Evidence on Effective Practices Using the I-BEST Model

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Presentation Outline

• Background on the I-BEST Model

• Review of Prior Research Findings
  – How does I-BEST work?
  – Is I-BEST effective?

• Current Research on: What makes I-BEST effective?
  – Analysis of program outcomes
  – Structure
  – Instruction
  – Cost Analysis
Background

• Research on low-skilled adult students in WA
  – Significant economic gain when students reach certain level of training
  – Few students make the transition from basic skills to college-level coursework and credentials

• I-BEST developed by WA CTCs and SBCTC to increase rate at which basic skills students enter and complete postsecondary occupational education
Integrated Basic Education and Skills Training (I-BEST)

- I-BEST is an approach that integrates teaching of basic skills and technical content in order to accelerate the transition.
- An I-BEST program is a series of these integrated courses in a prof-tech field, often also includes support courses.
- Students earn college-level credit for the occupational courses.
- I-BEST sequence is part of an educational and career pathway.
- Currently there are about 150 approved programs in WA.
Three Phases of Research

2010

- How does the I-BEST model work?
- Is I-BEST effective?

2011

- What program practices make the model effective? What are the costs of delivering I-BEST?
How Does I-BEST Work?

Research Method: Statewide analysis of the model (wide-angle lens)

Findings from our fieldwork

- Variables: field, length, intensity, support, credential
- Transition from basic skills to college-level is challenging
- Instructor relationship is critical
- Integrated instruction varies

- See Wachen, Jenkins, & Van Noy in *Community College Review 39*(2) for more information
Is I-BEST Effective?

Research Method: Quantitative Study*

• Data: basic skills students in WA State enrolled in 05-06, 06-07, and 07-08
• Multivariate analyses: logistic regression, PSM, DID

Findings: I-BEST students were significantly more likely than their counterparts who did not take I-BEST courses to:

– earn credits toward a college credential
– earn occupational certificates
– and make gains on basic skill tests

But what program practices make this model effective?

*Zeidenberg, Cho, & Jenkins, 2010
What Makes I-BEST Effective?

• Research Method: Program-level analysis (macro lens)

• Site visits to colleges with targeted programs
  • Interviews, classroom observations

• Analysis of program outcomes

• Analyze interviews, examine key elements of program model, and compare across higher and lower performing programs
Analysis of Program Outcomes

• Cohorts of first-time students, 2006-07 through 2008-09

• Focus on descriptive statistics on program completion
Analysis of Program Outcomes

• I-BEST Programs Vary Considerably in Completion Rates and Credits Accumulated
  – Among those I-BEST programs with more than 20 students, for example:
    • CIS programs range in completion rate from 8% to 83%, in credits earned from 12 to 27
    • Health programs range in completion rate from 2% to 94% and in credits earned from 4 to 43

• We looked at programs that vary in degree of effectiveness within five fields of study
Program Practices

• Field study focused on support services, integrated instruction, program structure, sustainability, and cost

• Today: focus on two key elements of effective programs
  – Structure
  – Instruction
Structure

The Structure Hypothesis

– “Community college students will be more likely to persist and succeed in programs that are tightly and consciously structured, with relatively little room for individuals to unintentionally deviate from paths toward completion, and with limited bureaucratic obstacles for students to circumnavigate.”

– Scott-Clayton (2011)
Navigating College

• College knowledge
• Making good choices
• Connecting with support services

I-BEST offers higher level of assistance
Student Decision-Making

Complex decision-making process

– Choosing programs
  • I-BEST model requires entering field of study and working toward credential

– Choosing courses
  • In the I-BEST model, this process is eliminated
Support Services

I-BEST support courses

- Improving study skills and supplemental instruction for technical courses

Financial aid is critical

- 58% of I-BEST students are in the bottom two quintiles of SES
- Basic skills students adjusting to paying for college-level courses

Opportunity Grant funding and case management
Structure - After I-BEST

Two major issues

• Lack of direct transition
  – Need for more academic preparation
    • NAC to Nursing
  – Loss of momentum
    • Welding short-term certificate

• Released back into the wild
Nursing (LPN, RN, BSN)

?  

Nursing Assistant I-BEST
Staying on Path

Approaches

- Establish an intermediate term/program along the pathway
- Continue intervention or support through a longer portion of the program
- Develop centralized location for supporting transitions
- Consider alternate pathways
Instruction

Team Teaching: SBCTC requires at least 50% overlap

- “Adult literacy and vocational instructors work together to develop and deliver instruction.” - SBCTC

- Support for development/planning
  - Essential but sporadic
  - Funding
Integrated/Contextualized Basic Skills Instruction

• “Integrated basic skills instruction is the incorporation of reading, writing, or math instruction into the teaching of content.” – Perin 2011

• Unlike integrated instruction, contextualized basic skills instruction teaches academic skills in the context of the technical subject.

Design of I-BEST model focuses primarily on integrated instruction
Models of Integrated Instruction

Model 1: Non-Integrated Instruction

• P-T instruction delivered without change. BS instructor assumes support role.

Model 2: Non-Integrated Instruction with Separate, Contextualized Basic Skills

• P-T instruction delivered without change. Co-instructors jointly identify basic skills needed – taught separately. BS instructor assumes support role, focuses on these skills.

Model 3: Partially Integrated Instruction

• Co-instructors jointly modify P-T course to accommodate basic skills students. BS instructor assumes support role, but course content includes more focus on basic skills.

Model 4: Fully Integrated Instruction

• Co-instructors jointly revise existing course more extensively (or develop new curriculum) to accommodate basic skills students. BS instruction is interwoven fully into P-T content.
Integrated/Contextualized

- Fully integrated instruction with integrated learning outcomes is difficult to achieve

- However, many programs feature *contextualized* basic skills instruction.

- Combination of integration and contextualization of basic skills.
College Respondents

Responses from programs:

– Integration/innovation in instruction
  • “Builds a culture of more effective pedagogy beyond I-BEST”
– Administrative support
– Pathways/transitions
  • “Know how to transition students (and to what)”
– Co-planning
– Faculty partnerships
– Overall student support
Implications

Structure

– Multiple Transitions
– Release Criteria
  • Addressing the gap

Instruction

– Support development and planning
– 50% overlap: guideline/starting point
– Integration and contextualization
CCRC I-BEST Publications

• Integrating Basic Skills and Career-Technical Instruction
  – Community College Review (April 2011)
  – http://crw.sagepub.com/content/39/2/136

• New Evidence of Effectiveness
  – CCRC working paper (Sept 2010)
  – http://ccrc.tc.columbia.edu/Publication.asp?UID=805
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