Enhancing the Student Learning Experience Through AI and Virtual/Augmented Reality

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ChatGPT

☼ Examples	⚡ Capabilities	⚠ Limitations
"Explain quantum computing in simple terms" →	Remembers what user said earlier in the conversation	May occasionally generate incorrect information
"Got any creative ideas for a 10 year old's birthday?" →	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content
"How do I make an HTTP request in Javascript?" →	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021

Why should university incorporate Virtual/Augmented Reality into the learning environment?

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT May 24 Version

Meet Your Presenters

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Session Objectives

Attendees at this session will learn:

- Why AR and VR, and AI innovation is important for meeting student expectations and enhancing the learning experience

- How to assess the potential of AR, VR, and AI-driven experiences as a key differentiator for your online programs

- What to consider when fostering technological innovations on your campus

RNL

Poll Question

In the past academic year how have you seen AR, VR, or AI used in the (online) learning environment?
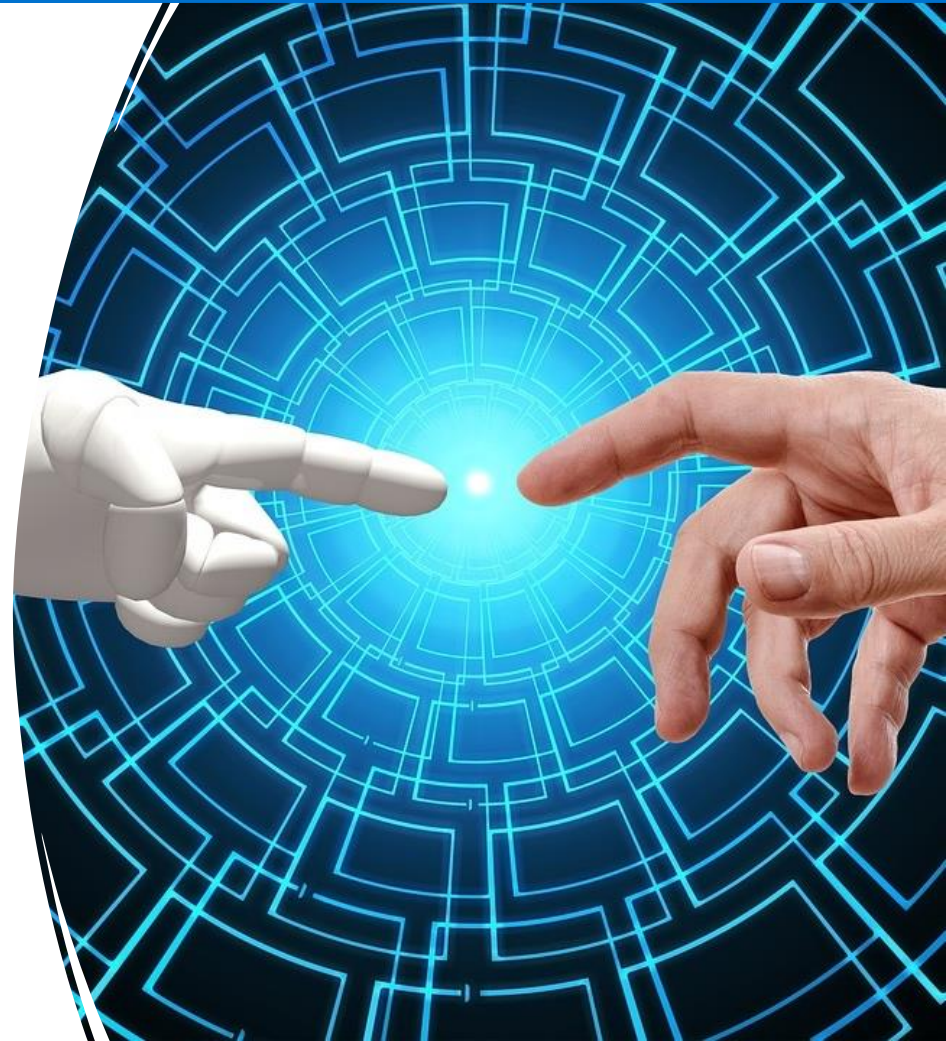
Go to menti.com, enter 8934 1611

