From What Happened to How it Happens

Fidelity of Implementation Evaluation of a First Year Seminar at Bronx Community College

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Overview

- The Outcomes Approach
- Why 'How it Happens?'
- The Process Approach
- Defining the First-Year Seminar (FYS)
- Applying The Process Approach to FYS
- Management Implications

Outcomes Approach (or What Happened?)

- What is the impact of program XYZ?
 - Focus is on
 - Defining "impact" outcome measure(s)
 - Controlling for independent variables that affect the outcome measure
 - Variables mostly limited to student record-level data derived from administrative systems

'What Happened' Assumptions

- Instruction and support services provided are stable, consistent and valid over time for treatment group
- Controls can be used to account for major differences between those in treatment and non-treatment groups
- Conclusions are generalizable over time and space

Use of Outcome-based Information

- High-level performance-based judgments
 - High-stakes standard periodic evaluation models
 - Policy recommendations
 - Reward-based management systems
 - Accountability systems
 - Public relations and marketing campaigns

Outcomes Approach to Research



- Context-free
- Rigid
- Short-term
- Engenders fear of failure
- Ends justifies the means
 - Culture of secrecy
 - Data manipulation to avoid failure

- Objective
- Quantitative (SMART)
- Standardized
- Predictable
- Generalizable
- Linear
- Accountability

Why Study How it Happens?

- Programs, especially newly developed ones, are not implemented in a stable, consistent and sometimes valid way
- Programs are not often evaluated systematically on adequacy of program design and implementation (process-related)
- Process-related findings help refine and sometimes reimagining initial program model

Why developmental evaluation exists...

Our program just started we have no idea where to go or how to evaluate We'll start by predetermining the program's outcomes using very little evidence then over the years we'll judge you according to that





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Process Approach (or How it Happens?)

- Focus is on
 - Way instructional model is designed and delivered over time
 - Classroom observation ratings by instructor over time
 - Satisfaction ratings across course components over time
 - Way grades are distributed between course sections

Use of Process-based Information

- And knowing the implications for program development
 - Field work findings and its discussion lead to affirmation or adjustments of original program model
 - Understanding of unexpected program developments can lead to tweaking or re-conceptualizing original program model

Process Approach to Research

- Means-focused
- Contextual
- Realistic
- Flexible
- Developmental
- Dynamic
- Useful
- Long-term
- Learning-based
- Focus on quality



- Subjective
- Difficult
- Not generalizable
- Disorderly
- Ambiguous
- Not linear

Building a First Year Program

- BCC's First Year Program is a comprehensive initiative targeting first year students
 - -Originated out of the College's experience with the Foundations of Excellence project during 2010-2011
 - -Analyses and thorough review of literature resulted in proposals for improvement

First-Year Program



FYS: First Year Seminar

- One credit academic seminar embedded in a larger programmatic effort
- Designed to prepare first-time freshmen for the demands of college
- Academic seminar with:
 - a. Selected academic content
 - b. College orientation activities
- Integrated academic advisor and student peer mentors in each class

Components of FYS

I. Academic Content

- Academic topic which is meaningful and appropriate to the skill level of first year students
 - Food, Culture, and Sustainability
 - The Art of Struggle
 - Sports and Urban Education
 - Language Identity and Community
 - Coming to America: Immigration and Social Change
 - Bad Guys Have All the Fun
 - Introduction to Passions: Lessons Learned From Reality TV

II. Embedded General Education proficiencies

- Students are introduced to the selected General education proficiencies
- Activities and assignments which revolve around selected general education proficiencies (i.e., critical thinking, communication, and/or quantitative or scientific reasoning skills)

III. Student-Centered Teaching Model

- Shift the focus of activity from the teacher to the learners
- Focus is on students' success and on their learning outcomes
 - Active learning
 - Cooperative learning
 - Inductive teaching and learning

IV. The use of e-Portfolio

- Integrating e-Portfolios to provide students opportunities to synthesize their learning experiences. Students are required to:
 - -Create their own personal profile
 - -Create their own academic plan
- Upload at least two-assignments which reflect Gen-ed proficiencies
- Use the e-portfolio platform for group activities

V. Full Integration of Peer Mentors

- Provide instructors feedback on student understanding of material
- Lead small group discussions in FYS
- Provide guidance and support with technology

Is FYS working?

- Typical IR Approach
 - Label enrollees as FYS or non-FYS
 - Connect to outcome measures like retention, grades, GPA, etc
- Assumptions
 - FYS participants receive equal program treatment
 - Focus is on finding general tendencies on a large number of cases

Typical IR Approach: Is FYS Working?

Following Fall 2012 semester

First Year Course	Total N	End-term Average GPA	End-term Average Credits	Re-enroll Rate
FYS	469	2.29	6.57	79%
Traditional	893	1.60	3.64	68%
No course	479	1.77	4.73	50%

How it Happens: Is FYS Working?

- Fidelity of Implementation Approach
 - What are the various components of FYS?
 - How can we measure each of these components in terms of implementation fidelity?
 - Are some components more valuable than others?
 - Are original components appropriate and/or other components necessary?
 - How does fidelity of implementation relate to outcomes?

FYS Course Evaluation

- The Community College Research Center (CCRC) of Teacher's College Columbia University is collaborating with BCC on an in-depth evaluation of the course
- Classroom observations: 34 Fa13 and Sp14 with same section observed three times in same semester
 - Rubrics used to rate instructors on a three-point scale across program components
- Interviews: 10 faculty, 5 staff and 13 students
- Focus groups: 4 mentors, 27 students

FYS Components

- Student -centered pedagogy and use of collaborative learning activities
- E-portfolio
- Winner's Circle/Peer Mentors
- Intensive advising
- Student engagement with FYS
- Embedded General Education proficiencies and discipline-based content

Why Rubrics?

