

Oxnard

Traditional or Transitional: Are They Transpositional?

Mark Bates

October 2, 2013

Sabbatical Proposal

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- 1. Purpose:** The purpose of my sabbatical is to analyze, evaluate, and communicate the effectiveness of the various modalities of teaching currently and historically used in the Math Department—the “traditional” classroom model use for the majority of our mathematics courses, the “transitional” math program currently used for our developmental sequence, and other models used by some teachers (hybrid, online, “flipped classroom”, etc.).

In my roles as the Math Basic Skills Coordinator, the co-chair of the Transitional Studies Committee, and now as BSI Coordinator, I have taken an active part in administering, analyzing, and leading dialogue on data collected from our students, mostly those who were taking classes in Developmental English, Developmental Math, or ESL. The last such project, conducted by the Transitional Studies Committee, was completed in Spring 2012, and led to a number of changes on campus designed to increase student-teacher interaction, services, and ultimately, student success.

By Spring 2015, Oxnard College will have completed two full years of the Transitional Math program. As such, we will begin to have sufficient data to track such indicators as student retention and persistence, as well as the number of semesters taken to complete the developmental math sequence.

Besides simply tracking data held in Banner, I would also like to conduct focus groups to evaluate (qualitatively) strengths and weakness of the Transitional Math program. While on sabbatical, I could hold such groups at times that were convenient to different student populations, and approach such groups independently (that is, not as an instructor to any of the students).

Finally, I would like to examine approaches used by other faculty on campus—those teaching hybrid, online, or “flipped” classes—both in mathematics, and other disciplines. I would like to examine the strengths and concerns of such classes, as expressed by those faculty, to lead campus discussions which can best serve our students.

2. Rationale

- a. Professional Development:** This proposal would help me to see how to best lead campus changes with respect to developmental education, both as a member of the math department, and as BSI Coordinator.

b. Value to Department: The Department would benefit by having consistent data which specifically addresses our new Transitional Math program. Current data—provided through PEPC or the State Scorecard—is more generic, and would not serve the department in this way.

c. Value to College or District: As the Transitional Math program is the first in the state of California to employ the “Redesign Model” proposed by NCAT (the National Center for Academic Transformation), we can be of service to our sister colleges, as well as to other disciplines where this model may be appropriate.

Furthermore, I plan to organize the results and disseminate to the campus community through the Student Success Committee, and through flex day activities in following semesters.

d. Value to Students: This proposal would specifically target measuring student success, not only through developmental math, but beyond. As 70-80% of incoming students place into developmental math, the results of this study will be crucial to our student population.

e. Value to Community: Simply said, the faster students complete developmental sequences, the faster they transfer, which will allow us to serve more of our community. I will also be examining “barriers to entry” that exist for certain groups of the community that cause them to be underrepresented at Oxnard College.

3. Implementation

a. Implementation Procedure: Beginning January 2015, I will begin to gather data from the last two years of our Transitional Math program. I will also gather data from our (defunct) Success Academy, and earlier cohorts of math students who were enrolled in our basic math sequence (Math 9, 10, and 11).

My initial analysis will be to look beyond the basic measures of success and persistence through the math sequence. Per recommendations of the Student Success Task Force, I plan to measure how many semesters students take to complete the basic skills sequence, for each modality. I plan to explore how many students switch modalities mid-stream, and why. Furthermore, I plan to examine the success rate of students in following courses (such as Math 14, or 100-level courses), separated by cohort and modality.

Such questions will include, but not be limited to:

- What percent of students who began in basic skills Math eventually completed the sequence?
- Were there “gaps” in progress, and if so, how many?
- How many semesters did it take to complete the sequence?

- Did completing the sequence help overall GPA?
- Do students who take a STEM course fare better if they have completed a math sequence at OC?
- Does choice of modality affect success in future math classes (14 or 100-level)?

In February 2015, I will begin to organize focus groups of students who are currently enrolled in Transitional Math, as well as students in higher-level classes. I plan to develop a survey and group questions that explore which factors of each modality may serve to enhance (or block) possible success for students.

Such questions will include, but not be limited to:

- Why did you choose the modality of your class? [If choices were available.]
- Do you believe that the modality of your class matches your learning style?
- Do you feel that you are engaged with the material?
- Is your instructor available for help?
- Are there frustrations of the technology required for your class?
- What are some of the positive benefits of the class you chose to take?

In March, I hope to follow up with faculty from all three campuses to discuss strengths and weaknesses of each modality from their perspective. This is similar to a faculty survey I conducted for the Transitional Studies Committee in Fall 2011, but would be broader (in terms of number of faculty surveyed), deeper (in scope of questions), and more focused (with respect to modality, instead of measuring general student engagement).

Such questions will include, but not be limited to:

- How would you compare your classroom of a different modality, compared to the “traditional” classroom?
- How engaged do you feel your students are with the material?
- How often do you help students?
- How would you advise or warn students who are signing up for this type of class?

Finally, in April and May, I hope to aggregate the results, look for significant factors, and write up my findings.

b. Projected Results: While I can not predict the exact results of my research, I would hope that the methodology and the questions used could serve as a baseline for future exploration into student success at Oxnard College. In my service to the Math Department and the Transitional Studies Committee, one of the largest barriers to being

a “data-driven” campus is consistency in measuring and analyzing key academic statistics.

Striving for consistency and statistical rigor will allow for a more firm framework, within which we can analyze the qualitative data—thus putting more of the “why” on the numbers we see.

- c. Dissemination Plan:** Such results will be available for viewing by anyone in the College community, and would be posted on Desire 2 Learn, as well as other academic support sites.

I also plan to disseminate the results through the Academic Senate, the Math Department, and the Transitional Studies and Student Success Committees.

- d. Project Timeline:** My rough timeline would be as follows:

January 2013: Collect and analyze basic data from Banner and Math Success Academy

February 2013: Conduct student focus groups on Oxnard campus

March 2013: Conduct faculty surveys at all three campuses

Aug. 2013: Aggregate and analyze all results

4. Past Contributions to the District

Program Director, Proyecto Access, 2001-2004

Department Chair (Mathematics), 2004-2008

Basic Skills Coordinator (Mathematics), 2009-Present

BSI Coordinator, 2013-Present

Transitional Studies Co-Chair, Jan. 2011-Present

Past Member of Professional Development Committee

Past Member of Sabbatical Committee

Past Academic Senator

5. Length of Service: 15 years full-time

Past Sabbaticals Awarded: None