *not important*. Table 2 details responses regarding the importance of assessment skills sorted from most to least important distributed across all skill areas.

Self-Reported Assessment Proficiency Among New Student Affairs Professionals

New student affairs professionals rated their proficiency of each assessment skill on a 4-point Likert scale (1 = *not at all proficient*, 2 = *moderately proficient*, 3 = *proficient*, and 4 = *very proficient*). Overall, few respondents (26.4%) rated themselves as *very proficient* on any assessment skill. Also, at least 20% rated themselves as *not at all proficient* on 15 of the 34 skills.

Learning and development outcomes skills (the same category with the highest percentage of very important responses) were among the top ten *very proficient* skills. Interestingly, three ethics and politics skills were among the top ten *very proficient* skills, but only one of these skills was among the top ten *very important* skills.

Thirty percent or more of new professionals reported being *not at all proficient* on ten skills. Among skills most often reported as *not at all proficient* were: both benchmarking skills, three of the departmental review and evaluation skills, and five of the quantitative and qualitative measures and analysis skills. Table 3 details responses regarding new professionals' self-perceived proficiency at assessment skills sorted from most to least proficient.

Table 3
Highest to Lowest Proficiency Distributed Across Skill Areas

Skill Area	Skills	Not at all proficient	Moderately Proficient	Proficient	Very Proficient	Don't Know What It Is	Missing
Ethics and Politics	Maintaining confidentiality or anonymity when producing assessment reports	11.2%	24.4%	38.0%	26.4%	2.9%	13.6%
Learning and Development Outcomes	Determining what learning outcomes should be achieved from a program/activity/event	5.8%	33.6%	42.9%	17.8%	0.7%	7.5%
Learning and Development Outcomes	Creating learning outcomes that support the University, division, and department mission	6.2%	37.1%	40.5%	16.2%	1.1%	7.5%
Departmental Review and Evaluation	Using assessment results to improve programs and practice	7.4%	31.7%	45.7%	15.2%	0.4%	13.2%
Ethics and Politics	Understanding the role of an Institutional Review Board (IRB) or human subjects committee on campus	22.0%	35.8%	27.2%	15.0%	0.7%	12.1%
Learning and Development Outcomes	Creating learning outcomes that are developmentally appropriate	8.1%	41.3%	35.9%	14.7%	0.4%	7.5%
Quantitative Measures and Analysis	Creating surveys with effective wording and in a format appropriate for sample population	7.5%	43.5%	36.4%	12.6%	0.4%	9.6%
Assessment Design	Identifying types of data needed for assessment (e.g. needs, demographics, satisfaction, outcomes, climate, benchmarking, etc.)	11.7%	40.4%	35.5%	12.5%	1.8%	5.4%
Learning and Development Outcomes	Articulating measurable student learning outcomes	10.5%	44.6%	33.3%	11.6%	0.4%	7.9%
Ethics and Politics	Identifying and addressing ethical issues in assessment	17.8%	37.2%	33.6%	11.3%	0.4%	11.8%
Qualitative Measures and Analysis	Determining when interviews, focus groups, document analysis or other data collection techniques are appropriate	12.7%	44.4%	32.5%	10.3%	0.4%	10.0%
Assessment Design	Choosing appropriate methods of data collection	11.8%	41.1%	37.6%	9.5%	1.8%	5.4%
Departmental Review and Evaluation	Evaluating the degree to which the assessed programs foster learning	16.0%	42.8%	31.7%	9.5%	0.4%	13.2%

Most Helpful Delivery Methods for Learning Assessment Skills

Respondents also rated the degree to which 13 delivery methods were helpful for learning assessment skills using a 4-point Likert scale (1 = *very unhelpful*, 2 = *somewhat unhelpful*, 3 = *somewhat helpful*, and 4 = *very helpful*). The delivery methods used in this study were part of the New Professional Needs Survey conducted by ACPA (Cilente et al., 2007). Respondents selected "other" to indicate methods used for learning assessment not represented on the survey. For the purpose of reporting findings, the *not applicable* responses and missing cases were deleted to best illustrate the degree of helpfulness perceived by the respondents. A revealing finding in this study is that a majority of respondents rated six of the delivery method options as *not applicable*. This result indicates that a majority (52.1%-82.1%) of new professionals did not experience or learn assessment through administrative exchange programs, training videos, site visits with other institutions, teleconferences, assessment-specific conferences, or online learning experiences. Further, a significant percentage (19.6%-49.6%) of respondents rated the following as *not applicable* for learning assessment: a full-time position, assistantship, workshops at a national or regional conference, a conference at their own campus, or job shadowing.

Overall, 49.1% of respondents rated the delivery methods they experienced (not marked as *not applicable*) as at least somewhat helpful. "Other" was the delivery method with the highest *very helpful* percentage (78.3%) of responses. There were 21 delivery methods written in as "other" and 14 of these related to assessment courses taken in the graduate program (master's or doctoral) whereas four responses related to coursework or practical

Table 3 (continued)
Highest to Lowest Proficiency Distributed Across Skill Areas

Skill Area	Skills	Not at all proficient	Moderately Proficient	Proficient	Very Proficient	Don't Know What It Is	Missing
Departmental Review and Evaluation	Using CAS (Council for the Advancement of Standards) Standards and other standards to regularly review and improve programs	30.0%	35.8%	25.1%	9.1%	0.7%	13.2%
Learning and Development Outcomes	Gathering evidence of program impact on learning outcomes	12.0%	45.9%	33.6%	8.5%	1.8%	7.5%
Quantitative Measures and Analysis	Developing rubrics for evaluation of assessment methods	23.7%	43.9%	24.1%	8.3%	0.7%	9.6%
Assessment Education	Educating others about the goals, needs, and techniques of assessment	16.3%	45.3%	30.2%	8.2%	0.7%	12.5%
Ethics and Politics	Identifying political issues related to the assessment project and developing plans that will minimize potential challenges and negative consequences within the institutional environment	27.0%	40.6%	24.2%	8.2%	1.8%	12.9%
Assessment Design	Using assessment results in the context of strategic planning, budgeting, and decision-making	17.4%	40.2%	34.5%	8.0%	1.1%	5.7%
Quantitative Measures and Analysis	Selecting appropriate sampling techniques (random, stratified, cluster, systematic) and sample size for survey	29.0%	46.0%	17.5%	7.5%	0.7%	10.0%
Qualitative Measures and Analysis	Analyzing data using techniques of analysis appropriate to qualitative methods	22.3%	46.6%	23.9%	7.2%	1.8%	10.4%
Benchmarking	Identifying and determining benefits of participating in national, regional, and local benchmarking studies	30.1%	39.8%	23.3%	6.8%	2.1%	11.1%
Assessment Education	Working with educators across the institution to create programs that have shared learning outcomes	21.7%	43.0%	28.7%	6.6%	0.7%	12.9%
Ethics and Politics	Developing reports that effectively communicate assessment results given the audience and stakeholder's sophistication	19.1%	43.1%	31.7%	6.1%	2.1%	12.1%
Benchmarking	Using benchmarking for strategic planning	32.9%	36.1%	24.9%	6.0%	2.1%	11.1%
Quantitative Measures and Analysis	Using software to perform analysis of quantitative measures (e.g., SPSS)	46.2%	31.5%	16.3%	6.0%	1.1%	10.4%

Table 3 (continued)
Highest to Lowest Proficiency Distributed Across Skill Areas

Skill Area	Skills	Not at all proficient	Moderately Proficient	Proficient	Very Proficient	Don't Know What It Is	Missing
Assessment Design	Identifying contextual/institutional factors that shape the need for assessment (e.g. accreditation, financial pressures, etc.)	19.8%	52.5%	22.1%	5.7%	1.1%	6.1%
Quantitative Measures and Analysis	Analyzing and interpreting quantitative data using the appropriate statistical techniques	38.5%	36.5%	19.4%	5.6%	1.4%	10.0%
Assessment Design	Identifying, recognizing, and overcoming barriers to assessment	19.6%	48.3%	26.8%	5.3%	1.1%	5.4%
Assessment Design	Creating an assessment plan	16.2%	46.8%	32.1%	4.9%	0.7%	5.4%
Qualitative Measures and Analysis	Establishing standards of rigor, trustworthiness, and authenticity using qualitative methods	30.0%	40.4%	24.8%	4.8%	0.4%	10.7%
Departmental Review and Evaluation	Distinguishing between statistical and practical significance of assessment results	31.0%	36.4%	28.5%	4.1%	2.1%	13.6%
Departmental Review and Evaluation	Developing a comprehensive departmental review plan that incorporates a variety of assessment types (e.g., satisfaction studies, outcomes assessment, benchmarking).	28.9%	43.8%	23.1%	4.1%	2.1%	13.6%
Qualitative Measures and Analysis	Using software to perform analysis of qualitative data	55.1%	29.6%	13.4%	2.0%	0.7%	11.8%

experience with research. The delivery method with the highest percentage (15.4%) of *very unhelpful* responses was training videos.

Those new professionals who were able to attend conferences rated them as *helpful* and an assessment-specific conference was rated as *very helpful* by a majority (52.3%) of respondents. Workshops at the new professional's campus and regional or national conferences were rated as *very helpful* by 20.4%-33.3% of respondents. Table 4 illustrates the most to least helpful methods for learning assessment.

Finally, teleconferences and training videos appear to be the least helpful delivery methods as they were rated the least helpful for learning assessment skills in the past and the least likely for learning assessment skills in the future.

Master's program-related delivery methods. Respondents with a master's degree rated the helpfulness of five delivery methods from their master's program using the same Likert scale as above. The five delivery methods were: courses on research, internship/practicum, courses on assessment, assessment lessons integrated into multiple courses, and thesis work. Respondents were also able to select *not applicable* to the delivery methods. A majority (73.6%) of respondents experienced all but one of the delivery methods during their graduate program or reported that they played a role in teaching assessment. Thesis work was the only delivery method that a majority (59.6%) of respondents stated was *not applicable*, indicating that either new professionals did not learn assessment through thesis work or they did not complete a thesis.

