

**Questions
Information Technology
Professionals Should Ask About
Competency-Based Education Programs**

A RESOURCE GUIDE



Copyright © 2016 The Competency-Based
Education Network

This work is licensed under the Creative Commons
Attribution-NonCommercial-ShareAlike 3.0
Unported license. To view a copy of this license,
visit [http://creativecommons.org/licenses/
by-nc-sa/3.0/](http://creativecommons.org/licenses/by-nc-sa/3.0/) or send a letter to Creative Commons
at 171 Second Street, Suite 300, San Francisco,
CA 94105, USA.

WITH SPECIAL THANKS TO:

Public Agenda

C-BEN 2014-2015 Business Processes and Systems Strand members
(full member list is included at the back of this resource guide)

Deb Bushway, Independent Consultant

Ed Callahan, Brandman University

Phillip Doolittle, Brandman University

Frederick Hurst, Northern Arizona University

Mike Offerman, Independent Consultant

If you have a question about this resource, please email
info@c-ben.org for assistance.

The information contained in this document is provided for informational purposes only. Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, the authors, publishers and financial supporters (collectively referred to as "C-BEN") of this document assume no responsibility, therefore. The user of the information agrees that the information is subject to change without notice. C-BEN assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. In no event shall C-BEN be liable for any direct, indirect, special or incidental damage resulting from, arising out of or in connection with the use of the information.



Questions

Information Technology Professionals Should Ask About Competency-Based Education Programs

A RESOURCE GUIDE

Introduction

Institutional leaders have a myriad of questions when tasked with the challenge of designing and implementing a competency-based program. Often, institutions report not knowing how to even get started. The Competency-Based Education Network (C-BEN) created this resource for information technology professionals so they can support competency-based innovation on their campuses. These questions will ensure institutions have the technological systems needed to launch and scale sustainable competency-based education (CBE) programs on their campuses.

Instructions for Using this Resource

Please note that many responses will depend on the program's academic calendar type: standard terms (semesters or quarters), nonstandard terms that are substantially equal in length; nonstandard terms that are not substantially equal in length; or non-term programs. Responses will also vary depending on whether the program is offered using credit hours or using direct assessment.

Questions

Additional Questions

- What is your model¹?

- Will your current enterprise resource planning (ERP) system and/or student information system (SIS) support this model²?

- Can your current enterprise resource planning system and/or student information system be customized to support your model?

- Will your financial aid module support your CBE model?
- Will your accounts receivable module support unique billing periods for each student, if needed?
- What modules, screens, and reports would need to be modified?
- What other systems would be impacted by these customizations (e.g., data warehouse, customer relationship management, payment gateways, student portals)?

- How will your financial aid system support your CBE model?

- What are other institutions using for financial aid, and what are the challenges?
- What enterprise resource planning system/student information system have they integrated with?
- Are there prebuilt connectors for these enterprise resource planning systems/student information systems, or will you need to build your own?
- Does your financial aid system offer a portal integration with your existing student portal?
- How will data move from the new financial aid solution to the enterprise resource planning system/student information system, data warehouse, customer relationship management, student portals, and other current enterprise or legacy systems?
- Will the solution integrate with your existing single-sign-on solution, or will you need to build a custom integration?
- Does the solution offer on-premise cloud solutions (e.g., cloud solutions have a series of questions: security, backups, patches, upgrades)?

¹ Standard (semester), standard with modules, nonstandard: substantially equal-length terms, nonstandard: substantially unequal-length terms, credit-hour nonterm, hybrid, or direct assessment.

² Standard (semester), standard with modules, nonstandard: substantially equal-length terms, nonstandard: substantially unequal-length terms, credit-hour nonterm, hybrid, or direct assessment.

Questions

- Will your institution be using a customer relationship management system for recruiting and admissions?

Additional Questions

- Will these be impacted by a new financial aid system?
- Will the CBE application follow the same flow into the enterprise resource planning system/student information system?
- How will these applicant records be identified in the enterprise resource planning system/student information system as CBE applications?
- Are there custom inquiry forms and application forms that will need to be modified?
- How are attachments to the application handled?
- Traditionally, an account will get created in the learning management system only after someone becomes a student. How does this process change if you want to allow prospective students to evaluate the CBE content before they have applied and been accepted?

- What learning management system will you use to support the delivery of the CBE content?

