

## Abstract

This qualitative study examines how service-learning pedagogy can facilitate graduate students' learning of assessment. Interviews with 14 students enrolled in a student affairs graduate program suggest that a.) direct application of content knowledge through a service-learning course enhanced students' learning of assessment, b.) exposing students to the utility of their assessment findings deepened students' understanding of the value of assessment in student affairs, and c.) students shifted their focus from grades to conducting a rigorous assessment study as they experienced the value others placed on their service.



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# Learning Assessment in Student Affairs Through Service-Learning

**R**ising college costs, coupled with declining resources, has prompted an accountability movement in higher education. Between 2003 and 2014, the Government Accountability Office reported that, on average, state appropriations for public colleges and universities decreased by 12% while tuition rates rose by 55% (Emrey-Aaras, 2014). As resources become scarce, higher education leaders are increasingly being asked to respond to constituents' needs for creating opportunities for social mobility, leading innovation, and preparing students for the workforce (Alexander, 2000). Consequently, policymakers are scrutinizing postsecondary education to determine how it fares in terms of access, affordability, student retention, graduation rates, job placement, and student learning (Callan, 2008).

Under this mounting pressure to show results, institutional leaders are asking student affairs professionals to increasingly engage in assessment to demonstrate their contributions to student learning and development, as a matter of survival, and for decision-making (Schuh & Associates, 2001). Indeed, the Joint Task Force on Professional Competencies and Standards representing College Student Educators International (ACPA) and the National Association of Student Personnel Administrators (NASPA) identifies assessment, evaluation, and research (AER) as one of 10 professional competency areas expected of student affairs educators (ACPA/NASPA, 2015). According to ACPA and NASPA (2015), student affairs professionals competent in AER will have the "ability to design, conduct, critique, and use various AER methodologies and their results to inform practice" (p. 12). Foundational AER outcomes also include being able to facilitate "appropriate data collection," and understand how to assess the "legitimacy, trustworthiness and/or validity of various methods" (p. 20). Importantly, AER foundational outcomes also include knowing how to communicate results in an "accurate, responsible, and effective" way as well as with sensitivity to "organizational hierarchies" (p. 20). These foundational outcomes necessitate that student affairs professionals are taught how to conduct assessment while responding to various stakeholders within higher education.

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**Despite the increasing emphasis on assessment in higher education, and specifically in student affairs, efforts towards developing a culture of, knowledge in, and skills around assessment within student affairs have been slow.**

Despite the increasing emphasis on assessment in higher education, and specifically in student affairs, efforts toward developing a culture of, knowledge in, and skills around assessment within student affairs have been slow. Faculty of graduate preparation programs and senior student affairs administrators rate assessment as one of the most desired competencies among new student affairs professionals, yet new student affairs professionals display large gaps in their knowledge for conducting assessment (Dickerson et al., 2011). This finding is troubling given that job postings increasingly ask that entry-level student affairs professionals demonstrate knowledge of assessment, evaluation, and research. In fact, almost half of all 2008 student affairs job postings through The Placement Exchange—an annual placement conference held at the national meeting of NASPA geared towards entry-level student affairs professionals—included assessment, evaluation, and research skills as part of the job description (Hoffman & Bresciani, 2012). Beyond inadequate preparation and the growing demand of assessment skills, Elkins (2015) finds that newer professionals are overwhelmingly represented in the lower stages of Erwin's (1991) five stages of reacting to assessment—discovery, questioning, resistance, participation, and commitment (as cited in Elkins, 2015).

The past two decades have seen a proliferation of assessment literature within higher education and student affairs. This literature spans from discussions about the philosophical underpinnings of assessment to “how-to” guides that discuss assessment plans and implementation efforts (Elkin, 2015). Absent, however, is a focus on pedagogical approaches that promote the learning of assessment for future student affairs professionals. As such, we need to better understand how student affairs professional preparation programs can help prepare graduate students entering the student affairs profession to engage in the practice of assessment. In response to this need, we aimed to address the following research question: How, if at all, does engaging in a service-learning assessment project facilitate the learning of assessment among graduate students enrolled in a student affairs professional preparation program?

