The Co-Requisite Initiative: An Initial Assessment of Its Impact at Ivy Tech Community College – Central Indiana Region

Gateway Course Experience Conference
March 25, 2014
Objectives

- Provide history and rationale for institutional mandate
- Introduce the overall approach to implementation
- Summarize the overall results from modeling the main effects
- Disaggregate these effects for any secondary benefits to disadvantaged students
- Describe focus group feedback on the student experience
- Discuss faculty survey on improving learning experience
About Ivy Tech

- Founded, 1963; community college, 2005
- Nation’s largest statewide community college system with single accreditation
- 23 campuses statewide
- Over 130,000 unduplicated students annually
- Central Indianapolis Region: 39,000 annually
- Accredited by the Higher Learning Commission
Ivy Tech’s History of Developmental Education Reform

- 1980s: Standardized learning objectives
- 1990s: Multiple levels of remediation
  - 2 levels of writing
  - 2 levels of reading
  - 3 levels of math
- 2000s: Remediation pilots
  - Lilly Endowment—Acceleration
  - Joyce Foundation—Contextualization
- 2010s: New Models
  - Modularization
  - Consolidation (single levels instead of multiple levels)
  - Co-Requisite Delivery
Co-Requisite Initiative

- The ALP model at the Community College Baltimore County (CCBC) serves as the template for the Co-Requisite initiative at Ivy Tech.
- Previous studies on co-requisite delivery have shown substantial benefit from placing academically underprepared students concurrently into a college-level and remedial course with small class size and maximum support.
- ALP compared to traditional developmental writing approaches, is completed in half the time, cost effective, doubles the success rate and reduces attrition by half.
Co-Requisite Delivery at Ivy Tech

- Based on ALP model from Community College of Baltimore County
- Concurrent enrollment in developmental course and program-level cognate
- Developmental section is no more than half the size of program-level section
- Ideally, same instructor for both sections
- Mandated at all Ivy Tech regions
Co-Requisite Courses at Ivy Tech

- Co-Requisite English: Introduction to College Writing (093) + English Composition (111)
  - *Available to any student who needs remedial writing but not remedial reading

- Co-Requisite Math: Mathematics Principles with Algebra (080) + Concepts in Mathematics (118)
  - MATH 080—recitation for MATH 118
  - Available to any student who needs remedial math and MATH 118
Ivy Tech—Central Indiana Region

English Co-Req Results

Fall 2013

All results are preliminary.
Research is ongoing.
English Co-Requisite Course Withdrawal Rates

Co-Req = College-Prep students taking both courses simultaneously
Classmates = Program-level students in the same classroom as Co-Req students
Control = Course sections without Co-Req students

Graph showing the percentage of withdrawal rates for different course sections from FA 2008 to FA 2013.
**English Co-Requisite Course Success Rates**

- **Co-Req** = College-Prep students taking both courses simultaneously
- **Classmates** = Program-level students in same classroom as Co-Req students
- **Control** = Course sections without Co-Req students

The graph shows the success rates for ENGL111 and ENGL093 courses from FA 2008 to FA 2013. The success rates are as follows:

- **ENGL111**
  - Control: 60.6%, 60.2%, 59.6%, 57.1%
  - Co-Req: 69.0%, 69.5%, 64.1%, 54.5%, 46.3%
  - Classmates: 69.5%, 64.1%, 60.2%, 58.8%, 46.7%

- **ENGL093**
  - Control: 41.2%
  - Co-Req: 46.7%

The success rates consistently decrease over the years for both courses and the different groups.
English Co-Req Results

• Withdrawal rates effectively linked and cut in half

• Success Rates:
  – Co-Req can be associated with improved pass rates (+5%) for the developmental course
    • African-Americans (+8%)
    • Other Ethnicities (+2%)
  – But this success is accompanied by reduced pass rates (-13%) for the college-level course
    • African-Americans (-12%)
    • Other Ethnicities (-5%)
Ivy Tech—Central Indiana Region
Math Co-Req Results
Fall 2013

All results are preliminary.
Research is ongoing.
Math Co-Requisite Course Withdrawal Rates

Co-Req = College-Prep students taking both courses simultaneously
Classmates = Program-level students in the same classroom as Co-Req students
Control = Course sections without Co-Req students

![Graph showing withdrawal rates over years for different categories loosen and tighten]
Math Co-Requisite Course Success Rates

Co-Req = College-Prep students taking both courses simultaneously
Classmates = Program-level students in the same classroom as Co-Req students
Control = Course sections without Co-Req students

- MATH18 Classmates
  - FA 2008: 69.3%
  - FA 2009: 63.7%
  - FA 2010: 58.5%
  - FA 2011: 54.4%
  - FA 2012: 59.1%
  - FA 2013: 79.1%

- MATH080 Co-Req
  - FA 2008: 59.5%
  - FA 2009: 60.7%
  - FA 2010: 49.8%
  - FA 2011: 58.1%
  - FA 2012: 59.1%
  - FA 2013: 66.7%

- MATH18 Co-Req
  - FA 2008: 55.2%
  - FA 2009: 57.9%
  - FA 2010: 62.4%
  - FA 2011: 54.4%
  - FA 2012: 59.1%
  - FA 2013: 62.4%

- MATH023 Control
  - FA 2008: 59.5%
  - FA 2009: 60.7%
  - FA 2010: 49.8%
  - FA 2011: 58.1%
  - FA 2012: 59.1%
  - FA 2013: 42.4%
Math Co-Req Results

• Withdrawal rates linked and cut by one third.
• Success Rates:
  – Co-Req can be associated with improved pass rates (+11%) for the developmental course
    • African-Americans ( +23% )
    • Other Ethnicities  ( + 9% )
  – Co-Req can be associated with improved pass rates (+3%) for the college-level course
    • African-Americans ( +12% )
    • Other Ethnicities  ( + 2% )
Follow-Up Research Opportunities

• Split college-level control groups to separate college-ready and former college-prep students.

