CBE: Ready, Set, Go
Competency-based education model

March 23, 2016

Dr. Nancy Thibeault, Dean eLearning Division / Director TAACCCT Grant
Christina Amato, Project Manager TAACCCT Grant
Agenda

1. What is CBE?
2. TAACCCT Grant
3. Project Model Components
   a. Overview
   b. Workforce Relationships
   c. Curriculum
   d. Program Delivery
   e. Student Experience
4. Challenges
What is CBE?
What is CBE?

• **Direct assessment**
  – Students demonstrate achievement of competencies without regard to courses or credit hours. They demonstrate mastery of individual competencies through summative assessments such as exams and portfolios.

• **Course-based**
  – Students demonstrate mastery of skills and knowledge at a course or module-level. Competencies, defined at the program level, are translated into topics that are packaged into the courses or modules.
How is Course-Based CBE Different from Traditional?

<table>
<thead>
<tr>
<th>Traditional</th>
<th>CBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time-based</td>
<td>Flips time and mastery</td>
</tr>
<tr>
<td><strong>Commonalities</strong></td>
<td></td>
</tr>
<tr>
<td>Aligned with regional workforce needs</td>
<td></td>
</tr>
<tr>
<td>Common course outcomes</td>
<td></td>
</tr>
<tr>
<td><strong>Differences</strong></td>
<td></td>
</tr>
<tr>
<td>Weekly lessons</td>
<td>Topics and Units</td>
</tr>
<tr>
<td>Time-based: Progress weekly with class</td>
<td>Mastery based: Progress as competencies mastered</td>
</tr>
<tr>
<td>Fixed entry and completion dates (semester)</td>
<td>Flexible entry and completion dates</td>
</tr>
<tr>
<td>Ad hoc student support</td>
<td>Holistic case management</td>
</tr>
</tbody>
</table>
The Grant
What is Accelerate IT?

Sinclair’s TAACCCT Grant Project

- Grant Goal – Adapt and adopt competency-based IT instruction to accelerate learning for TAA-eligible, veterans, unemployed, and other adult learners.
Round 2 TAACCT Grant
Consortium Partners
• Austin Community College
• Broward College
• Sinclair College
• Western Governors University, Consultant
• Mathematica, Grant Evaluator
• National Office, Sinclair Community College
Accelerate IT Model
Implementation Considerations

- How does CBE align with institutional mission?
- How does your institution react to innovation / change?
- Who is the executive sponsor?
- What resources, staffing and funding will be allocated?
- Who is the CBE champion?
- Where will CBE be housed?
- Will you pursue Direct-assessment or Course-based CBE?
- How will you fit CBE into your semester-based systems?
- What policies will be impacted?
- How will you select programs for CBE development?
- Is there faculty buy-in?
## Implementation Considerations

<table>
<thead>
<tr>
<th>Model</th>
<th>Example</th>
<th>Areas of focus</th>
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</thead>
<tbody>
<tr>
<td>CBE University</td>
<td>Western Governors University</td>
<td>Education, IT, Business, Healthcare</td>
</tr>
<tr>
<td>CBE Campus</td>
<td>Southern New Hampshire University College for America</td>
<td>AA Liberal Arts</td>
</tr>
<tr>
<td>Statewide Degree</td>
<td>Washington State Community and Technical College system</td>
<td>AS Business Administration</td>
</tr>
<tr>
<td>Central Oversight</td>
<td>Sinclair Community College</td>
<td>IT (networking and software)</td>
</tr>
<tr>
<td>Department</td>
<td>Austin Community College Broward College</td>
<td>IT (programming and user support)</td>
</tr>
<tr>
<td>Faculty</td>
<td>Bellevue College</td>
<td>Office applications</td>
</tr>
</tbody>
</table>
# Implementation Considerations

## Staffing Functions / Roles

<table>
<thead>
<tr>
<th>Function</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Recruiting</td>
<td>Recruiter/Admissions Counselor</td>
</tr>
<tr>
<td></td>
<td>Referrals from: College Enrollment services, Academic Department, Academic Advisors</td>
</tr>
<tr>
<td>Admissions / Screening</td>
<td>Recruiter / Admissions Counselor</td>
</tr>
<tr>
<td>Orientation</td>
<td>Recruiter / Admissions Counselor</td>
</tr>
<tr>
<td>Course Development</td>
<td>Instructional Designer and Faculty</td>
</tr>
<tr>
<td>Assessment Development</td>
<td>Instructional Designer and Faculty</td>
</tr>
<tr>
<td>Facilitation</td>
<td>Faculty</td>
</tr>
<tr>
<td>Grading</td>
<td>Faculty</td>
</tr>
<tr>
<td>Student Performance Monitoring</td>
<td>Academic Coach and faculty</td>
</tr>
</tbody>
</table>
Market and Employer Needs