Augmented Reality (AR)

- Blends digital and real-world elements to enhance the learning experience

- Drives student engagement by simulating superimposed, artificial objects in real-world environments and enhancing their perception

- A variety of devices can support the AR learning environment

Artificial Intelligence (AI)

- Includes machine learning tools and techniques to assist in solving problems

- Allows for customized learning experiences to differentiate and provide targeted guidance

- Can automate many rote tasks and assist or accelerate non-routine tasks (e.g., research, brainstorming, diagnosis, design, content creation)

RNL

Poll Question

On a scale of 1 to 10 how important are the conversations around AR, VR, and AI for university leaders to be having?

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AR in Higher Education

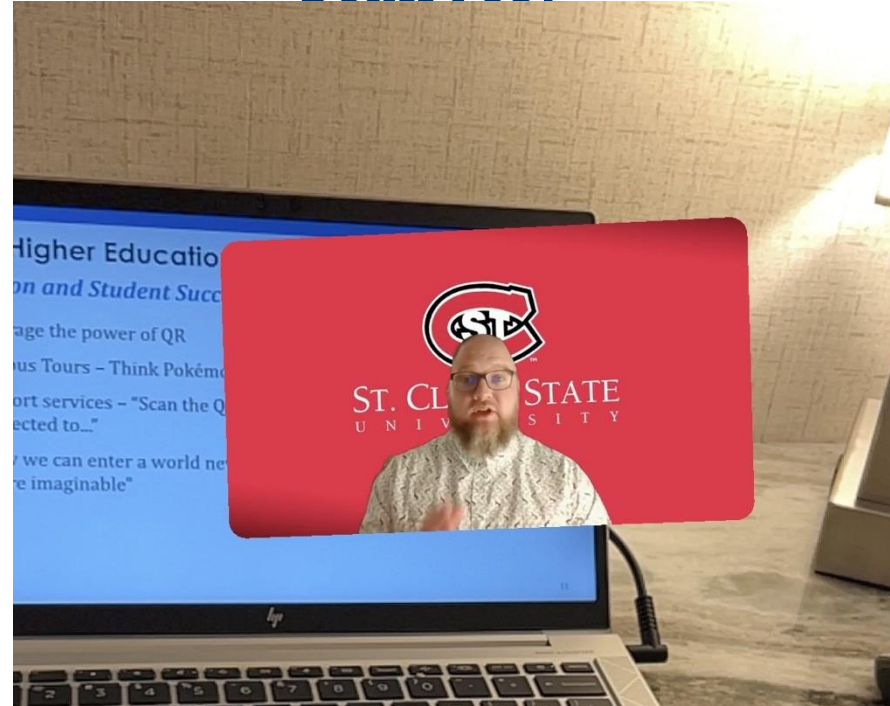## *Student Learning and Engagement*

- Enhances the way the learning environment is viewed

- Builds confidence as learning transition from theory to practice

- Examples:

  - Nursing: Overlay the digital world into the real world

  - Workforce development

AR in Higher Education

Retention and Student Success

- Leverage the power of QR

- Campus Tours – Think Pokémon Go

- Support services – "Scan the QR to be connected to…"

- 'Now we can enter a world never before imaginable.'

If you have Flip, open
Flip and scan me!

