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Effective Course Design for Student Success

Kristin A. Jones

Abstract

Higher education has endured great changes since the turn of the 21st century, including changes in expectations for curriculum design, implementation, course delivery, and student experience. The emphasis is no longer on acquiring credentials until the minimum requirement is met; the emphasis is now on evidence of student learning and achievement of industry-specific outcomes. For this, many institutions are developing new innovative programs in a format that shifts the emphasis from what is being taught to what is actually learned. Students are provided with outcomes they must meet rather than inputs they will receive. This chapter will focus on how to write effective competencies and outcomes to ensure students have a clear understanding of what they must demonstrate to gain the credentials and degrees they seek.

Effective Course Design for Student Success

Higher education has endured great changes over since the turn of the 21st century, including changes in expectations for curriculum design, implementation, course delivery, and student experience. Emphasis on degree attainment has shifted from just obtaining credentials. As James Merisotis from the Lumina Foundation stated, "What students need and what our global economy and democratic society increasingly demand- is the learning those credentials signify, the highly developed knowledge and skills that postsecondary education provides" (Adelman, Ewell, Gaston, & Geary-Schneider, 2014, p. 2). No longer is the emphasis on simply counting credentials until students meet the minimum requirements. The emphasis now is on the credentials themselves.

To keep with these changes, colleges and universities are shifting from a more traditional instructor-centric to a more student-centric format, which emphasizes the demonstration of learning, not simply the completion of hours. For this, many institutions are developing new, innovative programs in a format that shifts the emphasis from what is being taught to what is actually learned. There is an emerging practice of delivering content through modes such as Competency-based Education (CBE), which emphasizes the student-centric approach and focuses on individual demonstration of competence.

There are three main facets of CBE: knowledge, skills, and performance. In many programs, knowledge is emphasized while skills and performance are less emphasized. Yet, skills and performance are essential for workforce readiness, and intentionally including these components in CBE is essential to applying new knowledge. This chapter will include a discussion on all three facets as equally important. In addition, suggestions will be shared for designing high quality competencies, ensuring that all three facets are included. A brief overview is included on how to write quality competencies and map these competencies to program learning outcomes for optimal program progression, increasing student success.

Well-crafted competencies are designed with the end in mind. The competencies clearly state what proficiencies students need to demonstrate to show that they have met the standards. Reciting information and knowledge as a performance measure is becoming less accepted in academic and industry circles. Employers are looking for individuals who can succeed in the modern and global workforce; who can take the learning they have acquired and successfully transfer it to a workforce setting; and who can implement their learning into new situations outside of a classroom setting. Well-written competencies use active language; describe the knowledge and skills that must be applied; include clear performance criteria; and allow for personalization and direct implementation outside the classroom setting.

Competencies that incorporate all three facets – knowledge, skills, and performance – ensure that students have what they need to be successful in the workforce. It is important that all development in CBE ensures each of these facets is represented throughout the program and competencies set for each facet build upon each other to ensure continual development of learning towards the standard set. Graphic 1 gives examples of each facet and the importance of all three working together in a learner's development.

Graphic 1:

Three Facets of CBEs: Knowledge, Skills, and Performance

Knowledge	Skills	Performance
Vocabulary Theories Historical information	Synthesize research Determine best practices Develop plan of action Research-based support	Implement new learning Gather data on effectiveness Analyze results Reflect on process Determine next steps
Demonstration	**Demonstration**	**Demonstration**
Test method Written paper	Research reports Videos Lesson plans Portfolio of artifacts	Videos Presentations Student work samples Portfolios Leading on-site trainings

Well-written competencies that include active verbs support student success. One valuable resource to have on hand is a copy of *Bloom's Taxonomy*, *Bloom's Revised Taxonomy*, or, if in an online program, *Bloom's Digital Taxonomy* (Churches, 2009). Simply put, "You cannot understand a concept if you do not first remember it, similarly you cannot apply knowledge and concepts if you do not understand them. It's a continuum from lower order thinking skills (LOTS) to higher order thinking skills (HOTS)" (Churches, 2009, para. 8). Students must develop learning through the process of developing higher order skills that build from the lower order knowledge.

