Less Talk, More Action!
A Step-by-Step Guide to Competency-Based Education

April 5, 2017

Christi Amato, CBE Program Manager
Sinclair College
Today’s Agenda

Plan
Design
Implement
Improve
Group Discussion, Q & A
Before You Get Started: 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?
Plan: What kind of CBE?

Course Based vs. Direct Assessment

• **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 (Credit)-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.
## Plan: Implementation Models

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

How is Course-Based CBE Different from Traditional?

Traditional

1. Defined semester/term start and end dates
2. Students progress on a time-based schedule
4. Weekly lessons
5. Advance weekly with class regardless of performance
6. Instructor led
7. Central student services

Course-Based CBE

1. **Flexible** Starts
2. Students *master competencies* to progress
3. Outcomes plus *competencies* mapped to content and assessments
4. **Modularized** into Units
5. Advance to next topic / unit by *demonstrating competency*
6. Faculty *mentor*
7. Case managed by *academic coach*
Plan: External Forces

- Federal
- State
- Institutional
Design: Curriculum

- Competencies
  - CCNA
  - MCSA
  - Ohio IT Standards

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

1. Advisory Board Review
2. Map to Programs & Courses
3. Develop Courses
4. Deliver Programs/Courses
5. Assess Programs

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Design: Aligning competencies

Programs

Gen Ed Outcomes
Program Outcomes

- Master Syllabus
- Course Description
- Course Outcomes
- Topics
Design: Online Course Organization and Maximizing the LMS

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
Design: Learner Experience

How do I find the right students?

How do I create intake and enrollment policies, processes, and tools?

How do I create a coaching model for CBE students? How is it different?
Design: How do I find the right students?

- What is the “right” student?
- Recruiting externally
- Recruiting internally
Design: Screening and Intake

Screening Guidelines

- 3.0 cumulative GPA and basic DEV placement scores
- Completion of orientation to Learning Management System
- Completion of CBE orientation
Design: Building an Orientation

- Introduces students to CBE
- Houses admission requirements
- Reviews course policies
- Delivers college know-how
- Encourages academic and career engagement
- Assesses “right-fit”
1. Success Habits

Topic 3 - How to Succeed in CBE

Accelerate IT competency-based courses are intended to be a flexible option for high-performing students, where you have the ability to progress in your course as you master topics. In order to be successful, your computer needs to work, you need to understand the grading system, and you need to know how to pace your coursework completion.
2. Pacing

<table>
<thead>
<tr>
<th>Topic</th>
<th>Graded Assignments</th>
<th>Week Due</th>
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</thead>
<tbody>
<tr>
<td>Topic 1 Introduction to Course</td>
<td>Assignment - Taking Screen Shots and Compressing Files</td>
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<tr>
<td>Topic 2 Introduction to Programming</td>
<td>Assignment - Hello World</td>
<td>Week 1</td>
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<tr>
<td>Topic 3 Parts of C++ Program</td>
<td>Assignment - Defining Variables</td>
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<td>Topic 4 Programming Math Formulas</td>
<td>Assignment - Hotel Bill Program</td>
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<td>Topic 5 Expressions</td>
<td>My Programming Lab Chapter 1</td>
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<td>Topic 6 Interactivity</td>
<td>Quiz 1</td>
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<tr>
<td>Topic 7 - Making Decisions</td>
<td>Assignment - Stock Market Portfolio Tracker</td>
<td>Week 2</td>
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<tr>
<td>Topic 8 Relational Operators</td>
<td>Assignment - Calculating Shipping Charges</td>
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<tr>
<td>Midterm Exam and Midterm Project</td>
<td>Assignment - Horse Stable</td>
<td>Week 3</td>
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<td>My Programming Lab Chapter 3</td>
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<td>Quiz 2</td>
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<td></td>
<td>Assignment - Tips and Pennies Program</td>
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<td>My Programming Lab Chapter 4</td>
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<td>Quiz 4</td>
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<td></td>
<td>Assignment - Stock Market Portfolio Tracker</td>
<td>Week 4</td>
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<td></td>
<td>Assignment - Calculating Shipping Charges</td>
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<td>Assignment - Horse Stable</td>
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<td>Topic 9 Loops</td>
<td>Assignment - Tips and Pennies Program</td>
<td>Week 5</td>
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<td>Topic 10 Files</td>
<td>Assignment - Calculate your Grade</td>
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<td>Topic 11 Functions</td>
<td>Assignment - Stock Market Portfolio Tracker</td>
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<tr>
<td>Topic 12 More Functions</td>
<td>Assignment - Average Quiz Grades</td>
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<td>Topic 13 One-Dimensional Arrays</td>
<td>My Programming Lab Chapter 5</td>
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<tr>
<td>Topic 14 Career Exploration</td>
<td>Quiz 5</td>
<td>Week 6</td>
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<tr>
<td>Final Exam (proctored) and Final Project</td>
<td>My Programming Lab Chapter 6</td>
<td></td>
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<td>Assignment - Restaurant Functions</td>
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<td>Assignment - Create a Hierarchy Chart</td>
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<td>Assignment - Sinclairs Got Talent</td>
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<td>My Programming Lab Chapter 6</td>
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<td>Assignment - Skiers Competition</td>
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<td>My Programming Lab Chapter 7</td>
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<td>Assignment - Careers in IT</td>
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<td>Final Exam and Project</td>
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<td>Week 6</td>
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Design: Orientation Critical Components