TACTICAL

Executive Management
Middle Management
Line Management
  Advisory Boards

AREA OF FOCUS

Response Based upon need

Reactive
  Operational Plan
Proactive
  Strategic Operational Plan
Anticipatory
  Strategic Plan

AREA OF FOCUS

Watch List

STRATEGIC

Executive Business & Industry Forums
Advisory Boards
Focus Groups

Based upon need
Program Development | Curriculum Updates

**Competencies**
- CCNA
- MCSA
- Ohio IT Standards

**Programs**
- AAS Network Administration
- AAS Network Engineering
- AAS Software Development
- 4 Embedded Certificates

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Competencies vs. Outcomes

• Competency
  – A general statement detailing the desired knowledge and skills of student graduating from our course or program. (What employers expect graduates to know and be able to do)
  – A competency may have several specific learning outcomes

• Outcome
  – A very specific statement that describes exactly what a student will be able to do in some measurable way.
  – A learning outcome is written so that it can be measured or assessed.
### Competencies vs. Outcomes

<table>
<thead>
<tr>
<th>Competency</th>
<th>1. Webpages: Create basic webpages.</th>
</tr>
</thead>
</table>
| Outcomes   | 1. Describe the basic principles of **Hypertext Markup Language (HTML)** and its functional relationship with web browsers.  
             2. **Plan a webpage** considering subject, devices, audience, layout, color, links, graphics, and Americans with Disabilities Act (ADA) requirements.  
             3. **Format the text of a webpage** in a WYSIWYG(What You See Is What You Get) editor and in a text editor using HTML formatting tags (e.g., hyperlink, e-mail, table formatting, graphic attributes).  
             4. **Use writing process techniques** (i.e., drafting, revising, editing, proofreading) to check the webpage for format and text accuracy.  
             5. Create and format **ordered and unordered lists** on a webpage using HTML list formatting tags.  
             6. Create and format a **table** in a webpage using HTML table formatting tags and attributes.  
             7. Integrate styles (e.g., inline or external **Cascading Style Sheets [CSS]**). |
Curriculum

Program Development | Aligning Competencies

Programs

Gen Ed Outcomes
Program Outcomes

Master Syllabus
Course Description
Course Outcomes
Topics
<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>ISS</th>
<th>NS</th>
<th>PSD</th>
<th>IM</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Course 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Webpages: Create basic webpages.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Links and Multimedia: Add links to a webpage and insert multimedia 6.2 files</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6.3 Scripting: Integrate scripting into a webpage.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6.4 Web Forms: Integrate forms into a webpage.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6.5 Websites: Create and update a website.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Competency /Outcome Mapping within Course

<table>
<thead>
<tr>
<th>Competency 1 – 6.1. Webpages: Create basic webpages.</th>
<th></th>
<th>Type of assessment: Declarative (objective exam) or Procedural (programming activity), or both</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sinclair Ref</strong></td>
<td><strong>Learning Outcomes</strong></td>
<td><strong>Tutorial</strong>, <strong>Declarative</strong> or <strong>Procedural</strong></td>
</tr>
<tr>
<td>1.1</td>
<td>Describe the basic principles of Hypertext Markup Language (HTML) and its functional relationship with web browsers.</td>
<td>Tutorial 1, 3, 5</td>
</tr>
<tr>
<td>1.2</td>
<td>Plan a webpage considering subject, devices, audience, layout, color, links, graphics, and Americans with Disabilities Act (ADA) requirements.</td>
<td>Final Project</td>
</tr>
<tr>
<td>1.3</td>
<td>Format the text of a webpage in a WYSIWYG (What You See Is What You Get) editor and in a text editor using HTML formatting tags (e.g., hyperlink, e-mail, table formatting, graphic attributes).</td>
<td>Tutorial 1, 2, 3, 4, 5, 6, 7, 8, 9, Multimedia, Mobile, Final Project</td>
</tr>
<tr>
<td>1.4</td>
<td>Use writing process techniques (i.e., drafting, revising, editing, proofreading) to check the webpage for format and text accuracy.</td>
<td>Tutorial 2, Final Project</td>
</tr>
<tr>
<td>1.5</td>
<td>Create and format ordered, unordered, and definition lists on a webpage using HTML list formatting tags.</td>
<td>Tutorial 1, 2, 3, 4, 5, 7</td>
</tr>
<tr>
<td>1.6</td>
<td>Create and format a table in a webpage using HTML table formatting tags, attributes and Cascading Style Sheet.</td>
<td>Tutorial 8</td>
</tr>
<tr>
<td>1.7</td>
<td>Integrate styles (e.g., embedded, inline or external Cascading Style Sheets [CSS]).</td>
<td>Tutorial 3, 4, 5, 6, 7, 8, 9, Multimedia, Mobile, Final Project</td>
</tr>
</tbody>
</table>
Granularity Challenge