Table 4
Most to Least Helpful Methods for Learning Assessment

	Very Unhelpful	Somewhat Unhelpful	Somewhat Helpful	Very Helpful	Not Applicable	Missing
Other	4.3%	4.3%	13.0%	78.3%	39.3%	68.2%
An assessment specific conference	4.6%	9.2%	33.8%	52.3%	75.7%	1.1%
Shadowing (observation of another professional over time)	1.3%	4.5%	46.5%	47.7%	43.6%	1.1%
Assistantship	5.0%	9.0%	41.0%	45.0%	26.4%	0.7%
Administrative exchange programs (working at another institution for a short period of time)	2.0%	12.2%	42.9%	42.9%	82.1%	0.4%
Site visits to other institutions	1.8%	5.3%	52.6%	40.4%	79.3%	0.7%
Full-time position	4.5%	10.3%	47.3%	37.9%	19.6%	0.4%
Learning individually, on my own	2.0%	7.4%	54.3%	36.3%	7.5%	0.4%
Workshops on my own campus	5.5%	12.1%	49.1%	33.3%	40.4%	0.4%
Workshops at a regional conference	5.7%	14.3%	55.0%	25.0%	49.6%	0.4%
Workshops at a national conference	3.6%	10.7%	65.3%	20.4%	29.6%	0.4%
Online (webinars, discussion groups, e-learning courses)	4.6%	12.2%	67.2%	16.0%	52.1%	1.1%
Teleconferences	14.0%	36.8%	38.6%	10.5%	78.9%	0.7%
Training videos	15.4%	34.6%	40.4%	9.6%	80.7%	0.7%

Most (80% or more) respondents rated the master's program-related delivery methods as *helpful* or *very helpful*. Course(s) on assessment and thesis work (for those who completed a thesis) were the top two *very helpful* delivery methods while assessment lessons integrated into multiple courses was most commonly rated as *very unhelpful.* It should be noted that course(s) on assessment and thesis work were also rated as *not applicable* by the largest percentage of respondents. Thus, graduate students are either not choosing to access these learning opportunities or they are not available to them.

Interestingly, course(s) on research during the graduate program had the lowest percentage of *helpful* and *very helpful* responses and the highest percentage of *unhelpful* and very *unhelpful* responses. However, this was the delivery method with the least amount of not applicable responses (only 5.0%).

After each assessment skill category, respondents rated their level of agreement with the statement, "I am satisfied with the degree to which my master's program taught X skills" using a 4-point Likert scale (1 = *strongly disagree,* 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*). At least 50% of the respondents agreed or strongly agreed that they were satisfied with the degree to which their graduate preparation program taught all of the assessment categories, except benchmarking (only 43.7% of respondents agreed or strongly agreed). More than half (50.5% or more) of the respondents disagreed or strongly disagreed that they were satisfied with their preparation in two assessment categories: quantitative measures and analysis and benchmarking. Table 5 illustrates the most to least helpful master's program delivery-related methods for learning assessment.

Table 5
Most to Least Helpful Master's Program Delivery-Related Methods for Learning Assessment

	Very Unhelpful	Somewhat Unhelpful	Somewhat Helpful	Very Helpful	Not Applicable	Missing
Course(s) on assessment during graduate program	2.9%	6.3%	35.6%	55.2%	24.6%	13.2%
Thesis work during graduate program	1.3%	6.6%	42.1%	50.0%	59.6%	13.2%
Internship/practicum for graduate program	4.6%	9.2%	40.5%	45.6%	16.8%	13.6%
Course(s) on research during graduate program	4.8%	14.8%	37.1%	43.2%	5.0%	13.2%
Assessment lessons integrated into multiple courses during graduate program	2.4%	5.9%	52.1%	39.6%	26.4%	13.2%

Delivery Methods New Student Affairs Professionals Will Most Likely Utilize in the Future

Respondents rated the likelihood they would use the same 13 delivery methods to learn assessment skills in the future. The survey provided a 4-point Likert scale (1 = *very unlikely*, 2 = *somewhat likely*, 3 = *likely*, 4 = *very likely*) and an option for respondents to select *not applicable*. Almost half (48.4%) of the respondents were likely or very likely to utilize seven of the delivery methods in the future: shadowing, online, workshops at a regional or national conference, on-campus workshops, learning in their full-time position, and learning individually.

Participants in this study viewed all but one of the 34 skills across eight assessment categories as very important

A large segment (40.2%-71.3%) of the respondents indicated that it was very unlikely they would utilize six of the delivery methods in the future: attending an assessment-specific conference, a site visit to another institution, an assistantship, an administrative exchange programs, teleconferences, and training videos. Even though the assessment-specific conference was reported by new professionals as the most helpful delivery method for learning assessment, 40.2% stated it was very unlikely they would use this in the future. This may be due to perceived lack of available resources available for conference travel.

Only 17.7% of respondents indicated it was *very likely* they would learn assessment through online methods in the future. Finally, teleconferences and training videos appear to be the least helpful delivery methods as they were rated the least helpful for learning assessment skills in the past and the least likely for learning assessment skills in the future. Table 6 illustrates the most to least likely methods for learning assessment.

Discussion

Overall Importance and Proficiency of Assessment Skills

Participants in this study viewed all but one of the 34 skills across eight assessment categories as very important. Most existing studies also found that student affairs professionals perceive assessment skills to be important or believe that new professionals should be competent in assessment (Cilente et al., 2007; Kuk et al., 2008; Lane, 1998; Ostroth, 1981; Waple, 2000; Young & Coldwell, 1993). However, new professionals' proficiency at assessment was considerably lower than their perceptions of the importance of these skills. At least 20% of new professionals rated themselves as not at all proficient on 15 of the 34 skills. A great deal of evidence exists supporting the finding that both new student affairs professionals and experienced professionals do not believe they have sufficient assessment knowledge to be successful in their position or rate their assessment proficiency much lower than other competencies (Cooper & Saunders, 2000; Fishbeck, 2006; Harms, 2001; Henning & Elling, 2008; Lane, 1998; Renn & Jessup-Anger, 2008; Roberts, 2003; Robertson, 1999).

However, new professionals' proficiency at assessment was considerably lower than their perceptions of the importance of these skills.

Table 6

Methods Most to Least Likely to Use in the Future

	Very Unlikely	Somewhat Likely	Likely	Very Likely	Not Applicable
Learning individually, on my own	3.9%	11.8%	29.7%	54.5%	0.0%
Full-time position	9.7%	16.5%	30.3%	43.4%	4.3%
Workshops at a national conference	8.1%	22.2%	32.2%	37.4%	3.2%
Workshops on my own campus	12.2%	24.3%	34.5%	29.0%	8.6%
Workshops at a regional conference	11.6%	26.6%	33.0%	28.8%	4.4%
Shadowing (observation of another professional over time)	25.8%	25.8%	24.2%	24.2%	7.5%
Online (webinars, discussion groups, e-learning courses)	22.6%	27.5%	32.1%	17.7%	4.3%
An assessment-specific conference	40.2%	29.1%	17.6%	13.0%	5.7%
Site visits to other institutions	46.2%	27.1%	16.1%	10.6%	15.0%
Assistantship	71.3%	12.1%	8.0%	8.6%	37.1%
Administrative exchange programs (working at another institution for a short period of time)	67.7%	17.9%	6.1%	8.3%	17.9%
Teleconferences	56.6%	26.2%	11.1%	6.1%	12.1%
Training videos	58.8%	24.6%	10.8%	5.8%	13.6%

Most and Least Important Assessment Skills

Interestingly, new professionals perceived that they are most proficient at learning and development outcomes-related skills and thought these skills were the most important. Conversely, new professionals reported their proficiency at skills in the qualitative and quantitative measures and analysis categories as lowest among all skills and also rated these skills as least important. The two measures and analysis skills rated as least important were: using software to conduct quantitative and qualitative data analysis. Roberts (2007) also found that recent graduates rated their understanding principles of systematic data analysis as less than competent.

For those new professionals who experienced various assessment delivery methods, those considered the most helpful were shadowing another professional, visiting another institution, attending an assessment specific conference, and assistantships.

There are two possible reasons for the lower importance and proficiency ratings of methodology and data analysis skills. First, it is possible that student affairs professionals are not expected to conduct data analysis to complete their assessment projects successfully. When describing the difference between research and assessment, Upcraft and Schuh (2000) claim that because the goal of assessment is to make local (institutional) impact on practice, "[assessment] should be done even when [student affairs professionals] do not adhere strictly to the standards of social science research" (p. 18). Thus, it is possible that data analysis skills are not necessary for new professionals to fulfill their assessment responsibilities.

The second possible reason data analysis skills were rated less important and lower in proficiency is that many student affairs professionals work at an institution that employs an assessment expert who assists with, or conducts, data analysis. According to Henning and Elling's (2008) study, institutions with enrollment above 15,000 are most likely to have an individual employed as an assessment expert/professional. Of the participants in this study, 31.6% worked at an institution with an enrollment of more than 20,000 and therefore were possibly more likely to have access to an assessment expert who can assist with data analysis. However, many institutions (especially smaller ones) remain that do not have offices devoted to student affairs research or assessment, so student affairs professionals will need to be at least moderately proficient at methodology and data analysis skills—a deduction supported by Wall et al. (2009) who found that 35.9% student affairs professionals report they are highly involved with analysis and reporting of data and 27.5% have moderate involvement.

