Accelerating Adoption of Adaptive Courseware at Public Universities

Arizona State University Update, Spring 2019

Supporting Scale

- Arizona State University (ASU) is sustaining the scale of its implementation through the use of Course Coordinators. They are responsible for training new faculty and liaising with the vendor. They also serve as a guard against the negative effects of faculty and staff turnover.
- ASU is mindful of maintaining support from four levels of academic leadership: provost, dean, department chair and faculty.

Microeconomics

Two essential elements of success for any new implementation in Teaching and Learning are faculty buy-in and overall momentum. Recognizing this, ASU implemented a plan to take a snapshot of success early in the first semester of adaptive courseware in Microeconomics. ASU paused to show the results of the first exam of the semester, comparing them to the previous year’s non-adaptive sections. The percentage of students earning an A had increased substantially. While this was only a snapshot, it was useful in sustaining motivation for faculty to continue the method through the semester.

By the Numbers

- **9 Courses using adaptive courseware**
- **9,000 Fall 2018 enrollment**

Priorities for 2019 and Beyond

- Create an “adaptive + active learning” orientation program for new faculty.
- Increase faculty training and support for US history courses.
- Expand adaptive courseware adoption in economics courses.
Accelerating Adoption of Adaptive Courseware at Public Universities

Colorado State University Update, Spring 2019

Supporting Scale

- Participating instructors typically become “faculty champions” for the program. Word of mouth from these early adopters has helped bring additional faculty into the grant program.

Accounting

A thoughtful course redesign of a course can be the first step toward success in implementation of adaptive courseware. It is also true that an instructor sometimes needs to try more than one product before the right match is found. Fundamentals of Accounting at CSU underwent such a redesign and the instructor who shepherded it through that process is now using her second courseware product. First the course was redesigned to meet the needs of students (correcting the mix of financial and managerial accounting involved). Then, confident in the redesign, the instructor fine tuned the course by being flexible to switching to a new product when it became apparent it was a better fit.

By the Numbers

- **22** Courses using adaptive courseware
- **9,000** Fall 2018 enrollment

Priorities for 2019 and Beyond

- Develop a post-grant transition plan to maintain the momentum.
- Continue to develop the Faculty Collaboration Group and extend to other interested faculty.
- Use collected feedback to identify student intervention strategies.

SCALE

OVER 15% OF GENERAL EDUCATION ENROLLMENTS USE ADAPTIVE COURSEWARE
Accelerating Adoption of Adaptive Courseware at Public Universities

Georgia State University Update, Spring 2019

Supporting Scale

- Georgia State University (GSU) has focused on high-enrollment, general education courses that have significant DFW rates, with the aim of making a significant and sustainable impact on retention and graduation rates for high risk populations.

Global Issues

There is no single way to implement adaptive courseware and no single timeline for success. Each implementation requires a different approach that brings faculty, administrators, instructional designers, technologists, and courseware providers together to create a course that has the greatest potential to positively impact student success. At GSU, implementing an adaptive approach to Global Issues required a custom-built course instead of something straight “out of the box.” This approach meant that faculty were embedded in the development of the courseware and had a significant say in how the courseware would be used. This approach required that the faculty rethink the way the course was taught through consultation with instructional designers and colleagues. It was a heavy lift and has required ongoing resources, time and effort but the result is a high-quality product operating at scale. This approach also required that the faculty rethink the way the course was taught through consultation with instructional designers and colleagues.

By the Numbers

- 5 Courses using adaptive courseware
- 4,000 Fall 2018 enrollment

Priorities for 2019 and Beyond

- Explore alternative adaptive courseware implementations.
- Engage with student support services to ensure that students have access to these services.
Supporting Scale

- The University of Louisville (U of L) is using research and careful planning to expand efforts. They compiled relevant studies and publications to present adaptive courseware to faculty who are skeptical.
- May Course Design Institute: faculty can learn to integrate active and adaptive learning components into courses. More than 60 faculty attended and follow up programming was implemented to meet faculty need.

College Mathematics

At the University of Louisville over the last three years, College Mathematics has seen an impressive 20% drop in the rate of Ds Fs and Withdrawals (DFW rates). The University has found success through the use of an adaptive platform and the Emporium Model. Classes are held in a computer lab with students working at their own pace. Color-coded flags signal the instructor for help or display progress. Learning Assistants (Grad Students and Undergraduate Student Workers walk around the room answering questions. Additionally, the Math Resource Center is open for personalized tutoring and to work on the courseware outside of class time.

By the Numbers

- **47** Courses using adaptive courseware
- **8,000** Fall 2018 enrollment

Priorities for 2019 and Beyond

- Focus on communication with departments more broadly.
- Consider ways to obtain buy-in from more senior level faculty and stakeholders.
- Collecting and examining student feedback to evaluate impact.
Supporting Scale

- Northern Arizona University (NAU) has found it is important to involve faculty at all stages of identifying candidate courses for adaptive courseware and to involve chairs early and often.
- After a successful 2 ½ day kickoff workshop for 30 pilot faculty at the start of the grant, NAU hosted a follow up one year later with 125 faculty & staff to continue building momentum.

