Introduction to Competency-based Education

Presenters: Marilyn Olsen and Mona Yanacheak
Objectives:

Understand how competency-based education

- Promotes higher levels of engagement, application and analysis
- Goes beyond the constraints of seat time, location and content area
- Incorporates skills for 21st century success
- Creates a personalized learning system
Three Lenses

K-12 Transition to a Competency-Based Education

Envisioning the Impact of Transitioning Students from CBE to the Community College

Advocating for CBE at the Postsecondary Level
K-12 Transition to a Competency-Based Education

Iowa’s Journey
• 2010  State Board Priority
• 2011  State Guidelines on CBE
  o  Principles
  o  Definitions
  o  Examples
• 2011  Governor’s Blueprint on Education
• 2011  CBE Forum
A Snapshot of Competency Education State Policy Across the United States

- Advanced States
- Developing States
- Emerging States
- No Policy
Policy Issues

More Children

Legislative: Code changes require legislative action

▪ Eliminate the Carnegie unit (2012)

▪ Teach more than one course at a time in the same room (2012)

▪ Unrestricted credit earned before 9th grade (2014)
Policy Issues

More Children

- **State Department:**
  Chapter 12 (administrative rule)

- **Local District:** Local School Board
  Definition of Unit
  Graduation Requirement
K-12 Transition to a Competency-Based Education

- CBE Principles
- Characteristics of CBE
- License and Endorsement
What High School Will Look Like:

Iowa BIG: Cedar Rapids Alternative High School

https://www.youtube.com/watch?v=xpRhalH-Uvc
“the mantra from the Harvard education expert Tony Wagner that the world doesn’t care anymore what you know; all it cares ‘is what you can do with what you know’...”

Who do we serve?

Changing Profile of Learners
Economic Pressures
High Demand for Skilled Workforce
Significant Learning Outside of Academia
What would the implications be at the community college level if the K-12 educational system currently in place would shift to a competency-based educational model?
Advocating for CBE at the Postsecondary Level

https://www.youtube.com/watch?v=ILOyaI5W0xA
FIGURE 1
A conceptual learning model

New Reporting Mechanism

You have completed 19 criteria, towards 32 total criteria.
You have completed 22 of 40 criteria.
You have completed 5 assignments, out of 10 total assignments.

You have 6 competencies in this course:

- Competency 1: Examine the basic business models for e-business. More >>
  - 2 of 2 criteria for BASIC

- Competency 2: Relate the importance of e-business infrastructure to the economic impact of a business. More >>
  - 2 of 6 criteria for BASIC

- Competency 3: Examine the relationship of basic e-business strategies to business success. More >>
  - 1 of 2 criteria for PROFICIENT

- Competency 4: Apply effective e-business planning and implementation. More >>
  - 1 of 4 criteria for Distinguished

- Competency 5: Develop a technology and management e-business plan. More >>
  - 11 of 14 criteria for Distinguished

- Competency 6: Evaluate the management implications of e-business. More >>
  - 3 of 4 criteria for NON-PERFORMANCE
Critics of Competency-Based Education

“Cheap version of a real education...”

“It is too flexible in terms of the kinds of learning accepted...”

“Exacerbates class and race-based inequalities...”

“Transfer to a different community college or 4-year institution...”
Why should we care

Should more kids skip college for workforce training?

http://blogs.edweek.org/edweek/on-air-video-blog/2016/02/can_vocational_schools_be_alternative_to_college.html?cmp=eml-enl-eu-news2
Federal Support of CBE

- Revised definition of “attendance” and “satisfactory academic progress”
- Separated the financial aid from traditional time-based requirements such as the semester, quarter or credit hour
Federal Support of CBE

- Students may be eligible for Title IV funds (federal student loans & PELL grants) - allowing community colleges to offer financial aid to students whose progress is determined by direct assessment rather than credit hours*
  - Must apply for approval from the U.S. Department of Education
  - Must demonstrate how equivalencies are determined between credit hours and direct assessment methods
  - Must get approval for these programs from their accrediting body
  - Financial aid may only be awarded for learning that takes place under the supervision of the current institution
Reducing costs of time and money

Adapt the way credentials are earned & reported

Provide a more realistic evaluation of skills of job candidates

http://www.stanford2025.com/axis-flip/
What Community Colleges Need to Move this Work Forward

- Ensure strong leadership and vision.
- Develop a system of reliable assessments.
- Rethink the traditional models for staffing and courses.
- Establish pathways to other degree programs or careers.

