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MAKING THE CASE FOR COURSEWARE

Courseware has the potential to improve outcomes, increase access, and decrease costs for students, but discussions of adoption at scale raise questions from faculty and administrators. Case-making for scaled adoption requires appealing to a wide range of perspectives.

TIME FOR CLASS TOOLKIT

QUESTIONS ADDRESSED

What is courseware?

What are the potential benefits of courseware to students, faculty, and institutions?

What are the challenges related to courseware adoption?

What tools can you use to plan, pilot, and implement courseware effectively?

KEY INSIGHTS

Courseware is a digital instruction tool that includes content and assessment; it is scoped and sequenced to support an entire course.

The emerging evidence base around courseware shows potential to improve outcomes, increase access, increase engagement, and decrease costs for students.

Faculty report time and effort as key barriers to the adoption of new digital learning tools, including courseware. To support successful adoption at your institution, focus on clear goal-setting and providing sufficient institutional support to faculty.

Courseware enables full-course digital content delivery and assessment and is not a learning management system (LMS).

Courseware products work in conjunction with but are not learning management systems (LMS). They are digital instruction tools that include instructional content and assessment, scoped and sequenced to support an entire course.[1] An LMS, by contrast, is focused on course administration and reporting, though it can host courseware products within its interface.

Courseware ranges from content-led to platform-led.

In the marketplace today, it is possible to find courseware products with a wide range of customization and usage options. This spectrum allows for faculty to choose the products that best fit their instructional practices, adoption goals, and student learning needs (Figure 1).

	Content-Led Courseware		Platform-Led Courseware	
	Off-the-Shelf	**Customizable**	**Adaptive**	**Other**
Definition	Course-complete solutions that create opportunities for reduced time spent building out content. Can contain adaptive capabilities.	Tailoring options combine the benefits of off-the-shelf, curated courses with flexibility to make adjustments for students, context, and objectives.	Platform that is primarily built to deploy course content using adaptive features.	Provide features, functionality, and/or content that is beyond typical LMS, but does not include adaptivity.
Illustrative (not Comprehensive) Players	aplia, connect, LaunchPad macmillan learning, Pearson | Revel, lumen, MINDTAP From Cengage, WileyPLUS, zyBooks	create, MindEdge LEARNING, SMARTBOOK, soomo LEARNING	acrobatiq, ALEKS, fishtree, KNEWTON, area9 LYCEUM, LoudCloud, LEARNING OBJECTS, LEARNSMART, Cerego, Open Learning Initiative, CogBooks Adaptive Learning, Querium, drillster, Realizeit, SMART SPARROW	cafélearn, intellus LEARNING, junction, Pearson | MyLab, TOP HAT

[1]A Guide for Implementing Adaptive Courseware: From Planning Through Scaling, Association of Public and Land-grant Universities (APLU) and Every Learner Everywhere, October 2018. https://www.everylearnereverywhere.org/resources

Courseware is used to achieve outcomes across four broad categories—outcomes, engagement, access, and affordability.

1. Improve Outcomes – While the fact base evaluating courseware's efficacy is still being developed, many institutions have reported that the adoption of courseware has helped them achieve their goals for student outcomes. Studies on gains to learning and content retention credit adaptivity—the use of assessment and analytics within courseware to provide a personalized learning experience—as a key driver of student learning outcome successes.[2] Courseware's analytics features, if deployed properly, allow faculty to assess continuously, intervene early, and diagnose appropriately. On average, grades earned by students in course sections using products from the SRI Next Generation Courseware Challenge (NGCC) were slightly (and statistically significantly) better than the grades earned by students in sections without the software.[3]

Case Study: Arizona State University (ASU) Improves College Algebra Completion[1]

Each year, ASU enrolls over 5,000 students in college algebra—a course that is often seen as a barrier to college progression. With an unsatisfactory average success rate (grade of A, B, or C) of 59%, ASU redesigned the course in 2016 based on the latest educational research on courseware, scheduling, and developmental instruction.
As a result of these changes, success rates for all enrolled students increased to 79% in 2018. ASU found that over 800 additional students were able to complete the course on their first attempt, improving persistence in subsequent courses and allowing students to stay on track for degree completion.

[1]"The 2018 Digital Learning Innovation Award Winners," Online Learning Consortium, [Webpage]. https://onlinelearningconsortium.org/about/olc-awards/2018-digital-learning-innovation-award-winners/

[2] Johnson, Dale. "Adapting to Adaptivity." Conference Talk, Southeast Digital Learning Forum, Charlotte, NC, February, 2019 [3] House, A., Means, B., Peters Hinton, V., Boyce, J., Wetzel, T., & Wang, S., Next Generation Courseware Challenge Evaluation. (Menlo Park, CA: SRI International, 2018) [4] National Center for Education Statistics; students enrolled in at least one distance education course

2. Improve Engagement – As a specific strategy to improve course-level student outcomes, courseware is used to drive student engagement with content. Courseware can be a tool to convert online or face-to-face content—such as large lecture-based courses or passive online lessons—into active learning experiences. With features for social learning and collaboration, courseware can enable exchanges and discussions between students and faculty. In blended learning environments, courseware can be used to create "flipped classrooms," to support in-class interactions and reinforce classroom learning through post-lecture assessments.