We chose to study graduate students' learning of assessment within the context of a graduate class designated as a service-learning course because this type of teaching provides students with a form of experiential learning that aligns with the theory-to-practice model pursued in many student affairs graduate programs in the United States. We use Kuh's (2008) definition of service-learning as a “field-based experiential learning with community partners... [where] students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences” (p. 11). For this project, we defined community partners broadly to include the campus community since the graduate students in this course engaged in service student affairs departments on campus. As such, we see graduate students engaging in service with campus partners as an opportunity to prepare student affairs professionals to engage in collaborative work and service to the field of student affairs. Further, because the assessment-project sites selected for this course during the year of this study served traditionally underserved student populations on campus (e.g., LGBT, Latino/a), students also had to engaged in discussions of power and ‘otherness’ within the context of learning assessment.

## Conceptual Framework

To explore how engaging in an assessment project through a service-learning course facilitates the learning of assessment among graduate students enrolled in a student affairs professional preparation program, we constructed a two-part framework comprised of the concepts of situated cognition and service-learning.

### Situated Cognition

Situated cognition entails supporting students' learning by having them engage in authentic activities—“ordinary practices of the culture”—that resemble what practitioners in that field would potentially face (Brown, Collins, & Duguid, 1989, p. 34). Brown et al. (1989) state, “people who use tools actively rather than just acquire them, by contrast, build an

increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves” (p. 33). A valuable point here is that through situated cognition students learn tools—conceptual knowledge and skills—by directly using them as opposed to solely hearing about them from the instructor or reading about them in a book. Another feature of situated cognition is that students learn about the tools by using them within the context, in this case, community, where that tool would naturally be used. In doing so, students also learn *how* to use the tool within that community, and that experience becomes part of the learning too.

Situated cognition can be valuable because learning how to use a tool is one thing but knowing how to use it in a real context, where the context itself may shape how you use the tool, can be completely different. Brown et al. (1998) wrote, “The community and its viewpoint, quite as much as the tool itself, determine how a tool is used” (p. 33). They assert that often students learn tools in the abstract and without knowing how to use what they know within the context of their work. Yet, the context provides information, structures, and cues that would inform the use of tools, and therefore the learning of them. As such, situated cognition entails cognitive apprenticeship—an opportunity for students to “acquire, develop, and use cognitive tools in authentic domain activity” (Brown et al., p. 39).

Cognitive apprenticeship entails collaborative learning where novices and experts work together to learn.

The apprenticeship system often involves a group of novices (peers) who serve as resources for one another in exploring the new domain and aiding and challenging one another... The ‘master,’ or expert, is relatively more skilled than the novices, with a broader vision of the important features of the culturally valued activity. However, the expert too is still developing breadth and depth of skill and understanding in the process of carrying out the activity and guiding others in it. (Rogoff, 1990, pp. 39)

Through cognitive apprenticeship, students learn from each other, and skilled experts, to collectively solve problems, engage in multiple roles, and work through ineffective strategies, misunderstandings, and misconceptions (Brown et al., 1998; Hennessy, 1993). The collective learning, however, is always grounded in the authentic activity to deepen students’ knowledge and skills. For this project, the graduate students were the novices and the experts were the faculty teaching the assessment course—having expertise in conducting assessment, evaluation, and research through qualitative, quantitative, and mixed-method designs—and the campus partners who have expertise as practitioners in their functional areas.

