

Conditions that Supported Scaling of Course Redesign in Maryland

A Report to Lumina Foundation



The purpose of this report is to share what SPEC Associates learned through a study of the course redesign work in Maryland completed in September of 2014 about the core issues related to transfer, spread and scaling of an idea or process.

INTRODUCTION

Lumina provides grants for projects and initiatives not only as ends in themselves but as means to the Foundation's broader higher education goals. Therefore, Lumina is interested in the ideas and the activities that underpin their projects and initiatives, and in spreading them to other contexts or expanding them within a single context. This report identifies some core factors that affected the spread of course redesign in Maryland, and reflects on the implications of our findings for Lumina's grant strategies. It suggests two related future strategies that Lumina could consider in order to enhance transferability and spread of its innovations. Transfer, spread, and scaling are all common terms used when referring to the adoption of an idea or process from one situation to another, or to expanding a project from a small pilot to an entire institution, system or state.

A core issue for Lumina is what are the necessary and sufficient conditions for transfer, spread and scale? Given that every situation is different, is it possible to make some generalizations about what is required to transfer, spread or scale ideas and initiatives?

To gain some insights about these questions, SPEC explored the spread of course redesign within Maryland by interviewing people who had been involved in various stages of the course redesign process from its origins in 2006 to the present day. The discussions focused on exploring two core questions:

1. What were the necessary and sufficient conditions that allowed course redesign to spread throughout Maryland?
2. When those conditions were not present, how were they created?

The answers to these questions are discussed in Part One of this report. In Part Two, we discuss what the insights from Maryland might indicate for Lumina's efforts to spread, transfer and scale innovation in higher education.

PART ONE - SPREAD OF COURSE REDESIGN IN MARYLAND

To learn about the necessary and sufficient conditions for scaling course redesign in Maryland, SPEC interviewed nine individuals who were involved in course redesign in the state including:

- Carol Twigg, a national expert on course redesign
- Five members of Maryland's Lumina productivity grant team
- Three faculty members who led course redesign efforts on their campuses (each representing a community college, a four-year public university or an independent university).

From interviewees' responses, SPEC identified seven themes: Need, Support, Skills, Resources, Structures and Processes, Adaptability and Flexibility, and Planning for Spread.

NEED: The redesign product or process will be more successful to the extent that it is adopted in response to an acknowledged need (e.g., a problem with the existing course such as not enough capacity, high Drop/Fail/Withdraw rates, students not getting what they need to be successful in the next course).

Three kinds of need drove course redesign ideas and practice in Maryland:

1. An instructional need. These are generally expressed by faculty identifying an academic problem with a course or set of courses, as opposed to being driven by a broader continuous improvement agenda.
2. An institutional need. These are generally expressed in relation to institutional goals such as student completion or dropout.
3. A financial need such as reducing cost. Reducing cost may be a driver but we found some disagreement as to its success as the primary driver. In particular, it is not a popular argument with faculty.

Interestingly, non-academic student needs (e.g., more flexible course scheduling to fit in with work or family commitments) were not mentioned as a primary driver for course redesign.

SUPPORT: It is important that the redesign is “valued” by peers, by departments, by institutions, and by legislators.

Faculty support is critical. Course redesign starts at a deficit if pitched as an efficiency strategy because there is an association with “productivity” and an implied threat of “cost-reduction” through personnel reduction. A better strategy for garnering faculty support is to focus on course redesign’s potential to improve student learning outcomes. To help allay concerns that cutting costs equals cutting faculty, an effective strategy is to allow departments to keep some or all of the savings from course redesign. This has the added benefit of potentially providing resources for additional redesigns.