3. Assessments

• Career Self-Assessment

- Phase I: Getting to Know Yourself
  - Things to Consider:
    - What are your interests?
    - What are your strengths?
    - What skills do you have?
    - What do you value when choosing a career?

- Phase II: Exploring and Choosing Options
  - Things to Consider:
    - What are the academic requirements for your pathway?
    - What types of careers are associated with particular pathways?
    - How can you connect your skills with career options?
    - How can you set goals towards your academic and career choices?

- Phase III: Gaining Knowledge and Experience
  - Things to Consider:
    - How can you gain experience in this field?
    - How do you finalize your resume/portfolio?
    - How can you develop networking, interviewing, and negotiation skills?
    - How do you build an action plan for your job search?

- Phase IV: Putting it all together
  - Things to Consider:
    - How can you effectively market your skills, knowledge, and experiences to employers?
    - How can you identify professional opportunities?
    - How do you continually develop and maximize your network?

- Technology Literacy
- LMS Literacy
Design: Coaching Model
Design: Supporting Learners (the details)

**ADMIT**
- **Apply**
  - Admissions Counseling
  - Career Counseling
  - Right Fit Assessment
- **Screen**
  - Placement Test
  - Prior Learning
  - Transcripts
- **Funding**
  - FAFSA
  - GI Bill
  - TAA
- **Orientation**
  - How to Succeed
  - Program Policy
  - Readiness Assessment

**ENROLL**
- **HANDOFF**
  - Coach Intake Session
- **MAP**
  - Progress Monitoring
  - Course
  - Degree

**REtain**
- **Coaching Sessions**
  - LMS Caseload Report
  - SSP
- **Triggered Intervention**
  - Performance
  - Engagement
  - Stop Out or Withdrawal
- **Motivation & Persistence Tools**
  - Registration Prompts
  - Completion Countdown
  - Career Community

**TRANSITION**
- **Faculty & Peer Mentoring**
  - Career Community
  - Connections with Faculty
  - Student Groups
- **Resume & Career Preparation**
  - Job Center
  - Workshops
- **Internship**
  - Trigger Courses
- **Transfer Planning**
  - Articulations
  - Connection with Transfer Counselor

**COMPLETE**
- **Job Placement**
- **Promotion**
- **Transfer to 4-year**
- **Graduate Feedback & Follow-Up**
  - Program Survey
  - Service Survey
  - State Wage Agency
Design: Critical Components of Learner Support

1. Case Management
Design: Critical Components of Learner Support

2. Retooling Early Interactions
   - Reinforced Handoff

<table>
<thead>
<tr>
<th>Student Name</th>
<th>John Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID Number</td>
<td>0814015</td>
</tr>
<tr>
<td>Placement Information</td>
<td>Took Math portion of Placement Test, scored into DEV 0026. Used Eng Comp class from Cinci State to waive reading portion of test. (unofficial transcript uploaded into SSP)</td>
</tr>
<tr>
<td>Courses/Term Requested</td>
<td>CIS 1107 14/SP</td>
</tr>
<tr>
<td>Student Status Requested</td>
<td>Part-time</td>
</tr>
<tr>
<td>Career Aspirations</td>
<td>Wants to become CCNA certified so he can utilize new skills in his current position. Not looking to change jobs.</td>
</tr>
<tr>
<td>Career Development Prescription Level</td>
<td>Minimal level of career development interventions prescribed</td>
</tr>
<tr>
<td>Program Plans</td>
<td>NEA.S.STC through Accelerate IT</td>
</tr>
<tr>
<td>Method of Payment</td>
<td>Self</td>
</tr>
<tr>
<td>Notable Intake Data</td>
<td>Parent of OCA student. J Previous ups and downs as a programming student in the 90s. Currently works full time in IT, and has been in field for 19 years.</td>
</tr>
<tr>
<td>Preferred method of contact</td>
<td>Email at <a href="mailto:john.smith@my.sinclair.edu">john.smith@my.sinclair.edu</a></td>
</tr>
<tr>
<td>Vision Statement</td>
<td>To obtain training that would enable me to leverage my previous work experience to develop innovative solutions that meet or exceed the expectations of both end users and business unit leaders. Furthermore, I would like to become a leader within my organization promoting integrity, teamwork, and innovative problem solving that will support quality work and surpass the organization goals.</td>
</tr>
</tbody>
</table>
Design: Critical Components of Learner Support

