

## HOW TO REDESIGN A DEVELOPMENTAL MATH PROGRAM BY USING THE EMPORIUM MODEL

### XIII. Building and Maintaining Consensus

From working with more than 200 course redesigns, NCAT has found that the most serious implementation issues encountered had to do with building and maintaining consensus about the redesign among all stakeholders: students, parents, faculty, professional staff, and senior administrators. The need for a shared, campuswide understanding of the Emporium Model begins when a redesign plan is developed; it continues through the pilot period as the plan becomes real; it becomes even more necessary during full implementation as more students, more faculty, and more staff get involved; and, equally important, it must continue on an ongoing basis.

Redesigning developmental math is not simply a faculty project but, rather, a solution to a recognized, institutional problem. The sustainability of that solution is based on continuing institutional agreement at all levels. Ongoing communication with all stakeholders about the redesign's effectiveness keeps the goals of the redesign and its outcomes clearly visible. The team needs to keep everyone updated on student success rates, student satisfaction, and cost reduction and remind everyone of the situation prior to the redesign. Even though the *team* may be familiar with these facts, others in the institution may be new or may not know the history or be aware of the reasons the change was made.

Some institutions have not encountered these implementation issues because they foresaw them and dealt with them in advance. Others did not anticipate them and had to deal with them in midredesign. Some worked on resolving the issues constructively and ended up with successful redesigns; others backslid and abandoned key aspects of their redesign plans as consensus among various stakeholders waned.

We encourage you to pay special attention to how you will achieve initial and ongoing consensus among:

- Faculty
- Campus offices
- Senior administrators

#### **Achieve initial and ongoing faculty consensus about the redesign.**

The biggest implementation issue faced by most redesigns is achievement of consensus on a variety of issues among all faculty teaching the course. Because course development in the traditional format is usually done by a single faculty member working on a single course, the redesign of an entire course sequence by multiple faculty can present a number of challenges, such as reaching agreement on core course outcomes, instructional formats, topic sequences, and a common website. And because instructors are usually not used to talking about such issues, they need time to work through them. As several institutions have commented, however, this can be a good problem to have. Collective decision making and departmental buy-in are key factors that lead to successful redesigns.

About two-thirds of institutions have reported challenges about the redesign when it comes to achieving faculty consensus within the department. Some of this was attributed to leadership issues—for example, interim department chairs who were reluctant to press resisting faculty. All institutions stress the need for strong leadership and administrative support to overcome these challenges. Some team leaders thought they had solved the problem of faculty buy-in at the outset but were surprised to find they had not communicated as effectively as they had thought. Team leaders thought they had their colleagues' support, but when the redesign got under way, they discovered that the opposition was stronger than anticipated. This underlines the importance of constant communication to check signals and maintain momentum.

### Examples

“Even though the math faculty agreed to the redesign initially, once it was accomplished there was some opposition from several faculty members. In retrospect, the team needed to do a better job of communication and inclusion and actively involve the other 16 full-time faculty in improving redesign components and course evolution. This has been largely overcome and is not an issue with adjunct faculty.”

“Due to some instability in leadership in the math department during the transition period, there was a large disparity among full-time faculty in the amount each was involved in the process. This led to some not being aware enough of processes and procedures when the semester started. It was expected and understandable that faculty used to lecturing had reservations about adopting the Emporium Model, but many quickly saw the value to students and embraced their new roles. Some were unable or unwilling to adapt to their new roles. And undesirable behaviors like checking e-mail instead of checking on students during emporium class or open lab hours were the result.”

“The mathematics department has consistently supported redesign. Although there were initial skepticism and inertia to overcome, the result has been a very collegial process and one that has strengthened the department. The adjunct faculty are now fully involved with the implementation, having received extensive training and mentoring. The college has hired professional part-time tutors and one full-time tutor specifically for the developmental math lab.”

### **Achieve initial and ongoing consensus among campus offices.**

Institutions frequently encounter challenges associated with preparing others on campus for the redesigned format. Most such challenges involve advising, wherein advisers do not provide correct information for students or simply misunderstand what the course is about. Team leaders need to constantly and consciously market the redesign to key campus constituencies that know little about the new format and how it differs from more-traditional offerings. Taking a proactive approach by offering sessions about the Emporium Model for various campus offices, explaining the benefits of the redesign to student government officers and organizations, using the summer to visit advisers and coaches to describe the benefits of the new approach, and immediately addressing colleagues' concerns can help during the transition period.

