



# Competency-Based Education Design and Delivery

April 13, 2018

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# Rules of Engagement

We'll be monitoring the WebEx "**Chat" tool** for questions (may be closed by default). Send your comments and questions to the Host. Do not send messages to us via e-mail.

Write your name and school via the chat box. We want everyone to get credit.





## Presenters

Sinclair Community College Dr. Mike Libassi, Associate Professor

Salt Lake Community College Doug Miller, Associate Professor

# About the eLearning Division

- 326+ online and CBE courses including 36 degree programs/certificates and 11 CBE programs
- 40% of college's enrollment in 2016-17
- Support the design, development, delivery, and maintenance of Online/CBE/Hybrid modalities
- Use D2L Learning Management System (eLearn)



## Sinclair's CBE Model

Market and Employer Needs	
Program Development	
Master Courses	
Sections	
Learner Support Faculty Academic Coach	
Data-informed	



# Sinclair's CBE Programs

11 programs

55 courses

Continuous enrollment and completion

Specialized, data-driven academic and career coaching, from admissions to graduation

CBE programs deployed first use of faculty-coach partnership in the classroom, for teaching and student support



## About eCourse Design & Development

- Develop 50-55 new and major revision eCourses per year
  - Templates for consistency, scalability, and student success
  - Quality Matters (QM<sup>™</sup>) internal review on all courses
  - Web Content Accessibility Guidelines (WCAG 2.0)
- Provide support for eCourses
- Develop online faculty trainings



## Sinclair's eCourse Model



## **Know Your Vocabulary**

Vocabulary	Meaning
Objective	specific and measurable knowledge, skills, attributes, and habits learners are expected to achieve and demonstrate (statement)
Outcome	demonstration of the attainment of the expected knowledge, skills, attributes, and habits (action)
Competency	demonstrated mastery of a particular set of knowledge and/or skills (action)



# **Know Your Delivery Modalities**

Modality	Course Materials and Activities	Course Assessments	Educational Technologies	Delivery Timeframe
Classroom	Delivered in a face-to-face setting (often referred to as "traditional")	Delivered in a face-to-face setting or proctored	May or may not utilize institution's learning management system (LMS) and other educational technologies	Follows institutional terms (typically 16, 12, 8 week)
Online	Delivered via LMS	Delivered via LMS and/or proctored	May or may not utilize other educational technologies	Follows institutional terms (typically 16, 12, 8 week)
Hybrid	Mixed delivery (classroom and online) - split based on institutional policies (e.g., 60/40)	Mixed – via LMS, face-to-face, proctored	May or may not utilize other educational technologies	Follows institutional terms (typically 16, 12, 8 week)
CBE	Primarily delivered via LMS; may or may not include classroom components	Mixed – via LMS, face-to-face, proctored	May or may not utilize other educational technologies	Flexible based on institutional policies (e.g. may allow rolling starts and accelerated completion)

# **Consider these Questions**

**Regardless of delivery modality, course development** <u>starts with the Objectives</u>: what do my students need to know?

- What do my students need to learn that knowledge and skills? (materials, activities, additional resources)
- What supports will my students need as they learn?
- How will my students' learning be assessed? (getting away from "one and done")
- How will my students and I know they have met those objectives? What defines "Mastery?"



# **Options for Course Structure**

#### **Unit** – group layout of content to meet objectives

- BIS course groups three word processing topics into a "Word" unit
- MAN course groups several related topics into a "Planning" unit

#### **Topic** – singular layout of content to meet objectives

- CIS course contains 11 individual topics
- LAW course contains 14 individual topics



## **Options for Course Assessments**

#### **Pre-assessment/Post-assessments**

- Can students demonstrate mastery on a pre-assessment?
- What additional activities and/or assessments will be required before taking a post-assessment?

#### Midterm/Final Exam/Final Project

• Are summative assessments required?

#### **Retake options**

• Will multiple attempts be permitted? If so, how many and under what criteria?



# **CBE Faculty Support**

- CBE Faculty Community (includes self-paced *Teaching CBE* course)
- CBE program meetings (during and after development)
- CBE Drop-ins (for all programs)
- eLearning Division Intranet
- One-on-one meetings with faculty



# CBE for Your Institution: Questions to Ask

#### Curriculum & Course Development

- What courses or programs "fit" this delivery modality?
- How do you develop courses now?
- Can you deploy a Master Course model?

#### • Training & Support

- How do you select faculty for CBE development?
- How will you support faculty in the CBE modality?





The OMG's of CBE: Lessons Learned, Heartaches Felt, and FAQ's of Competency-Based Education



#### Lest you think we have it all figured out...

• We are not experts—nor do we have all the answers. We are simply in the middle of a transition and have learned some very important lessons that we are sharing with you today.