Assessment Delivery Methods

Helpfulness of methods used. Of the 13 delivery methods on the survey, six (administrative exchange programs, training videos, site visits with other institutions, teleconferences, assessment specific conferences or online learning experiences) were rated as *not applicable* by a majority of respondents, indicating a likelihood that new professionals did not have the opportunity to experience these methods. It is possible that a lack of resources (including time and money) prevented new professionals from taking part in these professional development opportunities, especially during periods of budget cuts and economic hardship. Lane (1998) found that assessment-related financial resources were rated as the least sufficient among resources. The lack of financial resources for pursuing professional development could also explain why many new professionals appear to have learned about assessment to some degree on their own; only 19.6% indicated *not applicable* to learning through their full-time position and 7.5% learned individually.

Interestingly, training videos and teleconferences were rated as very unhelpful or somewhat unhelpful by at least 50% of respondents indicating a possibility that new professionals prefer face-to-face learning modalities.

For those new professionals who experienced various assessment delivery methods, those considered the most helpful were shadowing another professional, visiting another institution, attending an assessment specific conference, and assistantships. Interestingly, training videos and teleconferences were rated as *very unhelpful* or *somewhat unhelpful* by at least 50% of respondents indicating a possibility that new professionals prefer face-to-face learning modalities.

Future likelihood to utilize methods. When asked about which delivery methods respondents would most likely utilize in the future to learn assessment, at least half were either *likely* or *very likely* to utilize six of the 13 delivery methods including learning individually, through their full-time position, workshops at a national conference, workshops on their own campus, workshops at a regional conference, and online. The two methods with the highest percentage of *very likely* responses were self-initiated/taught methods of learning individually and through their full-time position. Conference attendance was among the top five methods most likely to be utilized in the future (with the exception of attending an assessment specific conference), a useful finding to professional associations. Other studies have echoed the value of conferences as a preferred form of professional development in general, and specifically for assessment (Fishbeck, 2006; Green, 2006; Harms, 2001; Roberts, 2003; Sermersheim & Keim, 2005).

Interestingly, regardless of technological advances and the increase in online education, only 17.7% of respondents were *very likely* while 22.6% were *very unlikely* to utilize online methods (seminars, discussion groups, e-learning courses). This supports the rationale that student affairs professionals may prefer to learn assessment in a face-to-face environment.

At least half of the respondents were satisfied with the degree to which their graduate preparation program taught skills in five of the eight assessment categories (assessment design, learning and development outcomes, departmental review and evaluation, ethics and politics, and assessment education).

Graduate program-related delivery methods. Most (80% or more) of the respondents in this study rated all of the master's program-related delivery methods as *helpful* or *very helpful.* Similarly, 73.8% of Wall et al.'s (2009) respondents reported to have learned assessment from graduate school and "learning in an academic course in the graduate program" was the highest rated delivery method in Roberts' (2007) study. Thesis work was rated the second most helpful delivery method for learning assessment (though more than half of the respondents did not complete a thesis). Because the completion of a thesis can require knowledge of scientific research methods, it is logical this would be a useful method for learning assessment. Conversely, a majority (95%) of respondents reported that they took a course on research but also rated this as the least helpful method for learning assessment. This result is surprising given that research and assessment are so closely tied together. It is possible that instructors of research courses are not making explicit connections between research and assessment.

At least half of the respondents were satisfied with the degree to which their graduate preparation program taught skills in five of the eight assessment categories (assessment design, learning and development outcomes, departmental review and evaluation, ethics and politics, and assessment education). Conversely, several studies, which provided the perspectives

These findings lead to the conclusion that graduate preparation programs should increase the attention paid to assessment.

of the new professional, their supervisors, directors of housing, and faculty of preparation programs, found that graduate preparation programs could have better prepared students in the area of assessment (Cuyjet et al., 2009; Herdlein, 2004; Hyman, 1988; Waple, 2000). The difference in this study's findings (i.e., that new professionals were mostly satisfied with the degree the graduate preparation program taught assessment) and those of existing studies could be explained in at least two ways. First, new professionals may be generally satisfied with the assessment skills taught during the graduate program but are not as satisfied when comparing it to other skills taught (Cuyjet et al., 2009; Waple, 2000). Another explanation for this discrepancy is that new professionals are more satisfied with the program than other constituents such as supervisors of new professionals, directors of housing, and chief student affairs officers, who likely have a broader understanding of the skills required for success in the first professional position and beyond.

New professionals were least satisfied with the degree to which their graduate preparation program taught quantitative measures and analysis and benchmarking. Two other studies also found that recent graduates possess a lower proficiency in quantitative methodology than many of other competencies studied (Cuyjet et al., 2009; Herdlein, 2004).

Limitations

When reviewing the findings of this study, a limitation inherent in the sample and study design should be considered. A key challenge of this study is that the findings cannot be generalized to the entire population of new professionals in student affairs. Another limitation was the labels used for the Likert scales on the survey. After analyzing the data, it was evident that the labels on the survey scales could have been more specific. When rating a skill on varying degrees of competence it is useful to have a comparison point or applicable scenario (e.g., assessment is integral for success to current role or sometimes necessary in current role versus simply very important or important).

Recommendations for Graduate Preparation Programs

Student affairs professionals must not rely on graduate programs to teach assessment and attention must be paid to ongoing professional development supported through professional associations.

The data collected in this study show that new professionals' assessment competency may fall behind their perceived importance of assessment skills. This suggests that their assessment proficiency may need to be enhanced. Though the new professionals in this study were generally satisfied with the degree to which the graduate preparation program taught a majority of the assessment skills, in other studies student affairs professionals thought that preparation programs should increase assessment in the curriculum (or that entry-level professions are under prepared in this area; Cuyjet et al., 2009; Herdlein, 2004; Hyman, 1988; Kuk et al., 2008; Roberts, 2003; Waple, 2000; Young & Coldwell, 1993). Additionally, this study found a discrepancy between the assessment skills that new professionals perceive are important and their proficiency of those skills especially within the area of quantitative measures and analysis and benchmarking. These findings lead to the conclusion that graduate preparation programs should increase the attention paid to assessment. The following five recommendations are provided for further developing graduate students in the area of assessment:

1. Include assessment courses as a requirement to complete a student affairs degree (or highly recommend them as electives) since courses on assessment were rated the most helpful delivery method for learning assessment. If a program cannot require an assessment course, make purposeful connections between research and assessment in research methods and/or other courses (since 95% of the respondents took a course on research during their graduate program).
2. Require a thesis to complete the master's degree. Although few respondents completed a thesis, those that did, rated this as the most helpful method for learning assessment; it is possible that the completion of a thesis in lieu of comprehensive exams or other special projects could enhance new professionals' assessment competency.

3. Require an assessment project as part of a practicum/internship experience. Studies show that new professionals benefit more from learning through practical application (e.g., internships, assistantships, full-time positions, etc.) than classroom lectures (Forney, 1994; Renn & Jessup-Anger, 2008).
4. Emphasize quantitative measures and analysis and benchmarking by integrating these skills into required assessment or research courses. These were the skill areas new professionals were least satisfied that their graduation program taught and should be addressed more carefully.
5. Prepare new professionals with knowledge on how to plan for future professional development opportunities. Given all of the demands placed upon the curriculum of graduate preparation programs, it is evident that not all required assessment skills can be taught, and therefore new professionals need to know how to navigate their own future learning endeavors.

Recommendations for Professional Associations

Although the graduate preparation program is an integral training method for the majority of student affairs professionals, programs have an extensive curricular agenda (Malaney, 1999) and it may not be possible to teach all assessment-related skills. Student affairs professionals must not rely on graduate programs to teach assessment and attention must be paid to ongoing professional development supported through professional associations. The following three recommendations are offered to ACPA as a result of this study's findings.

Therefore, student affairs professionals, faculty of graduate preparation programs, administrators in professional associations, and chief student affairs officers (CSAOs) should consider the role they can play in advancing the profession toward a commitment to assessment.

ACPA should create a recognition or reward-based certification program that incorporates assessment skills. Dean, Woodard, and Cooper (2007) recognized that once a new professional completes a graduate program, there is no common requirement or training program that facilitates student affairs professionals to learn best practices. The quality of existing professional development opportunities and programs (conferences, online courses, etc.) vary and do not have a defined set of learning outcomes (Janosik, Carpenter, & Creamer, 2006). Existing reports and studies call for the development of an incentive or reward-based certificate program to streamline the postgraduate training of student affairs professionals (American College Personnel Association, 2006; Dean et al., 2007; Janosik et al., 2006).

Dean, et al. (2007) recommended three types of professional development credits: a registry (individuals who have completed criteria would be listed on a registry), certification (individuals would be evaluated in some way to determine if they have met standards and then awarded certification), or licensure (similar to certification but generally a governmental function). The National Association of Student Personnel Administrators (NASPA) offers certification programs for the competency areas in the Professional Competency Areas for Student Affairs Practitioners (ACPA & NASPA, 2010); however the certification programs are geared toward a specific area such as Law and Policy (NASPA, 2015) and are predominantly topic-specific conferences as opposed to a holistic program that would allow new professionals to take responsibility for, and be intentional about, their own professional development across competency areas (Dean et al., 2007; Janosik et al., 2006).

Provide face-to-face, cost-effective delivery options. Due to resource limitations for travel to national conferences and low perceptions of the utility of online programs or teleconferencing, it is recommended that institutional and regional workshop offerings be increased.

Continue to publish literature on assessment. Self-initiated/taught methods were those that student affairs professionals were most likely to use in the future for learning assessment. It is important for professional associations to continue publishing articles and studies pertaining to assessment to guide the new professional's learning.

