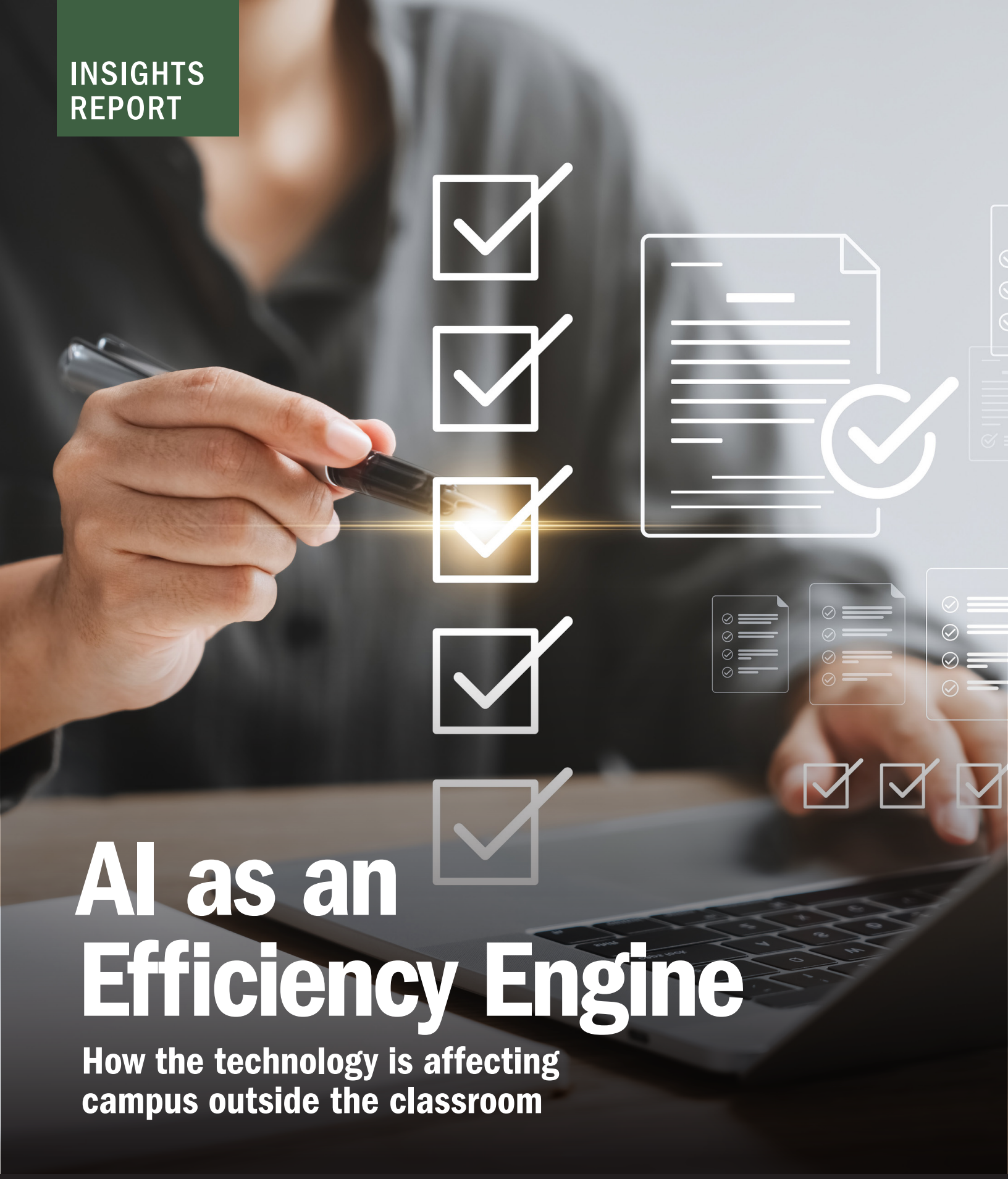
INSIGHTS REPORT



AI as an Efficiency Engine

How the technology is affecting campus outside the classroom

With Support From workday.

THE CHRONICLE OF HIGHER EDUCATION

On behalf of Workday and as the vice president of artificial intelligence (AI), we are proud to support the report “AI as an Efficiency Engine” from The Chronicle of Higher Education. Prior to this role, I was the inaugural executive director of the National Intelligence Advisory Committee, where I helped lay the foundation for meaningful AI recommendations to the White House, coordinating efforts across government, industry, nonprofits, advocacy groups, and academia. Through this experience, I recognized that we are at a pivotal moment for addressing AI policies and governance in both government and organizations that educate the next generation on leveraging AI responsibly. In addition to my role at Workday, I am affiliated with a university as a senior fellow and adjunct faculty member where I teach responsible product development. This academic affiliation deepens my appreciation for the technology infrastructure that supports our teaching and research efforts.