## Service-Learning

Service-learning, as a way of teaching, is a high-impact practice that integrates community service with instruction and reflection (Kuh, 2008; National Service-Learning Clearinghouse, 2007). Service-learning has been associated with student gains in content knowledge, critical thinking (Astin & Sax, 1998), and identity development of undergraduate students (Jones & Abes, 2004). Researchers have documented the long-term impact of service-learning for undergraduate students. For example, Fullerton, Reitenauer, and Kerrigan (2015) found that students identify service-learning as a significant learning experience 3–15 years after completing a service-learning course. Further, participants in the study identified specific “epiphanic” moments that led to their learning about others, altered their perspectives, and enhanced interpersonal communication. The ability to vividly remember these experiences is likely a product of the service-learning environment. That is, service-learning settings produce strong emotional experiences often not experienced in traditional course offerings (Noyes, Darby, & Leupold, 2015). Moreover, project-based service-learning strategies, such as those employed in the course that informs this study, develop undergraduate students’ technical, critical thinking, and interpersonal skills (Gomez-Lanier, 2016).

Service-learning has also been applied to undergraduate students’ learning of research methods (Curwood, Munger, Mitchell, Mackeigan, & Farrar, 2011; Nigro & Wortham, 1998; Stocking & Cutforth, 2006). For example, Nigro and Wortham (1998) find that students engaged

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in community action research value the direct hands-on experience gained from thinking through complex problems on their own. Despite the educational benefits of service-learning at the postsecondary level, little is known about the benefits of service-learning courses at the graduate level or specifically within student affairs graduate preparation programs. As such, this study draws on graduate student data from students enrolled in a service-learning assessment course to examine students' engagement and learning of assessment.

These two concepts, situated cognition and service-learning, frame this project in useful ways. Situated cognition helps us see the value of having in- and outside-classroom experts supporting the learning of novices regarding assessment within authentic situations of practice, or what Brown et al. (1998) refer to as cognitive apprenticeship. Through service-learning, we are able to frame students' opportunity to learn content knowledge, apply it in a real-world setting, and importantly to service-learning, reflect on their learning of the content and the experience of applying knowledge and skills in service to the field. Together, situated cognition and service-learning ground this project in ways reflective of the course structure offered to participants.

## Methods

To address the question of how engaging in an assessment project through a service-learning course facilitates the learning of assessment among graduate students enrolled in a student affairs professional preparation program, we conducted a qualitative study. We collected an in-person questionnaire, student reflections, and conducted two one-on-one in-person interviews with the graduate students who matriculated in the service-learning assessment course offered as part of a master's degree student affairs program at Northeast University (pseudonym). Northeast University is a large, public research (R1) university located in the Northeastern region of the United States. We selected Northeast University as the site for this study because students in this program are required to enroll in a two-part *assessment in student affairs* course sequence with a service-learning designation as part of the core curriculum. Students in the program represent diverse gender, racial, ethnic, and sexual identities. They also have a wide range of professional experiences, but most students enroll directly after completing their bachelor's degrees. Because the instructors of the course were also the researchers of the study, student consent was not requested until the conclusion of each semester to reduce the possibility that students experienced any pressure to participate in the study.

As the instructors, we worked in partnership with four offices within student affairs departments to identify the assessment projects. We selected the assessment projects based on need, scope, and office resources. After selecting the projects, we assigned students to groups based on students' prior experiences with assessment as well as interest in the project. Stocking and Cutforth (2006) suggest that students who feel a sense of connection to their community partners display flexibility, patience, and personal investment when engaging in their research projects, regardless of prior research experience.

Students enrolled in the year-long course sequence in the first semester of their first year. We used Jacobson's (2015) method for conducting rigorous, scholarly assessment to guide our teaching of the course. This includes developing clear goals, leveraging and building expertise, using appropriate research methods, interpreting results, disseminating work, and engaging in the peer review process. The fall semester consisted of students developing the research design and plan that informed their assessment activities for the spring semester (e.g., data collection and data analysis). Further, the two-course sequence is essential to addressing pedagogical challenges that may arise when students lack the readiness to engage with basic principles of assessment or cultural competencies for engaging with community partners (Stocking & Cutforth, 2006). Each class session was intentionally structured so that students applied the content covered in class to their assessment projects through a variety of exercises. For example, students learned about the components of developing a good questioning route and then created an interview protocol in line with their assessment project that reflected that learning.