Recommendations for Division Leadership

Various reports discuss the integral role that division leadership, particularly the chief student affairs officer (CSAO), should play in championing assessment initiatives by leading efforts and providing resources for development (Banta, Black, & Kline, 2001; Culp, 2012; Green, 2006). CSAOs are urged to find creative ways to provide financial resources for professional development so that student affairs professionals can be exposed to various opportunities for learning assessment. Even during difficult economic times, on-campus assessment training workshops taught by experts could be held. Finally, CSAOs should play a key role in creating and recognizing a national certification initiative described above. This will enhance the validity of such a program and encourage participation.

Conclusion

This study sought to shed light on assessment, an issue that has not received much attention in previous studies about the student affairs profession. The findings showed that new professionals perceive that they lack assessment proficiency across all 34 skills studied and that their proficiency in benchmarking and quantitative and qualitative methodologies are the weakest. This study also found that the graduate program was integral for new professionals to learn assessment and emphasized the utility of self-initiated learning and training through professional conferences. Therefore, student affairs professionals, faculty of graduate preparation programs, administrators in professional associations, and chief student affairs officers (CSAOs) should consider the role they can play in advancing the profession toward a commitment to assessment.

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Book Review

Higher Education Accreditation: How It's Changing, Why It Must.
Paul J. Gaston. Sterling, VA:
Stylus Publishing, 2014. 244 pp.
ISBN-13: 978-1579227623. Hardcover, $37.50.

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Higher Education Accreditation: How It's Changing, Why It Must traces the history of accreditation (regional, national, and special). Gaston explores the disconnect between public (including the federal government) perceptions of accreditation and accreditation agency requirements and provides a pathway for accrediting agencies to make positive changes.

Conceived in the late nineteenth century, accreditation served to distinguish between credible and inadequate institutions of higher education. Since its inception, accreditation has gained many other missions, such as ensuring the transferability of courses from one institution to another, promoting effective governance practices, disseminating best practices through the peer review process, providing a platform for public review of higher education institutions, promoting professional development for faculty, advocating change throughout higher education institutions, and serving as a gateway for government support to institutions of higher education. Accreditation's role as gatekeeper for government support increased its authority over institutions and raised the stakes for institutions because many institutions depend on federal funding. Thus, withdrawal of accreditation can threaten the survival of an institution.

In *Higher Education Accreditation*, Gaston identifies several accreditation issues. Accreditation procedures and protocols have not kept up with the changing educational environment. For example, institutions today (as compared to the late nineteenth century) have more diverse student bodies, including more first generation college, commuter, and underprepared students. In addition to the challenges faced from the changing educational environment, the public demands accountability of the institutions it funds. Consequently, higher education institutions must obtain United States Department of Education (USDE) approved accreditation to qualify for student financial aid, research funding, and other forms of public support (p. 55). The dependence of the federal government on accrediting agencies results in a paradox: "An increasing reliance on accreditation by federal and state governments to ensure that funds directed to higher education are well spent, and increasing tension between government and accreditation regarding accreditation's effectiveness in this regard" (p. 58). Gaston indicates that this paradox is also rife with misconceptions.

Accreditation procedures and protocols have not kept up with the changing educational environment.

Appointed in 2005, the Spellings Commission identified several shortcomings of accreditation: (a) the internal predominance of accreditation, (b) institutional interests placed above the public by accreditation agencies, and (c) a lack of transparency regarding accreditation processes and judgments. Among the Spellings Commission's recommendations is one that accreditation agencies have been moving toward for some time now—the focus on educational results rather than inputs (e.g., student-teacher ratio, new state-of-the-art buildings). Since the 1980s, accreditation has shifted from looking at processes and inputs to measuring outcomes supported by an emphasis on assessment. This example of the disconnect between public perceptions and accreditation requirement changes over the last three decades exemplifies the difficulty of changing perceptions about accreditation.

Regional accrediting agencies developed at a time when regional cultures were truly very different. Advantages of regional accrediting agencies include lower travel costs and ease of organizing peer evaluators. One major disadvantage is that accreditors and the accredited may become too well acquainted, which could lead to a perception of leniency or bias. All regional accrediting agencies operate in a similar manner and have comparable organizational structure, standards, and processes (p. 113). Regional accrediting agencies may experience pressure to make the following changes: further emphasize quality, focus on educational outcomes and student performance (both in the classroom as well as obtaining employment and performing on the job), emphasize operating more efficiently and economically, protect diversity of U.S. higher education, encourage innovation, differentiate between strong and weak institutions, provide useful information to the public, and include more public members in leadership and review teams (pp. 112–138).

National accrediting agencies, which are not confined to any region, reflect a wide array of priorities, motives and assumptions. They cover a broad variety of institutional types, such as for-profit, non-profit, community college, four-year college, and university. Initially, they were a means to ensure quality of non-degree programs to allow students access to Title IV student aid funds. Interestingly, not all national accrediting agencies assume direct responsibility for quality improvement. National accrediting agencies may feel pressure to change by defining themselves more in terms of their natural alliances with regionally accredited institutions and with specialized accreditation.

Specialized accreditation can be traced back to the formation of the American Medical Association (AMA). In 1904, the AMA appointed a committee to compile a list of medical schools in order of student success rate on licensure exams (p. 19). According to Gaston (p. 20), there are currently 62 specialized accreditors in a wide variety of disciplines (such as funeral services, nutrition, music, and veterinary medicine). Specialized accreditation has already responded to many criticisms due to its focus on licensure. These criticisms include an emphasis on learning, heightened accountability expectations, and increased distance learning preference (pp. 154–177). However, many changes remain including the need to adapt to changing institutional priorities, increase awareness of interrelationships between departments and disciplines, shift to competency based learning, adopt appropriate competency assessments at each stage of the curriculum, and communicate in a clear, cost-effective manner. Specialized accrediting agencies need to work more closely with each other to have a similar vocabulary, processes of peer review, and evaluation. In addition, specialized accrediting agencies need to work more closely with regional and national accrediting agencies.

Gaston (pp. 179–180) suggests six categories for changing accreditation: consensus and alignment, credibility, efficiency, agility and creativity, decisiveness and transparency, and a shared vision. Although there has been some movement to align standards, protocols, actions, and vocabulary, accrediting agencies need to make further efforts, especially with vocabulary. If all accrediting agencies had a common vocabulary, communication with the public, including government agencies, might become much easier and more efficient. While consensus and alignment will improve credibility, further improvements can be made by adding "well-qualified and carefully prepared public members" to both review teams and accrediting boards (p. 187). By

Gaston suggests six categories for changing accreditation: consensus and alignment, credibility, efficiency, agility and creativity, decisiveness and transparency, and a shared vision.

utilizing technology along with a streamlined reporting approach, accrediting agencies can increase efficiency while achieving more effective, less intrusive, and more affordable oversight (pp. 179–203). Accrediting agencies are required to maintain greater agility and creativity to remain relevant and ensure a quality education in the fast-paced evolution of higher education driven by technological innovation (such as online learning and massive open online courses). While decisiveness can be enhanced by standardizing appeals processes amongst the accrediting agencies, effective communication would enhance both transparency and decisiveness. If accrediting agencies change by coming together on the first five categories, Gaston (p. 180) believes that a shared vision—one that is "coherent, principled, and forward-looking" will be the natural result.

Two current items covered in Gaston's book are the USDE's role in changing accreditation and the reauthorization of the Higher Education Act. President Barack Obama set the tone for the reauthorization of the Higher Education Act in his 2013 State of the Union address—a clearer focus on affordability and students' success. This task could be handled by accrediting agencies. However, if accrediting agencies did not handle this task, an alternative would be

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developed (p. 109). The USDE's development of a ratings system, to be implemented in 2015, was an attempt to devise a comprehensive system to evaluate all colleges on several measures of interest to the public (Blumenstyk, 2015). This rating system would be a consumer information tool as well as an accountability tool. The USDE's college rating system might eventually have allowed accrediting agencies to be decoupled from the Title IV funding just as Gaston suggested. However, the USDE recently decided to eliminate the ratings system and develop a consumer-focused, customizable website. Gaston (p. 109) predicted both the federal government's attempt to develop an alternative to current accrediting agencies as well as the failure of the federally controlled approach (p. 91).

The reauthorization of the Higher Education Act will be debated in the fall of 2015 by the U.S. Senate Committee on Health, Education, Labor, and Pensions. Senator Lamar Alexander released a staff white paper on the topic of higher education accreditation that puts forth several proposals to change accreditation (Senate Committee on Health, Education, Labor and Pensions, 2015). To refocus accreditation on quality, the white paper suggests the that accrediting agencies should remove standards not directly related to institutional quality and improvement, allow flexibility in accreditation reviews allowing institutions with superior track records to have expedited reviews while giving more attention to institutions that need more assistance, and develop gradations in accreditation status rather than the current pass or fail status. In addition, the federal government should separate accreditation from eligibility for Title IV student federal aid. The white paper suggests the following proposals to promote competition and innovation: establish new pathways to accreditation and/or Title IV eligibility for nontraditional providers of higher education (i.e., trade associations, businesses, labor unions, etc.) and eliminate the geographic limitations of regional accrediting agencies. Finally, the white paper suggests that recognition of accrediting agencies should remain independent and free from politics—the decision by the Secretary of Education to grant recognition to an accrediting agency should not be based on any political motivation. Gaston discussed each of these proposals in full detail, which was prior to the publication date of the white paper.

Higher Education Accreditation is a timely, well-referenced book that gives the reader the history of accreditation and key insights about topics currently being debated in the legislature. The author successfully achieves his purpose by informing the reader about forces behind changes in higher education accreditation as well as proactive changes accreditation agencies can make to improve their relationship with stakeholders. The recommended changes for all accrediting agencies hinge on a unified vocabulary, which would certainly improve relationships among the accrediting agencies as well as their relationship with the federal government. This book is appropriate for anyone who wants knowledge about accreditation as well as anyone involved with accreditation agencies, including individuals in the USDE and elected officials. It provides assessment professionals with a working knowledge of current accreditation changes as well as a comprehensive resource on regional and specialized accreditation. This book provides the day-to-day practitioner with practical information about current accreditation practices as well as possible future scenarios that institutions may encounter to prove accountability (such as student learning and cost-effectiveness).