At the institutional level, support is required from provosts, chief academic officers, and presidents. These leaders are in a position to encourage faculty and provide incentives for their participation (e.g., providing release time or counting the work toward tenure and promotion decisions). Presidents also support the work to the external world by talking about it publically and to political leaders. Political leaders can support the work by providing funding for the upfront costs (administrators can do this as well); sometimes their support helps secure external funding. There are different views about which kind of support is more important. In the Maryland interviews the consensus was that faculty support is critical; support occurs when faculty members feel engaged and have administrative support to try new things. However, Carol Twigg, who has a broader view of redesign throughout the U.S., regards support from senior higher education figures in the state and institutions as more important for spreading redesign.

It is important that administrators and institutional leaders show medium- and long-term support for course redesign. In the short term, course redesign is challenging and things may not go smoothly in the pilot semester. With administrative support, faculty are more likely to feel that the effort is worthwhile, will occur in a safe space for trying new things, and will be sustained.

In terms of *building* support, respondents mentioned a variety of strategies:

1. **Funded mandate.** At the University System of Maryland, course redesign began at the Regents' urging. In 2006, the Chancellor asked each campus president to find one faculty member willing to undertake one course redesign, and provided the necessary funding. Although the system administration made efforts not to seem heavy-handed, faculty reported feeling as though the initial push was "top-down." Nonetheless, at least one faculty member on each campus was interested in trying redesign.
2. **Faculty-to-faculty sharing.** The University System of Maryland's initial work was successful enough that more faculty became interested. When the University System of Maryland secured grant funding for additional redesigns, faculty came forward voluntarily. Funding from Lumina and Complete College America subsequently enabled the University System of Maryland to share its course redesign experience with other public and independent four-year institutions and community colleges across the state. Currently, there are over 200 faculty members in the state who have been involved in a course redesign; one respondent felt that Maryland is well on the way to having a "critical mass" of faculty who are committed to the work. Interviewees agreed that it is reassuring to consult with peers who have already completed a course redesign, especially during the pilot phase when adjustments are often required.

Two interviewees described their experiences working individually with faculty to build support for course redesign. One person enlisted the help of two other faculty who were somewhat interested in working through the first redesign on their campus. Other faculty on their campus became interested when the redesign showed positive results and drew positive attention from the administration. This interviewee felt strongly that for faculty to be willing to take on the work of redesigning courses, it has to be clear how the redesign will benefit the faculty members themselves, not just the students. A second interviewee, who served in a coordinating role, built support among participating faculty through many hours of meetings and hands-on assistance. This person was also, through her coordinator role, able to relieve the faculty of much of the "project management" work associated with course redesigns, such as working with the registrar's office to revise course numbers and listings.

There was an intentional plan to build a shared community of practice through Course Redesign workshops, which were held regularly as part of the initial University System of Maryland regents' course redesign work and also built into the Lumina productivity grant. According to an interviewee, these redesign workshops made a big difference in refocusing faculty away from their initial "resentment" of top down, toward very positive professional learning communities of shared practice.

3. **Faculty-to-administrator sharing.** Administrators may not be open to innovations such as course redesign, especially when they require dedicated resources. Faculty interviewees with whom we spoke felt that data showing improved student outcomes, ideally in combination with cost savings, are the best arguments for building support for redesign among administrators. One faculty member, who conducted the first course redesign on her campus, felt that she had succeeded in part by keeping the redesign in front of her administrators through frequent updates and an emphasis on positive outcomes.

4. **Demonstrations of administrative support for faculty.** Interviewees agreed that administrators can help build support for course redesign among faculty by showing that the work is valued. This can be accomplished through awards or other public recognition of faculty who have redesigned courses, by awarding additional resources to departments that redesign courses, through tenure and promotion policies, and through giving faculty “credit” for the work in the form of course or service releases. One interviewee commented that at her institution, course redesigns are one type of multi-year project that counts toward faculty promotions.