Foundational Business Course

Redesign of the foundational business course Introduction to Computer Information Systems (ISM120) was successful because of a strong faculty team, led by a dynamic course coordinator. They took the time to develop a plan to make their courseware decision, followed by an inclusive detailed review of the course goals and activities by a team of faculty dedicated to understanding student needs for successfully accomplishing the course learning goals. By reviewing all aspects of the course design, bolstered by experience with previous courseware systems, the team took a comprehensive design approach to include individual student work outside of class, review and work in a computer “tech lounge” and regular active learning in weekly class meetings.

By the Numbers

- 12 Courses using adaptive courseware
- 7,600 Fall 2018 enrollment

Priorities for 2019 and Beyond

- Improve existing adaptive course designs.
- Increase use of courseware dashboards by both students and instructors.
- Expand to upper level and online programs & courses.
Supporting Scale

- The University of Mississippi (UM) sees sustainable success in courses where a consistent course coordinator is in place, and instructors are included in the process of continuous change through feedback sessions, training, and course revisions.
- Over 20 student focus groups have been conducted to learn the student perspective on the effectiveness of platforms in their learning. Insights gained from student feedback inform current practices and future implementations.

English Comp

While many consider adaptive courseware to be the domain of STEM disciplines, The University of Mississippi has found success in English Composition. Writing 101 and 102 faculty worked with Lumen Learning on a course using Open Educational Resource (OER) material. This approach produced courseware that is relevant, engaging and connected to the needs and experience of UM faculty and students. In recognition of these efforts, the Writing 101 team won the Digital Learning Innovation Award at the Online Learning Consortiums 2018 meeting.

By the Numbers

- 29 Courses using adaptive courseware
- 11,000 Fall 2018 enrollment

Priorities for 2019 and Beyond

- Provide department chairs with information about successful adoption of adaptive courseware so that hires will use the same tools.
- Increase faculty utilization of adaptive courseware dashboard.
Accelerating Adoption of Adaptive Courseware at Public Universities

Oregon State University Update, Spring 2019

Supporting Scale

- Oregon State University (OSU) has discovered that building collaborative teams of faculty with diverse perspectives results in implementation approaches that support students from all backgrounds.
- Instructors that have successfully implemented adaptive courseware are the best champions for scaling adaptive courseware.

College Algebra Redesign

OSU redesigned the key gateway course of College Algebra working “backwards” from course-level outcomes to weekly objectives to individual assignments and questions. A large team of instructors and TAs worked for twelve weeks eventually producing a completely new course which has been highly successful in its first year. To maintain that momentum and guard against the negative effects of turnover, a new position, Director of Foundational Math, has been created to provide oversight to first year mathematics courses making use of adaptive courseware and active learning. A full-time coordinator for the Math and Stats Learning Center has also been hired, providing additional support for students.

By the Numbers

13 Courses using adaptive courseware

6,000 Fall 2018 enrollment

Priorities for 2019 and Beyond

- Complete building of master courses in chemistry, statistics, and writing.
- Assess student experience and outcomes through surveys and focus groups.
- Campus tour to engage colleges and faculty to support scaling beyond grant goals.
Accelerating Adoption of Adaptive Courseware at Public Universities

Portland State University Update, Spring 2019

Supporting Scale

- The Office of Academic Innovation (OAI) at Portland State University (PSU) brings faculty together from various adaptive courseware pilots in regular forums and wider symposia to share lessons learned, and advocate for redesign in foundational courses.
- OAI meets on a recurring basis with university leadership to promote and support gateway course redesign using adaptive courseware, and to seek alignment in times of leadership change and adjustments to strategic priorities.
- OAI has built capacity at PSU by integrating multiple staff members into projects.

Office of Academic Innovation

Administration of the grant at PSU is housed in the Office of Academic Innovation (OAI). This Office is a leading example in the cohort of a Center for Teaching and Learning set up to support and nurture faculty in their adaptive efforts. OAI offers full support to faculty in the use of adaptive courseware, including selection, integration, project management, instructional design, faculty development and the use of learning analytics. OAI also provides training for graduate teaching assistants in the use of active and adaptive technologies, holds faculty forums, and builds relationships with other relevant support units on campus such as the office of student success, the university bookstore, the learning center, and academic advising.

By the Numbers

- 9 Courses using adaptive courseware
- 1,000 Fall 2018 enrollment

Priorities for 2019 and Beyond

- Deployment of student feedback surveys & results to faculty & department chairs.
- Shifting to a course coordinator model to maintain success at scale.
- Space assignments to provide greater flexibility for active learning in the classroom.