When writing competencies, instructors can align these towards the appropriate level of Bloom's for the standard the student must meet. If there is a knowledge component, the instructor can use one of the lower levels like knowledge, remembering, understanding, and comprehension. As learning progresses, so should the level of demonstration. Well-designed competencies focus on higher levels of the framework. While the lower levels are vital for the process of building knowledge and skills, it is the higher levels which they demonstrate mastery in applying the knowledge and skills. This application of learning is the essential element to ensure workforce readiness.

For a full list of active verbs to help with developing competencies, one can search Bloom's on the web and locate numerous resources. Finding the list that is best for one's program is invaluable for developing effective competencies that logically build to program outcomes. Regardless of which version of Bloom's one uses, starting with an active verb is the key element to each competency. Some possibilities are included in Graphic 2.

Graphic 2

Sample Active Verbs for Bloom's Taxonomy Levels

Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
LOTS					HOTS
Relate	Summarize	Complete	Contrast	Justify	Plan
Describe	Paraphrase	Implement	Examine	Assess	Invent
List	Explain	Examine	Explain	Prioritize	Compose
Name	Discuss	Illustrate	Identify	Recommend	Design
Define	Compare	Classify	Categorize	Rate	Construct

Program outcomes are larger learning statements that indicate what the student must demonstrate upon completion of the program. Having clear and direct outcomes is just as viable as competencies in ensuring student success. Table 3 maps a series of competencies that aligns with a program outcome and a university learning goal. In this map we see how the competencies all start with active verbs and clearly indicate what the student must demonstrate to meet the program outcome. We also see the clear alignment from competencies to program outcome to, in this case, a university learning goal, providing a clear and well supported structure for the student.

Graphic 3:
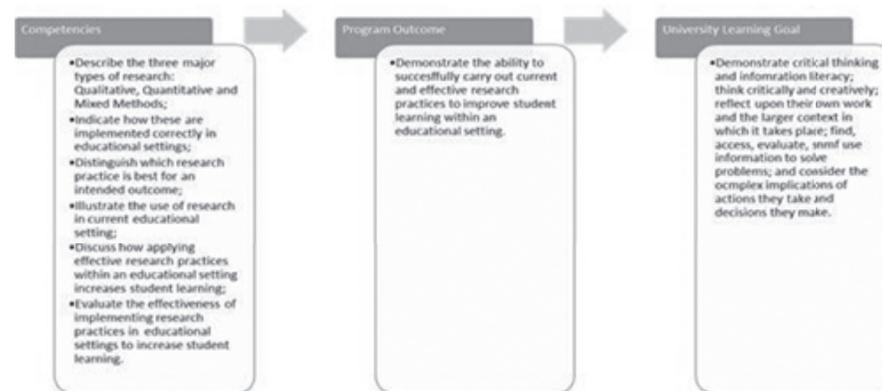
Conclusion

Twenty-first century learning impels great shifts for higher education and students earning degrees within it. Instructors are now asking, "What will my students demonstrate?" rather than "What will I teach?" when developing content for learning. The use of competencies switches the emphasis from memorization of content to implementation of learning in a new setting. This implementation piece is key to preparing workforce-ready individuals who must thrive in corporations that are more dynamic and global than ever before. Completing a program that uses a map to

align competencies with learning outcomes enables students to develop learning paths that best fit their needs, all while ensuring they are developing the knowledge and skills necessary for workforce readiness.

References

Adelman, C., Ewell, P., Gaston, P., & Geary-Schneider, C. (2014). The degree qualifications profile: A learning-centered framework for what college graduates should know and be able to do to earn the associate, bachelor's and master's degree. *The Lumina Foundation*. Retrieved from http://www.luminafoundation.org/resources/dqp

Churches, A. (2009). Bloom's digital taxonomy. Retrieved from http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy