**Technologies and Practices Impacting the Future of Higher Education**

Research

**6 Technologies and Practices Impacting the Future of Higher Education**

* By [Rhea Kelly](https://campustechnology.com/forms/emailtoauthor.aspx?AuthorItem=%7b2D7E57D7-17DE-4E78-935C-82BB7E2F788F%7d&ArticleItem=%7b5836837E-F8F4-4CE7-B36D-2F540055A817%7d)
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The [2022 Educause Horizon Report Teaching and Learning Edition](https://library.educause.edu/resources/2022/4/2022-educause-horizon-report-teaching-and-learning-edition), released this week, offers six key technologies and practices that will have "a significant impact on the future of postsecondary teaching and learning." Overall, the trends reflect a focus on hybrid learning, microcredentials and artificial intelligence — but it's not enough to consider these as broad categories, the report emphasized. Rather, in selecting the top technologies and practices this year, Horizon panelists drilled down into specific facets and details that command attention in their own right.

For example, the overarching theme of hybrid learning is broken up into three key trends: hybrid learning spaces, mainstreaming hybrid/remote learning modes, and professional development for hybrid/remote teaching. Likewise, artificial intelligence takes two forms: AI for learning analytics (referring to the institution's use of AI to understand data for decision-making) and AI for learning tools (how students themselves interact with AI-powered tools). And the trend of microcredentials brings an increased focus on "the connections between the goals and work of higher education and the demands and needs of professional industries and the workforce."

Following are the Horizon Report's top technologies and practices to watch for 2022:

**AI for learning analytics.** The report noted that advancements in AI "promise to help institutions more easily handle and generate insights from large amounts of institutional, learning, and student data they collect and store." Yet challenges remain that "risk frustrating institutions' efforts to implement meaningful AI analytics": Data silos and lack of integration between systems, institutional cultures and lack of awareness around analytics, and ethical considerations such as privacy and algorithmic biases will all need to be addressed in institutions' data and analytics planning.

**AI for learning tools.** "More and more of the technologies and tools students encounter in their classrooms will be powered by the institutions' maturing AI capabilities, elevating the position of AI within higher education beyond merely being a data tool to also being a constant companion and aide to students on the journey of learning and growing," the report predicted. Potential benefits include improving student performance through automated and responsive feedback, customized learning experiences and pathways, and more authentic simulations of real-world scenarios. Still, "many higher education leaders, faculty, and students may simply not be ready yet to embrace AI-powered learning experiences and tools," the report cautioned. "Clearly, stakeholder buy-in and support may be a significant challenge and even a barrier for practitioners seeking to integrate more AI-powered tools and technologies into their institution's learning strategy."

**Hybrid learning spaces.** Here, institutions must understand the nuts and bolts of technology and training needed for successful and meaningful hybrid learning experiences, the report said. But above all that, they must engage in pedagogical planning and best practices in learning space design. "Effectively designing spaces for hybrid education, in other words, will require much more of institutions than simply purchasing the right technologies or showing faculty and students how to use those technologies," the report asserted. "It will require practitioners to invest the time to get out of the weeds and connect back up to higher notions of pedagogy, to understand why certain spaces and designs might work better than others for their particular educational goals and for the students they serve.

**Mainstreaming hybrid/remote learning modes.** "While the development of hybrid spaces and the offering of professional training in hybrid education both comprise relatively concrete actions and defined outcomes, mainstreaming deals with the more nebulous challenges of changing hearts and minds, shifting the institution's culture, and rethinking the practice of education itself," the report explained. Key areas of focus here include gaining student and faculty buy-in into online and hybrid modalities, blending modalities for a richer learning experience, and addressing issues of equity and access.

**Microcredentials.**"Microcredentials and other forms of skills-based certifications may be positioned to overtake the traditional college degree as the most common and even most preferred form of postsecondary education and training," the report noted. With their practical focus on skills and competencies, microcredentialing programs "can help instructors, students, and advisors establish clearer linkages between students' curricular goals and the skills needed for job placement and success in the workforce of the future." For that reason, Horizon panelists rated this practice highly for its potential to impact students' learning outcomes.

**Professional development for hybrid/remote teaching.** As hybrid learning modalities have become the norm for many institutions, expectations for faculty have evolved — making faculty development critically important. "Investing the time and resources to ensure faculty are trained and equipped to effectively engage in hybrid and remote learning environments may be one of the easiest and highest-reward decisions an institution can make, and it may produce the biggest returns in improved student experiences and learning," the report said.

The full report, which goes into depth on the top trends, technologies and practices for 2022, possible scenarios for postsecondary teaching and learning, and implications for institutions around the globe, is available on the [Educause site](https://library.educause.edu/resources/2022/4/2022-educause-horizon-report-teaching-and-learning-edition).

About the Author

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