

Implementing Competency- Based Education Models in Community Colleges: Findings and Implications from the Evaluation of a TAACCCT Grant

Presentation at the ACF meeting on “Developing
and Assessing Competencies for Teachers and
Caregivers Serving Infants and Toddlers”

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Presentation Overview

- **CBE models in postsecondary education**
- **Background on the CBE grant and evaluation**
 - Trade Adjustment Assistance Community College Career Training (TAACCCT) grant program
 - “Adapting and Adopting Competency-Based Education (CBE)” consortium grant
- **Overview of evaluation findings**
 - Implementation
 - Participation
 - Outcomes
- **Implications for competency-based approaches in other fields**

CBE Models in Postsecondary Education

Common Characteristics of CBE Models

- **Programs include measureable, job-relevant competencies**
 - Learning outcomes (competencies) must be precisely defined and objectively measurable
 - Competencies must reflect skills necessary for a given position or field, especially as articulated in federal, state, and industry standards
- **Learners demonstrate competency through valid assessment**
 - Assessments must be clearly linked to required competencies and accurately measure mastery; must be secure and reliable
 - Learners demonstrate mastery of each competency before moving on to the next and advancing through a course or program

Characteristics of CBE Models (continued)

- **Variable pacing with potential acceleration through the educational program**
 - Flexible pacing not based on “seat time,” but students’ ability to demonstrate mastery
 - Pacing guidelines used to ensure students’ timely progress
- **Need for high quality materials and timely support**
 - Instructional designers and student support staff play important roles
 - Learning management systems and other technological platforms must be user-friendly

Comparison of Traditional and CBE Models

Traditional postsecondary programs	CBE programs
Time based progress; fixed entry and completion dates	Mastery based progress; flexible entry and completion dates
Course and exam content largely determined by faculty	Course and exam content aligned with competencies required for a given field
Ad hoc, learner initiated supports	“Holistic” (sometimes intrusive) supports triggered as needed



TAACCCT

TRADE ADJUSTMENT ASSISTANCE COMMUNITY COLLEGE AND CAREER TRAINING GRANT PROGRAM

Background on the Grant and Evaluation



TAACCCT Grant Program

- **USDOL invested \$2 billion over 4 years in community colleges and other postsecondary institutions**
 - Grants to consortia and individual colleges (totaling nearly 270 colleges) in all 50 states;
 - Range from \$2 million (individual) to \$25 million (consortia)
- **Goal is to build workers' skills and credentials, meet employer demand for skilled workers**
- **Target TAA-eligible and other adult workers**
- **Requirements:**
 - Short-term programs (2 years or less) in high-demand fields
 - Partnerships with employers
 - Rounds 2-4 required to have external evaluation

Grant Overview: Adapting and Adopting CBE

Who?

- Austin Community College (Austin, TX)
- Broward College (Ft. Lauderdale, FL)
- Sinclair Community College (Dayton, OH)
- Western Governors University (WGU)

What?

- \$12 million consortium grant to “adapt and adopt” WGU competency-based model in community college IT programs
- CBE curriculum development and delivery standardized and collaborative; most courses fully online and flex-paced
- Enhanced and technology supported student services, academic and career coaching
- Adult students progress independently through stacked and latticed IT credentials (certificates, certifications, degrees)

How?

- Documented in Mathematica implementation and outcomes studies (Y1 and Y3 implementation reports, practice brief, final outcomes/impact study, executive summary)

Evaluation Findings

Implementation Findings: Curriculum

- CBE curriculum development was **more collaborative and more standardized** than traditional models and relied heavily on instructional designers
- CBE curriculum delivery was **primarily online** and standardized to reduce students' learning curve; assessments were not entirely online
- More **strategic “chunking”** of content may improve student progress