SKILLS: Four kinds of skills and knowledge are necessary for adopting course redesign strategies:

1. **Technical ability to redesign a course.** These are both curriculum specific and also managerial. These skills have to be developed at the faculty level. Access to knowledge and skills of others who are experienced in redesign appears to be very important.
2. **Leadership skills.** Faculty who are “early adopters” of course redesign must gain and sustain support from other faculty and senior administrators.
3. **Administrative knowledge.** Redesigning a course can lead to unintended consequences. So it is important to know the broader, non-curriculum related consequences of the redesign, such as potential impact on financial aid, enrollment and assessment. For example, financial aid rules are based on credit hours, and one institution was struggling to figure out how to work a self-paced redesigned course into that system.
4. **Skills to implement, teach and assess a redesigned course.** There is a professional development aspect of redesign. This is critical if it involves quite different pedagogical approaches (e.g., shifting towards online, on-demand, instruction). Most redesigns involve new uses of technology, which implies the acquisition of instructional, assessment and IT skills to help with online components and learning management components.

Institutions and faculty who try to spread redesign on their campuses have to find ways to provide training for faculty in how to design, teach, and assess redesigned courses. Building these skills can be accomplished through consultation with faculty and administrators experienced in course redesign, with IT support personnel, and in some cases with institutional researchers or others with assessment skills. One interviewee pointed out the value of project management skills when undertaking a new course redesign. This person noted that project management is not a popular faculty activity, and that there are advantages to employing a project coordinator who possesses those skills. Course redesigns also give faculty an opportunity to partner with people in departments across campus who can help with these types of skills so that they don't feel they have to do everything when redesigning a course.

RESOURCES: Three kinds of resources are typically needed for course redesign:

1. **Time.** Redesigning a course is an extensive commitment. Faculty interviewees agreed that faculty must be able to dedicate time to the work, for example through course releases or during the summer if a stipend is available. After a large course has been redesigned, time is also needed on an ongoing basis to administer and coordinate across sections, and to further hone the course as needed from one semester to the next.

2. **Facilities.** Some course redesigns require the use of additional facilities such as computer lab space or larger classrooms.
3. **Money.** Funding is needed up front to pay for faculty time to redesign the course, as well as to pay for any new facilities and technology costs. Some expenses, such as technology licenses, are ongoing.

It can be possible, respondents said, to do course redesign without new resources if faculty and administrators are creative. However, respondents agreed that such a strategy is difficult, and more feasible for those who have already redesigned one or more courses and know what is needed and what to expect.

Funding for course redesign in Maryland has come in part from external sources, although at least three institutions have redesigned courses with their own funds. In theory, it should be possible to use the money saved from one course redesign to fund the next redesign. In practice, interviewees said, this has not necessarily been the case. First, not all redesigns have been designed to reduce costs; instead the focus has been primarily on improving student outcomes. Second, when redesigns have generated savings, some institutions reduce departmental budgets accordingly rather than allowing the department to reinvest the savings in another redesign. One institution started to fund ongoing expenses for redesigned courses (e.g., software access) through added fees for students who take the course. Although this may be a sustainable model, it provides a substantial cost savings to the institution but not for the students.

STRUCTURES AND PROCESSES: For institutions that want to adopt or spread course redesign, it is important to have initial discussions with faculty about what course redesign can do for both students and faculty (such as improving Drop/Fail/Withdrawal rates and freeing up faculty for research time) rather than identifying a priori which courses will be redesigned. Convenings across campuses with faculty who have been involved in course redesign are also valuable in this regard.

As the work progresses, the process should include technical support from experienced faculty redesigners who can answer questions and provide guidance and reassurance to faculty who are working through their first redesign. In Maryland, these faculty were called “faculty fellows.”

The key issue is the balance between top-down and bottom-up. Respondents offered the following suggestions:

1. **Start in the middle.** Department coordinators and chairs are in a good position to lead the work, both because they can work with faculty and because they know what resources are available and/or how to get them.
2. **Do more presentations.** Faculty are interested in innovations but do not always have time to seek out the necessary information.
3. **Work top-down, but be strategic.** First, institutional administrators have to create a system to support the work (including safe spaces to experiment), not just promote it as the latest good idea and then forget about it. They need to show enthusiasm, but also have a thoughtful plan to grow the work. Second, as mentioned previously, administrators should talk to faculty about the potential benefits to students and to faculty themselves, rather than focusing primarily on cost savings.