As full implementation continues, the team cannot assume that those who were informed about the development of the plan at the onset of the pilot still support the Emporium Model. Some campus offices may have thought the redesign was merely an experiment rather than a permanent change. In addition to keeping math colleagues informed, the team needs to be sure that advisers and others who work with students know that their ongoing support is needed.

## Examples

“Although the department worked closely with administrators while planning the redesign, more effort needed to be given to preparing the entire college community for the changes. Even though a thorough explanation of the redesigned rationale, benefits, and structure was presented to academic advisers and student service personnel, some were not as supportive as needed to encourage students to accept the change and take advantage of the ability to complete developmental math faster than in the past.”

“Regular meetings were held with the professional advising staff to share information about the redesign curriculum and course policies. Frequent communication between the department chair and the assistant registrar was also necessary.”

“The team made a campuswide presentation at an in-service training and conducted sessions for adviser training in order to educate the college faculty and staff. Some of the college’s instructors and advisers still do not understand the Emporium Model well enough to register students.”

### **Achieve initial and ongoing consensus among senior administrators.**

Institutional commitment to a course redesign includes building and sustaining that commitment throughout the life of the redesign. In the course of implementing a redesign, things happen: lead faculty members leave or retire; departments get reorganized; presidents and provosts get new jobs. Faculty members—on their own—can show and have shown spectacular success in creating highly effective new learning environments, but for those successes to be sustained or for them to have real impact on the institution as a whole, both departmental leadership and institutional administrative leadership need to play active and continuing roles.

You will inevitably encounter problems in implementing your redesign as you make a transition to a new form of instruction. Without a full commitment to preserving the key elements of the redesign while addressing the problems you encounter, the institution may simply abandon the redesign, thus forgoing either the learning gains or the cost savings benefits or both.

About half of all institutions cite the need to build institutional commitment to redesign outside their home department, especially among senior administrators. Participants frequently cite leadership and administrative support as factors in sustaining and expanding interest in redesign. In some cases, redesign is encouraged by system-level leadership; another team notes support by trustees as a factor. Like the building of acceptance within the department, however, the broadening of institutional commitment requires continuing attention and support even under favorable circumstances.

## Examples

“Our greatest challenge involved institutional support. Some administrators viewed this redesign as a grand experiment or a test case. The redesign has exposed a number of issues that need to be addressed regardless of its success. The university needs to develop—and communicate to parents and students—a coherent and compelling description of our e-learning initiatives that addresses common misconceptions and concerns (e.g., that the university is becoming a distance-learning campus). Far from being an insulated and isolated initiative, this redesign was simply the first of many such efforts.

The more the university can do now to learn from and address the larger support and public relations issues raised by this effort, the easier it will be for future redesign teams.”

“In the middle of the redesign, the department of mathematics and computer science became split into independent departments—in different colleges. The importance of having strong support from departmental (and university) leadership became increasingly clear after the department was split. Team members ended up in *both* departments, which created conflicting priorities that affected the pace of redesign. Unlike the joint department head, the new computer science department head was not a member of the redesign team, which resulted in a change in scope because of a decision about how the target courses would be used. The fragility of creating and sustaining major pedagogic change under changes in leadership, which could bring changed priorities, was evident. Existing redesign features at the time of the split have been sustained and more fully developed, but aspects of the redesign that were not yet in place have been problematic to initiate due to changing interests and changing personnel. The team is still working to achieve all of the redesign goals; however, the pace of implementation has been slowed.”

“All three of our campuses successfully implemented the full redesign with all 3,600 students, demonstrating increased student learning gains and decreased costs. Nevertheless, some faculty preferred the old model. In response to that faculty preference, a number of changes occurred on the three campuses. In the term immediately following the successful redesign, the college began offering a choice of either the redesigned or the traditional lecture format at two of the campuses. Altogether, 11 redesigned sections and 10 traditional sections were offered. The third campus developed a model that uses the redesign model but also incorporates pencil-and-paper homework requirements. Topics and term schedules are still coordinated between two of the campuses because some students use labs on both campuses; however, tests are developed independently. Although the workshops on math study skills and time management were successful, they are no longer part of the redesigned course. These techniques have been combined into a credit course not applicable to a degree; the course is offered occasionally.”