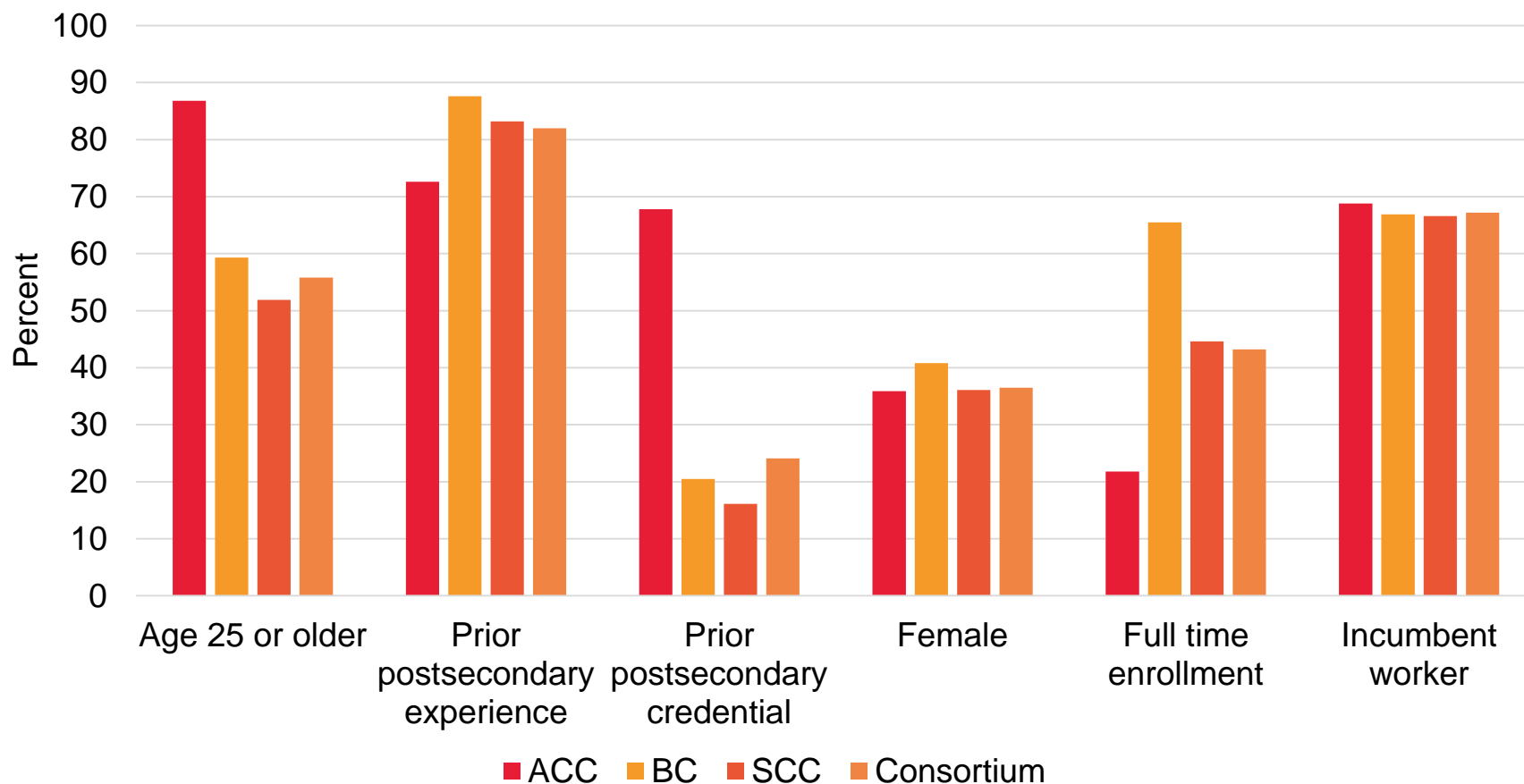
Implementation Findings: Learner Supports

- **Student “fit” with CBE models was critical for success, so colleges screened students**
 - Intake included readiness assessments, personal interviews
 - “High-tech/high-touch” approach put students on right path
- **Coaching models varied but evolved to be similar; tools supported coaches’ work (for example, data reports, pace charts)**
- **Career and transition supports at different levels of evolution**
 - All leveraged college career services
 - Other activities included resume prep, mock interviews, different types of job fairs

Implementation Findings: Industry/Workforce Engagement

- Industry partners **informed curriculum development**, including identification of competencies; new programs developed in response to employer input
- Partnerships addressed **local and regional economic conditions**; often built upon existing relationships
- **Engagement with workforce agencies** was less prominent (especially at ACC and BC), but purposes were largely similar (recruitment and career supports)

Participation Findings



Source: College administrative and state wage record data.

Note: Figure shows percentage of participants with the indicated characteristic, by college and overall. Number of participants at each college was as follows: ACC: 814; BC: 509; and SCC: 4,233.

Outcome Findings

- **Consortium-wide, 35 percent of participants completed a CBE program; participants completed programs quickly**
 - Industry certification preparatory courses took, on average, less than two terms to complete
 - Certificates and degrees took approximately four terms
- **Employment rates started and remained high; wages for employed participants increased at a higher rate than the national average**
- **Differences in participants' and nonparticipants' credential completion rates varied by college and may reflect unobservable differences between groups**

Implications for CBE in Other Fields

General Implications

- **Postsecondary institutional culture and structures pose challenges for CBE implementation, but programs can be launched without first resolving all these issues**
- **CBE curriculum development and delivery require a high degree of standardization; industry standards can serve as a foundation**
- **CBE models require relatively high level of academic preparation and maturity; should be one of multiple options for those seeking education and training**
- **Enhanced learner supports may help students, but they may be the most difficult program components to structure and sustain**

Implications for Infant/Toddler Teacher and Caregiver Programs

- **Postsecondary institutional cultural and structural challenges**
 - *Where would I/T programs be offered and what institutional challenges might apply?*
- **Standardization of CBE curriculum development and delivery**
 - *To what extent do federal, state, or industry standards fully articulate required job competencies?*
- **Expectations for participants' academic preparation and need for enhanced learner supports**
 - *What academic and other supports would the target population need and how could they be provided?*

Thank You!

Questions?



For more information, contact Ann Person

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Links to CBE Research Products

- [Competency-Based Education in College Settings: How Students, Institutions, and Workforce Partners Fare](#) is a two-page fact sheet highlighting findings and policy recommendations (2016)
- [Implementation and Outcomes of Competency-Based Education in Three Community Colleges: Findings from the Comprehensive Evaluation of a TAACCCT Grant \(Executive Summary\)](#) highlights implementation and outcomes findings (2016)
- [Outcomes of Competency-Based Education in Community Colleges: Summative Findings from the Evaluation of a TAACCCT Grant](#) describes participants' outcomes based on a comparison group design (2016)
- [Implementation of Competency-Based Education in Community Colleges: Findings from the Evaluation of a TAACCCT Grant](#) details how the consortium worked with Western Governors University (WGU) to adapt and adopt the WGU model of online, competency-based education (2015)
- [Best Practices in Competency-Based Education: Lessons from Three Colleges](#) highlights the promising practices from the consortium's experiences (2015)
- [Developing Competency-Based Program Models in Three Community Colleges](#) provides the first analysis of program implementation and documents the models near baseline (2014)