4. **Find or develop at least a few faculty champions.** Most interviewees agreed that spreading course redesign requires at least a few faculty members who are visibly enthusiastic about the work and willing to share their knowledge.
5. **Develop incentives.** Incentives play a role. For instance, putting something in place around accountability. If an institution decides to engage in course redesign, identifying how many, or what success metrics are being used, and then asking for reports (either from faculty to administration, or from administration to legislature or regents) makes a difference in scale and sustainability.

As mentioned previously, two interviewees felt that having a campus coordinator for course redesign facilitated faculty learning from one another. One interviewee also pointed out that because her institution had several concurrent course redesign grants, they were able to pool resources and do more than they would have with just one grant, or sequential grants. The pooled resources paid for a part-time coordinator position to handle the project management aspects of the work, and also gave participating faculty the means to participate with Quality Matters,¹ which was well-received.

ADAPTABILITY AND FLEXIBILITY: Interviewees agreed that adaptability and flexibility are critical when undertaking course redesign, especially for those who are new to the process. While the course redesign goals have to be clear and relatively fixed, the content and shape of a specific redesign will benefit from adjustments depending on the course, the students, and the available resources.

Interviewees also agreed that course redesign never goes according to the original plan. Therefore, it is important that any redesign is piloted for a semester (or two) in a single section to work out the wrinkles before attempting to expand the redesign to all sections of a course. It is also important to document both student learning and cost outcomes, so that adjustments can be made if needed. This documentation also provides evidence for convincing others about the effectiveness of course redesign.

Most respondents were of the opinion that individual courses would invariably have to be adjusted to take into account the nature of the institution, the makeup of the student body, and student needs for follow-on courses.

PLANNING FOR SPREAD: Spread, transfer, and sustainability should be incorporated as part of the project design. Any given redesign will have a much bigger impact (and be more sustainable) if the relevant faculty members and administrators agree upfront to expand the redesign to all sections of a course (given a successful pilot) and if they develop at the start a strategy to ensure the pilot generates the necessary support and information to enable expansion and transfer. Although this was not raised specifically with all of those interviewed in Maryland, it was implicit in most people's comments. It is also a common statement in the transferability literature.

It also makes sense to focus on spreading within certain curriculum areas, such as developmental math, where the need/problem is more obvious and the learning objectives are relatively standard across institutions. Similarly, redesigning large gateway courses will likely have a bigger impact than redesigning smaller, upper-level courses. In both developmental and gateway courses, faculty are often looking for opportunities to improve pass rates, so that students can continue to the next course.

¹ Quality Matters "is a nationally recognized, faculty-centered, peer review process designed to certify the quality of online course design and online components." (see <https://www.qualitymatters.org/>).

For gateway courses, redesign offers a way to increase standardization and reduce course drift across a large number of sections taught by different faculty.

CONCLUSIONS ABOUT SPREADING COURSE REDESIGN IN MARYLAND

Maryland institutions have focused their work on redesigning courses where the needs are highest (bottleneck and developmental courses), faculty and administrators are willing, resources are available (grant and institution match), and there is support from administrators and high-level leaders. The University System of Maryland's redesign mini-grant program provided additional support in the form of peer experts. The program also allowed for complete flexibility with respect to the details of how each faculty member/team wanted to redesign each course. The grant team is requiring accountability in the form of data collection and reporting according to provided forms and instructions.

The mini-grant process seems to have worked well, by all accounts, but it is not clear how long it will take before the work spreads sufficiently to have a substantial impact on overall productivity of higher education in the state. One interviewee noted that to have sustained impact on productivity, targets or goals need to be set against which institutions can benchmark. Grant team members were optimistic that as word about course redesign's success continues to spread, faculty will increasingly seek out or create opportunities to transform their courses. And as one interviewee pointed out, the process seems to have constituted a successful introduction of an innovation that faculty could easily have seen as a threat. Faculty whom we interviewed showed strong interest in continuing to pursue redesign, given adequate support and resources. One possible source of such support is the University System of Maryland's new Center for Academic Innovation. The Center is intended to serve as a hub and clearinghouse for research and best practices related to academic innovation.

