About Northern Arizona University
- Fall 2016 enrollment of approximately 30,000 students
- 40% of students take at least one course online
- 36% of entering freshman qualify for Pell grants and 32% of students identify as being members of underrepresented minority groups

Rationale and Goals for Participation in the PLC Grant Program
- Northern Arizona University (NAU) has a history of initiatives intended to support faculty to improve on their teaching and curricular design in order to support student success
- Participation in the PLC Accelerating Adoption of Adaptive Courseware grant program allows NAU to amplify its efforts to transform teaching and learning by supporting adoption of adaptive courseware at scale in high-enrollment general education courses
- NAU seeks to scale adaptive courseware across multiple sections of twenty-five high-enrollment courses, reaching over 8,000 enrollments (15% of general education enrollments) by December 2019

Implementation Status as of 6/30/2017
Several faculty members at NAU were familiar with adaptive courseware and had explored its use prior to the launch of the grant program. This provided a high-level of interest in the grant program and fairly quick implementation across participating courses during the first year. In Spring 2017, NAU implemented adaptive courseware in seven courses, reaching 9,374 enrollments. As part of the grant program, NAU faculty have adopted products from Learning Objects/Cengage, McGraw-Hill, Pearson and Smart Sparrow to implement across natural sciences, social sciences and humanities courses. Since launching the grant program, NAU hosted an on-campus event on adaptive learning with 125 attendees and interest in the program has continued to grow.
Implementation Challenges and Success Factors

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<th>Challenges</th>
<th>Success Factors</th>
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<td>● In the case of courses that are not well covered by existing adaptive courseware, evaluating the investment required to develop a new course is difficult and can be a barrier to adopting adaptive courseware in some disciplines</td>
<td>● The Accelerating Adoption of Adaptive Courseware program builds on a legacy of course redesign using technology with the goal of improved student outcomes, this gives faculty a familiarity and interest that has enabled quick uptake</td>
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<td>● The expertise and credibility of the Program Manager has helped to build support for the initiative across campus</td>
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Implementation Impacts as of 6/30/2017

NAU is tracking the D-Fail-Withdraw (DFW) rate in sections adopting adaptive courseware to identify potential impacts of the adaptive courseware implementation on student outcomes. Data collected to date includes a comparison of DFW rates in the sections where adaptive courseware has been adopted to those where adaptive courseware is not in use, plus DFW rates from the same courses in the prior academic year (before the implementation adaptive courseware). Early data shows that students in sections where adaptive courseware was in use in Spring 2017 demonstrated a slight increase in DFW rate as compared to those that did not use adaptive courseware in the same courses during that term or the previous year. Further analysis is required to determine whether the change in DFW rate is attributable to the courseware implementation and to see if the trend continues.

In future periods, NAU will aggregate data on the credit accumulation and completion, and retention and re-enrollment rates of students in courses using adaptive courseware as well as comparison groups. Takeaways from this data will be included in future reports.

To learn more about this adaptive courseware implementation contact:
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