



Assessing Student Learning Outcomes in Student Affairs: A Primer and Mixed-Methods Strategies

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Contemporary approaches to assessing student learning outcomes (SLOs) in student affairs (SA) at institutions of higher learning are reviewed. Mixed-methods involving stakeholders in assessment are emphasized as the emerging state of the art in SA assessment strategies, with attention paid to diversity and cultural competence in assessing policies, programs, and services. Innovative methods utilize student reflections, combined with direct measures of learning, to determine the impact of individual differences and the overall university experience on a variety of SLOs.

Student learning outcomes (SLO) assessment has evolved as standard practice in higher education over several decades, with attention increasingly moving towards assessment of SLOs within the realm of student affairs (SA) (Kezar, 1998; Penn, 2011a, 2011b; Smith, Szelest, & Downey, 2004). Researchers cite a range of reasons for this trend, including satisfaction of accreditation standards (Price & Randall, 2008; Smith et al., 2004), expectations for accountability (Henning, Mitchell, & Maki, 2008; Kuh, 2009; Penn, 2011a, 2011b; Shephard, 2009; Smith et al., 2004;), and informed decision making with regards to institutional policies and practices (Schuh & Upcraft, 1998; Steedle, Kugelmass, & Neweth, 2010). While student satisfaction surveys have been employed to address these concerns for decades, such assessments fall short in evaluating a range of SLOs, particularly in the arena of SA (Bresciani, 2002; Schuh & Upcraft, 1998; Smith et al., 2004). Contemporary approaches to assessing SLOs within SA

require consideration of the impact of student engagement and the college experience (Kuh, 2009; Reason, Terenzini, & Domingo, 2006; Terenzini & Reason, 2005), in conjunction with the four communities of scholarship identified by Bliming (2009): student learning, development, services, and administration. Furthermore, SA professionals must be skilled in identifying and implementing evidence-based mixed-methods approaches that best meet assessment needs (Smith et al., 2004). To be successful, SA professionals also need to collaborate with partners across the university, as well as external organizations, in the ongoing assessment of institutional policies practices (Bers, 2008; Henning et al, 2008; Siefert, 2011). Finally, SA professionals must take a multicultural approach to assessment, maintaining sensitivity to a range of cultural issues to ensure meaningful services for a diverse student body (Pope, Reynolds, & Mueller, 2004).

Developing an Assessment Plan

A sound assessment plan begins with identifying SLOs relevant to programs and services, where internal and external stakeholders are involved in the process (Henning et al, 2008; Schuh & Upcraft, 1998; Shephard, 2009; Smith et al., 2004). Bresciani (2002) recommends affirming the program's mission, goals, and objectives, then identifying specific measurable SLOs. Because individual differences combined with student engagement, classroom experience, authentic learning opportunities, and interpersonal experiences collectively influence SLOs, a range of affective and cognitive SLOs must be assessed to gain a comprehensive picture of the effects of program and policy on student development (Astin & Antonio, 2012; Chickering & Reisser, 1993; Duque & Weeks, 2010; Reason et al., 2006; Schuh & Upcraft, 1998). SA assessment professionals can then access evidence-based resources to draw from to inform the process of identifying and defining a range of SLOs. Henning et al. (2008) offer a set of 13 standards to guide the assessment process that can be used across the university to accomplish assessment goals. The Assessment Skills and Knowledge (ASK) Standards can also be used to assess SLOs between universities, as they make standardization, comparison, and benchmarking possible in SA (Henning et al., 2008). Schuh and Upcraft (1998) offer a summary of general SLOs including complex cognitive skills, knowledge acquisition, intrapersonal and interpersonal development, practical competence, and civic responsibility that can be used as a guide to identifying specific SLOs. Once SLOs are identified, SA professionals

can develop a plan to assess the impact of services and administration on student learning and development outcomes.

