Competency-Based Education in Theory and Practice

Dr. Deborah M. Seymour
Assistant Vice President
Center for Education Attainment and Innovation
American Council on Education

Dr. Deborah Everhart
Associate Vice President for Strategic Partnerships
Blackboard
@Ariadne4444
Overview

Competency-based learning and education defined

Research and enhancing the dialogue
American Council on Education and Blackboard joint research collaboration

Results:
Definitions, dimensions, and descriptions
Analysis of the currency of higher education
What is a competency?

A competency is a specific **skill, knowledge, or ability** that is both observable and measurable.
What is Competency-Based Learning?

“What transitioning away from seat time, in favor of a structure that creates **flexibility**, allows students to progress as they **demonstrate mastery** of academic content, **regardless of time, place, or pace** of learning. Competency-based strategies provide flexibility in the way that credit can be earned or awarded, and provide students with **personalized learning** opportunities.”

-U.S. Dept. of Education
What is Competency-Based Education?

“Competency-based education (CBE) is an alternative to the credit hour-based system of credentialing. Student progress is based on demonstration of proficiency and/or mastery as measured through assessments and/or through application of credit for prior learning. In competency-based education programs, time is the variable and student competency mastery is the focus, rather than a fixed-time model where students achieve varying results. In competency-based education, as distinct from competency-based learning, the focus is on academic programs, practices, and policies.”

- Clarifying Competency Based Education Terms: A Lexicon
Potential benefits of competency based learning

• Focus on learning outcomes
• Learning activities and assessments aligned to outcomes
• Credit for prior and experiential learning
• Motivated and engaged students
• Efficient, flexible, and lower-cost credentials
• Increased student retention and completion rates
• Lifelong learners’ portable evidence of learning
• Employers’ visibility into graduates’ competencies
• Outcomes-based frameworks for continuous improvement
ACE/Blackboard Joint Research
## SWOT of Competency Based Education

### Strengths
- Focus on learning outcomes
- Flexible
- Transparent
- Paths for post-traditional students
- Potentially shorter time to completion
- Potentially lower costs for students

### Opportunities
- Options for workplace preparation & professional development
- Building lifelong learning pathways
- Opens options for alternative credentials & micro-credentials
- Valuing outcomes over inputs
- Educational reform & renewal

### Weaknesses
- Challenges for scalability
- Manual processes for mapping competencies to credit hours due to rigidly time-based SIS systems
- CBE students need different/more support
- Lack of understanding among stakeholders

### Threats
- Credit-hour based financial aid conflicts with competency based models
- Disaggregation of faculty roles may lead to resistance
- Possibilities for over-simplification
- Potential for cannibalization of traditional programs
American Council on Education and Blackboard

Mutual interest in:

• Credit for prior learning and credit mobility
• Serving post-traditional students
• Digital badging and alternative credentials
• Expanding CBE dialogue
ACE-Blackboard collaboration outcomes

- Published *Clarifying Competency Based Education Terms: A Lexicon*
- Leadership roundtables with CBE practitioners
- Blackboard blog series
- ACE publications
- Public Forum releasing research paper: *The Currency of Higher Education: Credits and Competencies*
The shape and depth of competency-based education (CBE) shift each time a college or university starts a CBE program, because each institution’s needs are different. Generally speaking, however, CBE programs distinguish themselves by “clearly defining and communicating what their graduates are required to know and be able to do,” according to a report for the National Institute for Learning Outcomes Assessment. What follows are examples of cross-sections of postsecondary elements meant to illustrate a spectrum of CBE, from the more traditional to the more experimental. While necessarily non-exhaustive, the illustration is meant to give a quick introduction to how learning and other aspects of college and university work can differ according to how much CBE is applied.

## What Competency-Based Education Looks Like

### More conventional

#### Educational Model
- Competencies embedded in courses
- Faculty and textbooks

#### Faculty Role
- Vertically integrated roles: Designing and teaching and assessing and advising

#### Learning Support
- Faculty-based advising

#### Technology
- Web enhancements to classroom-based course

#### Typical Students
- More traditional students
- May be employed part-time

#### Fee Structure
- Time-bound
- Pay per term or credit hour
- Title IV eligible

### “Middle of the Road”

#### Educational Model
- Some classes
- Unbundled content
- Competencies and assessments

#### Faculty Role
- Partially disaggregated roles: Designing and/or teaching and/or assessing and/or advising

#### Learning Support
- High level of coaching and mentoring at the institution or through a contracted service

#### Technology
- Online delivery

#### Typical Students
- Some postsecondary experience but no degree
- Some work experience
- School and work highly integrated