Our AI journey began in 2014, enabling colleges and universities to reimagine business processes, automate and simplify work, provide faster insights and recommendations, and drive innovation in higher education. Today, our mission is to identify how AI can enhance workforce and student lifecycles, using our platform to empower higher education to transform its operations.

Workday harnesses the power of AI to automate routine and predictable processes within university and college settings. This automation delivers tangible benefits, enhancing efficiency while prioritizing people in decision-making and oversight. We are committed to empowering higher education with data-driven insights that guide strategic choices. In the face of constant change, AI serves as a valuable partner, offering intelligent recommendations that optimize decision-making in areas such as planning and talent matching to build high-performance teams. By comparing historical data with AI-driven forecasts, strategic planners can anticipate demands and identify gaps, allowing for effective resource allocation. Beyond our features and products, we collaborate with our customers to enhance Workday Extend AI Gateway capabilities, providing our APIs to those who have become some of our most innovative Workday Extend users.

As AI gains prominence in higher education, maintaining ethical and responsible use is paramount. It is crucial for institutions to develop rigorous policies and safeguards to manage the risks associated with AI while also partnering with governing bodies to create legislation that supports their institutions and students. That’s why Workday has implemented a Machine Learning Trust program that specifically addresses our AI practices with a strong focus on ethics and customer trust.

As a trusted partner to over 500 institutions worldwide—including R1 universities, private and public colleges, community colleges, and other higher education systems—Workday is dedicated to creating solutions that accelerate your institution’s success. We aim to push the boundaries of AI’s impact, enhance the student experience, streamline operational efficiencies, and collaborate with higher education now and into the future. Our commitment to innovation remains steadfast, and we look forward to continuing our partnership to achieve new heights in institutional excellence.

Sincerely,
Kathy Pham, Vice President of Artificial Intelligence, Workday

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Contact CI@chronicle.com with questions or comments.

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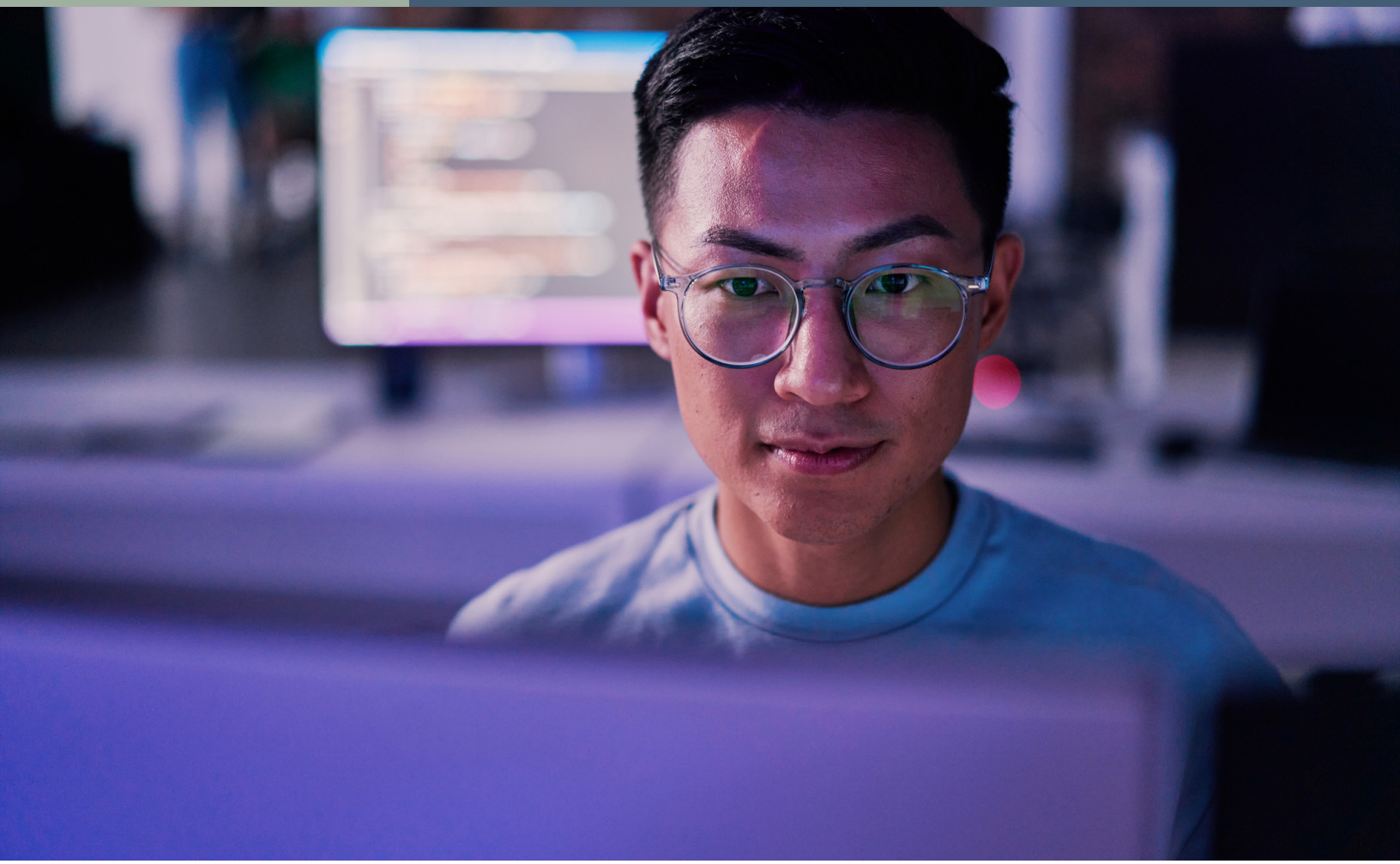