3. Increase Access – Since 2012, online and hybrid higher education enrollment has grown 20% to 6.2 million students.[4] This rise in technology to support non-face-to-face instruction has allowed more working adults to earn a college education. Because learners can access content through their own devices at their own pace, courseware has the potential to increase flexibility and to have a positive impact on progress towards degree.

Case Study: The American Women's College at Bay Path University Stays Affordable for Adult Female Undergraduates[1]

Bay Path University launched The American Women's College (TAWC) in 2013 to deliver online accelerated undergraduate programs to adult women. At an average age of 34, enrolled students are balancing multiple responsibilities, so TAWC sought to create a more affordable and flexible way for students to complete their degrees. TAWC credits the adoption of adaptive courseware products into 51 courses as critical to ensuring that students have access to materials on day one and to achieving better learning outcomes and persistence. The approach has **"yielded rates for retention (75%), course completion (93%), and student satisfaction (95%) that surpass national averages in the nontraditional, online space."**

[1]"The 2018 Digital Learning Innovation Award Winners," Online Learning Consortium, [Webpage]. https://onlinelearningconsortium.org/about/olc-awards/2018-digital-learning-innovation-award-winners/

4. Decrease Costs – The transition to digital learning materials is in part a response to the rising cost of instructional materials. In addition to providing interactivity not offered by printed content, access to digital instructional materials often means significant cost savings for students. In the NGCC study, schools using courseware saved approximately $105 per student, mainly due to the avoidance of textbook costs and improved course completion.[5]

[4]Scott Ginder and Janice Kelly-Reid, eds. _Enrollment and Employees in Postsecondary Institutions, Fall 2017_ (National Center for Education Statistics), https://nces.ed.gov/pubs2019/2019021REV.pdf. [5]House, A., Means, B., Peters Hinton, V., Boyce, J., Wetzel, T., & Wang, S., Next Generation Courseware Challenge Evaluation. (Menlo Park, CA: SRI International, 2018)

Case Study: Norfolk State University Adopts Inclusive Access to Reduce Cost1[1]

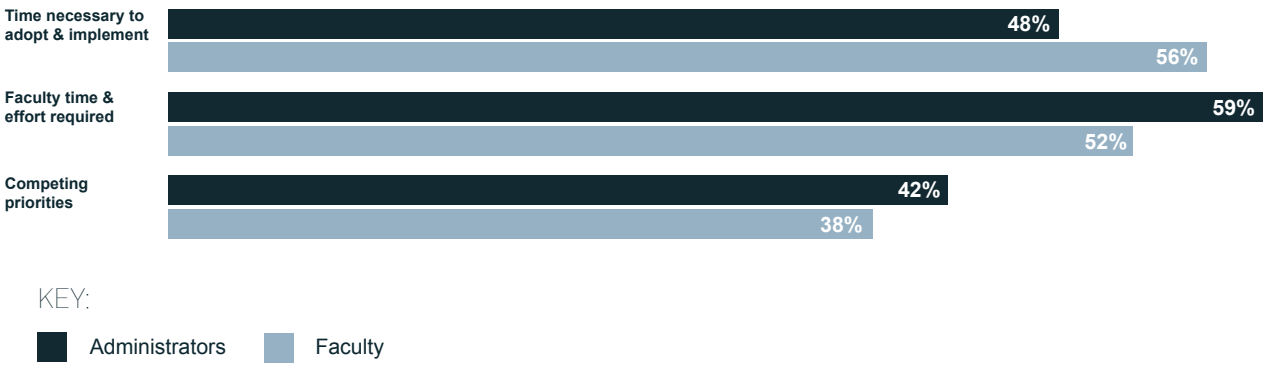
Norfolk State, a historically black university in Norfolk, Virginia, offers online certificate and degree programs. To keep course materials affordable and respond to the needs of the 21st-century learner, Norfolk State partnered with Barnes & Noble and Cengage Learning on an inclusive access[2] deal to eliminate textbooks and incorporate courseware into their computer science courses. Since adoption, Norfolk State has reported a jump in pass rates and student savings **"between 33% and 68% on textbooks and course materials."**

[1]"The 2018 Digital Learning Innovation Award Winners," Online Learning Consortium, [Webpage]. https://onlinelearningconsortium.org/about/olc-awards/2018-digital-learning-innovation-award-winners/
[2]In the inclusive access model (also known as digital direct or immediate access), publishers such as Pearson, Cengage, McGraw-Hill, or Wiley partner with organizations such as VitalSource, RedShelf, Verba, Follett, and Barnes & Noble to provide digital access to all students in a class on a subscription basis.

Despite these potential benefits, courseware adoption is not without challenges.

Faculty and administrators report that the top three barriers to digital learning implementation are time, effort, and competing priorities (Figure 2).

