



Take AI From Theory to Practice in Higher Education

College and university systems benefit when AI strategies become solutions through targeted goals and personalized tool development.





WITH THE RAPID RISE of Generative Artificial Intelligence driving excitement around the potential power of AI, many colleges and universities are ramping up AI efforts in support of teaching, learning, research, and business operations. They're formulating strategies, but strategy alone is not enough. Colleges and universities need a practical plan to move forward.

Campus Technology Editor in Chief Rhea Kelly sat down recently with two industry leaders from Oracle, to talk about how higher ed. leaders can begin to move from theory to practice as they seek to make the most of AI.

Developing an AI strategy

To drive an effective AI strategy, it makes sense to work backward from the need. The accounting department, for example, might have slow business processes that could benefit from automation. Likewise the registrar or provost's office could improve services to students, said Scott Howe, Oracle enterprise cloud architect.

Once you've found the things most in need of fixing, "then it's about prioritizing," Howe said. "Understand the ones that are an ideal fit to implement first."

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With those high-value, readily-achievable targets in mind, you'll be better positioned to tackle the technical nuts and bolts. Once administrators have identified the need, they can "start working with enterprise architects, with developers, depending on the level of integration they might want for this particular AI or ML," Howe said.

Parallel to all this, it makes sense to rally the troops. In one recent instance, "there was a university that hosted a full-day AI symposium," said Mary Olson, industry executive director for education and academic research at Oracle.

That gathering brought together "a broad swath



of people from campus, faculty, staff, the support personnel.” she said. They talked about education, about workforce readiness, about the risks and rewards of AI. That kind of early stakeholder buy-in can do much to drive a successful AI effort.

Addressing the challenges

Institutions will likely come across multiple sticking points on their AI journeys. They’ll need to ensure they have good data driving the AI systems, and that those systems don’t inadvertently perpetuate bias.

In order to minimize the risks around AI, particularly the perils related to possible biased outcomes, openness is of vital importance.

“People may not really be cognizant of the exposures that they have,” and they also may not trust the AI outputs, Olson said. “You need to make sure that there is transparency in the systems that you’re deploying, because transparency is something that’s going to help people accept the result of the AI tools.”

There may be hurdles around workforce development as well. “AI systems may seem human-like, but they really aren’t,” Olson said. Schools need to invest in the training to ensure people understand

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how the AI works, and how to make best use of these capabilities.

It’s important to get out in front of these challenges, to avoid reputational damage. Howe saw an early-adopter school launch a Generative AI initiative, “but it was based on a very open model that they didn’t really refine particularly well,” he said. Bad outputs led to precarious public relations issues.

Leveraging resources

As schools look to tackle these challenges, they can make use of resources they already have on hand.

Networking and security specialists on staff can help ensure data availability. Data scientists can help



develop the AI models, and “developers will almost certainly need to be involved,” Howe said, noting that a partner like Oracle can support them with low-code and no-code solutions like APEX.

Schools can also look to their existing data stores as the basis upon which to build AI. Olson described a community college that deployed an AI-enabled digital assistant, “and the reason that they’ve had such great adoption is that it is integrated to their student system,” she said. “When a student comes in to interact with the digital assistant, they’re authenticated. It is their information. It is personalized.”

With this in mind, it makes sense to establish some type of integration hub, Howe said. This could make it possible, for example, for the AI to pull from the learning management system in order to inform the course catalog. Robust integration “can really save quite a bit of time” as schools look to bring AI to life, he said.

Next steps

Institutions can take steps today to begin their practical AI journey.

They can get a jump start by using ready-made

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tools. “Oracle has a variety of different machine learning and AI services that are quite mature now,” Howe said. As schools look to enable AI in support of specific use cases, these tools “help to map to the right type of service or solution...and that moves from theoretical to practical pretty quickly.”

Institutions might also want to look at putting in place a “chief AI officer” to give overall guidance to the effort.

“How is it that we use Artificial Intelligence to personalize the learning for our students [or] to further our research?” Olson said. A chief AI officer can help “to ground it in the mission of the organization.” ▲