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A Consensus Approach to Ed-Tech Adoption

By Alexander C. Kafka

- **Ed tech is big, and growing**
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Education technology is ubiquitous in college education, so much a part of contemporary learning that it's like air for people or water for fish — an essential part of the environment, but easily overlooked unless something goes wrong with it.

The tech is varied and layered: learning-management systems, adaptive-learning tools, online program management platforms, data-analytics systems, instructional-design instruments, collaboration tools, career-readiness platforms, and so on.

That abundance can blind college decision makers to the fact that ed tech is useful only insofar as it serves their students. *The Chronicle* asked experts how colleges can best make responsible choices about adopting new ed-tech products and initiatives in a period of tightening

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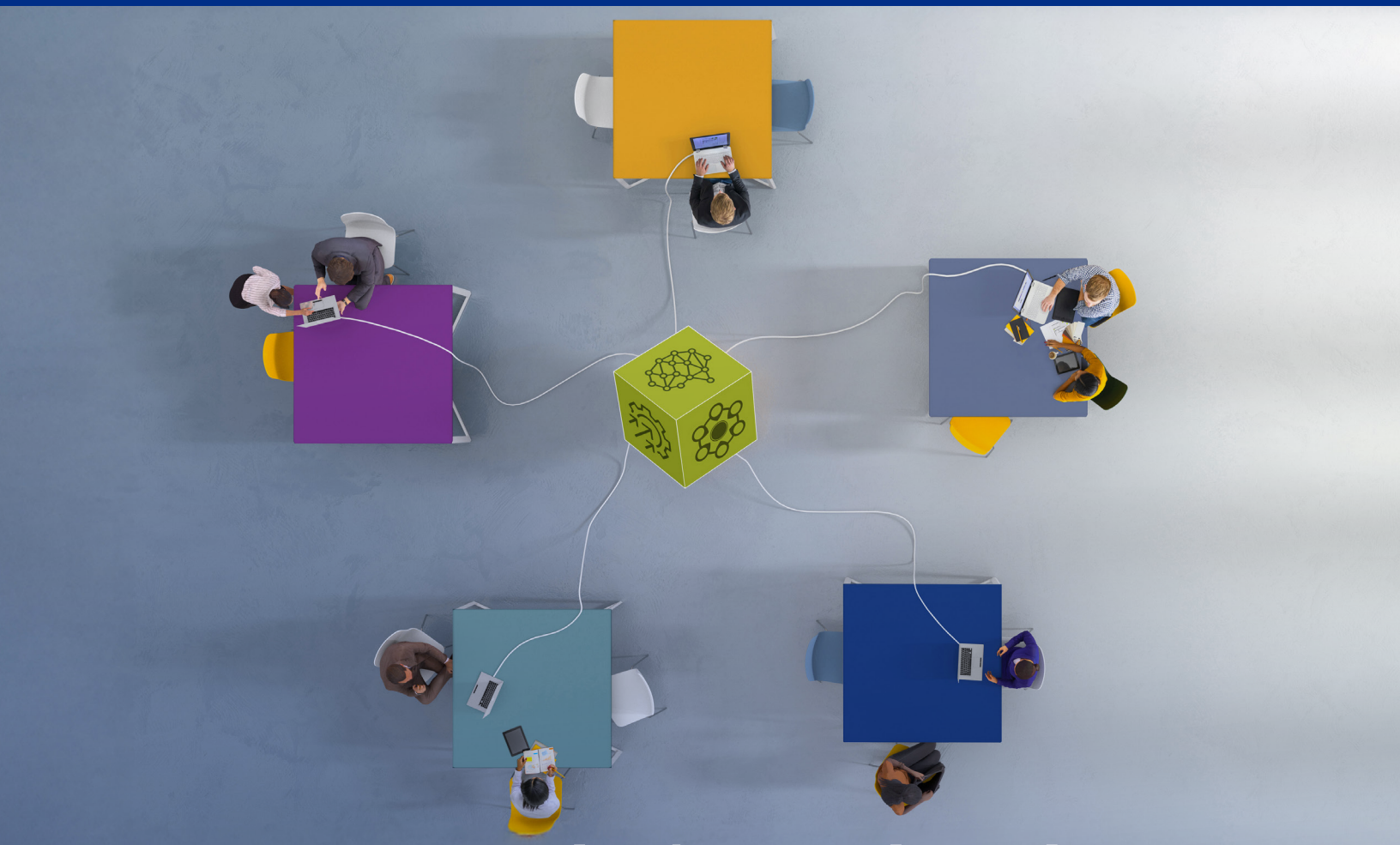

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budgets. This Trends Snapshot outlines some key principles emphasized by 20 of those experts as well as in other resources.

Ed tech is big, and growing

Educational technology in postsecondary education is a mammoth industry, with an estimated global market size, according to Grand View Research, of $36.24 billion in 2022. That figure is expected to reach $140.4 billion by 2030. The North American portion of that global market was about 30 percent in 2022.