Mixed-methods Approach

Contemporary practice requires design and implementation of evidence-based, mixed-methods to ensure we are engaging in effective assessment (Penn, 2011a; Schuh & Upcraft, 1998). Quantitative measures are useful tools in gathering accurate, broad information from a large sample of participants while allowing the application of statistical methods in determining the significance of results (Schuh & Upcraft, 1998). Such measures are cheaper and easier to implement, particularly in large university settings, but are not immune to the typical limitations of self-report data, most notably as indirect measures of SLOs (Pike, 2011). Nonetheless, quantitative measures are integral to assessment, and several measures have been consistently effective in addressing SLOs within the realm of SA. In particular, several validated measures are available for indirect assessment of affective and developmental SLOs such as the National Survey of Student Engagement (NSSE), the Community College Survey of Student Engagement (CCSSE), the College Student Experience Questionnaire (CSEQ), the Student College Inventory (CSI), and the Student Self-Perceived Gains Scales (SSGS) (Cheng, 2001; Kuh, 2009; Reason et al., 2006).

It is crucial SA assessment professionals develop expertise not only with regards to selection of validated instruments, but in the development and adaptation of measures. Often existing validated measures are inappropriate for the SLOs in question, or the unique nature of the institution itself. The assessment process benefits from such expertise, as well as collaboration between SA and external partners in developing measures of SLOs. The state of the art also requires SA professionals utilize technologically advanced data collection techniques, such as online surveys. Contemporary electronic data collection methods afford access to a greater number of university students, and are cost and time-efficient in that they eliminate the need for printing and mailing, as well as data entry (Rubin & Babbie, 2011).

Qualitative measures are also vital to the effective assessment of SLOs, as qualitative data afford the analysis of in-depth information and are often flexible in their administration (Creswell, 1998; Schuh & Upcraft, 1998). Furthermore, qualitative data allow for triangulation

of findings in mixed-methods approaches which strengthens the credibility of findings (Fitzpatrick, Sanders, & Worthen, 2004). In particular, Brown, Stevens, Troiano and Schneider (2002) discuss the utility of grounded theory in addressing complex research questions where little is known about a phenomenon. The authors acknowledge increasingly sophisticated questions posed by stakeholders do not lend themselves to traditional research methods, since there lacks a basis for analysis and comparison. A grounded theory approach is therefore valuable to assessment in SA, as student experiences and interactions within the university environment increase in complexity (Brown et al., 2002). Additional qualitative measures include focus groups and interviews, which yield in-depth information to help determine if student needs are being met by institutional programs and services (Fitzpatrick et al., 2004; Rubin & Babbie, 2011; Schuh & Upcraft, 1998).

SA professionals also need to incorporate existing institutional data in state of the art assessment practices as well. Grade point average, enrollment, and retention rates are readily available and serve as indirect indicators of cognitive and developmental SLOs (Bers, 2008). Direct measures of SLOs are also required, as they provide data that directly reflects student acquisition and mastery of skills and knowledge (Price & Randall, 2008). These measures include the actual products of student coursework, such as quizzes, exams, portfolios and research papers. Using appropriate sampling techniques, we can randomly select and analyze student coursework from a variety of disciplines to evaluate cognitive and development SLOs in conjunction with affective SLOs within the realm of SA. In addition, SA can implement standardized measures of general SLOs for accountability and decision making purposes. Research supports the use of instruments such as the Collegiate Assessment of Academic Proficiency (CAAP), the Collegiate Learning Assessment (CLA), and the Educational Testing Service Proficiency Profile (ETSPP) as validated measures of student achievement. However, questions still remain regarding comparability and construct validity (Steedle, et al., 2010). Nonetheless, implementation of such measures provides additional data for the assessment of SLOs, as student affairs professionals can merge the information with data collected from Student Affairs assessment efforts (Luther & Golian-Lui, 2013).

Analysis of SLOs

Once data collection methods have been established, identification of statistical tests of significance for quantitative data (Fitzpatrick et al., 2004), reliability and factor analyses for newly developed scales (Cheng, 2001) and appropriate qualitative analysis methods must be identified (Creswell, 1998; Fitzpatrick et al., 2004; Rubin & Babbie, 2011). Appropriate coding schemes based on literature relevant to SLOs in question need to be identified in advance, and grounded theory employed in developing coding schemes for new areas of inquiry (Brown et al., 2002). A content analysis protocol, including plans for inter-rater reliability analysis, is necessary when examining textual data to ensure data are coded in a timely and objective manner (Fitzpatrick et al., 2004).