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Book Review

Using Evidence of Student Learning to Improve Higher Education
George D. Kuh, Stanley O. Ikenberry, Natasha A. Jankowski, Timothy Reese Cain, Peter T. Ewell, Pat Hutchings, & Jillian Kinzie.
San Francisco: Jossey-Bass, 2015. 275 pp.
ISBN-13: 978-1118903735. Hardcover, $40.00.

REVIEWED BY:
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Using Evidence of Student Learning to Improve Higher Education is co-authored by an accomplished and influential group of scholars and practitioners, all of whom work with the National Institute for Learning Outcomes Assessment (NILOA). Established in 2008, NILOA's mission 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" (NILOA, 2012, para. 3). The authors of this volume draw upon the sustained work of NILOA, as well as the authors' other extensive experiences working with assessment of student learning in a variety of institutional contexts.

The preface spells out the intent of the book clearly: "identifying what colleges and universities must do to move the assessment of student learning from an act of compliance to the use of assessment results to guide changes that foster stronger student and institutional performance" (p. x). We, at institutions of higher education, assess student learning in order to ensure our students' success and as a result of what we learn, we are able to make "wiser decisions and improve the learning experience of all students" (p. xii).

How to effectively and strategically gather and use evidence of student learning, then, is the volume's focus. The phrase, the *consequential use of assessment*, introduced in the first chapter by Stanley Ikenberry and George Kuh, and used throughout the book, argues that every assessment project should begin with the clear intention to translate what is learned into actions that make a difference in student learning. The phrase gives us a particularly useful way of framing the goals and intended outcomes of assessment—it reminds us that our assessment efforts need to be driven by the questions that really matter about student learning in the context of our institutions. If assessment is seen as truly consequential, we are more likely to find partners throughout the institution willing to engage in assessment and eager to act upon what is learned. And if we begin to experience assessment in these terms, we have successfully made the paradigm shift "from compliance to ownership," which is the first chapter's title.

The book is divided into three main parts. Part One, "What Works? Finding and Using Evidence," offers an overview of the characteristics of meaningful assessments. Pat Hutchings, Jillian Kinzie, and George Kuh, in "Evidence of Student Learning: What Counts and What Matters for Improvement," make a strong case for "methodological pluralism" in the gathering of evidence of student learning because what is seen as compelling evidence can vary by audience and context.

The two remaining chapters in Part One turn to how to use the results of assessment effectively, something that has proven even more challenging than the gathering of data. Drawing upon many examples of effective practice from a variety of institutions, Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, in "Fostering Greater Use of Assessment Results," conclude with seven principles for fostering greater use of assessment results, a useful checklist for administrators and faculty involved with assessment to keep at hand when thinking broadly about assessment and before planning any specific assessment project.

The final chapter of Part One (co-authored by Jillian Kinzie and Natasha Jankowski) focuses on how assessment activities are organized on a campus and the implications of this organization. They address questions like "how should assessment be organized if improvement is the goal" and provide some insightful observations, ending the chapter with five principles for organizing consequential assessment.

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The second part of the book ("Who Cares? Engaging Key Stakeholders") explores the roles of the various stakeholders who have a vested interest in student learning assessment. Each chapter focuses on a different group: Faculty and students (Timothy Reese Cain and Pat Hutchings); administrative leadership (Peter Ewell and Stanley Ikenberry); regional accreditation agency standards (Peter Ewell and Natasha Jankowski); and external entities, including an examination of state and federal policy related to student learning assessment and the role of national organizations such as the Association of American Colleges and Universities and others (Stanley Ikenberry, Jillian Kinzie, and Peter Ewell).

These chapters are very useful reading for both those new to assessment of student learning, as well as those with more experience. They thoughtfully contextualize the relevant history, responsibilities, cultures, and roles of each group relative to the "assessment movement." This analysis helps identify the main challenges when doing assessment, but also where there are opportunities to create collaborations and alliances in the assessment of student learning across the institution and the types of support needed to do effective work.

As an assessment director who works closely with our institution's faculty development program and its teaching and learning initiatives, I particularly appreciated the nuanced and respectful analysis of faculty concerns about assessment and the recommendations offered in the chapter on "Faculty and Students: Assessment at the Intersection of Teaching and Learning" on how to establish or further faculty participation and ownership in assessment. Returning to the point made about the need for methodological pluralism in the type of assessment data collected, the authors argue that the more "informal practices" in assessment by faculty were sometimes disregarded as too subjective, but validate these efforts—which can be documented and built on—as part of a holistic view of assessment. For assessment of student learning to be done well and to be of consequence, faculty members are both necessary guides and participants (as are others who are in co-curricular instructional roles). Furthermore, as the authors point out, all too often we have neglected to bring students into partnership in assessment activities, but note that "explicitly bringing students into assessment activities strengthens that partnership and underscores the fact that assessment is about learning, not about reporting" (p. 107).

For assessment of student learning to be done well and to be of consequence, faculty members are both necessary guides and participants (as are others who are in co-curricular instructional roles).

Throughout the chapters in Part Two, there is a recurrent theme about the importance of institutional agency in assessing student learning. In the chapter on accreditation (aptly titled "Accreditation as an Opportunity"), Ewell and Jankowski conclude that "… institutions that engage in assessment because they genuinely see value in understanding student experiences and student learning are able to satisfy accreditation requirements *without* sacrificing internal improvement efforts" (p. 158). On the other hand, "institutions that begin with accreditation in mind do not usually get information that is useful for improvement" (p. 158).

The final part of the book is titled, "What Now? Focusing Assessment on Learning," and addresses how to keep assessment focused on student learning and consequential. As Kuh and Hutchings identify in their chapter on "Assessment and Initiative Fatigue," one threat to this can be the number of new initiatives or improvement efforts coming from multiple directions, sometimes overlapping, and each with an assessment component. Faculty and staff can find themselves overwhelmed and without the resources to engage meaningfully with an assessment process that would benefit from—and needs—their thoughtful engagement. Anticipating this, institutions must engage in careful and thoughtful planning, innovative approaches like "short-cycle" project assessment (where a series of small, quickly turned-around assessments can answer immediate questions), and keeping the focus on the authentic questions about student achievement.

It is welcome to see an entire chapter devoted to effective communication about student learning assessment as this is a common challenge on many university campuses for many reasons—including the rush to get to the next project. Jankowski and Cain in their chapter, "From Compliance Reporting to Effective Communication: Assessment and Transparency" argue for sharing information internally and externally in a way that provides attention to audience and context, including the core institutional mission, and the ways or actions the institution is taking to foster student learning. The latter approach constitutes "transparency, a form of communication that goes well beyond mere access to information."

The final chapter ("Making Assessment Matter") provides a succinct summary of the characteristics of consequential assessment, a thoughtful analysis of emerging trends in higher education that underscore the ongoing need for student learning assessment, and suggestions for *how to mobilize* for effective use of evidence of student learning that synthesize the key ideas of the book into a focused set of recommendations for institutions.

The authors provide a realistic and informed appraisal of the current political and social context surrounding higher education throughout the book. One of the most important contributions of the volume is its summary of, and critical reflection on, the current practices in assessment growing out of two decades of developing and implementing assessment tools and strategies. Drawing upon the surveys and other research efforts conducted by NILOA, the authors are able to provide current data and case studies from multiple types of institutions to both illustrate effective practices and the kinds of challenges that many institutions still need to overcome.

One of the most important contributions of the volume is its summary of, and critical reflection on, the current practices in assessment growing out of two decades of developing and implementing assessment tools and strategies.

This is the kind of assessment book that one goes to for a systemic view of assessment. Reading this can invigorate or sharpen one's current assessment practices or lead to a resetting of an institutional assessment approach—

especially if that approach is leaning more compliance- than student learning-centered. The authors make a strong and compelling case against a compliance approach to assessment: it does not tend to provide meaningful evidence, it does not lead to improvements in student learning, and it is not sustainable. They also present an equally compelling case for a student-learning centered assessment approach, and offer a blueprint for how to achieve this through an informed and thoughtful analysis with examples from institutions of many different types.

The book is not a how-to guide to assessment like many other fine volumes in the assessment area, but it is an immensely practical book and one that should be read and discussed by multiple individuals in various roles throughout an institution. It gives an unparalleled view of where we are nationally two decades into institutional-level assessment and how to translate this big picture view into on-the-ground strategies that will provide institutions with critical information about how to improve educational experiences for all students.

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Notes in Brief

The Assessment Leadership Institute (ALI) is a faculty designed, faculty taught, professional development program that provides academic units with the knowledge and skills to conduct effective program-level student learning assessment. This article reports on the creation of a faculty professional development program intent on changing the campus assessment culture from one of accountability to one of improvement. The article discusses the reasons for creating the ALI, provides an overview of the program, reports initial outcome data, and offers advice for faculty implementing a similar program on their campus.

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Faculty Professional Development in Student Learning Assessment: The Assessment Leadership Institute

In an accountability culture, assessment is conducted to meet administrative and external demands (e.g., accreditation requirements). Ewell (2009) explains that in an accountability culture the focus is on conveying the most positive impression possible about the progress of student learning. When assessment efforts do occur they usually produce data of limited value for improving student learning (Ewell, 2009; Maki, 2010). Alternatively, in an improvement culture, faculty members approach assessment as a scholarly pursuit in which they create, implement, and use assessment plans to understand student learning progress, uncover and address challenges that prevent or inhibit student progress, and improve teaching and learning (Maki, 2010).

