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The Honorable Bernie Sanders Chairman U.S. Senate Committee on Health, Education, Labor and Pensions 428 Dirksen Senate Office Building Washington, DC 20510 The Honorable Bill Cassidy, M.D. Ranking Member U.S. Senate Committee on Health, Education, Labor and Pensions 480 Dirksen Senate Office Building Washington, DC 20510

Via email: <u>HELPGOP_AIComments@help.senate.gov</u>

Dear Sens. Sanders and Cassidy:

The American Council on Education (ACE), the leading higher education membership organization representing over 1,700 colleges, universities, associations, and alternative postsecondary education providers, submits these comments in response to the white paper "Exploring Congress' Framework for the Future of AI: The Oversight and Legislative Role of Congress Over the Integration of Artificial Intelligence in Health, Education, and Labor." We appreciate Congress and the Senate's bipartisan and expansive interest in addressing issues raised by the growing role of artificial intelligence (AI) in postsecondary education and the workforce.

It should come as no surprise that much of higher education has been ahead of the curve when it comes to developing and adopting AI into our courses and operations. Colleges and universities often develop and adopt innovative technologies well before the broader society. Given the relevance of AI to efforts to accelerate the production, advancement, and dissemination of knowledge, this embrace of AI is a natural fit for postsecondary institutions. It is being used to develop curricula and rethink how courses are delivered; to support students and expand access; to reduce burden and streamline processes; and to create opportunities for students, faculty, researchers, and staff.

It will also not surprise the members of your committee that as with any transformative technology, it is important to keep a careful balance between utilizing its vast potential while limiting any possible risks. The federal government has a critical role to play in nurturing the growth of this technology while ensuring that it is utilized in the service of expanding and enhancing education. Keeping that balance in mind, our comments will focus on the possible impacts, both beneficial and concerning, to our students, our institutions, and our workforce.

Postsecondary Students

For students, properly designed and implemented AI tools offer the promise of greater support and enhanced academic opportunity throughout their academic careers. This begins with the

initial step of choosing programs and institutions at which to study in the college search process. Guided by AI-powered chatbots, students can identify programs and institutions that not only meet their specific needs, but where they might enjoy greater opportunities for success, including incorporating recent changes to simplify the FAFSA to provide advance knowledge of Pell eligibility or other forms of available student aid, as well as existing federal data on cost of attendance and aid awarded at institutions. Through AI, students could get a personalized understanding of what aid may be available to them and how that is likely to compare across institutions they may be interested in. While AI cannot substitute for the support of a college admissions counselor, it can serve to help target information and facilitate the process, freeing up professionals to work more directly on aspects of their work that benefit from direct interaction, such as assisting students in preparing applications.

After a student is enrolled, AI offers significant benefits for enhancing how institutions support them. Examples already cited in the white paper include student tracking and push systems, which can identify early warning signs of disengagement, such as missing a class, and direct personalized interventions to ensure that the student is contacted and supported before issues accumulate. While any such process would require human interaction, AI allows those interactions to be better targeted and ensures that staff time is directed to meaningful engagement with students.

Generative AI also demonstrates tremendous opportunities for academic support. Personalized, on-demand tutoring provides assistance that meets students where and how they learn in ways that faculty, teaching assistants, and academic advisors are not able to, allowing these professionals to devote more time to developing curricula, designing projects, or addressing more significant challenges students are facing. We have already seen important advances in remediation efforts such as the development and use of AI by Khan Academy to provide specialized and responsive tutoring to individual students.¹ The data gained through student interactions can also be of tremendous benefit to educators, identifying concepts that students most struggle with, helping to shape how much time or attention in a classroom is directed to those areas. Another example is ALEKS, which uses adaptive technology to respond to individual students. Institutions of higher education are using ALEKS to provide placement testing as well as to support students in lower division math courses (i.e. calculus and algebra).²

One other area where AI could be harnessed to improve the student experience has direct relevance for policymakers. Currently, students (along with other members of the public) who are entitled to receive local, state, and federal benefits such as financial aid and food assistance must apply for these benefits across a bewildering maze of forms. It is not hard to envision a process in which a student, guided by an AI chatbot, provides information one time and the system incorporates existing databases to supplement these answers and complete the applications across a range of programs, as well as identify next steps and assist in meeting

¹ See: https://www.khanacademy.org/khan-labs

² See: https://www.aleks.com/? s=8546815844628758

those. Such efforts could be broadened to include non-governmental efforts such as "RePlate" in San Francisco, which sources surplus food from restaurants and distributers and then distributes it to local nonprofits.³ The benefits for low-income students could be enormous, especially those with other external demands such as jobs or family responsibilities.