Daddy, do you like my picture?



Honey, if you'd like me to be objective, I'll have to create a rubric.

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Rubrics

 FYS classroom observation ratings for each course component with a description of low, medium and high implementation.

Component	Low	Medium	High
Student-centered pedagogy and use of collaborative learning activities	Instructor mostly lectures and delivers instruction during class session	Instructor or peer mentor occasionally facilitate a discussion among students that allows for self-reflection and application to daily experiences	Most class time is spent on students actively learning through structures activities or discussions

Rubrics

Component	Low	Medium	High
Winner's Circle/Peer Mentors	Peer mentors play limited role in the class. They mainly help with providing instructor and/or students support if requested	Peer mentors play somewhat of an active role in the class. The occasionally lead activities and discussions	Peer mentors lead Winner Circle discussions during the class observation

Rubric Scores 1=low, 2=medium, 3=high

Component	9/26/13	11/1/13	12/23/13	4/11/14	6/5/2014
# Instructors	10	10	10	5	5
Student- centered	1.7	2.2	2.7	2.6	2.2
E-portfolio	1.9	2.0	2.3	2.0	2.0
Peer mentors	2.1	2.0	2.2	2.8	2.6
Intensive advising	1.3	2.0	1.5	2.0	2.0
Student engagement	2.1	2.2	2.4	2.2	2.4
Gen Ed	2.3	2.3	2.7	2.6	2.4

- 9/26/13
 - Relatively low level of student-centered pedagogy
 - Low integration of academic and student success content
 - Peer mentors better used to mentor rather than to deliver course content
 - Inconsistent instructor quality

- 11/1/13
 - FYS teaching is challenging
 - Need to better model student centered pedagogy and integrated curricula, possibly through professional development efforts
 - FYS advisors not optimally used as many students do not know who they are
 - Peer mentors most useful aspect of the course
 - Student success content preferred over academic content in many cases
 - Many students surprised about academic component in the course

- 12/23/2013
 - Student-centered pedagogy quality improving as it takes time for instructors to learn how to use it, although still mainly instructordriven
 - E-portfolio mainly being used as a repository for student work
 - Uncertain role of peer mentors in the classroom
 - Instructor ratings range from 1.5 to 2.7 across six components
 - Instructors need at least two semesters to become skilled in using student-centered instructional methods
 - Difficult to integrate students success, academic and general education content.
 - Limit academic content options
 - Students want more student success content and find academic content less relevant

- 4/11/14
 - A number of instructors increase use and comfort of utilizing studentcentered pedagogies over time
 - All or nothing with respect to e-portfolio
 - Use of peer mentors being used more as a supplemental resource and role model
 - FYS advisors now a more integral part of the course
 - Student engagement varies and linked to use of student-centered pedagogies
 - Instructors not able to integrate all three types of learning: General Education, Discipline-based content and student success skills
 - Overall implementation score for five instructors substantially increased from 2.1 to 2.4 from same period in the prior year
 - Instructors grouped mainly into high and low implementer groups
 - Some instructors do not improve with practice

- 6/5/14
 - E-portfolio not most critical component of course and students rarely use e-portfolio in other classes
 - Increase clarity of mentor role
 - Advisement inconsistently implemented but very important to students
 - Patterns remains of groups of relatively high and low implementers
 - Low implementers remained low if they did not buy into FYS model, not self reflective about instructional practice and dismissive of professional developments efforts
 - Two semesters sufficient to grasp and implement the FYS model

Post-FYS Student Interviews

- 6/5/14
 - Academic content became more relevant during the Spring semester following FYS
 - FYS should be better "messaged"
 - Students speak strongly about the value of receiving advising through FYS

The Takeaway (as of June 2014)

- Student success content is by far the most preferable
- FYS needs to be better "messaged"
- FYS advisors still utilized after seminar course enrollment and discussion with them may be the single most powerful element in FYS
- Faculty need time and support to learn and master student-centered teaching methods
- Transfer of FYS knowledge to future courses will require deeper analysis

Management Implications

- Advisors made more visible to students and began working more closely with peer mentors
- Peer mentors should not play role of teacher's assistant but focus primarily on Student Success component of the course
- General Education skill development need to be emphasized and seen as separate from discipline specific content
 - Making skills development more obvious in assignments
 - Build a library of assignments and classroom activities that link with student-centered learning focus of FYS and integrate this in professional development activities
 - Limit content topics
- Develop a professional development committee comprised on eight senior FYS faculty that also serve as faculty mentors
- Two semesters sufficient amount of time to grasp model
- Expect faculty to use e-portfolio as a way to reflect on and publish student work

Question

- Does process-oriented research and evaluation only look at design and implementation issues and not outcomes?
- Answer: No! Although design and implementation issues are a focus, short-term outcomes can be examined to validate model

Outcomes by Implementation

Students in First-Year Seminar courses with higher levels of implementation demonstrated significantly stronger first-term outcomes.

Implementation Level	# Sections	Average Credit Range	Average GPA Range	Re-enrollment Range
High	8	7.1 - 9.7	2.38 – 2.88	81 - 100%
Medium	7	5.3 - 6.6	2.08 – 2.58	71 – 86%
Low	6	4.2 - 5.1	1.65 – 1.90	57 – 78 %

30 revisions, are you a perfectionist?



No, I'm just stuck in a formative self-evaluation feedback loop.



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