### **Ensuring Sustainability: The Fundamentals**

Once a successful pilot has been conducted, once the bumps in the road have been smoothed out, and once full implementation is in place, most institutions expect that sustainability would be a given. After all, the redesign has both improved student success and reduced instructional costs. Why wouldn't the redesign be sustained? Making the assumption that redesign will automatically be sustained without continuing attention will turn out to be a big mistake. Because the Emporium Model is so different from the traditional way of teaching in higher education, it must be continually sold and resold to all campus constituents. As the players change, continued focus on building and maintaining consensus cannot be underestimated.

*Executive leadership.* The important role of senior administrators does not end when full implementation occurs. Senior administrators need to be prepared to support the redesign and guard against the desire of some to backslide to the traditional format. The provost or president will need to remind those wanting to go back to the old way of why the redesign occurred in the first place and what the evidence is that proves its ongoing success.

*Faculty leadership.* Strong and continuing faculty leadership of the redesign is key to sustainability. While the individual providing the leadership may change, the importance of the role does not. The designated leader must continue to ensure the consistency of the course

among sections as well as adherence to policies and procedures established initially. The leader also serves as liaison with other departments and divisions whose support is needed to maintain the Emporium Model.

*Ongoing data collection.* Some institutions believe that demonstrating the initial success of the redesign through data comparisons is sufficient to generate campuswide consensus. They assume that similar results will continue, but they neglect to continue to collect and analyze the data that support that continuation. Many institutions have initially seen a small increase in student success after the first term of implementation, but as they continued to tweak the redesign and become more familiar with how to implement it, the number of students successfully completing the developmental math program continued to grow. Through ongoing measurement, institutions can see continuing improvement that will help sustain consensus and become aware of problems that need to be corrected.

*Ongoing communication.* It is important to continue to communicate with campus offices and other departments on an ongoing basis. Keep them updated on student success rates, student satisfaction levels, and cost-effectiveness, and remind them of the situation prior to the redesign. While the *team* may be familiar with these facts, others in the institution may be new and may not know the history or the reasons the change was made. Letting them know about the successes other institutions have achieved using the Emporium Model will make them feel they are not outliers but, rather, part of an important new trend.

Some institutions have developed a handout that explains the new way that developmental math is being offered. Advisers can use such a handout to assist them as they explain the Emporium Model, modularization, and mastery learning to students. Students can take the handout with them to review later. Some institutions have worked with the college newspaper to publish an article that explains the Emporium Model and includes data to demonstrate the successes students are experiencing.

*Orientation of new personnel.* Changes in personnel are common at most institutions, particularly among part-time instructors. New full-time instructors are also hired from time to time. Turnover at the department chair, dean, and executive levels occurs more frequently on most campuses than in the past. New faculty and new administrators need a good understanding of why the Emporium Model is used, how it works, and what benefits it offers. New faculty, staff, and administrators should learn about the emporium from more than just an e-mail or a data report. They should be invited to visit the emporium and talk with students, with tutors, and with faculty. They need to see firsthand how the redesign works and how all constituencies are benefiting.

*Financial plan.* To ensure long-term sustainability, a financial plan that keeps the lab/computer classroom current and functional will be needed. Such things as upgrading or replacing computers, hiring lab tutors, buying new versions of the commercial software, and so on require ongoing investment. Some administrators mistakenly believe that creating the labs/computer classrooms is a onetime investment. Others may not remember that the Emporium Model actually saved resources for the institution while improving student success. Unless administrators are reminded annually how cost-effective the Emporium Model is and what its important components are, they will forget. Some institutions annually calculate how many instructors would have been needed to teach the same number of students in the traditional format, and they compare those costs with the costs of the emporium. Such data provide evidence to remind administrators why providing needed resources is important.

## **Sustainability Checklist**

NCAT recommends that all institutions develop an annual plan to sustain the Emporium Model. Do you have an ongoing plan to:

- Collect data on learning outcomes, completion, and cost?
- Disseminate recent learning-outcome, completion, and instructional cost data to all stakeholders to document the redesign's continued success?
- Refurbish the lab/computer classrooms as needed?
- Orient new students and their parents to the Emporium Model?
- Orient and train new faculty in the department to work in the Emporium Model?
- Recruit and train lab tutors?
- Orient new administrators to the Emporium Model and invite them to visit the lab?
- Visit campus offices such as the registrar, advisers and IT staff to ensure their continued support of the Emporium Model?
- Invite representatives of campus offices to visit and observe the Emporium Model in action?
- Review course policies and procedures and make changes if needed?