All of these benefits come with real risk as well. As we have seen repeatedly, tools that gather large amounts of personal data, especially personally identifiable information, can be exploited either through criminal misuse or the deliberate commercialization of personal information in ways contrary to an individual's intent. It is therefore critical to ensure that existing privacy protections in law are strengthened and adapted to address the expansion of AI to protect student privacy. The Family Educational Rights and Privacy Act (FERPA) regulates the disclosure of student educational records and protects students from the misuse of their educational data through improper disclosure or dissemination of personally identifiable information. Any actions Congress might take around AI should incorporate existing FERPA regulations rather than weakening FERPA or creating any carveouts for AI technology.

Though the potential for generative AI to direct students to postsecondary education opportunities that meet their needs and offer greater opportunities for success is promising and exciting, there also are risks that the technology may amplify misleading and at times false advertisements by few bad actors. Much like search optimizations, the visibility of higher education institutions can be enhanced in generative AI by both accurate and inaccurate information that can be found in scrapable information on the web. Congress should seek to protect and promote the interests of students as consumers of postsecondary education and not give tools for predatory institutions to be more visible.

Postsecondary Institutions

On campuses across the country, AI is already impacting how students learn, how faculty teach, and how institutions operate. While healthy debates over the appropriate role of AI in the classroom continue, AI is here to stay and will make generational changes to all three of these core areas.

Among the many uses institutions are exploring is using AI to streamline, and in some cases remove, bias from some institutional processes, including the use of AI in the admissions process. In the admissions process, AI can perform initial screens of application materials to ensure that minimum requirements for admission are met before admissions personnel review them, saving countless hours of staff time. In addition, AI can review large data sets, such as transcripts, that could reduce time and burden for institutions as part of complicated admissions decisions in areas such as transfer.⁴

³ Bernabe, Danielle "How AI Technologies Could Help Resolve Food Insecurity." Fortune, https://fortune.com/2022/09/06/tech-forward-everyday-ai-food-insecurity/

⁴ Jaschik, Scott, "Admissions Offices, Cautiously, Start Using Al." Inside Higher Ed, https://www.insidehighered.com/news/admissions/2023/05/15/admissions-offices-cautiously-start-using-ai

AI has also been helpful in curriculum development for many institutions, especially in developing summaries, generating lesson introductions, and creating questions about material.⁵ These efforts provide students with more personalized content and instruction as well as reduce costs. Institutions have incorporated AI across the curriculum, leading to innovative work by students and faculty on how to incorporate AI into food production, for example.⁶ Institutions such as the University of Florida have entered into partnerships with other institutions to not only find innovative ways to incorporate AI into postsecondary courses, but also to develop curricula targeted to the needs of elementary and secondary schools in the state.⁷

There have already been a number of promising developments in the use of AI to help individuals with disabilities succeed in higher education. The use of AI to provide enhanced accessibility tools (such as enhanced synthesized speech in test-taking environments, clearer and more accurate text-to-speech, and error-free closed captioning) will directly improve the experience of students with a range of disabilities. Beyond improving on existing tools, AI offers the promise of learning environments that can not only adapt to the way an individual learns but provide a tailored experience that will allow students with disabilities to move beyond more traditional accommodations. The ability to develop and share these applications widely can help to address the existing resource challenges many institutions face in adapting learning environments to the needs of those with disabilities.

