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# Higher education leaders speak out on the latest IT trends

Key takeaways from 2022 EDUCAUSE Horizon Report®

## The most important trends for 2023

Panelists discussed, debated, and voted on the trends they felt were most important in shaping the future of post-secondary teaching and learning. Here's what they reported:

### Social

- Hybrid and online learning
- Skills-based learning
- Remote work

### Economic

- Cost and value of college degrees
- Digital economy
- Financial deficits

### Environmental

- Physical campus structures
- Increase in sustainable development goals
- Planetary health

### Political

- Political instability driving uncertainty in higher education
- Political ideology impacting pedagogy
- Decrease in public funding

### Technological



Cybersecurity



Learning analytics and big data



(Re)defining instructional modalities

EDUCAUSE's annual Horizon Report® Teaching and Learning Edition surveys a diverse group of education leaders to explore the latest challenges and trends facing higher education. Panelists included experienced professionals from a variety of locations — including representatives from every continent but Antarctica — and were balanced across gender, ethnicity, and type of institution.



## What does all this mean for IT?

Although the report explores the full range of trends encountered in higher education, there are some key insights aimed specifically at IT teams.

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Trend 1



### The cybersecurity feedback loop

#### Lack of funding for security threats

The pandemic forced institutions to rely on their networks for both education and administration. This made higher education networks a popular target, which reinforced the need for more security funding and resources.

#### IT takeaway

One concerning result of this feedback loop has been the declining trust among students and stakeholders in the ability of higher education institutions to remain secure.

Trend 2



### Big data and the promise of learning analytics

#### The perceived broken promise

The promise of what big data could deliver to institutions isn't being met. Although higher education has embraced collecting data, several obstacles remain, blocking its effective use.

#### IT takeaway

Collaboration is needed to clearly define the institutional strategy for analytics. Investment is needed at the leadership level for the resources to analyze the collected data while ensuring student privacy.

Trend 3



### Redefining instructional modalities

#### Standardization before transformation

Confusion reigns with new instructional modalities, directly impacting how IT supports the learning process. Similar words and phrases are used to define different modalities at different institutions.

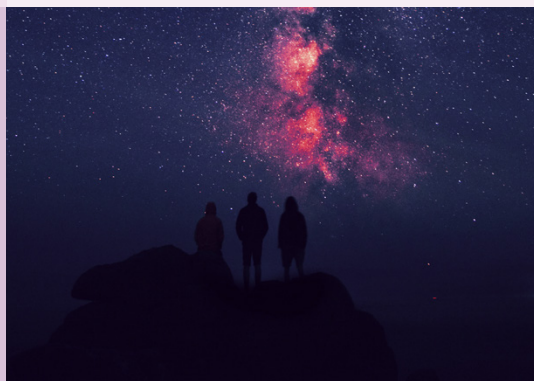
#### IT takeaway

Before transformational plans can receive buy-in, clearer definitions are needed for commonly used terms like:

- HyFlex**      **Synchronous**
- Blended**   **Hybrid online**
- Hybrid**     **Virtual learning**
- Flipped**

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## What will be the role of AI?

The report takes a deep dive into how higher education is using AI to address technology and learning trends.

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## AI for learning analytics

Immense amounts of data must be organized, analyzed, and used to support student success. However, data silos, ingrained institutional cultures, and algorithmic biases can block progress. Despite these challenges, real-world examples of success abound:

- **The Radiography Program** at Montgomery County Community College in Montgomery County, Pennsylvania, uses a virtual exam room for hands-on practice that's evaluated by an AI tool so instructors can intervene when knowledge gaps are detected.
- **Online Education Services** in Victoria, Australia, created a web-based application with an AI machine learning model to identify risk factors in student success and alert teachers and staff in real time by phone, SMS, or email. This has led to an increase in pass rates.
- **Southern New Hampshire University** used AI targeting models to reach out to learners who could benefit from tutoring and mentoring, guiding them based on engagement, performance, and needs.
- **The University of Washington's Retention Analytics Dashboard (RAD)** uses AI prediction for adverse student outcomes to help staff manage caseloads and identify students in need of assistance early on.

## AI for learning tools

AI tools are becoming ubiquitous on campuses and in the classroom to aid in learning. The panelists outlined some areas of AI-assisted learning where more attention is needed.

**Student performance.** Automated feedback and AI writing assistants like those created by FeedbackFruits, Erasmus University-Rotterdam, Rotterdam University of Applied Sciences, and the University of Technology-Sydney can customize learning experiences to the needs of the individual — offering immediate feedback so educators have more time to develop deeper, “higher-order” feedback.

**Student learning experiences.** As virtual, augmented, and mixed reality tools continue to evolve, AI will be integrated for more realistic experiences to improve student outcomes. For example, Purdue University Global is using AI patients in its Primary Mental Health Nurse Practitioner graduate program to simulate real-world human conversations.

**Readying the reluctant.** The panelists believe there is a reluctance from educators, staff, and students to embrace AI solutions. There's a concern that the AI may act less as an assistant and more as the educator — programming learners. More effort is required for buy-in across the institution.



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## All roads lead to hybrid learning

The panelists' discussions were informed by their previous two years of experience with hybrid learning. Debates over security, AI, and instructional modality trends had to be confronted at once when solving for hybrid learning.

What did the panelists learn from their experiences and discussions that IT teams can use?

- Institutions need their infrastructure to cover the basics: being able to see and hear clearly and securely from anywhere.
- Even the best devices for collaboration are useless if the staff isn't trained properly in their use. As one panelist remarked, "Professors need to be independent of the AV team. They should be able to walk into a classroom, connect the technology, and start teaching."
- New technology must be connected to higher notions of pedagogy or it won't be successful for the institution's goals.

## What can we do right now?

Carlos Guevara, the director of the Educational Technology and Center for Teaching and Learning at Hostos Community College (CUNY), wrapped up the report on behalf of US higher education. He stressed that flexibility must be the focus now — for everything from instructional modalities to the technology used.

"Community college leaders must invest in establishing the appropriate policies and structures to implement the pedagogical approaches necessary to address the evolving learning modes that students increasingly demand. Institutionalizing professional development as an integrated practice, investing in instructional designers and support staff, and embracing flexibility by creating and strengthening a culture of continuous improvement are the first steps to take," Guevara concluded.

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Read the full report from EDUCAUSE [here](#).

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