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The course structure aligns with the conceptual framework in that the graduate students developed and used assessment tools to enact assessment in actual professional practice, thus reflecting situated cognition. In terms of service-learning, the graduate students in this course conducted an assessment as a service to a program or office situated within student affairs departments at the research site. In this sense, the course took on another element—not only enacting assessment in actual practice but doing so to the benefit of student affairs programs and services.

## Data

In the fall semester when this study took place, students in the course completed an in-person questionnaire during the first day of class that helped instructors place them into their assessment groups. The questionnaire asked for graduate students' background information including their gender, race, education, and prior experience with assessment, evaluation, and research. This information helped us understand their demographic backgrounds as well as the transferrable skills and knowledge they may have brought to their learning of assessment.

In addition to completing the questionnaire, students who agreed to participate in the study were also asked to participate in two one-on-one interviews, one at the end of each academic semester. Interviews provide useful data for understanding how people make meaning of their experiences (Rubin & Rubin, 2012). In terms of assessment, Newhart (2015) argues that qualitative approaches more accurately depict the “complexity” and “depth” of student learning. Not only can qualitative approaches measure what students are learning they can also help us understand “why students are or are not learning” (Suskie, 2009, p. 24). Since we sought to better understand how students experienced learning about assessment through a service-learning course, interviews were a fitting method.

A member of the research team followed up with each student to schedule interviews at the end of each semester. Of the 20 potential participants, 14 participated in the spring interviews. The semi-structured interviews lasted 40–60 minutes, were audio-recorded, and were transcribed by a third party. The findings presented here are drawn exclusively from the 14 interviews conducted at the end of the spring semester where the semi-structured interview protocol intentionally asked questions about learning assessment through a service-learning course. For example, students were asked: “What aspects of the spring course do you think were most helpful to your learning?” and “How did it feel to learn about assessment through a service-learning course?” To systematically examine the role of service-learning in learning about the process of assessment for all students, we added these questions after the fall interview data yielded some student responses that spoke to the service-learning component of the class.

**Participants.** Table 1 provides an overview of the demographic characteristics of spring interviewees. A total of six participants identified their gender as male and eight identified as female. Seven of the participants self-identified their race as White, three as Latino/a, two as mixed race, one as Asian American, and one as African American. The average age of participants was 23 years. Overwhelmingly, participants indicated that they had prior experience with assessment, evaluation, and research. Most of these experiences were the result of undergraduate research experiences under the guidance of faculty.

## Analytical Approach

Before analyzing the interview data that informed this study, researchers de-identified each transcript by replacing student and program names with pseudonyms. Then, researchers reviewed the audio files to ensure that the transcripts were accurate. Next, researchers read each transcript to identify emerging concepts and codes (Rubin & Rubin, 2012) to develop a qualitative codebook—which kept a log of emerging codes and definitions. To this end, each researcher reviewed and coded two interview transcripts to identify initial concepts and codes (Saldaña, 2013) such as “service-learning\_relationships,” “service-learning\_prior experience,” and “service-learning\_emotion.”

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Table 1  
*Participant Demographics (n=14)*

	n	%
<i>Gender</i>		
Female	8	57
Male	6	43
<i>Race/ethnicity</i>		
White	7	50
Latino/a	3	21
Mixed race	2	14
Asian American	1	7
African American	1	7
<i>Prior Experience with Assessment, Evaluation, and/or Research</i>		
Yes	12	86
No	2	14

*Note.* Numbers may not equal 100 due to rounding.

Once we defined an initial set of concepts and codes, we engaged in the independent coding of the remaining data using NVivo software. We then brought our coding together to identify the similarities and differences in our coding by conducting an interrater reliability report through NVivo. The level of agreement across all codes averaged at 99.2% and ranged between 99.4% and 99.9%. This step strengthened the definition of concepts and codes and increased the reliability of the analysis (Miles, Huberman, & Saldaña, 2014). Upon completion of coding, we engaged in “second cycle coding” to identify emerging themes (Miles, Huberman, & Saldaña, 2014).