- Is there an automated method to allow prospective students to access the learning management system?
- How will the learning management system support the delivery of CBE content?
- How will the learning management system determine mastery of the competency?
- How will the learning management system track activities?
- How will the learning management system update the enterprise resource planning system/student information system with this data?
- If a student has not paid his/her bill, how will the billing system update the learning management system to prevent that student from continuing?
- How will the learning management system update the new financial aid system with this data?
- What platforms will students be able to use to consume the content?
- Are there dashboards and reports that show the status of students' progress?
- Can alerts or triggers be set up to alert advisers when a student's activity drops off?
- How will the learning management system manage this process?
- How will the existing funnel reports be modified to show the conversion rates and melts?

Questions

- How will implementing CBE impact the data warehouse and reporting structure?

- How will the data interfaces, integration, and Web services be configured as you separate out modules from the ERP system/SIS?

- How will the business processes scale as the number of CBE students grows?

Additional Questions

- What new reports will be needed?
- How will you collect all the data from the various systems to create the needed reports and dashboards?
- Do you have the in-house resources to build all the integrations between the various systems, or will you use consultants to help accomplish this work?

- How often will the various systems need to be updated?
- Will the updates need to be in real time?
- Do you have some infrastructure in place to support the amount of interfaces that will be required?
- Will you use flat files to update the various systems, or will you evaluate more modern tools to handle real-time integration?

- What processes need to be automated to minimize the need to add full-time enrollments to support the process?

Appendix

List of C-BEN 2014–2015 Business Processes and Systems Strand Members

BUSINESS PROCESSES AND SYSTEMS STRAND

Joellen Shendy <i>Strand Lead</i>	University of Maryland University College
Lesa Beals	Purdue University
Amy Berendes	University of Wisconsin - Extension
Robin Berenson	Excelsior College
Jay Box	Kentucky Community & Technical College System
Kevin Brockbank	Salt Lake Community College
Bernard Bull	Concordia University Wisconsin
Ed Callahan	Brandman University
Lee Carrillo	Central New Mexico College
Fang Chen	Central New Mexico Community College
Kris Clerkin	Southern New Hampshire University
Tawnie Cortez	Rasmussen College
Lyda Costello-Kiser	Lord Fairfax Community College
Donna Diller	Central New Mexico Community College
Phillip Doolittle	Brandman University
Brendan Farley	Walden University
Franz Feierbach	Salt Lake Community College
Jason Fish	Purdue University
Rebecca Garrett	North Arizona University
Eric Heiser	Salt Lake Community College
Chris Hofman	University of Wisconsin - Extension
Frederick Hurst	Northern Arizona University
Robert Johnson	Commonwealth College at Kentucky Council on Postsecondary Education
Laura Kite	University of Wisconsin - Extension
Amy Lash-Esau	Southwestern College
Mark Leuba	Pathway Technology
Ryan Lewis	Westminster College
Adam Love	Westminster College
John Milam	Lord Fairfax Community College
Phil Neal	Kentucky Community & Technical College System
Shelly Neal	Brandman University
Mike Offerman	Independent Consultant
Eugene Padilla	Central New Mexico Community College
Joni Rankin	Southwestern College
Marty Parsons	University of Maine Presque Isle
Gale Rhodes	University of Louisville
Carrie Riley	Salt Lake Community College
Betty Ring	University of Maryland University College
Paul Robinson	University of Michigan
Jenny Allen Ryan	Westminster College
William Ryan	Kentucky Community & Technical College System
Jim Selbe	Kentucky Community & Technical College System
Jennifer Share	Southern New Hampshire University
Jon Sizemore	University System of Georgi
Angela Turner	Danville Community College
Christina Whitfield	Kentucky Community & Technical College System

About the Competency-Based Education Network (C-BEN)

The Competency-Based Education Network (C-BEN) is a group of regionally accredited two- and four-year public and private colleges and universities working together to address shared challenges to designing, developing and scaling high-quality CBE programs. C-BEN institutions have developed or are developing affordable, high-quality CBE programs capable of serving many more students of all backgrounds. Additionally, member institutions are offering or will offer programs with well-defined learning outcomes and rigorous assessments. The C-BEN Board of Directors, comprising innovators from several participating institutions, guides the work to provide an evidence-based approach to advancing CBE across the country.

C-BEN can be found online at CBENetwork.org and on Twitter at [@CBENetwork](https://twitter.com/CBENetwork).

About Public Agenda

Public Agenda is a nonprofit organization that helps diverse leaders and citizens navigate divisive, complex issues. Through nonpartisan research and engagement, it provides people with the insights and support they need to arrive at workable solutions on critical issues, regardless of their differences. Since 1975, Public Agenda has helped foster progress on higher education affordability, achievement gaps, community college completion, use of technology and innovation, and other higher education issues.

Find Public Agenda online at PublicAgenda.org, on Facebook at facebook.com/PublicAgenda and on Twitter at [@PublicAgenda](https://twitter.com/PublicAgenda).