This article reports on the creation of a faculty professional development program intent on changing the campus assessment culture from one of accountability to one of improvement. The article discusses the reasons for designing the Assessment Leadership Institute (ALI), provides an overview of the institute, discusses early indicators of success, and offers advice for faculty implementing a similar program on their campus. Evidence suggests that the faculty professional development program has already altered the assessment practices of faculty at our university and we believe it is a program that can be adapted by any institution that desires to improve assessment of student learning.

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Background

Institutional Context

The University of Northern Colorado (UNC) is a public doctoral research university with approximately 12,000 students. UNC was founded as the State Normal School in 1889, and the tradition of preparing educational professionals continues to be an important part of the university's mission. UNC offers a comprehensive array of undergraduate majors and specialized graduate programs in disciplines including education, health sciences, and performing arts. Approximately 35% of UNC undergraduates are first-generation students, 32% are Pell-eligible, and 25% are students of color. UNC employs 490 full-time and 280 part-time faculty to deliver over 100 undergraduate and 100 graduate majors. Class sizes are small, with most classes enrolling fewer than 40 students.

Evidence suggests that the faculty professional development program has already altered the assessment practices of faculty at our university and we believe it is a program that can be adapted by any institution that desires to improve assessment of student learning.

UNC's Assessment Office was formed in 2002 in response to a recommendation from the university's regional accreditor. The office was charged with coordinating campus-wide assessment with a broadly-defined scope of responsibility. Resources and infrastructure to support the mission and purpose of the office were limited. In addition to the Director, the office was supported by two part-time graduate assistants and a small operating budget. Early efforts were directed toward implementing a centralized assessment management system. Professional development offerings were focused primarily on teaching faculty to use the new assessment technology. While these efforts generally increased documentation of assessment activities and outcomes, examination of assessment plans and reports emerging from these efforts suggested limited understanding of the purpose of assessment, poorly defined program learning outcomes, and an overuse of course grades and indirect measures for assessing learning. Faculty viewed assessment as an administrative task with limited value.

Since that time, the structure and role of the Assessment Office has evolved. Significant investments in personnel and infrastructure began in 2008, strengthening institutional capacity for effective engagement in assessment. Those changes are summarized in Table 1. Ongoing challenges to effective assessment remain, including lack of consistent policies and expectations regarding assessment, limited knowledge and/or lack of interest in implementing effective assessment practices at the program-level, some departmental cultures where faculty operate in isolation with minimal formal or informal structures for discussing curriculum and student learning, and lack of professional development that faculty find useful and meaningful.

Table 1
Changes to the Office of Assessment

- Academic program review process revised to increase the emphasis on student learning assessment.
- Implementation of student services program review to increase focus on student learning and program improvement using standards developed by the Council for the Advanceme of Standards in Higher Education.
- Academic program-level data collection and reporting capabilities improved to ensure th meaningful, comparable, and accurate data are available to support assessment.
- Reinstatement of a University Assessment Council to provide guidance and recommendations to the university community on assessment policy and practice.
- Establishment of college assessment committees and program-review coordinators.
- Allocation of resources to support six Faculty Assessment Fellows assigned to lead assessment efforts in their respective colleges.
- Implementation of a training program on assessment for student services units.
- Two new positions were created - an Assistant Director and a Survey Specialist.

Need for Professional Development

In 2011, UNC began the process of reaffirmation of accreditation with the Higher Learning Commission (HLC), preparing for a campus visit from the HLC in March 2015. Like other accrediting agencies, the HLC has increased its requirements for institutions to demonstrate evidence of student learning. As is typical with many institutions, the approaching external accreditation process motivated UNC to examine its assessment practices and work to improve those practices. For example, in a survey of university and college assessment leaders, it was found that most assessment efforts are primarily motivated by external accreditation requirements (Kuh, Jankowski, Ikenberry, & Kinzie, 2014). Working with the University Assessment Council, the Director of Assessment at UNC began developing a strategy that would meet the accreditation criteria while also improving the quality and use of assessment to improve student learning. Key to this strategy was the appointment of six faculty to serve as Faculty Assessment Fellows (FAF) within their respective colleges. The FAF were recruited in 2011 to support and improve teaching and learning by increasing understanding of the purposes and practice of assessment, fostering communication about effective teaching, identifying faculty development needs related to assessment, and providing consultation on the development and assessment of program-level student learning outcomes. The FAF disciplines included business, computer information systems, economics, education, geoscience, library sciences, music, and science education.

Institutional Challenges and Opportunities

In anticipation of increasing institutional and program efforts to assess student learning, the FAF embarked on a listening tour with faculty across campus in order to identify challenges associated with student learning assessment. The listening tour was informally structured based on cultures within the respective colleges. Some FAF held open forums, others met with faculty individually or with departments, and one conducted an online survey. Regardless of the structure of meetings, all FAF drew from a set of 25 questions developed to guide conversations (See Table 2). The listening tour provided the FAF with a better understanding of faculty perceptions of student learning assessment, institutional challenges, and resources that might be needed for improving assessment. Based on the results of the listening tour, key challenges and opportunities for improvement were identified.

Table 2
Listening Tour Question Protocol

Sample questions about program-level student learning assessment ▪ Does your program have a set of common learning goals for what students should know or be able to do by the time they graduate? ▪ How often do faculty in your program get together formally and informally to discuss learning goals and/or student performance? ▪ If your program doesn't have a set of common learning goals for students, why do you think this is so?
Sample questions about assessment practices ▪ Please describe how assessment is currently practiced in your program. ▪ Do you think your department's current assessment processes are providing information that is useful for faculty? Why or why not? ▪ What do you think are the biggest roadblocks to effective assessment in your department?
Sample questions about the value of assessment ▪ What is your opinion about the value of assessment in relation to teaching and learning? ▪ How important do you think it is for academic programs to regularly collect information about what students are learning at the program level? How about at the course level? ▪ What do you see as the role of assessment beyond accreditation compliance?

Challenges. The most significant challenge was that faculty and the institution operated within an assessment culture focused more on accountability than improvement. This culture presented a central barrier to meaningful and effective use of assessment in support of teaching and learning. Many of the characteristics of an accountability culture described by Ewell (2009) were reflected in the results of the listening tour. For example, a belief that the purpose of assessment is to prove a program's effectiveness to external stakeholders can result in programs developing easily quantifiable outcomes and/or setting performance criteria low enough to ensure that students will consistently perform well. What we observed at UNC was many programs using outcomes and measures that almost guaranteed a result of students meeting or exceeding expectations every year. Another challenge with an accountability culture is a focus on reporting summative results with an emphasis on compliance, or at least the appearance of compliance. While nearly all programs at UNC regularly reported assessment results in annual reports and program review, many faculty viewed these reports as "data dumps" rather than meaningful information about what and how well students were learning. On the surface, a significant amount of assessment activity was occurring; however, very little of this work was producing actionable results that faculty found meaningful and useful for program improvement.

Key to this strategy was the appointment of six faculty to serve as Faculty Assessment Fellows (FAF) within their respective colleges.

Another challenge was that many faculty lacked knowledge and skills in effective assessment practices at the program-level. While assessment of student learning occurred across all levels of the university at varying degrees of proficiency and enthusiasm, faculty

The most significant challenge was that faculty and the institution operated within an assessment culture focused more on accountability than improvement.

were most comfortable with course-level assessment. Many academic programs struggled to articulate well-defined, program-level learning outcomes and to implement aspects of assessment such as curriculum mapping, collection of appropriate assessment data, and curricular and teaching changes based on data results. The listening tour revealed that faculty felt unprepared to conduct meaningful assessment, felt that they did not have the time to do assessment, and felt that assessment would negatively impact tenure and promotion decisions. These concerns are similar to those identified elsewhere in the literature on assessment (Beld, 2010; Ewell, 2002; Hutchings, 2010; Ryan, 1993).

A final challenge was a lack of faculty assessment leaders. The Director of Assessment and the FAF recognized the need for assessment advocates from within the faculty who could lead assessment efforts and gain faculty support for those efforts. The Director realized that the institution needed to find creative ways of supporting and rewarding faculty for addressing the challenges and improving assessment practices.

Opportunities. The listening tour indicated that major barriers for assessment efforts were faculty members' lack of assessment knowledge and skills and the existing accountability culture. The FAF and the Director of Assessment decided to address these barriers by creating a faculty training program. We applied to participate in the Higher Learning Commission's Academy for Assessment of Student Learning. Our participation was funded by the University Provost and President. Through participation in the Higher Learning Commission's Academy for Assessment of Student Learning, we designed the Assessment Leadership Institute with the goal of achieving three short-term outcomes:

- Prepare UNC for re-accreditation
- Increase faculty knowledge and skills in assessment
- Improve faculty attitudes toward assessment

A longer-term outcome for the Assessment Leadership Institute and other university assessment activities is that these efforts will contribute to establishing a culture of assessment for improvement. In the remainder of this article, we describe the Assessment Leadership Institute, discuss preliminary indicators of its success, and provide advice for other institutions considering adopting similar professional development programs.

The Assessment Leadership Institute

The Assessment Leadership Institute (ALI) is a two-year professional development program that provides faculty and academic units with the knowledge and skills necessary to conduct effective program-level student learning assessment. In year 1, faculty participants attend a total of seven, two-hour workshops. Workshops occur monthly. In year 2, faculty participants complete their work started in year 1 to create or revise a program-level assessment plan, conduct an assessment project, and present their project at the UNC Assessment Fair. The year 1 and year 2 activities are outlined in Table 3. To date, 25 programs and approximately 70 faculty members have participated in the ALI.