## Findings

Our analysis of the data yielded three main findings related to the learning of assessment through a service-learning course. First, direct application of content knowledge through a service-learning course enhanced students’ learning of assessment. Second, exposing students to the utility of their assessment findings deepened students’ understanding of the value of assessment in student affairs. Finally, students shifted their focus from grades to conducting a rigorous assessment study as they experienced the value others placed on their service.

### Direct Application

Study participants described the direct application of course content to their assessment projects as key to their learning of assessment. This was especially helpful for students who described themselves as learning best by engaging in authentic problems of practice. David summarized how his learning, as well as that of his peers, may have been limited using a different approach, “if you didn’t have a service-learning component and you were talking about research from a more theoretical perspective, I think it would be difficult to connect with student affairs students in general.” Tam echoed this sentiment when asked how she enjoyed learning assessment through a service-learning course:

So, I think yes, the service-learning component was very helpful and allowed me to learn the theory part and then put that theory into practice. It was very helpful for my type of learning style because I want to know how it can be applicable to real life and how it can be applicable to student affairs in general, not just learning about it and hearing about it and hearing examples. But actually, being able to do it myself.

Beyond application, which could have emerged from engaging in a generic assessment project, or case studies, students also described the benefits of learning assessment by engaging in assessment projects situated within the context of student affairs, and across various functional areas. This is illustrated by Carlos who reflected on his learning assessment through a service-learning course: “I think I was able to really make that connection. For me, it was like if I could do this for this learning community, I could do this all the time in my professional career, but I think some people may not look at it like that.” Many of the student participants expressed this point that having an opportunity to directly apply what they were learning in the assessment course helped them make a connection between principles of assessment and the doing of it.

## Utility of Assessment

Several students also indicated that their learning of assessment was enhanced because they were working with community partners who intended to use their findings to inform program improvement. This is especially true for one group of students who worked on an assessment project for a program that was at risk of losing program funds for a mentoring program that provided college outreach to underserved students of color due to state budget cuts. By working on an assessment project of a program that was in the position of having to defend its existence, students were exposed to the financial realities of programs that exist almost exclusively on soft funds, as explained by Brittney:

I realized that this wasn't just about me, theory-to-practice, getting to learn while doing, which is very beneficial, but literally hearing about Engaging Children in Higher Education [pseudonym] being in a state where it might— the grant might not be renewed. That's— a lot has to do with the school districts and the governor, all these budget cuts, etcetera. But just seeing all the sponsors really say like we're literally going to use these findings.

Abigail, another student from the same group, expressed similar sentiments:

So that just made it so much more meaningful, to be working with real people on a real project. These are real experiences, and our research could— I mean they've already submitted the grant now, but in the future, it could help them to keep this program because statistics like 96% of [mentors] were satisfied with their experience, like hello, that's a really good number. And they're gaining skills, and they're learning and all the other things in the presentation.

As Abigail described, the application of the findings to program improvements made engaging of assessment “real,” with real stakeholders and consequences.

While students were invested in their assessment projects and seeing the results of their assessments being used, they also experienced how engaging in assessment prepared them as student affairs professionals. They saw how learning assessment, and applying the findings of their assessments, was useful for their development as future student affairs professionals who could be running similar programs in the near future. Brittney shared, “I think me being able to take that and say not only did we do theory-to-practice, the departments actually utilize our findings and our recommendations on a job interview or wherever, feeling like a little consultant.” Brittney saw assessment as a way to set herself apart from her peers.

## A Shift from Grades to Rigor

Lastly, students reported being invested in their learning of assessment because of the “real” implications of their work. Students were not asked to apply course content to a fictitious project. Instead, students were asked to conduct an actual assessment project with community partners that had real assessment needs. Students in this study indicated that they were less focused on their grade in the course and more focused on conducting a rigorous assessment that could provide the most useful information for their community partners and affiliated program.

