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Learning Outcomes for Post-Secondary

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There is general consensus that whether the United States remains economically competitive will depend in part on the ability of our postsecondary institutions to equip graduates with the necessary tools to adapt to the global workplace. As a result, institutions of higher education are increasingly being asked to provide evidence, in the form of student learning outcomes, that they are sufficiently preparing graduates to meet the demands of the 21st century.

What is a learning outcome?

A learning outcome is a specific skill, behavior, or level of knowledge that students are expected to demonstrate after a period of instruction (The World Bank Group, 2011). Learning outcomes are typically measured to assess the degree to which students have mastered what they are expected to have learned. These measurements in turn provide evidence of an institution's success in achieving its instructional goals and targets. Such evidence can come in many forms including standardized assessments, portfolios, simulations, and demonstrations.

Why measure learning outcomes?

Historically, we have tended to make assumptions about the educational quality of our postsecondary institutions based on reputation and perhaps the standardized test scores of its incoming students. However, no matter how talented a given institution's faculty and student body may be, there is no reliable way to provide evidence of educational quality without assessing learning outcomes (Millett, Stickler, Payne, & Dwyer, 2007). Learning is a continuous process, and non-mastery of skills at a given point in time can create obstacles to successful performance in the future. Student learning outcomes data

enable educators and policy makers to identify what is working and what is not and to use this information to improve pedagogy, and curriculum, which in turn should lead to better student learning outcomes.

How do we best assess learning outcomes?

The most fundamental consideration when establishing the quality of an assessment is validity (Millett et al., 2007). Validity refers to the degree to which accumulated evidence supports the interpretation of the assessment results. According to the Standards for Educational and Psychological Testing (American Educational Research Association [AERA], American Psychological Association, & National Council on Measurement in Education [NCME], 1999), validity is established by gathering evidence to provide "a sound scientific basis" for interpreting the assessment results as proposed by the developer and/or user. Emphasis is placed on the quality, rather than quantity, of evidence.

Regularly assessing learning outcomes mastery will enable postsecondary institutions to evaluate the efficacy of their instructional strategies and provide evidence that graduates are equipped to succeed.

The first step in the process of accumulating evidence is to determine the specific skills, behaviors, or knowledge levels that an institution's graduates are expected to demonstrate. Once those skills, behaviors and knowledge levels have been defined, the next step is to determine whether the current battery of assessments provides adequate evidence that instructional goals are being met, and to develop additional assessments if necessary. The final step in the process is to establish an ongoing assessment system whereby the students' skills, behavior, and knowledge levels are frequently measured, those measurements are used to provide evidence that the institution's goals are being

met, and deficiencies are noted and addressed in what amounts to a cycle of continuous improvement.

Conclusion

For the United States to remain economically competitive, our postsecondary institutions must adequately prepare our students to succeed in the global economy. In order to gauge whether or not students are graduating with adequate preparation, the institutions must first identify the learning outcomes that graduates will need to meet 21st century workforce demands. It is then incumbent upon the institutions to regularly assess students' mastery of identified learning outcomes. Regularly assessing learning outcomes mastery will enable postsecondary institutions to evaluate the efficacy of their instructional strategies and provide evidence that graduates are equipped to succeed in the 21st century.

References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (1999). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- Millett, C.M., Stickler, L. M., Payne, D.G., & Dwyer, C.A. (2007). *A Culture of Evidence: Critical Features of Assessments for Postsecondary Student Learning*. Educational Testing Service.
- The World Bank Group. (2011). *What are learning outcomes?* Retrieved from [http://web.worldbank.org/WBSITE/EXT](http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/)

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