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The public conversation about the rise of generative artificial intelligence has clearly taken a turn.

Shortly after the emergence of generative-AI tools, a Silicon Valley CEO compared the development of the technology to the discovery of fire, but some of the hype that flared up around AI in 2022 and 2023 is beginning to burn out. "By some estimates, more than 80 percent of AI projects fail," a Rand report noted in August, adding that "understanding how to translate AI's enormous potential into concrete results remains an urgent challenge." And while the technology has yet to radically change the business world,

about a quarter of Americans said they'd used ChatGPT by March 2024. Over all, it's a complicated moment.

This is true in higher ed as well. There's been plenty of buzz — along with a ton of ambivalence and apprehension — about the effect of AI tools on higher education.

> "In many ways this is the leading use of AI in higher education — for operational efficiency, making life easier and tasks simpler."

It's no surprise that some early predictions haven't panned out — and maybe they never will. Still, experimentation with AI tools and keen interest in their potential remains ongoing, and the technology has already brought significant change to academe. Some of that change is visible, but much of it, by its nature, is taking place away from public view. It's well established that many students are using AI — on their own or in the classroom, with the blessing of their colleges or against their institution's wishes — and some administrators and staff members have also begun to experiment with it in their workplaces. Their hope, bolstered by some early evidence, is that this can create greater efficiency in operations, especially by saving time for staff members, which can benefit students and possibly help cut costs amid enrollment and revenue challenges.

"In many ways, this is the leading use of AI in higher education — for operational efficiency, making life easier and tasks simpler," says Bryan Alexander, a futurist and adjunct professor at Georgetown University who studies how technology transforms education. The goal is to increase the quickness and the quality of work.

Staff members are using AI to power customized chatbots that can provide students with information at all hours of the day and night. They're using it to summarize and analyze massive amounts of data and documents and to schedule and prepare questions for interviews and other meetings. AI is also assisting them — much as it's assisting students, for better or worse — in researching, writing, editing, and otherwise generating drafts of digital content, be it text for an online marketing campaign, images for a flier to post on campus, or a first pass at an internal memo. And with proper prompting, they're finding that the technology is able to draft content tailored to specific groups they're trying to reach.

"I think a lot about how, when I was on the job market a decade and a half ago, one test of how I could think on my feet was someone saying, 'Describe your research

to me as an academic. Now describe it to your parents. Now describe it to university funding officials. Now describe it for a press release,'" says Ethan Mollick, an associate professor at the Wharton School of the University of Pennsylvania, where he studies the impact of artificial intelligence on work, entrepreneurship, and education. "That kind of work is a very big part of what we do — reaching different audiences in different ways and trying to bridge gaps — and AI is really good at that."

It's clear there's at least some use for it in virtually every kind of office that exists at a college. What isn't clear yet is *how* useful it is, or how much its usefulness is negated by its flaws, or the extent to which campus workplaces are embracing it. To say academe is slow to change is almost a cliché, but at this stage, experts aren't seeing AI fundamentally transforming operations — at least, not most operations at most institutions. "My sense is that while some individuals are increasingly leveraging AI for administrative tasks, it's not being widely encouraged in a broad, formal, structured, top-down way," Kathe Pelletier, senior director of community programs at Educause, wrote in an email to *The Chronicle*.

Other experts shared this sense — that while some institutions or office heads may be setting rules or giving guidance to their staff, there are a lot of offices and individuals using AI — and especially the free, publicly available tools — on their own. Staff members are highly aware that they shouldn't be integrating AI into their work, much less using it to interface with students and families, unless they can safeguard private information, account for the biases and inaccuracies the technology might produce, and allay other ethical concerns. It's vital to retain that human element — for staff members to carefully oversee how their AI tools are functioning — and constantly correct for its mistakes.

> "While some individuals are increasingly leveraging AI for administrative tasks, it's not being widely encouraged in a broad, formal, structured, top-down way."

At this point, colleges are expected to have at least something to say about AI on their campuses, but that doesn't always mean they say a lot. Stephen Drew, the chief operating officer at Ruffalo Noel Levitz, an education-consultancy firm, says that based on conversations he's had at conferences and the "informal polling and webinars" his AI-development and

product-management team has done, he believes it's "very, very rare" for colleges to have significant institutional rules or guidelines around AI governance that apply to their staff.