Interpretation and Dissemination of Results

The state of the art in assessment requires evidence-based guidelines in the interpretation process to demonstrate credibility and ensure positive impacts on programs and policies. SA must evaluate whether the goals of the assessment have been achieved, and involve stakeholders in the process to ensure accuracy while bringing multiple perspectives to interpretation. Furthermore, interpretation should encompass all data sources to allow for triangulation and evaluation of contradictory evidence (Creswell, 1998; Fitzpatrick et al., 2004). Finally, interpretation of the data must be guided by well-developed research questions and hypotheses grounded in educational-psychological theories.

Too often, assessment results are not communicated effectively to relevant stakeholders and members of the community in general (Schuh & Upcraft, 1998). The state of the art requires not just presentation of clear results in light of assessment purposes, but also recommendations for policy and program implementation in a format tailored to each audience of intended dissemination (Fitzpatrick et al., 2004; Henning et al., 2008; Penn, 2011b; Schuh & Upcraft, 1998). Effective dissemination practices provide concrete evidence with regards to accreditation and accountability, and allow stakeholders to implement policies and programs based on data-driven decisions. Finally, it is important not only to inform stakeholders and the local community, but to make results, as well as our data, available across institutions for benchmarking purposes.

Diversity, Collaboration, and Effective Assessment

The United States is becoming an increasingly diverse nation, and our colleges and universities are mirroring this trend. Therefore, the state of the art in assessment of SLOs requires SA professionals consider ethnic, religious, class, sexual orientation, age and ability differences in assessment practices (Pope et al., 2004). Therefore the development of cultural competence is integral to the assessment process and understanding the ways in which cultural differences influence developmental outcomes (Rubin & Babbie, 2011). Contemporary practices also highlight the need for SA to focus on SLOs that consider the impact of spiritual factors, how they are influenced by one's culture, and how they are transformed by the college experience (Love, 2001; Love & Talbot, 1999). Assessment approaches considering these factors allow for holistic assessment of SLOs and consideration of a broad spectrum of cognitive, affective outcomes.

To be effective, SA professionals also need to form partnerships with various organizations within the university to effectively assess a variety of SLOs. In doing so, SA professionals must take the lead in developing, implementing and disseminating assessment projects, as well as mobilizing staff to carry out assessment activities, while seeking expertise as appropriate (Schuh & Upcraft, 1998). To be successful, SA needs to coordinate partnerships with offices that span student learning, development, services, and administration (Bliming, 2009) using ASK Standards (Henning et al., 2008) as a guide to accomplishing a university-wide effort in assessment.

SA's partnership with Academic Affairs (AA) is vital to the assessment process, as both units benefit from sharing assessment activities that typically focus on the same SLOs (Schuh, 1999). Effective partnerships between SA and AA foster faculty "buy-in" and participation in the assessment process. Adhering to principles offered by Schuh (1999) combined with ASK Standards (Henning et al., 2008), SA can mobilize faculty to engage in a collaborative effort to identify SLOs and associated artifacts of student learning, develop rubrics, and aid in the administration of assessments of shared SLOs (Banta, 2004; Ribera, Fernandez, & Gray, 2012). Key units can work together to incorporate the use of embedded questions in course exams to assess cognitive SLOs (Price & Randall, 2008), making the data collection process easier and more efficient, further increasing faculty buy-in. A solid partnership also allows for the development of evidence-based assessment practices in advisement, particularly with efforts

aimed at retention and identifying at-risk students (Smith et al., 2004). SA and AA can also work together under a shared framework to assess the impact of college in the first year and expand the process to examine the entire college experience (Terenzini & Reason, 2005). Finally, an effective partnership coupled with appropriate dissemination of assessment results allows SA and AA professionals to engage faculty in professional development opportunities with regards to the assessment process.