Table 3
Outline of Assessment Leadership Institute

Year	Major Activity
Year 1	Participants attend the following workshops: • Workshop 1: Introduction to Assessment and Institute • Workshop 2: Program Mission Statement • Workshop 3: Program Student Learning Outcomes • Workshop 4: Curriculum Mapping • Workshop 5: Assessment Methods and Performance Criteria • Workshop 6: Data Collection • Workshop 7: Data Analysis and Using Results
Year 2	Participants complete three tasks: • Finish creating/revising assessment plan • Conduct an assessment project • Present assessment project at the UNC Assessment Fair

Year 1

The goals of the ALI workshops are to increase faculty knowledge about program-level assessment, improve skills for creating and implementing a program-level assessment plan, and improve faculty attitudes toward assessment. During initial planning, the assessment cycle served as a conceptual framework around which to organize the workshop topics so that the individual workshops connected to and built upon each other. Figure 1 illustrates the framework for the ALI. Each workshop focuses on a single topic connected to the assessment cycle. There are 30 to 60 minutes of lecture and 60 to 90 minutes of hands-on activities and group discussion in each workshop. Participants from the same program work in teams during group activities to apply the workshop concepts and start the process of creating or revising an assessment plan. The text *Assessing Academic Programs in Higher Education* (Allen, 2004) serves as the primary source for readings assigned prior to each workshop; however, additional readings from research articles, books, and white papers are also assigned. Participants complete homework assignments in the weeks between the workshops that both emphasize the concepts presented and prepare participants for the next workshop. The homework serves as a way for participants to remain engaged with assessment work and to involve the other faculty in their programs.

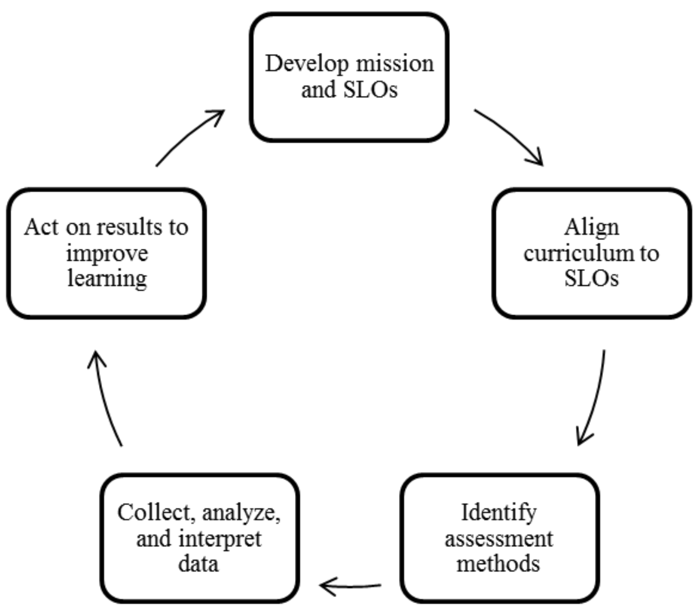

Figure 1. Assessment Cycle Framework for the ALI.

Year 2

We are interested in the impact of the training after the workshops end, so year 2 of the ALI is a transition year for programs to apply what they learned in year 1, with some accountability measures built in to encourage ongoing work toward improving assessment practice. During year 2, participants work with the other faculty from their programs on three activities. First, the participants finish creating or revising an assessment plan. Second, participants develop and implement an assessment project. Assessment projects address real issues, questions, or challenges that the participants' program has related to the assessment of student learning. For example, a program might develop and pilot a rubric for scoring student performance data for a specific student learning outcome, or a program could develop and implement a process of communicating their assessment results to stakeholders. Third, participants present their assessment project at the annual UNC Assessment Fair.

Characteristics of the Assessment Leadership Institute

There are six characteristics that we believe make the ALI an effective faculty development program. These characteristics represent a structured approach for introducing program-level assessment into a university environment.

Characteristic 1: Role and Focus of Assessment

The goals of the ALI workshops are to increase faculty knowledge about program-level assessment, improve skills for creating and implementing a program-level assessment plan, and improve faculty attitudes toward assessment.

The feedback from the listening tour indicated most faculty members believed that the goal of program assessment activities was to satisfy external accreditation standards or for accountability purposes to judge individual faculty performance. Few faculty members thought that the goal of assessment was to improve student learning. We wanted to promote the concept that the main goal of assessment is to improve student learning; therefore, the ALI curriculum is intentionally designed to emphasize that the purpose of assessment was for program improvement with the intent of enhancing student learning.

A second ALI consideration that was influenced by the listening tour is the role of grades in the assessment process. Some faculty members equated assessment with course grades, thus implying that final course grades are adequate measures for assessing program learning outcomes. The ALI emphasizes that final course grades are not adequate measures of the students' mastery of program-level student learning outcomes. This is an important distinction because it raises the participants' focus from a course-level view of the curriculum to an integrated program-level perspective. This perspective is necessary to affect program improvement.

Characteristic 2: Developed by Faculty for Faculty

The FAF developed the ALI goals, curriculum, and teaching methods and delivered the workshops. As local faculty, we were aware of the political environment and personalities of the key stakeholders on campus. We also understood the unique disciplinary challenges and approaches to assessment that ALI participants encountered because we were from a range of disciplines (business, computer information systems, economics, education, geoscience, library sciences, music, and science education). Our knowledge of institutional and disciplinary contexts helped us interact with participating programs and faculty. Our model of a locally developed, faculty-led program provided us with more credibility and access than would be afforded to an external consultant who provides short-term training. External consultants would have difficulty gaining our level of understanding of the political environment and key stakeholders.

Characteristic 3: Faculty Teams

Our model of a locally developed, faculty-led program provided us with more credibility and access than would be afforded to an external consultant who provides short-term training.

It is not feasible for all faculty members in a program to attend the ALI workshops; therefore, each participating program assigns at least two faculty members as a permanent team for all workshop and follow-up activities. This requirement was put in place because consistent team members can be more cohesive, effective, and exhibit better performance than a single participant or a rotating group of individuals (Beal, Cohen, Burke, & McLendon, 2003; Casey-Campbell & Martens, 2009; Dineen, 2005). In addition, a consistent team brings different perspectives and skill-sets to the discussion. Finally, by requiring permanent teams, inter- and intra-group relations formed during the workshops, thus improving the discussion and overall group dynamics (Chang, 2011). It is important to note that we allow flexibility in the faculty team make-up because many of the participating programs only consist of three or four faculty members. While permanent teams are ideal, they are not always feasible.

Another component of the faculty team model is that it incorporates aspects of a train-the-trainer model. In the train-the-trainer model, individuals attend training for a content area and are expected to train other individuals on that content. The model is an efficient, cost-effective method to disseminate information and build a group of local experts within the organization (LaVigna, Christian, & Willis, 2005; Suhrheinrich, 2011). In the ALI, a faculty team attends workshops to learn about assessment and then is expected to disseminate what they learned with the rest of the faculty members in their program. With this model, each faculty participant attending the ALI workshops becomes a local resource for assessment within their respective programs. To support the train-the-trainer model, ALI workshop lectures, discussions, and homework stress that assessment should be a team endeavor and that participants should distribute the responsibility for assessment across the faculty members in their program. In this way we increase the reach of assessment participation within the university.

Characteristic 4: Homework Requirement

Required homework is a key component of the ALI model. The homework assignments are designed to relate to the content in each individual workshop, prepare participants for the next workshop, serve as a foundation for the program's assessment plan, and engage the program faculty members not attending the ALI in assessment work. Close coordination between the FAF teaching each workshop ensures that the homework assignments are connected to the workshop in which the homework was assigned and helps prepare participants for the next workshop. For example, the homework assignment for the mission statement workshop has participants develop or revise their mission statement, which was what they learned in the mission statement workshop. Also, that homework assignment prepares participants for the next workshop, developing student learning outcomes, by having participants brainstorm the learning goals for their program.

The intent is to initiate the process of culture change and to distribute the responsibility of assessment to all program faculty members.

The homework assignments encourage involvement by the rest of the faculty members in participating programs who are not members of the ALI team. The intent is to initiate the process of culture change and to distribute the responsibility of assessment to all program faculty members. Table 4 outlines the homework requirements for the ALI workshops.

Table 4
ALI Homework

Workshop	Homework
Workshop 1: Introduction to Assessment and Institute	• Interview faculty about perceptions of the program's current mission/purpose
Workshop 2: Program Mission Statement	• Revise/write a program mission statement • Create a plan to work with faculty on developing a mission • Reflect on challenges encountered when writing the mission statement.
Workshop 3: Program Student Learning Outcomes	• Write 3-5 SLOs for the program • Create a plan for working with faculty on developing SLOs. • Upload program syllabi to SharePoint to prepare for Curriculum Mapping
Workshop 4: Curriculum Mapping	• Develop a curriculum map for the program, mapping 3-5 SLOs to key courses in the program • Reflect on courses that do not support any SLOs and reflect on SLOs not supported by any courses.
Workshop 5: Assessment Methods and Performance Criteria	• Identify direct methods and indirect methods for all of the program SLOs • Identify performance criterial for all of the program's SLOs
Workshop 6: Data Collection	• Develop a data collection plan for 3-5 SLOs.
Workshop 7: Data Analysis and Using Results	• Design a program data analysis and reporting data results plan

Characteristic 5: Participant Support

Based on our listening tour, we identified other areas of support that faculty members needed to sustain and encourage their assessment work while participating in the ALI. We provide the following resources and incentives to each participating academic department:

- One Faculty Assessment Fellow is assigned to each participating program to provide consultations and mentoring during and outside of the ALI workshops. During the ALI workshops, the FAF work with the faculty team on the workshop activities. Outside of the ALI workshops, the FAF answer questions, help with homework assignments, and deliver mini-workshops to the participants' program. Each program is assigned a secondary FAF to ensure availability in the event of scheduling conflicts and to provide a second opinion should the need arise. The consultations with FAF are particularly helpful when faculty teams encounter situations in their programs that they are not prepared to address.
- All participants receive a resource notebook containing the workshop slides, homework assignments, and external readings for all the ALI sessions. These materials are also posted electronically for participants to share with other faculty in their programs. Each participant is given a textbook, *Assessing Academic Programs in Higher Education* (Allen, 2004).
- Participating programs receive $2,500 of unencumbered funds: one-half at the start of the program and one-half after its completion. This is a significant amount of money in our cash-strapped university environment, and serves as a strong motivator. Participating programs are encouraged to spend these funds on assessment related activities such as training, brown bag seminars, etc.