Afia Tasneem, a senior director at the education-consulting firm EAB who oversees IT- and AI-advisory services, says most colleges "are still trying to figure out how to provide guidance," and some are hesitant to impose rules that might stifle exploration. "We're in the experimentation phase," she says. "We're in the opening credits of a movie."

"There's a lot of 'wait and see,'" says Claire Brady, a consultant focused on AI in higher ed who's currently partnering with NASPA: Student Affairs Administrators in Higher Education to research uses by student-affairs staffers. Some employees may be afraid to talk about their usage, worried that it wouldn't be approved by their bosses or institutions, or that their jobs may be threatened by AI.

"If you put a call out asking who's a pioneer in this area, nobody answers 'yes,'" Brady adds. "It's hard to get people to raise their hands and say they're out front." As a result, she's seeing "very localized usage by individuals or individual departments, and in many cases it's supplementing existing processes or technologies, not supplanting them."

Alexander wonders whether anxiety about AI might be creating an environment in which employees are saying one thing about their use in public and doing something different in private. Part of this dynamic, as Mollick sees it, is whether employees believe it's in their best interest to talk about their use of the technology. If telling their bosses about all the AI-driven efficiencies they're finding means they'll be rewarded in some way, that's an incentive to speak up. If it means they might lose their jobs, that's an incentive to keep quiet.

Still, there's good evidence that experimentation is happening. About a year ago, Educause surveyed higher-education stakeholders, and more than half of the respondents said their institution's AI-related strategy was at least somewhat focused on improving administrative processes and boosting productivity. Over a third said their college was implementing AI-focused initiatives to improve institutional use of the technology, and 60 percent said their college's business and operations policies were already being affected — or would soon be affected — by AI. In some cases, experts say, these efforts include having AI officers or committees and working groups of administrators and faculty and staff members to develop institutional approaches to the technology.

This report will consider the current use and ongoing promise of generative AI as an engine of efficiency in admissions, enrollment, student affairs, human resources, and other campus offices — where things stand now and where they may be headed.

What's Happening in Admissions and Enrollment

When Southeast Missouri State University's admissions director, Lenell Hahn, makes the case that her workplace is benefiting from AI, her evidence is quantitative as well as qualitative. Hahn says all 19 of the employees in her office are finding some good use for it, and their data shows that their generative-AI powered chatbot has had over 11,500 conversations and saved their team almost 200,000 minutes since going live in July of last year.

To gain this kind of efficiency, she adds, it's crucial that a chatbot isn't leaving users "frustrated and wanting immediately to be handed off to a human. It needs to have a really good knowledge base to be able to provide the best customer service, whether through emails, text messages, or web chats."

> "One way to look at AI in admissions is as an extra set of eyes considering student applications."

But if it's done well, it can free staff up — as it has Hahn and her team – to spend more time out in their communities, meeting with students, families, and high-school and college counselors. "AI can't go into a high school and be with a classroom of students to help them with planning for college," Hahn says. "It can't replace us going to a community college campus and supporting students with transitions from a two-year school to a four-year school."

Admissions offices are using AI to improve how they identify and contact prospective students, to develop messaging campaigns, and to manage transcripts. For outreach to prospective students, Drew, of Ruffalo Noel Levitz, says AI can help colleges provide them with information "faster and in a more personalized way, whether through the answer to a question they're posting to a bot or through proactive outreach." It can help fine-tune not just the group of students colleges are reaching out to but also what they're saying to those students.

"One way to look at AI in admissions is as an extra set of eyes considering student applications," says George Siemens, co-founder, chief scientist, and architect of Southern New Hampshire University's Human Systems, an organization studying and developing responses to the impact of AI on learning and wellness."It's a way of increasing the efficiency and speed at which you can process those applications" — better managing what Siemens calls the "deluge of data" these offices face and simultaneously providing "higher-quality support for students through the application process."

Using AI software to process applications — to scan essays and personal statements, and score them based on various traits and skills — doesn't appear to be common. It carries the obvious risks of inaccuracy and bias when the stakes for students are high.

But experts note that conventional evaluation of applications is hardly a flawless process — especially when admissions staffers are overburdened, undersupported, or just plain exhausted

after hours of work. "Humans don't do a good job right now of evaluating thousands of applicants, because they have to go through them really fast," says Tasneem, of EAB. "There's inconsistency in how humans grade things, whether in HR, admissions, or the classroom. The benefit of AI is consistency. AI doesn't lose patience."

Colleges like Maryville University of Saint Louis have started using AI tools to review transcripts. Phil Komarny, Maryville's chief innovation officer, has spoken publicly about how AI can scan a transcript for all of a student's science grades, add them up, and evaluate those numbers. (Other experts describe how AI analysis can be set up to compare transcripts from different high schools, using calculations to make sense of how certain grades or experiences at one school might be equivalent to the same grades or experiences at another school.) Rather than spending a significant portion of their time reviewing transcripts, admissions staff can use those hours to do social-media campaigns and interact more with students.

