

How Associated Colleges of the Midwest's Institute on College Futures Online is Using Adaptive Learning to Teach Educators About the Economics of Higher Education

By A.J. O'Connell

Idea in brief

In 2012, recognizing an opportunity to educate faculty members about the economic realities facing small residential liberal arts colleges, the Associated Colleges of the Midwest (ACM) created the Institute on College Futures (ICF), a five-year program intended to educate professors about campus finances. Although the in-person institute wraps up in summer 2017, the ACM is continuing its mission by partnering with Acrobatiq to develop and deliver a new interactive, adaptive, and fully self-paced online learning experience.

Faculty and staff are a crucial part of the financial ecosystem at small residential liberal arts colleges. They sit on committees tasked with making decisions that impact the entire campus financially. Despite that reality, members of the faculty and staff are often placed on those committees before they have a clear understanding of the economic challenges that their campuses face, including those driven by national trends and those that result from campus circumstances surrounding discount rates, merit aid, and other complexities of strategic planning and budgeting.

That creates a gap between responsibility and context where few formal resources have been developed, according to Brian Williams, vice president and director of faculty development and grant programs for the [Associated Colleges of the Midwest](#) (ACM), a consortium of 14 private liberal arts colleges. Depending on the campus, the responsibility for teaching committee members about the economic challenges their campuses face may fall to a committee chair, a member of the finance office, or to no one at all. Many faculty appointed to committees have to bring themselves up to speed, learning about these issues as they go.

As a result, Williams says, faculty and staff may have limited awareness of these broad issues and how they play out on their campuses and are not fully prepared to participate in important campus decisions like investments in new residence halls or whether to increase enrollment. In the absence of a broad understanding of the economic challenges their campuses face, it is difficult to anticipate how a decision to advance one goal might affect other aspects of a college's financial strategy.

"The campuses we work with have pretty small, intimate decision-making structures," says Williams. "Faculty and staff will be involved in everything related to governance from the creation of new majors to the selection of deans and presidents. It's important that everyone involved in those decisions has a nuanced understanding of the broader challenges their campuses face and how they might play out in strategic planning decisions."

To help educate faculty about college finances, ACM, with a grant from The Andrew W. Mellon Foundation, created the Institute on College Futures (ICF). This annual two-day institute is aimed at instilling in faculty a better awareness of the economic challenges their campuses face and how their strategic decisions are affected by those realities.

"A college in its operational setting is an ecosystem where if you push in over here, it bulges out over there," says Williams. "Everyone who participates in strategic planning conversations needs to understand the broader challenges and how decisions they might make about revenue, expenses, enrollments and discount rates, new capital projects, and fundraising are all interrelated in ways that are not immediately apparent."

Since its first seminar in 2013, ICF has reached more than 200 faculty, many of whom have returned to their campuses to run sessions there. While the five-year grant comes to an end in June 2017, there are thousands more faculty and staff across the consortium who could benefit from the curriculum instruction and even more at liberal arts colleges outside the ACM consortium who might benefit from ICF's content.

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In order to reach this broader audience and with funding from the Teagle Foundation, ACM turned the ICF in-person seminar content into an online course. The Teagle Foundation had previously provided funding to produce short videos of the four primary ICF presentations.

“The Teagle Foundation was very responsive to the ACM’s approach,” says Ed Finn, the ACM liaison for innovation and collaboration for teaching and learning. “We wondered, ‘What if we could carry this on after the Mellon Grant ended in a different format?’ With my background in adult learning and instructional technologies, it seemed a very promising and interesting project.”

An online version that improves on the original

ICF’s new online course, which is targeted to reach both faculty and staff, is a digital extension of the in-person institute. [ICF Online](#) is a short self-paced course designed to inform and encourage on-campus discussion. Faculty and staff are introduced to a range of financial topics: tuition, discount rates, financial aid, and endowments, for example. They then explore more advanced subjects, such as the difference between operating budget and capital budgets or the costs associated with student recruitment.

In addition to simply translating the face-to-face ICF experience into an online course, ACM also wanted to take advantage of the unique opportunities available in the online environment. For example, to supplement in-person lectures, ACM brought two of the original speakers back as content experts, along with other experts in economics from participating campuses, who provided supplemental activities, materials, and feedback for the course.

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“These content experts created narrative pieces, problem sets, screencasts, and other interactive elements to help learners through the budget worksheets,” says Finn. “They provided many components that enhanced what was already there.”

The digital course encompasses 16 learning objectives. Some are broad objectives, such as “The learner can explain the broad factors affecting the economics of higher education within the context of the last 10-15 years.” Others are incremental objectives, such as “Explain how changes in specific financial indicators can impact the real net price of attending college.”

Activities and projects were added to the course to deepen understanding of each. One competency, “create possible solution sets based on modifications to the numerical model,” is accompanied by a downloadable financial spreadsheet, for example.