• 16 week courses
  – 14 topics
  – Midterm
  – Final

• Unit Based for acceleration
  – Bundle topics into 3 – 7 Modules
  – Module Pre- and Post-tests
  – Bypass module if competency demonstrated in pre-test
Curriculum

Unit-based course

Welcome from the Instructor
Learning Resources
Expectations in This Course
Academic Support Services

WHAT TO DO

Assignment Checklist

Unit 1 - Living with Art & Defining Art
Unit 2 - The Vocabulary of Art
Unit 3 - Two-Dimensional Media - Drawing
Unit 4 - Two-Dimensional Media - Painting
Unit 5 - Three-Dimensional Media - Sculpture
Unit 6 - Three-Dimensional Media - Architecture
Unit 7 - The Art World - Buying, Selling, Collecting & Exhibiting

FINAL STEPS

You Made It!
Final Assessment
Unit-based course

Instructions on How to Complete a Unit-Based Course:

This course is slightly different from other courses in the CBE program because it's a unit-based course. The course content is divided into units that are self-contained and assessed individually. This unit-based approach allows students who are knowledgeable about the course content to progress more quickly through the course. This particular course contains seven units.

As you begin each unit, do the following:

1. Read the Introduction and Objectives page for the unit to get an understanding of the content and objectives that the unit covers.

2. Take the unit Pre-Assessment. Go ahead and take the unit Pre-Assessment first. (You will only have one attempt at the Pre-Assessment.) The Pre-Assessment is worth 100 points, if you score 80% or higher, you can skip the rest of that unit and move on to the next unit. If you don't score 80% or higher, you are not penalized in any way. Your first attempt at the unit assessment does not count against you if you do not pass it.
   - If you do not achieve a score of 80% or higher on the unit Pre-Assessment, then you must work through the unit lessons and complete all of the graded assignments within the unit, with a score of 80% or higher. In this course, the graded assignments in each unit include the following:
     - unit writing activity (graded as "pass or fail" - pass is equivalent to a score of 80%)
     - unit Post-Assessment (worth 100 points; a passing score is 80% or higher)

3. Work through the entire course this way, one unit at a time, in order.

4. Once you have successfully passed all of the units, you will complete the final assessment, which is a critique paper.

Click Next at the top right of the screen to navigate through each page in order.
Policies

- Intellectual Property
- Course development stipend
- Faculty payload
- Course development project plan / timeline
- Deadlines
  - Email Response time
  - Grading Response Time
- Student Performance
  - Level of mastery
  - Retakes / Redo’s
  - Student progress expectations
Program Delivery

- 25 self-paced, online courses
- Enrollment on Mondays through week 12 of term
- 12 Registration sections funneled into one teaching sections
Learner Support | Model

Recruit

1. Admit

2. Enroll

3. Retain

Coordinate Student Services

4. Transition

5. Complete

Academic Advising

Integrated Career Coaching

Progress Monitoring and Motivation

Job, Promotion, Transfer
Learner Support

Critical Functions: Recruitment, Screening & Intake

• “Right Fit”
• Orientation
• Career and Readiness Assessment
• CBE Policies, Success Habits, Pacing
Critical Functions: Case Management

- Transparency
- Seamless handoffs
- Benchmarking, tracking
- Quality assurance
## Critical Functions: Data & Progress Monitoring

### Weekly Caseload Reports
- Classifies risk by known predictive indicators
- Check-ins and interventions prioritized by risk
- Monitoring/Intervention is shared between faculty and coaches

