

# Integrated Planning for Competency-Based Education

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### **Intended Learning Outcomes**

- A clear understanding of the differences between competency-based education and traditional academic programs
- An appreciation of the wide-ranging impact that competency-based education can have on operations throughout the institution
- An awareness of the types of factors that need to be taken into consideration in developing competency-based programs
- Examples of best practices in planning competency-based education programs



### **Growing Enthusiasm for CBE**

- "It is an understatement of near-epic proportions to say that policy makers and politicians are smitten with Western Governors University's brand of competencybased learning. . . . [The] nonprofit institution has been embraced (*if not hyped*) as one possible answer to the challenge of educating more students (especially adults) at a lower cost."
  - *Inside Higher Ed*, 4/30/12



### **Institutions Offering CBE**

#### **University Examples:**

- Western Governors University
- Southern New Hampshire University
  - College of America
- University of Wisconsin
- University of Michigan
- University of Texas
- Purdue University



#### **Nation-Wide Interest**

#### Community & Technical College Examples:

- Sinclair Community College (он)
- Austin Community College (TX)
- Kentucky Community & Technical Colleges
- Valencia College (FL)
- Spokane Falls Community College (WA)
- Ivy Tech Community College (IN)
- Illinois Central College



### **Many Other Examples**

 Estimated that more than 200 colleges & universities have developed or are in the process of developing CBE programs.



### Why the Sudden Interest?

- CBE is not new
  - o Alverno, Western Governors, etc.
- So, why the sudden interest?
  - Increased focus on college completion
  - Increased focus on meeting employer expectations
  - O Money!
    - √ Grant Funding
    - √ Financial Aid



### **Defining Competencies**

- Council of Regional Accrediting Agencies (C-RAC) June 2, 2015
- Can include statements about knowledge or understanding
- Primarily emphasize what students can do with their knowledge.
- Often tied to employer expectations.



### **Defining CBE**

- Council of Regional Accrediting Agencies (C-RAC) June 2, 2015
- Outcomes-based approach to earning a credential
- Satisfactory academic progress is expressed as the attainment of mastery of identified competencies
  - Not fulfillment of seat-time requirements



### **Two Principal Approaches**

- 1. Course/credit-based approach
- 2. Direct assessment approach

Note: Hybrid approaches also possible



# Course/Credit-Based Approach

- Required demonstration of competencies is embedded into a traditional curriculum consisting of discrete courses
- Typically term-based
- May generate two types of transcripts:
  - 1. List of courses and credits earned
  - 2. List of competencies demonstrated



### **Direct Assessment Approach**

- Competencies not tied to discrete courses/credits
- Self-paced
- Not term-based
- Credential awarded upon demonstration of all required competencies
- No grades or G.P.A.
- Transcripts simply list competencies demonstrated



### **Credit Hour Equivalencies**

- Direct assessment programs establish "credithour equivalencies"
  - Draw on institution's previously-defined policies for awarding credit hours
  - Must conform to general practice in higher ed
  - Focus on equivalent learning demonstrated, rather than equivalent seat time



# **Time Constant, Not Learning**

- Traditional learning model:
  - Time held constant (for all students)
  - Learning (one student to the next) is variable.



### **Learning Consistent, Not Time**

- Self-paced CBE programs
  - o Time is variable
    - Some students proceed faster, some slower
  - Expectations for learning held constant
    - All students expected to demonstrate all competencies



#### All You Can Learn Buffet

- How does your institution charge tuition?
  - O By the credit hour?
  - O By the term (semester, quarter, etc.)?
- Many self-paced CBE programs charge by subscription periods
  - o "All you can learn" model
  - Similar to Netflix subscription



#### **CBE vs. Traditional**

- Even course/credit-based CBE programs differ significantly from traditional
- C-RAC: An accreditor will consider a program to be competency-based when:
  - All of the courses have learning goals expressed as competencies
  - Students are required to demonstrate mastery of every competency in each course to earn credit for such courses