#### Fee Structure
- Fully competency based
- Title IV eligible with special approval

### Less conventional

#### Educational Model
- No formal classes
- Referrals to open educational resources
- Prior-learning assessment

#### Faculty Role
- Disaggregated roles: Designing or teaching or assessing or advising

#### Learning Support
- Online mentoring
- Informal learning groups

#### Technology
- Adaptive learning

#### Typical Students
- Nontraditional

#### Fee Structure
- Subscription model (all you can learn within a given time)
- Direct assessment
- Not Title IV eligible
Clarifying Competency-Based Education Terms
What’s in a name?
The need for definitions
Clarifying Competency Based Education Terms

- 94 terms defined
- 11 classifications
  - Overview
  - Competencies & Learning Outcomes
  - Assessment Processes
  - Evidence of Learning
  - Credentials
  - Badges
  - Instructional and Supporting Roles
  - Student Support
  - Regulations & Accreditation
  - Validation
Competency-Based *Education* (CBE)

Focus on institutions and educational programs

- Competencies and Learning Outcomes
- Credentials
- Instructional and Supporting roles
- Student Support
- Regulations and Accreditation
- Validation
Competency-Based *Learning* (CBL)

Focus on learners and learning processes

- Learning Processes
- Assessment Processes
- Evidence of Learning
- Badges
- Validation
CBE Competency Definitions and Frameworks

Focus on institutions and educational programs

- Competency
- Occupational Skills
- ONET
- Learning Outcomes
- Program Outcomes
- Institutional Outcomes
- Accreditation Standards
CBE Educational Structures: Credentialing

- Focus on institutions and educational programs

- Credentials
- Certificates and Degrees
- Stackable Credentials
- Credit for Prior Learning
Focus on institutions and educational programs

- Instructor
- Coach
- Assessor
- Advisor
- Tutor
- 360 Help and Support

CBE Educational Structures: Instructional Roles
Focus on institutions and educational programs

- Attendance
- Credit Hour
- Seat Time
- Title IV
- Direct Assessment
- Experimental Sites
- Accreditation
CBL Learning Processes

Focus on learners and learning processes

- Differentiated Learning
- Authentic Assessment
- Project-Based Learning
- Mastery
- Proficiency
- Levelling Up
CBL Badges and Portable Evidence of Learning

Focus on learners and learning processes

- Badges
- Micro-credentials
- Open Badge Standard
- Portable Evidence of Learning
- Badge Backpack
- Portfolio
- Profile
Digital Badges

Badges are a form of credential signifying a person’s achievement at some level of competency. Badges are issued by organizations to individuals who then use their badges as representations of accomplishment or achievement.
The Currency of Higher Education: Credits and Competencies
Credit-hour processes are likely to remain deeply embedded in post-secondary systems for some time, but there is ample opportunity for innovation with competencies as a parallel and complementary currency.
Credits *and competencies* both reflect important structures of value for diverse stakeholders:

- government agencies
- educational leaders and administrators
- faculty
- assessors
- students
- employers
Competencies provide representations of learning outcomes that are more flexible and transparent than credits.

Competencies are more prone to change over time than the fixed-unit representation of credit hours.
Implementing CBE practices in credit-hour environments is complex, but CBE faces fewer barriers and can more rapidly provide benefits to large numbers of students when outcomes-based approaches are compatible with credit-hour systems and processes.
Students need to know how they can evaluate the **quality** of CBE programs, but little structure is currently available to help students in this regard.
Employers are key stakeholders both in the definition of CBE credentials and in the credentials’ marketability.
Badges and other micro-credentials can be useful bearers of competencies achieved, and as employers begin to accept their value, they can become part of the framework for competency exchange value.
Realizing the potential of competency based learning

• Focus on learning outcomes
• Assessments aligned to outcomes
• Credit for prior learning
• Motivated and engaged students
• Efficient, flexible, and lower-cost credentials
• Increased student retention and completion rates
• Lifelong learners’ portable evidence of learning
• Employers’ visibility into graduates’ competencies
Related BbWorld Sessions

CBE in Action: Implementing in Blackboard Learn
Wednesday, 4:15 - 5:00 (Maryland B)

Planning for a Competency-based Training program
Thursday, 8:00 - 8:45 (Baltimore 1 & 2)

Increasing Student Engagement with Digital Badges
Thursday, 1:00 - 1:45 (National Harbor 12 & 13)
Thank you!

Contact the researchers:
Deb Seymour (ACE) dseymour@acenet.edu
Karen Yoshino (Bb) karen.yoshino@blackboard.com
Deb Everhart (Bb) deverhart@blackboard.com, @Ariadne4444

American Council on Education: http://www.acenet.edu/

CBE Lexicon, Research Paper, and Blogs: http://blog.blackboard.com/