## What is Competency-Based Education?

### **Definition from C-BEN**

- Competency-based education combines an intentional and transparent approach to curricular design with an academic model in which the time it takes to demonstrate competencies varies and the expectations about learning are held constant.
- Students acquire and demonstrate their knowledge and skills by engaging in learning exercises, activities and experiences that align with clearly defined programmatic outcomes.
- Students receive proactive guidance and support from faculty and staff.
- Assessments are robust, meaningful, and authentic.
- Learners earn credentials by demonstrating mastery through multiple forms of assessment, often at a personalized pace.



### **From the Accreditors**

"An accreditor will consider a program to be competencybased when all of the courses (for the program, for general education, for the major) have learning goals expressed as competencies approved at the program level (i.e., any instructor teaching a course will teach it as a competency-based course) and each student is required to demonstrate mastery of every competency in a course to earn credit... for such course."

> (Regional Accreditors Announce Common Framework for Defining and Approving Competency-Based Education Programs)



### **C-BEN** Video

#### What is Competency-Based Education?





## Salt Lake Community College's School of Applied Technology (SAT)



**Mission and Role Summary** 

- Provide low-cost, short-term, open-entry training leading to high-wage, high-demand jobs.
- Prepare economically and educationally disadvantaged students with a workforce skill.
- Maintain a strong curriculum in CTE courses which can be articulated with credit CTE courses.

#### **Over 30 Program Offerings**



## **Better SAT Approach to Education**

Faculty and administrative group collaboratively set out to address ongoing clockhour model concerns by exploring Competency-based Education solutions.

#### Why move to CBE?

- Summary of Goals:
  - Improve student access, retention, and completions.
  - Revise courses and programs to meet a new quality standard consistent throughout the school.
  - Improve faculty and student engagement.
  - Incentivize students to accelerate learning.





### **CBE Solutions and Benefits**

Clock Hour Challenges	<b>CBE Transition Solutions</b>
Inflexible Schedules.	<ul> <li>Expand hours of operation and allow students to attend any time during those hours.</li> <li>Create more online content allowing any time any where access.</li> </ul>
Penalized For Accelerated Progress.	<ul> <li>Students progress as quickly as they demonstrate content mastery through completion of summative assessments.</li> <li>Reward accelerated completion through reduced tuition costs.</li> </ul>
Students pay for each course	<ul><li>Block model for tuition</li><li>10 week block</li></ul>



### **CBE Solutions and Benefits (Cont.)**

<b>Clock Hour Challenges</b>	<b>CBE Transition Solutions</b>
Faculty load discrepancies.	Recognize CBE as a new load type and provide loads for CBE instructors that are equitable across the institution.
Inconsistent approach to curriculum development and delivery.	Provide instructors with support resources, training, guidelines, and external review in transitioning courses to CBE modality.



#### Curriculum Development Process – Transition From Clock Hour to CBE

Process for a consistent and quality student experience across all CBE courses at SLCC.

- 1. Industry analysis
- 2. Identify and write competencies
- 3. Write objectives aligned to competencies
- 4. Align assessment to competencies
- 5. Identify instructional activities





## **Competencies, Objectives & Assessments**

- Competencies: the measurable overarching skill, knowledge, or ability that the learner already has or will obtain after completing the course
  - Relevant to real-world job tasks or responsibilities
- Learning Objectives: measureable, discrete goals that guide learning to obtain the competency
  - The competency is "unpacked" into objectives
- Assessment: authentic (real-world), valid, reliable, aligned with and accurately measures the competency
  - Objective exams, performance-based, projects



## Course Alignment Map with Comps and LO's

#### Competency

C1: Identify the basic elements and functions of computer hardware and operating systems.

Learning Objectives		Assessment	
The student wil			
C1-L01	Compare and contrast the features and requirements of various Microsoft Operating Systems.	Canvas Chapter 1 Exam 80% for pass	
C1-L02	Compare and contrast various connection interfaces and explain their purpose.	1.0 Port Identification Assignment, 100% accuracy. Canvas Chapter 1 Exam	
C1-L03	Connect computer components	Lab Sim 1.3.5, 100% accuracy	



#### From the Trenches

- So What is Progress?
  - Time vs Amount of work completed
- No averaging of test scores
- Student progress tracking
- Weekly meaningful contact





## Where we are today

- Over 150 students have enrolled in the past year
- Finishing at or above average (sooner than expected)
- No data yet on retention
  - Anecdotal evidence suggests we are trending a little better
- Very diverse audience
  - Current numbers show nearly 50/50 split in minority to non-minority populations
  - Largest minority audience is Hispanic at 35% of total





# **Questions?**









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# Questions?



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