Figure 2: Top Reported Barriers to Digital Learning Adoption[6]



Planning, coupled with institutional support, can promote the successful selection and implementation of courseware.

Other action briefs in this series describe specific institutional, course, and individual faculty factors that contribute to greater levels of use and satisfaction with various courseware products. Among the key factors are institutional support and professional development.

[6] Question: "What factors, if any, have contributed most negatively towards the implementation of digital learning?"

TOOL FOR ACTION

Frequently Asked Courseware Questions

As you make the case for courseware at your institution, use the frequently asked questions below to help you communicate courseware's value and address common concerns.

The Outcome Skeptic

Common Questions	Strategies for Consensus Building
• What research supports the claims that courseware improves outcomes? • Is courseware relevant for our student population demographic? • How will we assess the quality of an individual courseware product?	• Review the resources and research available at Every Learner Everywhere, SRI, and Courseware in Context. • Develop clear performance indicators, and continuously monitor success at the student, course, and institution level. • Look at ratings aggregators like the Learn Platform Product Library and the EdSurge Product Index.

The Cost-Conscious Critic

Common Questions	Strategies for Consensus Building
• How much are the implementation costs to students and to faculty? • What are the ongoing costs to maintain the product? • Who will bear the cost of purchasing courseware?	• Review costs for comparable institutions as outlined in SRI's *NGCC* research. • Review the *Adopting Courseware through Course Redesign* action brief for redesign cost considerations. • Refer to the *Bridging the Gap Between Digital Learning Strategy & Execution* action brief and think about your institution's strategic priorities. What financial resources are available for well-aligned initiatives? • Think about alternative sources of funding: what local, regional, or federal grants are available for the type of initiative you want to implement?

The Engagement and Experience Cynic

Common Questions	Strategies for Consensus Building
• What are the challenges of learning a new tool? • Will students be less engaged with each other and with the content if they are learning online? • How will faculty and students stay connected?	• Define the goals and objectives—as well as the tradeoffs—of adopting courseware in your specific instutional context. • Explore products with collaboration functionalities and consider third-party social tools to enrich the experience. • Using the *Scaling Courseware Adoption* action brief, identify faculty who align with the Early Adopter profile. • Refer to the *Designing Professional Development for Impact* action brief to identify potential resources to support successful implementation.

Courseware has the potential to help institutions achieve a variety of teaching and learning goals. However, successful implementation requires that you address the following:

- √ Courseware products range in their value propositions, features, and functionality. Clarify the challenge(s) your institution wants to address via courseware, and evaluate various product options and features relative to those goals.
- √ A growing number of tools are available for discovering and evaluating courseware products. Review the available research base to understand what products have driven outcomes for similar student populations in similar contexts.
- √ The adoption of courseware requires collaboration across faculty, administrators, and staff. As you consider your implementation, identify the stakeholders involved in your institution's decision-making process, and drive fact-based exploration to address stakeholder concerns.

TIME FOR CLASS TOOLKIT

As part of a portfolio of resources published by the Every Learner Everywhere network, Tyton Partners has published this Time for Class Toolkit, a set of actionable reports that summarize findings from the *Time for Class* large-scale survey of faculty and administrators. Each brief includes data, analysis, and a tool to ease the digital learning adoption and implementation processes. All briefs are available at https://www.everylearnereverywhere.org/resources and are designed to be shared with any campus stakeholder considering courseware adoption.
Tyton Partners recommends that faculty and administrators pay special attention to the following topics:

	Making the Case for Courseware	Scaling Courseware Adoption	Adopting Courseware through Course Redesign	Designing Professional Development for Impact	Creating a Positive Courseware Adoption Experience	Understanding Adaptive Courseware
Individual Faculty	X		X		X	X
Department/ Program-Level Leadership	X	X	X		X	X
College/ Institutional Leadership	X	X		X	X	X

ADDITIONAL RESOURCES

For more information, visit Every Learner Everywhere Resources or the Tyton Partners Library.

ABOUT

Time for Class is a comprehensive longitudinal survey of 4,000+ higher education faculty and administrators, fielded since 2014 by Tyton Partners and the Babson Survey Research Group and underwritten by the Bill & Melinda Gates Foundation. Results inform a comprehensive fact base focused particularly on the postsecondary digital courseware landscape, in the service of making this diverse and complex market easier to navigate for institutions and education professionals.

Tyton Partners is the leading provider of investment banking and strategy consulting services to the education sector and leverages its deep transactional and advisory experience to support a range of clients, including companies, foundations, institutions, and investors.
For more information, visit www.tytonpartners.com.

The Babson Survey Research Group is a survey design, implementation, and analysis organization. Founded in 2005, the organization has worked on a number of large surveys including an annual survey of online education that includes all colleges and universities in the United States.
For more information, visit www.onlinelearningsurvey.com.

Every Learner Everywhere is a network of 12 partner organizations focused on providing a comprehensive, coordinated approach to help colleges and universities take advantage of the rapidly evolving digital learning landscape.
For more information, visit www.everylearnereverywhere.com.

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