**Through service-learning, we are able to frame students' opportunity to learn content knowledge, apply it in a real-world setting, and importantly to service-learning, reflect on their learning of the content and the experience of applying knowledge and skills in service to the field.**

Many students spoke of feeling that they had to work harder than they would have if they were just submitting a paper for a grade. For example, Benjamin reflected that while the theory-to-practice model was one of the most helpful components of his learning in the course, knowing that the project and the final paper was in service to a program raised the stakes. As such, he focused on “really” learning the course content so that he could apply it to his project and produce a better product for their community partners:

I think having that in-class time, the reading time to say that and then apply it, but also apply it with the idea of giving. I think it was a little extra boost to be like I better do this really good because I’m providing a resource, I’m providing information to [community partners] so I want to really make sure that I get this... So that when I’m applying it, I can really serve to the best of my abilities as well. I think that that was— it was up’d level of attention and focus that I needed to give to the learning happening in this class because there was going to be a result produced that wasn’t just a hypothetical result.

Students often expressed their shift from grades to learning and producing “good work” within the context of building relationships. They did this by describing their connection with the assessment projects and/or the relationship they developed with their community partners. This was expressed by Abigail, “if this was just like any mentoring program that wasn’t tied to a cultural center, I don’t think I would care as much as I do because it’s [Engaging Children in Higher Education] and because I know Leah [Director].”

## Discussion

**In terms of service-learning, the graduate students in this course conducted an assessment as a service to a program or office situated within student affairs departments at the research site. In this sense, the course took on another element—not only enacting assessment in actual practice but doing so to the benefit of student affairs programs and services.**

A service-learning assessment course, where students are in service to offices and programs within the larger university community that have assessment needs, provides an opportunity for students to learn assessment through cognitive apprenticeship, which entails having the processes of the task made visible to students, having abstract tasks situated in authentic contexts, and varying the situations to promote transfer of learning (Collins, Brown, & Holum, 1991). Students, in this service-learning course, had opportunities to learn about assessment in class and in the field, through promoting transfer of learning. This transfer of learning was evidenced directly with the finding of “direct application” whereby students in this course indicated deepening their learning of assessment because of the opportunity to apply immediately what they were learning in class. For instance, in class, they discussed course readings and began to consider how readings helped them develop tools for their assessment project. These readings contributed to students developing knowledge about the difference between assessment, research, and evaluation; how to assess the legitimacy of studies; consider strengths and limitations of different methodologies; and how to use scholarly literature to inform the content and design of assessment tools. These outcomes align with ACPA and NASPA (2015) AER outcomes.

In the field, they learned about the practices of the office and gained insight from community partners that informed how they carried out their assessment, when, and what they assessed. This approach made the learning of assessment processes visible and situated it in student affairs contexts, thus contributing to the situated cognition that is part of a cognitive apprenticeship. Students in this study experienced situated cognition by engaging in authentic activities of practice (Brown et al., 1989), which included meeting student affairs stakeholders to gain a sense of the purpose and value of the assessment, to deepen their understanding of the community and context, and to develop relationships with the community being served. This authentic practice of meeting with the stakeholders aligns with ACPA and NASPA’s (2015) intermediate AER outcomes of knowing how to appropriately design assessment “based on critical questions, necessary data, and intended audience(s)” (p. 20). The students had the opportunity to hone this outcome in their meetings with stakeholders (their intended audience). Those meetings were real, and not hypothetical, situating their learning in authentic contexts where they had to manage the relationships while asking critical questions to guide the assessment project. In addition, they developed the foundational



AER competency of developing sensitivity regarding the raw data and “handling them with appropriate confidentiality and deference to organizational hierarchies” (p. 20).