Since institutional data is a necessary component for effective assessment, forming a partnership with the Office of Institutional Research (OIR) plays a dynamic role in providing data and accomplishing assessment goals. The OIR can also serve as a liaison to external data sets and offer SA staff expertise in research design and interpretation. OIR professionals can engage in regular dissemination of institutional projects with other colleges and universities. Such practices allow for professional development opportunities and collaboration (Bers, 2008), and contribute to benchmarking, as well as evaluation of policies and programs in comparison to national standards (Penn, 2011a; Schuh & Upcraft, 1998).

In addition, SA professionals must work collaboratively with external partners to achieve assessment goals. It is often the case SA professionals turn to established, validated measures of SLOs, and at times measures need to be tailored to meet the institution's needs. An effective partnership with external partners can provide assistance in this area when SA lacks resources to independently develop such measures (Bresciani, 2002). External partners can also aid in effective dissemination and benchmarking activities, leading to improvements in university policies and programs (Schuh & Upcraft, 1998). Therefore, collaboration with internal and external partners is a vital component of the state of the art in SA assessment.

Conclusion

The state of the art of assessing SLOs in SA requires professionals adhere to contemporary, evidence-based practices and standards that include mixed-methods approaches to the assessment of a range of SLOs. It is crucial SA professionals collaborate in a university-wide assessment effort along with external partners to inform the decision making process, to meet standards of accreditation, and answer calls for accountability at the local and national level. In doing so, SA must consider issues of cultural diversity, spirituality, and the overall

college experience, and how these factors affect a wide range of developmental outcomes. Consideration of these factors allows SA to conduct objective, state of the art assessment processes that effectively inform institutional practices, and improve learning experiences and opportunities for a diverse student body.

References

- Astin, A. W., & Antonio, A. L. (2012). *Assessment for excellence* (2nd ed.). New York, NY: Rowman & Littlefield.
- Banta, T. W. (2004). Assessing outcomes of undergraduate research programs. *Assessment Update*, 16(4), 3; 15.
- Bers, T. H. (2008). The role of institutional assessment in assessing student learning outcomes. In D. G. Terkla (Ed.), *Institutional research: More than just data* (New Directions for Higher Education, No. 141, pp. 31-39). San Francisco, CA: Jossey-Bass.
- Bliming, G. S. (2009). A legacy of scholarship in which every student affairs professional. *Journal of College Student Development*, 50(6), 712-714.
- Bresciani, M. J. (2002). External partners in assessment of student development and learning. In M. B. Snyder (Ed.), *Student affairs and external relations* (New Directions for Student Services, No. 100, pp. 97-110). San Francisco, CA: Jossey-Bass.
- Brown, S. C., Stevens, Jr., R. A., Trioano, P. F., & Schneider, M. K. (2002). Exploring complex phenomena: Grounded theory in student affairs research. *Journal of College Student Development*, 43(2), 1-11.
- Burkard, A., Cole, D., Ott, M., & Stoflet, T. (2005). Entry-level competencies of new student affairs professionals: A Delphi study. *Journal of Student Affairs Research and Practice*, 42(3), 545-571.
- Cheng, D. X. (2001). Assessing student collegiate experience: Where do we begin? *Assessment & Evaluation in Higher Education*, 26(6), 525-538.
- Chickering, A. W., & Reisser, L. (1993). The seven vectors: An overview. In *Education and Identity* (pp. 43-52). San Francisco, CA: Jossey-Bass.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Duque, L. C., & Weeks, J. R. (2010). Towards a model and methodology for assessing student learning outcomes and satisfaction. *Quality Assurance in Education*, 18(2), 84-105.
- Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2004). *Program evaluation: Alternative approaches and practical guidelines* (3rd ed.). New York, NY: Pearson.