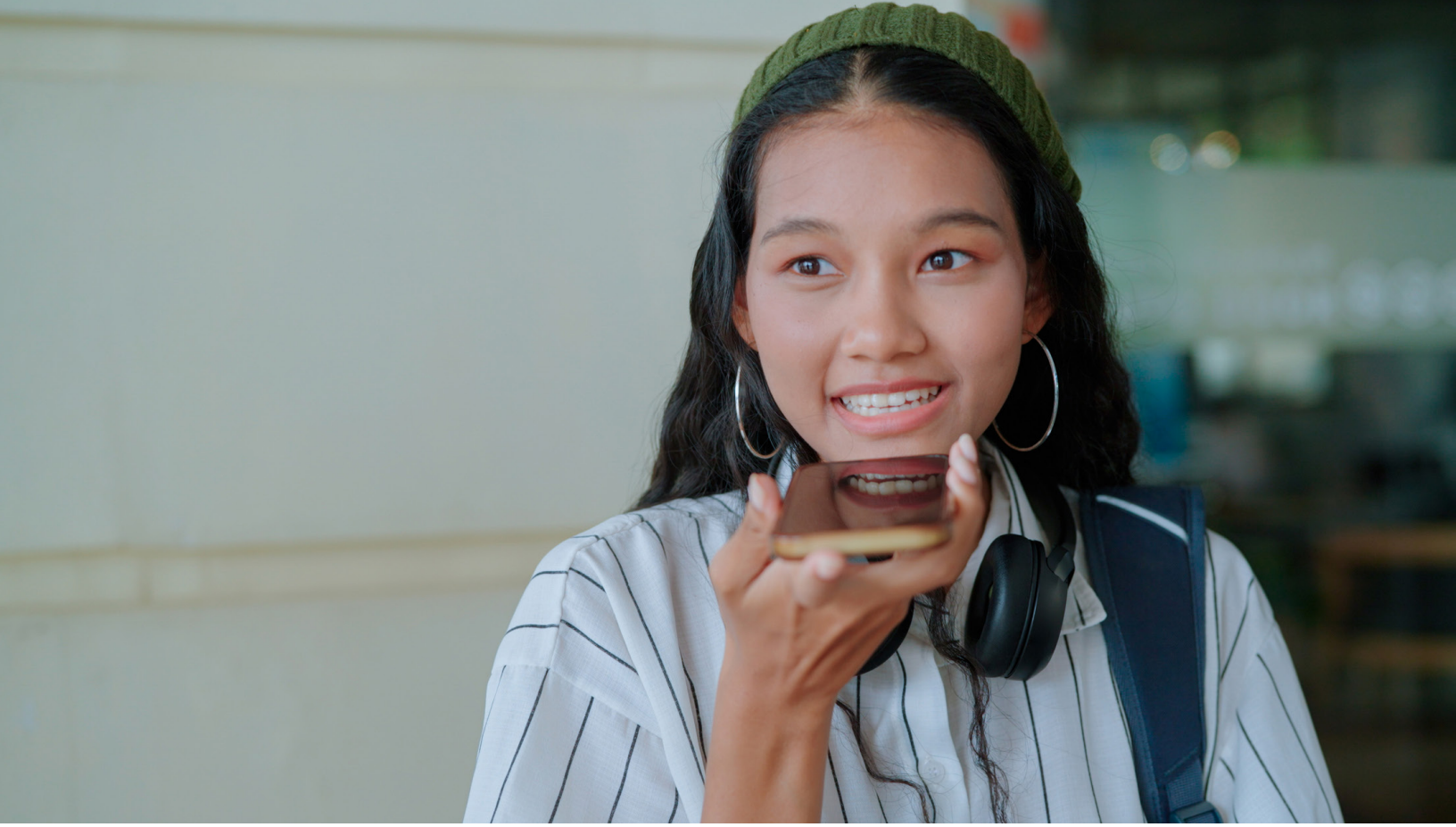
Another potential use is for designing or redesigning campus tours. Bart Caylor, a higher-ed marketing consultant who trains enrollment and advancement professionals, says AI tools can take a campus map — and perhaps an existing tour script — and create a new script and walking directions for student tour guides.

> "There's inconsistency in how humans grade things, whether in HR, admissions, or the classroom. The benefit of AI is consistency. AI doesn't lose patience."

Siemens also sees great promise in admissions offices using AI-driven data analytics:

"Using these tools, if a university develops them in the right way, is the equivalent of turning on a light in a dark room," he says. "You see where the bulk of your students are coming from, the regions where you should be more active in recruiting, and how you should more effectively support learners from different populations."

What's Happening in Student Affairs



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Brady, the consultant working with NASPA, says student-affairs professionals feel their "bandwidth is very low for disruption, because their entire days are disruptions." But there are many examples of staff experimentation with generative AI, including using it to schedule appointments across the division.