VR in Higher Education

Student Learning and Engagement

- Similar to AR, VR allows for enhancement within the learning environment

- Builds confidence

- Removes (four wall) barriers to allow for inclusivity and accessibility

- Examples:
  - True classroom immersion
  - Trucking and Equipment

VR in Higher Education
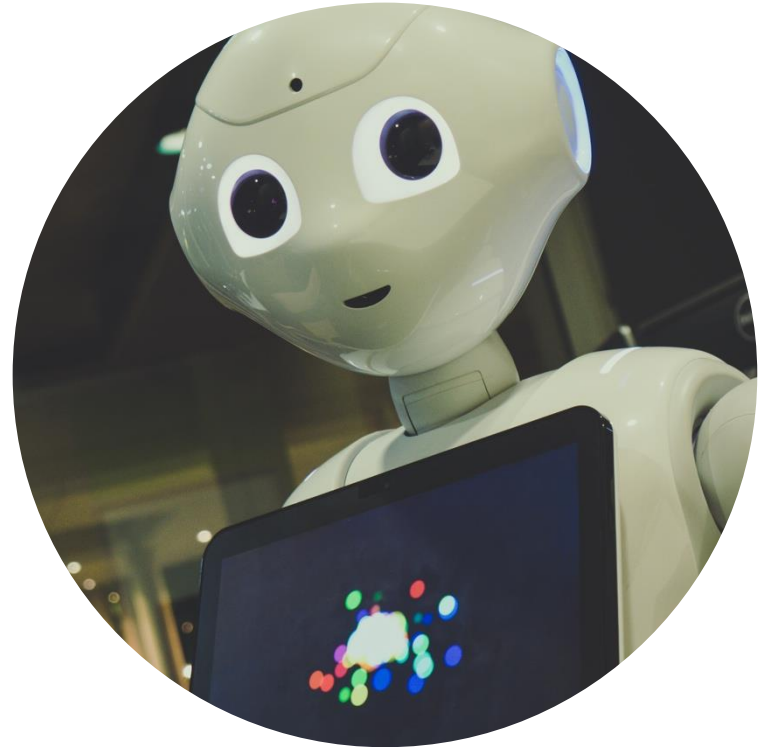
Retention and Student Success

- Immersive technologies help students feel that they are taking part in the learning

- Student collaboration and networking increases when distance is no longer an issue

AI in Higher Education

Student Learning and Engagement

- Increase access and inclusion

- Automate feedback, grading, and responses to FAQs

- Offer personalized and adaptive learning

- Generate dynamic learning content (lecture notes, case studies)

- Examples:
  - AI tutors and teaching assistants
  - Real-time transcription and translation

AI in Higher Education

Retention and Student Success

- Assist students in navigating bureaucratic administrative processes

- Reduce "summer melt" for incoming students

- Produce intelligent learning analytics tools and monitoring systems

Discussion Question

How important do you think AR, VR, and AI learning experiences are to your students?

Turn and Talk

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Market Demand

- Market analysis suggests that AR/VR will surpass **$100 billion** by 2026. Companies creating AR/VR tools are seeking education partners
  - Example: Purdue University Global and Incite VR.

- More and more industries are turning to AR, VR, and AI.
  - Demand for AI skills has grown by **4 times** in the past decade
  - Studies show wage premiums for jobs postings with AI skills

- Students need opportunities to explore these technologies in learning environments to prepare them for the workforce.
  - **52%** of recent graduates say the growth of AI makes them question how prepared they are for the workforce.
  - **65%** of recent graduates say they are eager for training on working alongside AI

Impact

- AR, VR, and AI adoptions bridge the physical gap and increase the feeling of belonging in online programs.

  - We must communicate that we see you, that you show up in the plan." Dr. Terrell Strayhorn

- Immersion removes barriers to learning. When accessibility increases, so does the learning experience for <u>all students</u>.

- AR, VR, and AI provide customized learning experiences tailored to your program outcomes and unique institutional brand.

Implications for Adoption

- Consider ethical implications (AI bias, transparency, academic labor).

- Assess your organizational culture around innovation and who needs to be "at the table."
  - Funding
  - Faculty professional development
  - IT infrastructure

- Weigh potential limitations in student access and equity (digital divide).

- Decide whether to partner with external organizations versus investing to build internal capacity.

Discussion Question

How is your institution using (or planning to use) AR, VR, and AI as a differentiator?

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Thank You

We appreciate your time and look forward to further conversations with your teams!

Contact Us

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