Students in this course also developed assessment tools (i.e., surveys, interview protocols) in partnership with the community partner, as well as in a team-based approach, thus exemplifying the cognitive apprenticeship that can contribute to situated cognition. Developing assessment tools with their community partner also meant that these students learned how to “select... tools that fit with the research and evaluation questions and with assessment and review purposes” as well as facilitate “appropriate data collection,” both of which are foundational AER competencies (ACPA/NASPA, 2015, p. 20)

This experience of carrying out assessment in an authentic student affairs office helped these future student affairs professionals learn how to conduct assessment in student affairs in a meaningful way. Students did not learn only for themselves but also engaged in learning assessment to serve others. They learned about how to meet stakeholders’ needs and how assessment findings can be used to inform programmatic improvements or to leverage future funding during difficult economic times. In doing so, students could see how assessment could be useful for the work they do in their assistantships, as well as the work they will do in the future as student affairs professionals. Equally as important, students saw for themselves the potential consequences of opting-out of doing assessment—that is, not having the “evidence” to defend a program during hard economic times. These learning gains align with what Brown et al. (1998) refer to as learning tools by using them specifically within the community where they will be practiced.

**Future inquiry should also seek to investigate whether service-learning, and specifically situated cognition, is helpful in the development of other student affairs competencies.**

### Limitations

The authors identify several limitations to consider when interpreting the results of this study. First, student accounts of how service-learning facilitated their learning of assessment is an indirect account of student learning. Future research should seek to combine both direct and indirect measures of student learning when determining the significance of service-learning pedagogical strategies in the learning of assessment. Second, the sample of students is limited to students in one graduate preparation program at one institution. As such, the design of the study limits our ability to generalize findings to other programs at other institutions.

### Implications for Research and Practice

This study begins a line of inquiry about how service-learning can prepare student affairs professionals enrolled in graduate preparation programs to develop their competency in assessment, evaluation, and research. Future research is needed to examine how learning assessment through a service-learning course may affect student views of engaging in assessment over time. That is, are students who complete such a course more apt than their colleagues who have not taken such a course to engage in assessment as part of their work as student affairs practitioners? Future inquiry should also seek to investigate whether service-learning, and specifically situated cognition, is helpful in the development of other student affairs competencies.

Study findings also have implication for practice. Findings indicate that students who engage in learning about assessment through a service-learning assessment course can deepen their understanding of how assessment can have direct application for practice. Assessment, with its research foundation, may not initially be a practice student affairs professionals view as essential to their work. However, by seeing the direct application, students can develop into practitioners who see the value of conducting assessment as a form of student affairs practice.

Study findings have implications for campus partners as well. Campus partners who sponsor students may find that having enthusiastic students doing assessment for them may lead to synergy in their offices that can contribute to a culture of assessment—an intermediate AER outcome (ACPA/NASPA, 2015). They may also continue to sharpen their own assessment skills and knowledge as they collaborate in the cognitive apprenticeship experience.

Lastly, study findings have implications for faculty teaching in professional preparation programs such as student affairs. Graduate faculty who teach assessment may want to consider using service-learning pedagogy, with a cognitive apprenticeship lens, to deepen students' subject-matter learning while serving local communities. Even more, graduate faculty may want to consider other courses that could benefit from a service-learning approach anchored in situated cognition to enhance learning across the graduate education curriculum.

### **Conclusion**

In conclusion, this study found that direct application of content knowledge through a service-learning course enhanced students' learning of assessment. Also, exposing students to the utility of their assessment findings deepened students' understanding of the value of assessment in student affairs. Lastly, students shifted their focus from grades to conducting a rigorous assessment study as they experienced the value others placed on their service. Such findings can inform how graduate preparation programs in student affairs, and faculty who teach in these programs, can leverage service-learning as a pedagogical tool when teaching assessment courses to build the competency of assessment among future student affairs professionals.