The spreadsheet is part of the Financial Challenges for the Future module, which was taught during the in-person ICF by David Wheaton, vice president for administration and finance at Macalester College in St. Paul, Minnesota. During the face-to-face seminar, Wheaton explained the dynamics of a small college budget. When it came time to create an online version of that presentation, he decided to make his module more interactive.

Rather than use slides, as he had in the seminar, Wheaton created a screencast of a budget spreadsheet, with animation, to walk students through a college budget and illustrate the points he made in his lecture. After watching the screencast, learners can download the spreadsheet to experiment with Wheaton’s dataset on their own and reset the data to the original format to work through multiple scenarios.

Using authoring tools to create a seminar environment online

Rather than release videos of the in-person ICF as webinars, ACM opted to partner with Acrobatiq and use its adaptive learning platform and course authoring tools to deliver the content. This was done to create a seminar-like experience that “talks back to” the learners as they work through the course. It was important to ACM that the online class recreate the feeling of the intimate in-person ICF program.

ACM initially knew of Acrobatiq as one of the Gates Foundation Next Generation Courseware finalists. When selecting a platform for ICF Online, they were attracted to Smart Author’s combination of instructional design authoring tools, cognitive modeling, and skill mapping to create a robust and learner-focused platform. “In addition to the authoring tools and platform, the support structure was invaluable,” Finn says. “Without the help of the learning engineers we would not have had the resources to complete the course in the available timeframe.”

To translate a discussion-oriented experience into an online course, ACM wanted the adaptive capabilities of a platform that allowed them to create and customize learning modules and that could regularly respond to a learner’s progress through the material itself. “With webinars, there’s really not as much individualized feedback or capitalizing on the knowledge learners are getting,” says Finn. “It’s more of a one-way conversation. The adaptive platform provides anyone taking the course with detailed feedback and checks in with them to see if they are mastering the material.”

The course encouraged participants to interact with the material as much as possible. For example, according to Finn, the platform allows learners to submit an answer to a question and then compare that answer to what an expert’s detailed answer would be. ICF Online also makes use of a multiple-choice grid, which requires categorizing the answers.

"In the course there is a question about capital goods, one-time expenditures, yearly expenditures, and recurring expenditures," says Finn. "We set up these categories as columns presenting different scenarios, and the learner chooses which expense category each goes into. There's detailed feedback, so it's not as simple as just picking the right definition of a category. It has them actually synthesizing data rather than just describing it. It requires more understanding than the traditional multiple choice question format asks for."

Modeling digital learning for reluctant faculty

Using an online adaptive platform to deliver the content serves another purpose, says Williams: providing an opportunity for faculty to engage in a high-quality online learning experience so that they can experience firsthand the potential for new approaches to teaching and learning in that environment.

"In addition to this being an opportunity to learn about the economics of higher education, it's also an opportunity to experience the advantages and opportunities available through online learning," says Williams. "Some people are comfortable moving in that direction, but others are either reluctant or skeptical or too busy to try and figure it out."

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Some professors may be reluctant about using digital learning for a variety of reasons: they've always taught in-person classes, for example, or they're concerned that online platforms minimize the role of the professor. Mostly, however, people are simply unfamiliar with online learning.

ICF Online models both online learning and an adaptive course by letting people experience a course from the student's perspective. The hope, says Williams, is that participating in an online, adaptive course as a learner will not only dispel anxieties about digital learning but also inspire them to experiment with digital learning.

Moving forward with the ICF Online course

The pilot ICF Online course was first offered in July 2016. Twenty-five faculty and staff enrolled in the pilot course, including five who had previously participated in the in-person seminar. At the end of the course, while people who had attended the in-person institute were pleased by the course, they also asked for more developed feedback from content experts — more detail, concrete examples, and activities to deepen their understanding of the material.

The main points in the feedback offered through the evaluation, says Finn, were incorporated into the next iteration of the course. The content is set to be updated every two years so that the information is always relevant.

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About ACM

The 14 member institutions of the Associated Colleges of the Midwest (ACM) use their association as a vehicle to conduct joint initiatives that would not be possible independently, including professional development opportunities, off-campus study programs, funding competitions, and networking events.

The ACM members are Beloit College, Carleton College, Coe College, Colorado College, Cornell College, Grinnell College, Knox College, Lake Forest College, Lawrence University, Luther College, Macalester College, Monmouth College, Ripon College, and St. Olaf College.

About Acrobatiq

Backed by Carnegie Mellon University (CMU), Acrobatiq is a learning optimization company building on CMU's strengths in cognitive and learning science, and applied research in technology-enabled learning from CMU's pioneering Open Learning Initiative.

Our enterprise platform, fast-start content library and services enable institutions to rapidly author, deliver, evaluate and continuously improve outcomes-based learning experiences that adapt to the needs of each learner. Insights generated from student learning data provide educators and student support teams with detailed information about which learners need help and with what, leading to improved student engagement and academic achievement.

acrobatiq.com



For more information on ICF Online, or to register for the course, please visit:
acm.edu/ICFOnlineRegistration