### **CBE vs. Traditional**

Traditional 1										
Asmt.	1	2	3	4	5	6	7	8	9	10
Score	70	70	70	70	70	70	70	70	70	70
Traditional 2										
Asmt.	1	2	3	4	5	6	7	8	9	10
Score	100	100	100	100	100	100	100			
СВЕ										
Asmt.	1	2	3	4	5	6	7	8	9	10
Score	100	100	100	100	100	100	100			



### **CBE vs. Traditional**

Traditional										
Asmt.	1	2	3	4	5	6	7	8	9	10
Score	100	100	100	100	100	100	100	100	100	45
CBE										
Asmt.	1	2	3	4	5	6	7	8	9	10
Score	100	100	100	100	100	100	100	100	100	65



#### CBE vs. CPL

- Both competency based education and credit for prior learning (CPL) require students to demonstrate competencies in order to earn college credits.
- However, CBE programs often do not grant credit for prior learning.
- Instead, prior learning can help accelerate progress through CBE program.



### **CBE vs. Correspondence**

- CBE is not a high-tech form of correspondence education.
- Unlike correspondence education, CBE must be designed to ensure "regular and substantive interaction" between students and qualified faculty.
  - USDE: Students must not be left "to educate themselves."



### **Regular and Substantive Interaction**

- Institutions offering CBE programs can and should provide students with support services such as "success coaches" and online tutoring.
   This is not sufficient, however.
- Faculty interaction with students must be designed into the program.
- Students must also be able to access qualified faculty when they need to.



### **Regular Interaction**

- While students may elect not to initiate contact with faculty, program design must include periodic faculty-initiated contacts.
- These contacts may be "event driven"
  - Completion of certain key competencies
  - Completion of some percentage of competencies
  - Submission of assessments
  - o Etc.



#### **Substantive Interaction**

#### Could include, but not limited to:

- Direct instruction
- Substantive feedback on assessments
- Email or phone discussions of relevant academic subject matter



### **Participant Interaction**

- 1. What are the pros and cons of the two primary approaches?
  - a) Course/credit based
  - b) Self-paced direct assessment
- 2. What concerns would you have about adopting a self-paced direct-assessment program at your institution?
- 3. Who on your campus would have to be involved if you were planning to develop a self-paced direct assessment program?



### **Integrated Planning for CBE**

- Who needs to be involved?
  - Faculty (program faculty + bargaining unit)
  - Program advisory committees
  - Academic administrators
  - o Financial Aid
  - Student Services (Enrollment services, advising, etc.)
  - o IT staff
  - Business office
  - Marketing
  - o Others?



### **Faculty Considerations**

- Define expected competencies
- Define levels of mastery
- Agree on assessments used to evaluate mastery
- Define faculty roles
  - Workload & contract considerations
- Develop curriculum
  - o "Curate content"?
- Establish expectations for student interactions
- What else?



# **Program Advisory Committees**

- Participate in discussions about expected competencies
- What else?



#### **Financial Aid**

- FA is typically tied to seat time, clock hours, and terms (semesters, quarters, etc.)
- Direct assessment programs require special USDE as well as accreditor approval
- Experimental Sites Initiative

• What else?



#### **Student Services**

- Advising
- Admissions
- Registrar
- Billing
- "Success Coaches"
  - Proactively engage students to help keep them on track
- What else?



### Information Technology (IT)

- Learning Management System
  - Blackboard, D2L, Moodle, etc.
- Student Information System
  - PeopleSoft, Banner, etc.
    - Typically designed to support term-based programs
- What else?



#### **Business Office**

- Tuition considerations
  - All you can learn model?
- Student billing considerations
- What else?



### Marketing

- Typical target market for self-paced programs:
  - Nontraditional (adult) students with some college, no degree
- Marketing strategy
- What else?