The Covid-19 pandemic and the abrupt need for remote and hybrid learning options at scale accelerated the growth of what was already a robust sector before 2020. Ed tech's continuing growth is being driven by factors including:

- adding to traditional credit-hour learning models more competency-based education, in which students demonstrate mastery of a skill and move on, at their own pace, to the next unit;
- a shift to personalized learning, in which content, pace, feedback, and format are adapted, to varying degrees, to the learner's preferences and capabilities;
- artificial-intelligence, virtual-reality, and augmented-reality technologies that are remaking and expanding the marketplace;
- integrated campus-technology systems that are increasingly coordinating data on students' academics, finances, wellness, and career goals;
- and accessibility concerns highlighted in impending ADA and other deadlines.

Fueling ed-tech growth is a powerful emerging ed-tech innovation, says Matthew Rascoff, vice provost for digital education at Stanford University. Model Context Protocol, a standardized interface that allows large language models to interact with various data sources and tools, is poised to considerably expand the ways ed tech coordinates through AI with real-time data.

"The institutions that will benefit most from AI aren't necessarily the ones with the biggest tech budgets. They're the ones who ensure that any new tool can learn from and respond to their unique environment."

That means, for example, that an administrator could ask AI to track what's happening with a student across a half-dozen different data platforms to see if academic, student-life, financial, and other indicators combined show that there might be a problem. That's a process that, if possible at all, would previously have entailed multiple interdepartmental requests and bureaucratic hurdles.

MCP would also allow a student to ask AI to list and gather all of her assignments, give her a reading schedule for the week based on those assignments and syllabi, check her grades and class standing, and flag where she needs more effort or help. She would, in effect, have a college-oriented agentic-AI personal assistant.

"The institutions that will benefit most from AI aren't necessarily the ones with the biggest tech budgets," says Jason Levin, executive director of WGU Labs, the nonprofit research and design arm of Western Governors University. "They're

the ones who ensure that any new tool can learn from and respond to their unique environment."

Pressures from outside and in

With hundreds of ed-tech companies selling thousands of ed-tech products, choices can be overwhelming. Moreover, as the product options increase, colleges' budgets are shrinking, in large part because of federal funding cuts and the enrollment cliff.

On top of that, major tech companies roll out free versions of generative-AI platforms like ChatGPT, Claude, and Gemini. Students, and members of the faculty and staff, get a taste for those and push chief information officers to license advanced versions of them. So added to the barrage of tech vendors' pitches, administrators are facing internal pressures that they didn't even five years ago.

All this will make ed-tech decisions tougher as colleges decide whether a given product is an expendable pricey luxury or whether it's a necessary investment in the college's core functions and strategic priorities. To help figure that out …

Look for pain points and gaps

"Avoid the 'shiny new thing' problem," advises Shannon McKeen, professor of the practice at Wake Forest University's School of Business and the executive director of the Center for Analytics Impact. "It is important to be problem-first, not tool-first, in the approach. A problem-first approach encourages identification of options and criteria based on issues, as opposed to 'look at what this tool can do.'"

Regular and routine technology audits, and potential renewals of tech licenses, offer a natural opportunity to evaluate a college's ed-tech resources, says Kim Arnold, director of the Teaching and Learning Program at Educause. Usually what colleges find in those audits or renewal considerations are "all these little constellations" of ed tech, some vetted centrally, some vetted in little niche units, and some not vetted at all but just adopted in individual classrooms.

Audits also spur necessary reviews of privacy and security standards, Arnold says. Those aren't only potential concerns for new ed-tech products but also for existing ones, already under license and in use, that have had AI functionality added to them since they were purchased. Educause's Higher Education Community Vendor Assessment Toolkit — Hecvat as it's commonly known — offers, at no cost, "lite" or "full" checklists to screen for those criteria.

> **"Avoid the 'shiny new thing' problem."**

In deciding ed-tech priorities, Nhora Serrano, director of academic technology, teaching, and research services at Hamilton College, poses these questions:

- What are the challenges your faculty and students are facing?
- Where are the friction points in the learning experience or teaching process?
- How might technology meaningfully support pedagogy, deepen engagement, or broaden access?

Who should be in on those discussions about gaps and pain points?

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A broad array of stakeholders

Involving a wide range of perspectives is essential not just to identify needs but to manage a successful transition to new or improved technology, says Kara D. Freeman, president of Nacubo, the National Association of College and University Business Officers. Freeman's previous positions included chief operating officer and CIO of the American Council on Education.

"People will support that which they help create," she says. To that end, include faculty, academic leadership, advisers, instructional designers, IT, students, and, if possible, staff from a college's institutional-research office. That broad input and a focus on the problem to be solved allow chief information, academic, and operating officers — whoever's holding those particular purse strings — to be "the office of How," she says, instead of "the office of No."

"A number of stakeholders need to be in the decision-making process," agrees Levin of WGU Labs. "From our research, we know that fewer than half of administrators (47 percent) feel confident in their ability to choose effective ed-tech products, and nearly all faculty (98 percent) believe they should have influence in the selection process."

