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

*C*reating 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).

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).

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

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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.

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.

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 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.

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).

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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.

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.

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

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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

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.

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

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.

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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