### **Important Considerations**

- Screening for student readiness/fit
- Student Success Coaches
- Defining "Satisfactory Academic Progress" (SAP)
- Defining "repeat policy"
- Process for counseling students into alternative delivery modes if not successful in self-paced model



### **Important Considerations**

- Appropriate Approvals:
  - Internal (Program Advisory Committee,
    Curriculum Committee, Board of Trustees, etc.)
  - Regional Accrediting Agency
    - Substantive Change Application
  - o USDE
  - o State?
  - o Others?



## **C-RAC's Evaluation Considerations**

- 1. Capacity to offer program and demonstrated expertise in assessment
- 2. Whether or not the "competencies" emphasize performance (not just knowledge)
- 3. Whether proposed competencies are externally referenced
- 4. Whether or not the institution ensures "regular and substantive interaction"



### **Evaluation Considerations**

- 5. Whether or not the competencies align with expectations for graduates in the field
- 6. Whether or not the competencies are appropriate to the degree level
- 7. Whether the institution's expectations for "mastery-level" performance are appropriate
- 8. Whether a student must demonstrate each competency to earn a credential



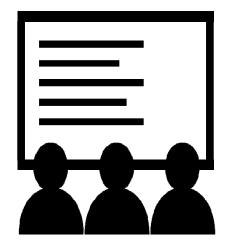
### **Evaluation Considerations**

- 9. Whether or not the institution follows good practice in assessment
- 10. Whether a high proportion of the competencies represent authentic demonstrations
- 11. Whether the institution validates the quality of the program through appropriate measures