- Henning, G. W., Mitchell, A. A., & Maki, P. L. (2008). The assessment skills and knowledge standards: Professionalizing the work of assessing student learning and development. *About Campus*, 13(4), 11-17.
- Kezar, A. J. (1998). Assessing learning outcomes. *About Campus*, 3(4), 28-29.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683-706.
- Love, P. G. (2001). Spirituality and student development: Theoretical connections. In M. A. Jablonski (Ed.), *The implications of student spirituality for student affairs* (New Directions for Student Services, No. 95, pp. 7-16). San Francisco, CA: Jossey-Bass.
- Love, P. G., & Talbot, D. (1999). Defining spiritual development: A missing consideration for student affairs. *Journal of Student Affairs Research and Practice*, 37(1), 361-375.
- Love, P. G., Bock, M., Jannarone, A., & Richardson, P. (2005). Identity interaction: Exploring the spiritual experiences of lesbian and gay college students. *Journal of College Student Development*, 46(2), 193-209.
- Luther, M., & Golian-Liu, L. (2013, October). *Discovering library value: Collaboration and the merger of institutional data sets*. Presentation at the 4th Annual Emory University Student Affairs Conference, Emory University, Atlanta, GA.
- Penn, J. D. (2011a). The case for assessing complex general education student learning outcomes. In J. D. Penn (Ed.), *Assessing complex general education student learning outcomes* (New Directions for Institutional Research, No. 149, pp. 5-14). Hoboken, NJ: Wiley.
- Penn, J. D. (2011b). Future directions for assessing complex general education student learning outcomes. In J. D. Penn (Ed.), *Assessing complex general education student learning outcomes* (New Directions for Institutional Research, No. 149, pp. 109-117). Hoboken, NJ: Wiley.
- Pike, G. R. (2011). Using college students' self-reported learning outcomes in scholarly research. In S. Herzog & N. A. Bowman (Eds.), *Validity and limitations of college student self-report data* (New Directions for Institutional Research, No. 150, pp. 41-58). Hoboken, NJ: Wiley.
- Pope, R. L., Reynolds, A. L., & Mueller, J. A. (2004). *Multicultural competence in student affairs*. San Francisco, CA: Jossey-Bass.

- Prebble, T., Hargraves, L., Leach, K., Suddaby, G., & Zepke, N. (2004). *Impact of student support services and academic development programmes on student outcomes in undergraduate tertiary study: A synthesis of the research*. Wellington, New Zealand: Ministry of Education.
- Price, B. A., & Randall, C. H. (2008). Assessing learning outcomes in quantitative courses: Using embedded questions for direct assessment. *Journal of Education for Business*, 83(5), 288-294.
- Reason, R. D., Terenzini, P. T., & Domingo, R. J. (2006). First things first: Developing academic competence in the first year of college. *Research in Higher Education*, 47(2), 149-175.
- Ribera, T., Fernandez, S., & Gray, M. (2012). Considering the scholarship of teaching and learning in student affairs. *About Campus*, 16(6), 25-28.
- Rubin, A., & Babbie, E. (2011). *Research methods for social work* (7th ed.). Belmont, CA: Brooks/Cole.
- Rucker, M. L., & Thomson, S. (2003). Assessing student learning outcomes: An investigation of the relationship among feedback measures. *College Student Journal*, 37(3), 400-404.
- Schroeder, C. C. (1996). The Student Learning Imperative: Implications for Student Affairs. *Journal of College Student Development*, 37(2), 118-122.
- Schuh, J. H. (1999). Guiding principles for evaluating student and academic affairs partnerships. In J. H. Schuh & E. J. Whitt (Eds.), *Partnerships between academic and student affairs* (New Directions for Student Services, No. 87, pp. 85-91). San Francisco, CA: Jossey-Bass.
- Schuh, J. H., & Upcraft, M. L. (1998). Facts and myths about assessment in student affairs. *About Campus*, 3(5), 2-8.
- Shephard, K. (2009). e is for exploration: Assessing hard-to-measure learning outcomes. *British Journal of Educational Technology*, 40(2), 386-398.
- Siefert, L. (2011). Assessing general education learning outcomes. *Peer Review*, 13(4), 9-11.
- Smith, J. S., Szelest, B. P., & Downey, J. P. (2004). Implementing outcomes assessment in an academic affairs support unit. *Research in Higher Education*, 45(4), 405-427.
- Steedle, J., Kugelmass, H., & Neweth, A. (2010). What to they measure? Comparing three learning outcomes assessments. *Change*, 42(4), 33-37.

Terenzini, P. T., & Reason, R. D. (2005, November). *Parsing the first year of college: A conceptual framework for studying college impacts*. A paper presented for the annual meeting of the Association for the Study of Higher Education, Philadelphia, PA.