• Statewide, we have a large enough sample to limit the research to FTIC students, so that longitudinal comparisons could be studied.

• Regression to statistically test the effects of various confounding factors (full-time faculty, FTIC students, and Accuplacer scores).
Co–Requisite Focus Groups: Methodology

1. Sixteen Co-Req students
2. Three student focus groups: two for the remedial math 080 and one for English 093.
3. 50 minute sessions.
4. Pizza and drinks as an incentive.
5. Assurance of confidentiality

Five questions:

1. What did you find rewarding?
2. What did you dislike?
3. What should students know/do before enrolling?
4. What should students do to ensure success once they’ve enrolled?
5. If Co-Reqs were co-taught (instead of by one teacher) what do the instructors need to know to be successful?
Results – Student Likes

• Need to “high five” person who invented this course
• Makes you proud to be an “Ivy Tech” student
• “Felt like a team with my teacher!”
• Teacher made all the difference!
• Built-in support group
• “I’m doing better than I expected”
Student Likes (Continued)

• Kept us on track with assignments
• Got more out of class, felt better prepared
• Keep me motivated
• More committed to class
• More time for review
• Able to ask questions – no threat or stress
• Like the sequencing – no gap, avoided forgetting items
• Knowing other students have similar issues
• Helps with everyday math
Student Dislikes

• Co-Registration not explained at registration
• Even with advisor there were (registration) conflicts
• Join the course – make registration “one step”
• Breaks too long between classes
• Wouldn’t like class spread over two semesters
Good Things to Know Before Enrolling

- Arrive prepared and ready to participate
- Ask other students who took (Co-Req) course
- Understand bigger time commitment
- Keep up with assignments,
- Don’t be afraid to ask questions,
- Attend class and arrive promptly.
- Know you’ll be with other students who struggle
- Come in with confidence and positive attitude
- Use 0-level class time effectively
What students Should Do to Ensure Success

- Commit – Attend class
- Be on time
- Ask the stupid questions -
- Work with people in class
- Outside class – study, do your homework, check Blackboard, check emails (very important)
- Let teacher know your weaknesses
- Follow syllabus
Student Views on “Co-teaching”

- Should stay with one instructor
- If you can’t have one instructor, both need to talk and be on the same page
- Should work together on exams and keep working together throughout the course
- All instructors should be versed in homework programs
- Wouldn’t like having two instructors
- Won’t work
Opportunity for Profound Learning

- Insightful Research Question:
  - Which populations benefit the most from the Co-Requisite initiative as traditionally implemented, and which populations might benefit from some adaptation of the Co-Requisite initiative to better serve diverse student needs?
Qualitative Research: Faculty Survey

- SNAP Survey
- Open-ended questions
- Current and previous Co-Requisite instructors
- Four central inquiries
  - Improvement to student learning
  - Disadvantages of the Co-Requisite approach to learning
  - Recommendations for expanding, maintaining, or reducing number of Co-Requisite sections
  - Improving faculty experience
- Result yielded over 65% participation
Faculty Survey Thematic Analysis

- Personalized Attention and Course Engagement
  - Smaller class equals individual attention
  - Increased participation

- Increased Support vs. Inadequate Support
  - Supplementary instruction
  - Time management

- Reinforced Learning and Confidence Building
  - Close group discussions
  - “Co-Req students developed ‘swag’”
Thematic Analysis Cont.

- Scheduling Logistics and Registration Process
  - Inconsistent class scheduling
  - Course-linking issues
  - Cohort registration

- Course Placement Strategy
  - Consider cut-off points

- Students’ Unpreparedness and Negligence
  - Disregard for ASA Classes
  - Poor work ethic and attendance rates
Thematic Analysis Cont.

- Faculty Disengagement
  - Lack of coordination in co-teaching
  - Improve communication strategy

- Faculty Development/Training
  - Provide additional tools and resources

- Scalability:
  - Expand
  - Maintain
  - Reduce
Next Steps

- Continuous data collection and analysis
  - Quantitative
  - Qualitative

- Sustained conversations regarding registration process
  - Advising
  - Student information system (Banner®)

- Enhanced professional development
Presenters

- Prof. Rod Brown, Dean of Academic Advancement  
  (e-mail: rsbrown@ivytech.edu)

- Dr. Jeff Cornett, Director of Institutional Research  
  (e-mail: jcornett29@ivytech.edu)

- Dr. Rick Bentley, Director of Assessment  
  (e-mail: rbentley3@ivytech.edu)

- Dr. Funmi Olorunda, Asst. Director of Institutional Research  
  (e-mail: oolorunda@ivytech.edu)