# **Faculty Perspective**

 Developing a competency-based Web Developer Program

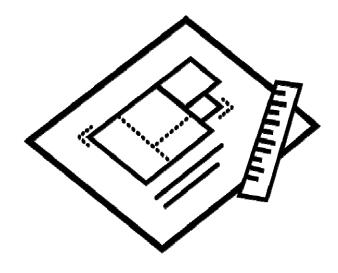


Created by Boudewijn Mijnlieff from the Noun Project

Lessons learned

**Plans** 

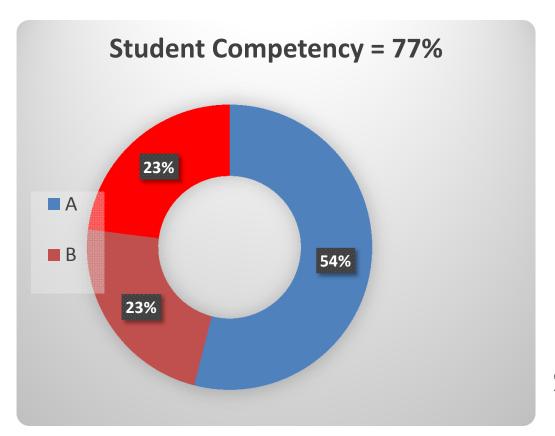
**Anecdotes** 



Created by Kelcey Hurst from the Noun Project

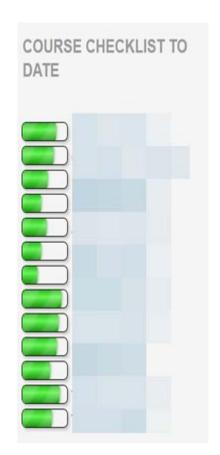


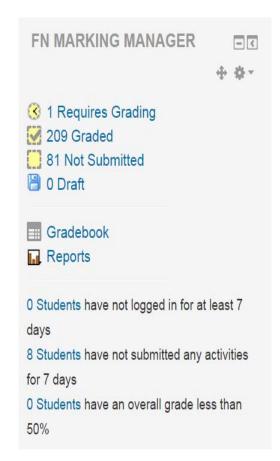
# CMWEB 155 – UX design

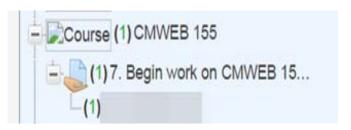




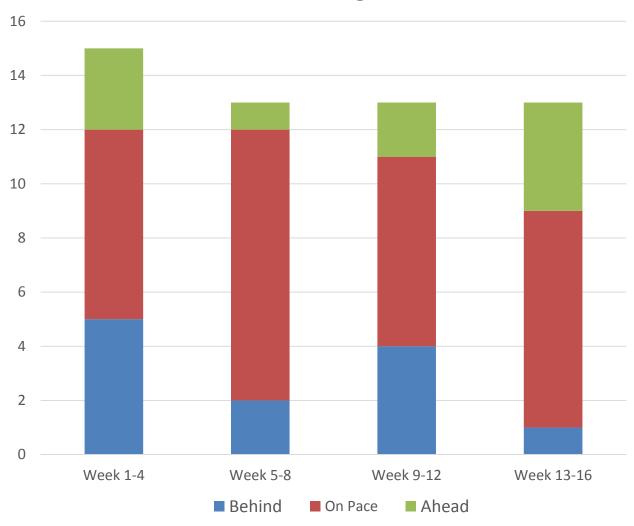
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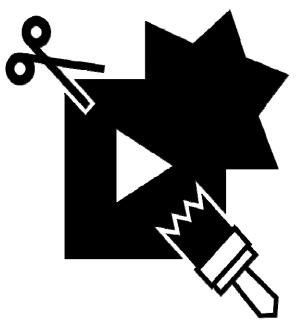


### **Student Progress**

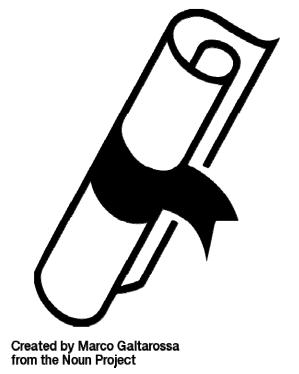




MWEB 250 \	1 create well-formed XML d	<i>y</i>	
	Learning Outcomes	Topic	Assessment
	1.1 Students use XML Notep	Topic 2	Lab 1, Quiz 1
	Single root element, eler.		
	2 understand how to creat		
	Learning Outcomes	Topic	Assessment
	2.1 Students create DTD bas	Topic 3	Lab 2, Quiz 2
	Create internal DTD and 🚽		•
	Create external DTD and		
	2.2 Students create XSD sche	Topic 4	Lab 3, Quiz 3
	Schema is associated wit		
	2.2 Students create Relax NG	Topic 5	Lab 4, Quiz 4
	Schema can be used to ve		\(\frac{1}{2}\)
	3 understand the base tech		
	Learning Outcomes	Topic	Assessment
	3.1 Students use Visual Stud.	Topics 11 & 12	Lab 9, Quiz 9
		7	`
	4 develop small applications		
	Learning Outcomes	Topic	Assessment
	4.1 Students use SOAPUI to $\zeta$	Topic 12	Lab 9, Quiz 9



Created by Plotrek Chuchla from the Noun Project



Modify courses

Help students understand new format

Modify transcripts



# Thank You!

- Questions?
- Comments?



# **Some Important Resources**

- Regional Accrediting Agencies
- Council of Regional Accrediting Commission (C-RAC)
- US Department of Education
  - http://www.ed.gov/oii-news/competency-basedlearning-or-personalized-learning



## **Experimental Sites Initiative (ESI)**

- USDE is using ESI to provide waivers and modifications to statutory and/or regulatory requirements to allow a limited number of institutions to participate in experiments that will test alternative methods for administering Title IV aid programs for students enrolled in CBE programs.
  - o <a href="https://experimentalsites.ed.gov/exp/index.html">https://experimentalsites.ed.gov/exp/index.html</a>



### Other Valuable Resources

#### CAEL

o <a href="http://www.cael.org/what-we-do/competency-based-education">http://www.cael.org/what-we-do/competency-based-education</a>

#### Lumina Foundation

o <a href="http://www.luminafoundation.org/files/resources">http://www.luminafoundation.org/files/resources</a> /competency-based-education-landscape.pdf



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