Experimentation is especially noteworthy in career services and mental-health services. Career-service professionals are using AI — and helping students use AI — to work on cover letters and job applications and prepare for interviews. Shawn VanDerziel, the president and chief executive officer at the National Association of Colleges and Employers, says that "AI has the potential to help career-services offices by automating repetitive tasks, enhancing student engagement, and even improving some decision making for students and staff." He believes it's already resulting in "guiding students in a much more efficient and effective way."

"My impression is that there's measured and slow adoption of AI tools, but there's a lot of promise, and career-services professionals are really excited about it," he adds.

In describing the kinds of uses his field is finding, VanDerziel notes that career-services professionals realize they can't be experts on every sort of job or industry their students might be interested in. "That's where AI comes in," he says. "It can help them expand their knowledge base in a much more efficient and effective way that directly impacts student success."

Career-services professionals and the students they're helping can use AI to generate questions that employers might ask — or that prospective employees might ask employers — and how those might vary depending on the job or industry. The technology can also identify gaps in résumés and help students describe how their experience translates to workplace skills — for example, students who have waitressing experience can point out that they're used to fast-paced environments and multitasking, and those who are veterans can get help finding the words to describe how the skills they've developed through their service will be beneficial in a civilian environment.

Much of this can be done just by using free, public AI tools. "These tools are easily accessible, and it's low-risk experimentation," VanDerziel says.

If career-services centers set up AI-powered chatbots, he adds, students can ask them how to start a job search, who can help them with their résumé, what a good résumé template looks like, or which alumni are in the kind of jobs they may want.

> "These tools are easily accessible, and it's low-risk experimentation."

"My sense is that it's a low percentage" of offices using chatbots, he says. "There's a resource issue — having people available to get a chatbot up and running and providing the information [an office] wants to be providing. My sense is that it's not widespread yet, but there's a lot of experimentation."

VanDerziel's organization is doing an "AI boot camp" — a four-part series on how to integrate AI into career services. "We had over 200 people register for it, which is a great sign of interest," he says. They're seeing interest in upcoming programming related to this subject, too.

Colleges are also experimenting with using AI to provide mental-health services, a critical need as percentages of anxiety, depression, and suicidal ideation remain alarmingly high, stressing college counseling offices. Ithaca College, for instance, is using AI in an effort that is behind the scenes, rather than student-facing. The college is developing "an AI tool that can extract and summarize student information for their ICare support team," according to its website. (ICare — "Ithaca College Awareness, Response, and Education" — is a collaboration between a number of offices on campus to promote student health and wellness.)

Peter Forkner, who directs the counseling center at Bentley University, in Massachusetts, says his office is currently piloting a chatbot for mental-health support. It's a very modest effort — the center hasn't invested more than $1,000 in the project, students have to sign waivers to participate, and they're not supposed to divulge personal information to the tool — but the idea is for them to test it out by asking general questions and seeing if they find the answers useful.

"I've never thought this will be a replacement for a therapist," Forkner says. "I'd be trying to work my way out of a job if that were the case. But what we at our counseling center — and at universities generally — are looking for are different doors of access for mental-health care."

Forkner knows there are many students who don't feel comfortable walking into a counseling center to make an appointment — which is why his team already does programming like its "Let's Talk" events,

where students can drop by the library or a lounge on campus to have informal conversations with clinicians — and he thinks a chatbot might be another entry point. It might be able to field their questions, provide them with resources, or redirect them to another office on campus. Since many students are already searching the internet for information about mental health, Forkner believes it's better for them to get it from a tool that's been trained by a therapist to respond to subjects like anxiety, depression, pregnancy, or sexual assault.

Victor Schwartz, senior associate dean for wellness and student life at the CUNY School of Medicine, is skeptical that there'll be much use for AI in providing mental-health services. "With things like scheduling and clerical work, I could see a place for that," he says, "but in every clinical college setting I've worked in, we've always wanted to have someone answering the phone or responding to emails personally. Typically our preference has been having people call in to make appointments so they're able to register the extent to which their problems seem urgent. I suppose you could build algorithms to do that without too much complexity, but it's nice to have a human touch."

Schwartz added that the hype around AI makes him think of past instances where new ideas in the counseling field didn't pan out: "Fifteen or 20 years ago, there was a push for outsourcing counseling services, thinking that would expand the breadth of services available and possibly save money. That pretty much collapsed, because it turned out not to deliver on those promises. My concern is that companies are going to try to promote [AI] aggressively, overstating its potential and understating its risk."