Initial results from our data collection suggest the ALI is contributing to increased faculty skills and knowledge.

Characteristic 6: Year 2 Activities

A final characteristic of the ALI model is that programs are expected to complete additional tasks for a year after the workshops end. To receive the second half of the incentive funds, during year 2, programs revise and submit an assessment plan, conduct an assessment project, and present their plan at the Assessment Fair. The intent of the year 2 requirement is to encourage the programs to replicate the train-the-trainer model within their respective programs and involve more faculty members in assessment activities. Ideally, this will contribute to our larger goal of changing program culture and will help embed assessment into regular departmental practices.

Early Indicators of Success

We are collecting data to understand the impact of the ALI. Participants complete pre- and post-surveys and short, open-ended evaluations of each workshop. Each program provides its assessment plan prior to participation in the ALI and a revised plan created by the end of its participation in the ALI. Data collected from individual faculty members are confidential. Assessment plans are not anonymous. Early results of our assessment of the ALI are promising. In the first cohort, all nine programs finished the first year of workshops and turned in pre- and post-assessment plans. For the second cohort, seven of the initial eight programs completed participation. Cohort 1 and 2 programs completed assessment projects and presented at the annual Assessment Fair. The third cohort, which includes nine programs, is currently participating in year 1 workshops.

ALI Goal 1: Prepare UNC for Re-Accreditation

Participation in the HLC Academy for Assessment of Student Learning and the subsequent implementation of the ALI were instrumental in preparing UNC for its recent decennial accreditation from the Higher Learning Commission. Faculty involvement in assessment was cited as an institutional strength in the self-study, in part due to the implementation of the ALI. At the time of the accreditation visit in March 2015, 25 programs from approximately 45% of academic schools or departments at UNC had participated in or completed the ALI. Sixty-four faculty members had actively participated in ALI workshops (about 13% of full-time faculty), and their work in their departments increased the number of faculty involved in discussing assessment and student learning on a regular basis. Although a final action from the Higher Learning Commission had not been determined at the time of publication, the ALI was viewed positively by the HLC site team, who commented on the number of faculty who knew about and referenced the Assessment Leadership Institute, including faculty who spoke at an open forum with the review team.

ALI Goal 2: Increase Faculty Skills and Knowledge in Assessment

Initial results from our data collection suggest the ALI is contributing to increased faculty skills and knowledge. For example, 25 participants have completed post evaluations and 24 of the participants reported increased understanding of assessment in general while 14 reported that participation in the ALI had improved how their programs assess student learning. Pre- and post-assessment plans from cohort 1 have been evaluated and all programs have improved their assessment plan. In the future, annual assessment reports will be analyzed to evaluate the long-term impact of participation in the ALI and to determine whether the assessment plans developed by participating programs are implemented and used for program improvements.

Initial feedback from participants suggests the ALI has positively affected faculty attitudes.

ALI Goal 3: Improve Faculty Attitudes toward Assessment

Initial feedback from participants suggests the ALI has positively affected faculty attitudes. Of the 25 participants who completed post evaluations, 24 reported that participation in the ALI increased their confidence to conduct assessment. This is further supported through written feedback on questionnaires. Anonymous representative comments showing a positive attitude toward assessment activities include:

- "This is really exciting because we now know how to identify where and why there are gaps in our program."
- "I'm recognizing the benefit of these 'formal' processes…I'm recognizing how this is an iterative process."
- "[The ALI is] helping me better articulate what we are doing in our program."

We are collecting additional pre- and post-attitude survey data from participants to triangulate these preliminary results.

Long-Term Goal: Establish Culture of Improvement

One of the long-term goals of the ALI is that it will help create a culture of improvement of student learning on campus. One component of a culture of improvement is that assessment is a shared activity across faculty members in a program. For many departments at UNC, assessment has been viewed as an administrative reporting activity assigned to the chair or to a single faculty member. For this reason, we designed the ALI so that all faculty members in participating programs are engaged, not just those attending workshops. We collected data to determine how participants who attended the workshops planned to engage other faculty in their respective programs in assessment activities. Some participants described how they might discuss topics from a specific session without specifying when these discussions would occur. Representative comments include:

- "Work with other faculty to think through and articulate our program's mission and goals."
- "Plan with faculty what implementation results reporting/sharing and action might look like and get their help/buy-in in figuring it out."
- "I could help colleagues in my department to identify how they can write SLOs that would hook into program-level goals."

- "Will get all faculty together to begin a discussion of individual course expectations that match program expectations. Are the program goals and SLOs reflected in the whole set of courses offered?"

These written reflections illustrate how ALI participants are beginning to expand assessment activities to include other faculty members in their program. We believe the activities described by the ALI participants are early indicators that a culture of improvement is starting to develop.

Many participants, however, described plans for initiating discussion of session content through formal departmental meetings and retreats:

- "I can use some of the discussion prompts in our planned faculty meeting focused on assessment."
- "This class discussion will inform our summer 'retreat' with faculty."
- "The ALI session #3 provided us with an opportunity to brainstorm our student learning outcomes. We found that our brainstormed ideas fit well with [our accreditor's standards]. We will meet during the week of December 16 and during the week of January 6 to discuss begin the more applicable task of Homework Assignment #3."
- "We will hold two faculty meetings in early spring 2014 to revise our current SLOs. These meetings will be on Monday January 20th, and Monday January 27th. We will order lunch to motivate faculty to attend."
- "We will host several catered breakfasts during the spring semester to gather faculty feedback on the program SLOs. We then plan to reach consensus on program-level SLOs during our retreat that takes place the week before the fall semester starts."

These written reflections illustrate how ALI participants are beginning to expand assessment activities to include other faculty members in their program. We believe the activities described by the ALI participants are early indicators that a culture of improvement is starting to develop.

Advice for Other Institutions Interested in Adopting the ALI model

Collaborative curriculum design by those teaching the workshops provides structure and predictability to the professional development and keeps participants in an organized, year-long conversation about assessment.

After facilitating the ALI for three years, we have learned several lessons about the design and implementation of professional development for faculty. In this section we provide recommendations to other institutions that want to implement faculty-led professional development.

Instructional Team

- The make-up of the instructional team is an important consideration. The interdisciplinary nature of our team strengthens the program by bringing different experiences, expertise, and skill-sets. Ensure that the team is made up mostly of faculty members so that they can relate to the needs and concerns of participants.
- Instructional team members must be assessment advocates. Avoid having individuals unwillingly appointed to the team, especially if they do not care about assessment. This not only wastes a team slot but could also impair the effectiveness of the group.
- While expertise is not essential, enthusiasm and interest in assessment are important. We spent time reading intensively and attended conferences to develop the necessary knowledge to create and deliver the program.
- Spend time building trust among the instruction team. We worked together for one year prior to designing the ALI. There can, and will, be disagreement among team members, but there also needs to be respect for each other and for the process. This level of cooperation does not happen overnight.
- Designate one team member for administrative duties. This would include communicating with participants about deadlines, distributing printed materials, maintaining online materials, selecting and reserving the venue, etc. Failure to do this increases the likelihood of miscommunication and workshop oversights.

Collaborative Curriculum Design

Collaborative curriculum design by those teaching the workshops provides structure and predictability to the professional development and keeps participants in an organized, year-long conversation about assessment.

Homework

Assign homework after each session to ensure that participants are working with the material and remaining engaged in the weeks between meetings. This homework should be "graded" by the faculty member who taught the session. The feedback keeps participants on track and helps the instructional team know when participants did not understand the material.

Structure homework assignments so that multiple members of the participants' home programs must be involved. This increases involvement within the participants' departments and communicates that assessment is everyone's job, not an activity to be completed by one person in the program.

Assessment

It is important to establish an evaluation process to provide feedback to participants concerning what is going well or not. To do this, data should be collected from participants.

Continuing Work & Support

Design a program with year 2 activities required of all participants. This helps ensure that the information presented in year 1 is applied, and provides participants more time to continue developing and implementing a viable assessment plan. During the second year, consider meeting with participating programs for lunch or coffee so that they continue to feel connected to the instructional team. Also create opportunities for participants to share their assessment projects and activities with colleagues on campus (we do this through an annual assessment fair). This provides recognition and affirmation that the work is valued by the university and provides another venue for disseminating best practices across campus.

These results will help us to determine which aspects of the ALI are most valuable for faculty, and allow us to explore opportunities for providing condensed models of the ALI in the future.

Create an on-line FAQ document so that participants feel their questions are being considered by the instructors and answered in a timely manner. A side benefit of this is the FAQ becomes part of the infrastructure of the program which can be made available to the rest of the campus as the program continues.

Looking Forward

The Assessment Leadership Institute is a faculty-led assessment model designed to facilitate how faculty conduct, perceive, and discuss student learning assessment. The initial data provide evidence of the success of the ALI through the improvement of the quality and completeness of participants' assessment plans and the positive impact of the ALI on the assessment culture in their programs. This model offers a framework that may be adapted and implemented on other campuses.

The next task for the Faculty Assessment Fellows is to complete the research project exploring the effectiveness of the ALI. These results will help us to determine which aspects of the ALI are most valuable for faculty, and allow us to explore opportunities for providing condensed models of the ALI in the future. In addition, it is time to reassess campus faculty members, perhaps through a new listening tour, so that we can offer needed, continuing professional development around student learning assessment on our campus.

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