

# Accelerating Adoption of Adaptive Courseware at Public Universities



## Arizona State University Update, Spring 2018

### Moving From Scaling to Sustainable

- Arizona State University (ASU) is testing two hypotheses in every active and adaptive course: active learning helps lower course withdrawal rates and adaptive courseware improves student preparation for exams. If both are correct, the model can be applied to any discipline to improve student success.
- ASU is investing in the active and adaptive learning approach for all of its core undergraduate biology courses. The curriculum integrated in an adaptive system will form the ‘BioSpine’ of the major allowing students to access knowledge learned throughout program.
- Faculty and instructional designers team up to evaluate the active learning exercises and improve the effectiveness of the adaptive courseware.

### Creating a Culture of Faculty Success

- Discipline-specific faculty learning communities at ASU have created an open and collaborative culture to support curriculum creation and faculty development in math, psychology and biology.
- ASU supported 20 faculty members who attended a conference on active learning and will now help spearhead the dissemination of the active and adaptive approach.
- Following the culture, the faculty were invited to assist with the facilities design for next generation ASU classrooms to support this new model.

### Challenges and Lessons Learned

- Customizing content and design in adaptive courseware adds complexity and delays scaling
- For biology and chemistry, the faculty prefer that students work in small groups (6 students) to develop critical thinking, problem solving and communication skills.
- In large courses like psychology and economics, an active learning lecture hall model had to be created:
  - Early results for psychology courses show if faculty get support and training, large lecture halls (200+ students) can be used effectively for active learning.
  - Retaining the large lecture model allows the department to scale the active and adaptive approach to 5,000 students each semester.

### BY THE NUMBERS

**4** vendors

ASU faculty are currently using 4 vendors across courses in biology, micro-and-macro economics, history, mathematics, physics and psychology

**5,263**

Fall 2017 enrollment



The ASU trajectory for reaching targeted number of adaptive courseware enrollments is on target



## SNAPSHOT

Success Factors	Looking Ahead
<ul style="list-style-type: none"><li>• Continuous significant overall and financial support from Provost's Office, along with EdPlus' commitment to student success in introductory courses, contribute to a steady upward retention rate</li><li>• Active and adaptive approach is an integral part of ASU's student success strategy and is a key component in overall curriculum innovations related to learning outcomes</li><li>• External validation of ASU's work on active and adaptive fuels internal motivation</li></ul>	<ul style="list-style-type: none"><li>• ASU anticipates full implementation of ALEKS software for college math in Fall 2018</li><li>• New centralized teaching and learning unit, the Provost Teaching Academy, will support faculty development efforts.</li><li>• Economics and Psychology departments have launched three courses and set goals to scale up their use of adaptive courseware in the next academic year</li></ul>

### About Arizona State University

The Arizona Regents' enrollment goal for ASU is **125,000** students by 2025. This figure is in keeping with the strategic plan to increase the number of Arizona residents with a college degree.

In Fall 2017, ASU reached the historic milestone of **100,000** students. Of this number:

- More than **30,000** students are taking all of their courses fully online
- Approximately **70,000** students are enrolled across ASU's five metropolitan campuses

#### Learn More

To learn more about Arizona State University's adaptive courseware implementation, contact:

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*The APLU Personalized Learning Consortium (PLC) is a membership organization of public universities leveraging collaboration and scale to advance the use of technology to improve student learning, retention, and graduation through personalization. To learn more, go to [www.aplu.org/plc](http://www.aplu.org/plc).*

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