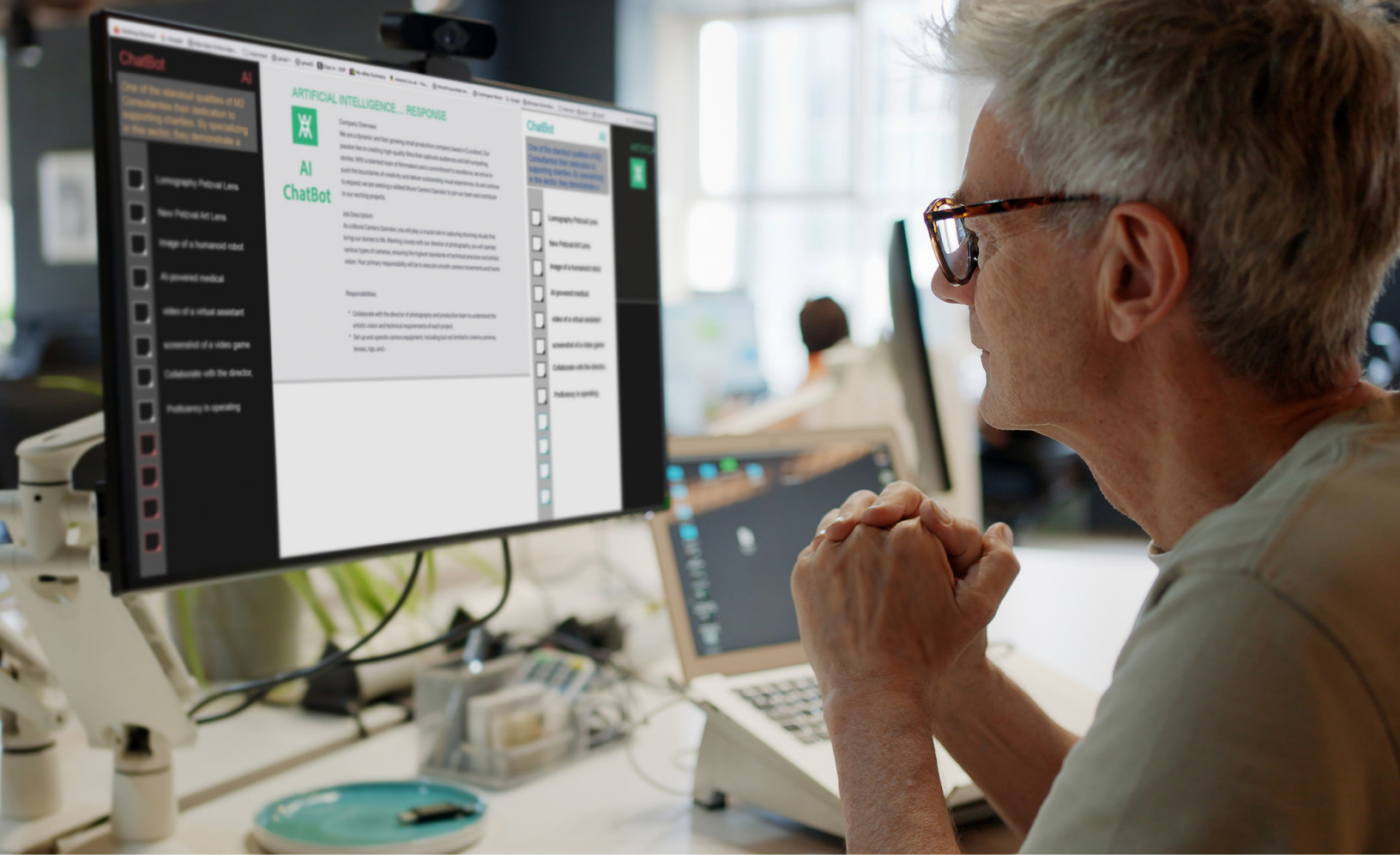
> "If I was struggling with something, I don't think I'd go to a chatbot. But then, I'm 47 years old, and I've got a support structure around me."

Forkner even has his doubts about chatbots. While their potential excites him — he gave a presentation about his pilot at the annual conference of the Association for University and College Counseling Center Directors — but he's still agnostic about how worthwhile they'd be. "If I was struggling with something, I don't think I'd go to a chatbot," he says. "But then, I'm 47 years old, and I've got a support structure around me."

There's bound to be a special sensitivity about how AI tools handle deeply personal information from students — or what information, advice, and referrals the tools might provide them on delicate mental-health subjects, particularly in the midst of a crisis. It heightens the need for privacy measures and ongoing monitoring of AI functionality. There are ethical issues to be worked out about what a chatbot should do if a student talks about being sexually assaulted, for instance. Should the tool make anyone else aware of that information?

Still, enthusiasts see these tools as a valuable means of being there for students, including when they're in their dorms and campus offices are closed. For students used to communicating by text or those struggling with anxiety, tools like chatbots may have real benefits.

What's Happening Elsewhere on Campus



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Like some of his colleagues in student affairs across the country, Tony Sanchez, chief human resources and people officer at Texas Woman's University, says AI is helpful for generating interview questions. In his case, he's thinking of the type of questions that he — and other college HR professionals — can ask potential hires.