### Learner Support

#### Critical Functions: Data & Progress Monitoring

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Tartan ID</th>
<th>Course ID</th>
<th>Term</th>
<th>Enroll Status</th>
<th>Course Status</th>
<th>Mid-Term Exam Status</th>
<th>Average Grade</th>
<th>Final Grade</th>
<th>Unsuccessful Attempt On Record</th>
<th>Multiple Unsuccessful Attempts On Record</th>
<th>Logins Last 7 Days</th>
<th>Submissions Last 7 Days</th>
<th>Risk Level</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown</td>
<td>Candice</td>
<td>943522</td>
<td>CIS-2515</td>
<td>14/FA</td>
<td>Enrolled</td>
<td>2</td>
<td>9%</td>
<td>0%</td>
<td>93.33%</td>
<td>No</td>
<td>No</td>
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<td>0</td>
<td>High</td>
<td>Low Activity</td>
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<tr>
<td>Adams</td>
<td>Scotts</td>
<td>345215</td>
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<td>9%</td>
<td>14%</td>
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<td>No</td>
<td>2</td>
<td>0</td>
<td>Moderate</td>
<td>Low Activity</td>
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<tr>
<td>Howell</td>
<td>John</td>
<td>876598</td>
<td>CIS-1411</td>
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<td>2</td>
<td>9%</td>
<td>6%</td>
<td>100.00%</td>
<td>No</td>
<td>No</td>
<td>10</td>
<td>0</td>
<td>Moderate</td>
<td>Low Activity</td>
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<tr>
<td>Smith</td>
<td>Cheryl</td>
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<td>9%</td>
<td>25%</td>
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<td>No</td>
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<td>5</td>
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<td>Johnson</td>
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<td>14%</td>
<td>56%</td>
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<tr>
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<td>Van</td>
<td>865334</td>
<td>CIS-2421</td>
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<td>2</td>
<td>9%</td>
<td>11%</td>
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<td>100.00%</td>
<td>No</td>
<td>5</td>
<td>3</td>
<td>Low</td>
<td>Low Activity</td>
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<td>Sedgwick</td>
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<td>No</td>
<td>No</td>
<td>3</td>
<td>0</td>
<td>Low</td>
<td>Low Activity</td>
</tr>
</tbody>
</table>
Learner Support

Critical Functions: Integrated Career Coaching

**ADMIT**
- Orientation
  - Vision Statement
- Career Assessment
  - self-perception
  - goals
  - PLA
  - work experience
- Handoff Report

**ENROLL**
- Pre-Enrollment
  - Vision Statement
  - goals, pacing, course selection
- Career Assessment
  - Industry expectations, career opportunities
- Post-Enrollment
  - Early peer/faculty mentoring opportunities
- Connection to Career Community

**RETAIN**
- Re-evaluate vision statement and goals
- Help student translate course competencies with workforce needs
- Encourage participation in Career Community events
- Introduce industry connections & mentoring opportunities

**TRANSITION**
- Resume/Interview Development
- Internship
- Transition industry connections into areas of potential placement
- Reverse Job Fairs, Career Placement Events

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Admitted | First two terms | Mid-program | Final term before graduation

**COMPLETE**
Outcomes

• 76% course success rate across all CBE sections

• Average completion time across all CBE courses is between 60 and 80 days

• 70% year-to-year retention rate

• Accelerate students are credentialing at *three times* the rate of students in companion program

• Accelerate students are *ten times* more likely to take an internship—and internship completers have a 90% hire rate
Accelerate IT - Challenges
Considerations: Strategy & Challenges

Strategy

• It’s not just about course development
• Build a college within a college
• Retrofit into semester-based system
• Innovation or Disruption (Bubble up vs. Push down)
Challenges

1. Implementing Self-paced mastery model in traditional Learning Management System
2. Accreditation – HLC required new process effective October 2015
3. Financial Aid eligibility
4. GI Bill living allowance
5. Faculty Policy
   a. Faculty Role
   b. Faculty Payload
6. Faculty grading load
7. Course granularity
8. Student procrastination
9. Integration into semester system / Delivery efficiency
   a. Flexible starts
   b. Out of synch grade reporting
   c. Restricted Registration (automate)
   d. Data / Report s (automation)
   e. Progress monitoring (automate)
Q & A

Your time is greatly appreciated.

Thank you!

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