Existing concerns about AI should not be minimized. Institutions of higher education and others are working to address issues of academic integrity as students and faculty work to incorporate AI, sometimes with good intentions, into academic work. Institutions and faculty are working to figure out how to determine if a paper or assignment has been completed by AI, rather than by a student. A May 2023 report by the U.S. Department of Education, "Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations," notes that AI is already being used to flag cheating in postsecondary education but "must be interrogated for evidence of unfair discriminatory bias." Indeed, the Department "holds that biases in AI algorithms must be addressed when they introduce or sustain unjust discriminatory practices in education." This also raises the issue of how to share best practices, and new AI technology, across higher education and with underresourced institutions, given that AI will be incorporated into many aspects of postsecondary education.

Workforce

https://michiganvirtual.org/blog/designing-for-the-future-with-ai-lessons-learned-in-curriculum-development/

⁵ McGehee, Nikolas, "Designing for the Future for AI: Lessons Learned in Curriculum Development"

⁶ https://www.cmu.edu/work-that-matters/farmview

⁷ https://ai.ufl.edu/about/

⁸ https://er.educause.edu/articles/2022/6/3-ways-ai-can-help-students-with-disabilities

⁹ Cornell University, Center for Teaching Innovation, AI and Accessibility: https://teaching.cornell.edu/generative-artificial-intelligence/ai-accessibility

¹⁰ https://www2.ed.gov/documents/ai-report/ai-report.pdf

AI also offers possible advantages in workforce development, including expanding open access for greater participation in postsecondary education, opportunities for existing workforce in upskilling, and the ability to support credential tracking across institutions and different certificates. Indeed, some institutions are already creating standalone programs to provide skills and learning for workers looking to enter AI fields, including creating an "artificial intelligence boot camp" designed for learners with no AI skills to access entry-level technical positions in AI.11

There are numerous challenges in this area as well. As a recent study found, the future will demand workforce development "on a far larger scale" and will require employers to recruit based on "skills and competencies" rather than just on credentials. 12 For postsecondary education to respond to these workforce needs, our institutions will need to become more agile. We will need to make investments across the education pipeline, from encouraging transfer of credit between institutions to encouraging students to major in AI fields to developing certificates and short-term programs to encourage new skills among those already in the workforce. The federal government can help incentivize these activities by funding pilot programs and convening groups to discuss best practices.

What Can Congress Do to Support AI in Postsecondary Education?

We believe there are several actions Congress and the administration can take to encourage the strategic use of AI and address some of the issues with AI in postsecondary education. These include:

- 1. Establish experimental sites for institutions across the postsecondary spectrum, piloting the use of AI in admissions and other areas that support students, so best practices can be measured and shared broadly with the community;
- 2. Keep FERPA in mind when considering student privacy issues;
- 3. Encourage the U.S. Department of Education to convene groups and share best practices, especially with underresourced institutions unable to be early adopters of AI technology:
- 4. Provide additional funding for the Small Business Innovation Research program at the Institute of Education Sciences¹³ and expand the FIPSE Digital Learning Infrastructure and IT Modernization Pilot Program¹⁴ to encourage the use of AI technology in postsecondary education and the development of tools that can be used across institutions;

¹¹ Nietzel, Michael "Several Universities Will Partner with edX to Offer New Artificial Intelligence Boot Camp." Forbes, https://www.forbes.com/sites/michaeltnietzel/2023/08/03/several-universities-will-partner-with-edx-to-offer-newartificial-intelligence-boot-camp/?sh=36885b741b7f

¹² McKinsey and Company, "Generative AI and the Future of Work in America" https://www.mckinsey.com/mgi/ourresearch/generative-ai-and-the-future-of-work-in-america

¹³ https://ies.ed.gov/sbir/

¹⁴ https://www2.ed.gov/about/offices/list/ope/fipse/index.html

- 5. Support efforts to protect academic integrity and incorporate AI into curricula; and
- 6. Support workforce development in AI throughout the academic pipeline, from community colleges through graduate and postdoctoral programs.

We look forward to continuing to engage with Congress and the Senate Health, Education, Labor and Pensions Committee on these important issues. If you have any questions, feel free to reach out to Derrick Anderson, senior vice president of Education Futures (danderson@acenet.edu) or Sarah Spreitzer, vice president and chief of staff of Government Relations (saspreitzer@acenet.edu). Please consider ACE as a resource as you move forward.

Sincerely,

Ted Mitchell President