While much ed tech is cloud based and has already met broad security, privacy, and other compliance standards, Mark David Milliron, president of National University, nonetheless urges including IT in discussions early on. "When IT leaders are at the table from the start," he says, "they become partners in possibility. When they are on the ideation front end, they can ask the tough questions about integration, security, and scalability."

In those stakeholder discussions, says Milliron, "you'll certainly hear from the extremes — caus-

tic critics who fear every tool and the true believers who think tech can fix everything. However, experience teaches us the truth usually lies in between." A peer-connection platform, for instance, was successful at NU "because students and faculty shaped how it was embedded into orientation and coursework. Consensus is built when people see their fingerprints on the outcome."

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That said, because of constraints on time, money, and energy, think of consensus within the context of the problem you're considering, urges Stanford's Rascoff. Different instructors, departments, centers, and schools within a college will have different ed-tech preferences and needs. So include representatives from the relevant stakeholders for that situation, however large or small.

Moreover, educational technology has become such an intricate part of teaching that tech choices are really a matter of academic freedom, Rascoff says. If possible, offer an intra-college app "store" of vetted products that adhere to privacy and security guidelines, and let instructors choose from that store, or suite, for their particular purposes. That approach balances their preferences with financial and logistical constraints.

Testing new ed tech

So you've made your provisional choice, you have your new platform or tool, and now you need to figure out whether it's right for you. What are the best ways to do that?

John J. (Ski) Sygielski, president of Harrisburg Area Community College, recommends:

- gauging the tech's functionality and integration in "sandbox testing" — that is, experimentation in an isolated, safe environment separate from live systems;
- piloting the tool in real courses with faculty and students;
- and seeking candid feedback from those faculty and students as well as from peer institutions already using the technology.

Educause, Internet2, OLC, REN-ISAC, UPCEA, and WCET are some of the organizations through which digital-learning professionals share their experiences.

While piloting a new tech tool is a great idea, says Fiona Hollands, founder and managing director of EdResearcher, make sure those involved understand that it really is a pilot and not a done deal. Explain how long the pilot will last and what data will be collected. Try to incentivize some faculty to use it rigorously in a course, and compare results from students in the pilot program with a control cohort of students not using the technology. Further, make sure you aren't biasing the results by giving the tech only to known high-performing students. In other words, make the pilot as scientific as you can.

Surveys, focus groups, as well as user data that are automatically generated by the tech itself are also helpful, tech admins say. But look at those data carefully, and in a nuanced way. Are students, for instance, using the tool enthusiastically at first but then ditching it a few weeks into the course?

If so, is that because of its quality, problems accessing it, bad content in a specific learning module, or because they are finding better alternatives? Dig deeper.

Examine key metrics at the course or module level like completion rates, assessment performance, and student engagement, says Harrisburg's Sygielski. But also look, at the institutional level, "at broader outcomes like term-to-term retention, degree completion, and equity in success rates."

Training and buy-in

Presumably, if the tech was purchased to solve a need identified by a broad group to begin with, it will be enthusiastically adopted. But, says Sygielski, "we are finding the best way to routinize faculty training and adoption of ed-tech improvements is by seeking out the early adopters and inviting them to gain expertise through professional-development offerings." The college tries to "embed professional development into the culture of teaching rather than treating it as one-off training."

Enlisting early adopters and super-users into testing the new wares has the added advantage, says Nacubo's Freeman, of creating "systems evangelists" who will spread the word, and their knowledge, more effectively than memos and instruction sheets from on high.

Ed tech is increasingly self-teaching, and playing with it can be fun, says Stanford's Rascoff. He himself has enjoyed learning to vibe-code in the university's AI Tinkery, which he describes as a digital maker space.

But he urges colleges to complement self-teaching tech with formal and informal collective training opportunities, meeting student, faculty, and staff users of new technology on their own terms. Besides, training isn't just a matter of learning how to use a new digital gizmo, Rascoff explains. It's also a matter of socializing around the new technology to share potential uses and discover how it fits into broader teaching methods and goals, offering camaraderie and innovation as part of the tool's adoption.

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Go play!

Has the AI cart gotten ahead of the ed-tech horse?

Security and privacy concerns are paramount — that's not just common sense, it's the law. Set firm institutional norms and technological barriers against compromising student and employee information, institutional data, and intellectual property. AI has also put academic integrity in the spotlight, and norms and expectations around that must also be firmly established and enforced.

Moreover, AI ed tech faces widespread skepticism among faculty. In the 2024 edition of WGU Labs' Faculty EdTech Survey, only 42 percent of faculty said they believe AI tools will positively impact faculty, and 49 percent did not use them in the classroom.

But, says Courtney Hills McBeth, chief academic officer and provost at Western Governors University, AI experimentation has great potential.

Such exploration "is a great asset with little downside," she says. "WGU encourages faculty and staff to engage in innovation. It's part of our DNA. … We want employees to bring fresh thinking and new ideas to their jobs, to take calculated risks in the continual effort to do better for our students."

With AI, as with all ed tech, however, remember what it's for, urges National University's Milliron.

"Technology alone does nothing," he reminds us. "It's technology with purpose, embedded in human connection, that can change lives."

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