CAEL, 2012 Competency-Based Degree Programs in the U.S.
Postsecondary Competency-Based Degree Programs Must:

- Be undertaken with purpose
- Ensure competencies and assessments are well defined to ensure mastery
- Support students’ individualized instruction/learning
- Reconstruct the role of the instructor
  - guide
  - tutor
  - facilitator
<table>
<thead>
<tr>
<th>Intended Program Outcomes</th>
<th>Hallmarks</th>
<th>Key Assessment Tasks</th>
<th>Core Concepts, Issues, and Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>What must the learner be able to do as a result of this program?</td>
<td>Which SUS Hallmarks are</td>
<td>What key assessment task(s) will provide evidence that the learner can demonstrate</td>
<td>What core concepts, issues, and skills must the learner acquire to</td>
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<td></td>
<td>addressed by this</td>
<td>proficiency in this program outcome? In which course is the task embedded?</td>
<td>demonstrate proficiency in program outcomes?</td>
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<td>program outcome?</td>
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<td>Design, implement, secure, and maintain databases that meet user requirements for both</td>
<td>H6=TECH, H5=CRIT, H3=INFO,</td>
<td>(Assessment Task)</td>
<td>(Concepts)</td>
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<td>transaction processing and data warehouses</td>
<td>H8=QUAN</td>
<td>Database design and implementation project</td>
<td>Database applications</td>
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<td>Secure applications and reports</td>
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<td>Design, develop, implement, secure, and maintain software applications that meet user</td>
<td>H1=HIST, H6=TECH, H5=CRIT,</td>
<td>Final programming project</td>
<td>Modular software applications and reports</td>
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<td>requirements, using current best practices and tools for all application interfaces and</td>
<td>H2=WRIT, H8=QUAN</td>
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<td>Algorithms</td>
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<td>domains</td>
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<td>Open source projects</td>
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<td>Design, implement, and maintain a reliable and secure network and services</td>
<td>H6=TECH, H5=CRIT, H2=WRIT</td>
<td>Design and implement 3-tier distributed application</td>
<td>Web-based applications</td>
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<td>infrastructure</td>
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<td>User guides - documentation</td>
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<td>Requirements</td>
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<td>Time management</td>
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<td>Reliability</td>
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<td>Ethics</td>
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<td>Risk management</td>
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<td>Write mobile, distributed, and web applications</td>
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<td>Solve problems</td>
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<td>Work in a team</td>
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<td>Discuss emerging trends, ethics, and history of computers</td>
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<td>Secure private, sensitive information</td>
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<td>Debug and troubleshoot</td>
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Year 1 Competency Reinforcement Plan

Assessment of student progress and the program will be conducted throughout.

Communications Module
- Advanced Writing
- Research and Presentation Foundation

Quantitative/Qualitative Module
- Math

Liberal Arts Module
- Intro to Philosophy

Computer Information Technology Module
- Advanced Computer Applications

Business Module
- Business Foundation
- Marketing

Management Module

Orientation Week
- Communications Module
- Communications Foundation

Integrating Experience
- Leadership
- Global Orientation
- Legal & Ethical Practices
- Strategic Mgt
Resources and Reference Material

Iowa Department of Education, www.educateiowa.gov/

International Association for K-12 Online Learning (iNACOL) www.inacol.org/resources


Community College Review, www.communitycollegereview.com, 3/03/15 by Grace Chen

Inside Higher Ed, www.isidehighered.com, 9/10/15 by Paul Fain

Council for Adult and Experiential Learning (CAEL), Competency-Based Degree Programs in the U.S., Rebecca Klein-Collins, 2012 (Slides 24-26)

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