2. Retooling Early Interactions

First Coach Appointment
- Coach-Student Relationship
- Vision Statement
- Goals, Progress & Pacing
- MAP

Expectations of Student: As a student, you are expected to

1) Be knowledgeable of your program and degree requirements, and understand all requirements of participating in Accelerate IT competency-based programs.
2) Keep coaching appointments.
3) Be prepared for coaching appointments by completing agreed upon action steps for enrollment, registration or any other steps to continued good academic standing.
4) Goal-set and complete a MAP/study calendar with your coach. Communicate with your coach if your circumstances change and you need to modify your MAP or studies.
5) Attend and actively participate in your studies; communicate with your coach as challenges arise.

Vision Statement
Change, Help, and Independence are all words that fuel me. I want to change my future, I want to change my life, but not only my life, I want to change others as well for the better. I want to be able to provide and donate to my family and those in need. I want to help, and I will make a difference. After my educational career I will be financially independent, I will be able to do all the things I always have wanted to do.

It starts right here right now with my time at Sinclair. I plan on improving with each semester, but even after that I will keep striving to be a better person and I will become a better me. It all begins with determination, it begins with earning my associates degree in Networking Engineering right here with Sinclair.

-Samantha Student
3. Data & Progress Monitoring: Use the LMS!

Weekly Caseload Reports
- Classifies risk by known predictive indicators
- Check-ins and interventions prioritized by risk
- Check-ins and interventions are now a faculty-coach collaborative

### Design: Critical Components of Learner Support

<table>
<thead>
<tr>
<th>Student Information</th>
<th>Course Information</th>
<th>Course Status</th>
<th>Risk Indicators</th>
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<tbody>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Tartan ID</td>
<td>Course ID</td>
</tr>
<tr>
<td>Brown</td>
<td>Candace</td>
<td>845323</td>
<td>CIS-2515</td>
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<tr>
<td>Adams</td>
<td>Scotts</td>
<td>345215</td>
<td>CIS-2510</td>
</tr>
<tr>
<td>Howell</td>
<td>John</td>
<td>876548</td>
<td>CIS-1411</td>
</tr>
<tr>
<td>Smith</td>
<td>Cheryl</td>
<td>786523</td>
<td>CIS-1111</td>
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<tr>
<td>Johnson</td>
<td>Meryl</td>
<td>645227</td>
<td>MAT-2170</td>
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<tr>
<td>Carson</td>
<td>Van</td>
<td>865234</td>
<td>CIS-2421</td>
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<tr>
<td>Sledsoe</td>
<td>Catherine</td>
<td>433284</td>
<td>CIS-2510</td>
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<tr>
<td>Powell</td>
<td>Shown</td>
<td>234124</td>
<td>CIS-1411</td>
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CBE
Design: Critical Components of Learner Support

4. Integrated Career Coaching
www.careerconnection.sinclair.edu

**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
Design: Delivery

- Must be flexible entry/exit
- Must integrate into college systems

Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Weeks 12 - 16

800 Teaching Section
Implement

• Faculty Roles/Coach Roles
• Classroom Policies
Implement: Considerations for Faculty Roles

• Intellectual Property
• Course development stipend
• Faculty payload
• Course development project plan / timeline
• Response Times
  • Email – within 24-48 business hours
  • Grading – within 72 business hours
Implement: Classroom Policies

• Mastery

• Retakes

• Milestones and Deadlines
  • How will you measure student progress?
    • Pacing Charts
    • Milestones that support accelerators and flex-pacers
    • Deadlines that prevent end of semester “cramming”
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)
Improve

- Student Success Data
- Course Data
- Program Feedback
- Assess and Improve
Questions