## References

- ACPA: College Student Educators International & NASPA: Student Affairs Administrators in Higher Education (2015). *Professional competency areas for student affairs educators*. Washington, DC.
- Alexander, F. K. (2000). The changing face of accountability: Monitoring and assessing institutional performance in higher education. *The Journal of Higher Education*, 71(4), 411–431.
- Astin, A. W., & Sax, L. J. (1998). How undergraduates are affected by service participation. *Journal of College Student Development*, 39(3), 251–263.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42.
- Callan, P. (2008). The 2008 national report card: Modest improvements, persistent disparities, eroding global competitiveness. *Measuring Up 2008: The National Report Card on Higher Education*, 1–31.
- Collins, A., Brown, J. S., & Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator*, 15(3), 6–11.
- Curwood, S. E., Munger, F., Mitchell, T., Mackeigan, M., & Farrar, A. (2011). Building effective community-university partnerships: Are universities truly ready? *Michigan Journal of Community Service Learning*, 17(2), 15–26.
- Dickerson, A. M., Hoffman, J. L., Anan, B. P., Brown, K. F., Vong, L. K., Bresciani, M. J., Monzon, R., & Oyler, J. (2011). A comparison of senior student affairs officer and student affairs preparatory program faculty expectations of entry-level professionals' competencies. *Journal of Student Affairs Research and Practice*, 48(4), 463–479.
- Elkins, B. (2015). Looking back and ahead: What we must learn from 30 years of student affairs assessment. *New Directions for Student Services*, 151, 39–48.
- Erwin, T. D. (1991). *Assessing student learning and development: A guide to the principles, goals, and methods of determining college outcomes*. San Francisco, CA: Jossey-Bass.
- Emrey-Aaras, M. (2014). *Higher education state funding trends and policies on affordability*. Report to the Chairman, Committee on Health, Education, Labor, and Pensions, United States Senate. GAO-15-151. Washington D. C.: Government Accountability Office.
- Fullerton, A., Reitenauer, V. L., & Kerrigan, S. M. (2015). A grateful recollecting: A qualitative study of the long-term impact of service-learning on graduates. *Journal of Higher Education Outreach and Engagement*, 19(2), 65–92.
- George-Jackson, C. E., & Rincón, B. (2012). Increasing sustainability of STEM intervention programs through evaluation. *ASQ Higher Education Brief* (Special Issue on STEM), 5(1).
- Gomez-Lanier, L. (2016). The effects of an experiential service-learning project on residential design student attitudes toward design and community. *International Journal for the Scholarship of Teaching and Learning*, 10(2), 1–7.
- Hennessy, S. (1993). Situated cognition and cognitive apprenticeship: Implications for classroom learning. *Studies in Science Education*, 22(1), 1–41.
- Hoffman, J. L., & Bresciani, M. J. (2012). Identifying what student affairs professionals value: A mixed methods analysis of professional competencies listed in job description. *Research & Practice in Assessment*, 7, 26–40.
- Jacobson, W. (2015). Sharing power and privilege through the scholarly practice of Assessment. In S. K. Watt (Ed.), *Designing transformative multicultural initiatives: Theoretical foundations, practical applications, and facilitator considerations* (pp. 89–102). Sterling, VA: Stylus.
- Jones, S. R., & Abes, E. S. (2004). Enduring influences of service-learning on college students' identity development. *Journal of College Student Development*, 45(2), 149–166.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Miles, M. G., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed). Los Angeles, CA: Sage.
- National Service-Learning Clearinghouse (2007). *What is service-learning?*

- Newhart, D. W. (2015). To learn more about learning: The value-added role of qualitative approaches to assessment. *Research & Practice in Assessment*, 10, 5–11.
- Nigro, G., & Wortham, S. (1998). Service-learning through action research. In R. G. Bringle & D. K. Duffy (Eds.) *Collaborating with the community: Psychology and service-learning*. Washington DC: American Association for Higher Education.
- Noyes, E., Darby, A., & Leupold, C. (2015). Students' emotions in academic service-learning. *Journal of Higher Education Outreach and Engagement*, 19(4), 63–84.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford: Oxford University Press.
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: Sage.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: SAGE.
- Schuh, J. H., & Associates. (2009). *Assessment methods for student affairs*. San Francisco, CA: Jossey-Bass.
- Stocking, V. B., & Cutforth, N. (2006). Managing the challenges of teaching community-based research courses: Insights from two instructors. *Michigan Journal of Community Service Learning*, 13(1), 56–65.
- Suskie, L. (2009). *Assessing student learning: A common sense guide* (2nd ed.). San Francisco, CA: Jossey-Bass.