Describing an experience at a previous workplace, he says: "We had a unique position that was open and I was struggling with the type of interview questions to ask." So he got 11 questions from a generative-AI chatbot, including some he hadn't thought of. He then refined the questions and tailored them for his workplace. "At the end of the day, we really got a good sense of the candidates' experience, and we made a great hire as a result," Sanchez says.

He also sees good uses for AI to help recruiters who have to read résumés, compare them to job descriptions, and then decide whether to move candidates forward: "It's very time-consuming. You could spend a whole day going through résumés and — if you're doing it right — only getting through 10 to 15, and you may have 100 to review. AI can do this almost instantaneously."

Uses of AI chatbots in HR, meanwhile, include answering questions about employee benefits. If your HR office has a good chatbot, he says, "you can take someone working in your front office

answering phones and upskill them." He gave an example from when he was working in the health-care industry of an employee who had been a secretary before becoming a benefits coordinator and an HR generalist.

Another use he recommends relates to promoting job fairs. "In most places, if you're going to do a job-fair campaign, you can do it in-house, but to do it really well, you could hire a marketing firm," he says. "They come up with a slogan, tell you where to advertise, and all that." Now, he says, they're using AI to come up with slogans, help them develop their recruiting materials, and "give us ideas about where to market the job fair." This sort of thing has the potential to save colleges a lot of money.

Sanchez says he isn't worried about AI eliminating the jobs of people in his field, either: "It will never replace humans in human resources. It can't understand the nuances of language, or tone, or body language, or [replace] the experience HR professionals have."

HR professionals are also using AI to create initial drafts of job descriptions, flyers, and training presentations.

Other departments are also beginning to make use of AI. The technology is helping campus-safety officials better monitor their campuses, regulate building access, and improve threat detection, alert systems, and response times. AI-enhanced analysis of video footage, for instance, can make clearer what's going on in large groups of people on campus — or among a few people who look like they might be fighting

"[AI] will never replace humans in human resources. It can't understand the nuances of language, or tone, or body language, or [replace] the experience HR professionals have."

— and diminish the need for a police presence in these circumstances, which might create tension. AI is also improving the ability to read license plates in videos and to detect the presence of weapons in campus spaces.

Given the various financial challenges throughout higher ed, it's not surprising that the AI experimentation has spread to fundraising. Earlier this year, Boise State University's advancement team said its use of the technology, which included streamlining outreach with pre-drafted emails, allowed them to find donors more quickly and resulted in an 87-percent increase in donors. AI can take plans for a college's fund-raising campaign — how much money it's aiming to raise, details about donors, information about the institution — and draft outreach emails within seconds. Analytics may provide colleges insight into what makes someone a donor and what keeps them donating.

CONCLUSION

It's impossible to know how much efficiency AI will — or won't — provide to higher education over time. Even *beginning* to understand that with sophistication will require seeing the results of various experiments now underway. Many of the sources who spoke to *The Chronicle* believe in the technology's potential to save time and money, but putting it to good use also requires some up-front investment of time and money. (Hahn, the admissions director at Southeast Missouri State University, said she "can't speak to any cost savings" from her office's AI investment.) Experts believe AI may result in some lost jobs among college employees — and will certainly change the nature of jobs, ideally by improving the experience of doing work and the quality of its results — but it may also lead to the creation of jobs.

"For the most part, we think of AI as a complement to human beings," says Tasneem, of EAB, "but there are going to be instances where AI will replace certain job functions. We're already seeing that." (Some chief business officers may already be holding off on hiring for new positions because they want to assess whether the work of those positions can be performed by AI — or by current employees using AI.) She believes it's "critical to think about how to upskill and reskill employees and deploy them to be more productive and not be replaced by AI."

In terms of administration-level, campuswide rules and guidelines for AI use, Alexander, the futurist, says, "I'd expect to see more policies appear once we get more stories of things going wrong. Say somebody generates a memo with a spectacular error — it talks about the campus in a bad way or misspells the city where the campus is located. You might start to see more policies."

It's also possible that the whole field of generative AI "might collapse or transform" in the near term. "There's no business model for it right now that works," he says. "Every company involved is losing money. Popular attitudes toward AI are pretty negative. There's a lot of concern about wanting to regulate this stuff and the looming copyright lawsuits." These realities may be another factor contributing to wait-and-see attitudes toward AI adoption.

Yet another possibility, Alexander suggests, is that AI users at colleges and elsewhere may simply find it isn't creating *enough* efficiencies to warrant a lot of use — that while it has some benefits, it may also just be the latest in a long line of new technologies that doesn't live up to its hype.

But assuming that kind of outcome is premature, too. The effects of this technological change are coming swiftly, and there's so much more to come, including what may happen as AI is further integrated and embedded in the most commonplace software from the major tech companies. "Most institutions haven't even started their journey with AI yet," Tasneem says, "because they haven't been able to buy or build the tools that would allow them to experiment productively. It's funny that we're talking about disillusionment when we haven't even started."

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