PART TWO: SO WHAT; NOW WHAT?

IMPLICATIONS FOR THE SPREAD OF INNOVATION IN HIGHER EDUCATION

This report is based on a case study of how course redesign spread in Maryland. Both Maryland and course redesign have unique features that affected the spread, but what broader lessons are possible? What does this mean for the general issue of transferring, scaling and spreading initiatives in higher education?

1. Plan for spread, plan for transfer, plan for sustainability. Despite this wide acknowledgement of the importance of including expansion and spread at the onset of a grant project, having specific "spread" provisions in grant criteria is often overlooked or downgraded in the final selection.
2. "Need" is important but a range of needs should be accommodated and, if necessary, trade-offs made. An important consideration is who decides whose needs and what kind of needs will be prioritized. A full needs analysis requires stepping into the shoes of a range of stakeholders to understand their incentives and motivations. Often, needs assessments are normative (what people ought to need – e.g., students ought to finish in four years) or assessed externally by observing behavior (e.g. students need better course guidance to stop them from making poor course choices). Both methods can be misleading and are often narrow in scope or institutional in focus. One aspect of a good needs assessment is that it can lead to the potential for co-creation, where the process of engagement leads to the satisfaction of different needs, or the identification of shared needs (e.g., maybe students need more child-care support on campus, or more appropriate part-time employment opportunities).

3. It is a good idea to do a “skills” audit prior to the introduction of any new initiative. If a critical skill is absent, it will have to either be brought in or developed locally.
4. Transfer, scale and spread have two resource dimensions: (1) the resources required in the spreading process (e.g., promotion, training, backfilling of jobs), and (2) the resources to support whatever has been transferred. Resources include money, people, and equipment.
5. In terms of structures and processes, it is good to think about the parts (i.e., the specific components of what is being spread), the whole (i.e., the institution within which the spread is taking place), and the bigger whole (i.e., structures and processes within the wider environment that may support the transfer).
6. Leadership is an important factor in spread. The leadership can be temporary or semi-permanent, positional or opportunistic. It can occur at every level of decision-making. Leadership is not just about charismatic individuals, but can include groups and departments. Creating safe spaces for people to work on the innovation is as much or more beneficial than charismatic actions. It is important to think in the medium- and long-term more than in the short-term.
7. Flexibility and adaptability are important both for faculty working directly on academic innovations as well as administrators who are responsible for overseeing the work. Administrators and grant making foundations have to be conscious of the non-negotiables (e.g., formal or informal professional standards) and other sets of motivations and incentives that may affect the degree of flexibility and adaptability required. For example, faculty may appear at times to be unnecessarily intransigent, but they may be intransigent for reasons that make sense from a different and entirely legitimate perspective.
8. Demonstrating the worth of the innovation from a variety of perspectives is important. Particular to academic innovation, three motivational factors that generate commitment to transfer and spread have played out: What’s in it for students? What’s in it for faculty and administrators? What’s in it for the higher education institution as a whole?

NOW WHAT FOR LUMINA?

Two possible courses of action suggest themselves from our findings. One is for Lumina to consider incorporating spread and transfer provisions into the grant criteria and negotiations – and having them as a high priority in the decision-making process. The other is to explore further how the broad comments in this report, based on a single case study (Maryland’s course redesign), can be generalized to cover the breadth of Lumina’s higher education investments. Lumina has been providing grants for higher education innovation for a decade – it is sitting on a mine of information about what spread, scaled and transferred and what did not. A look back at past grant efforts could offer a valuable and clearer idea of the specifics of that spread, over both time and space, which could substantially benefit its grant making strategies in the future.

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its officers or employees.*