

AI x Education

Official Conference Report

August 5th & 6th 2023

[Conference Website](#)

[Link to Recordings](#)

AI X EDUCATION CONFERENCE

Driven by Students, Dedicated to Educators.

AUGUST 5-6, 2023
10AM-4PM (CDT)

ONLINE CONFERENCE FOR K12
AND HIGHER-ED EDUCATORS

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FREE REGISTRATION

Understand how students are using AI, learn how classrooms are adapting to AI, demystify AI such as ChatGPT with AI experts, and connect with pioneering educators!

Register: www.aixeducation.com

Contact: organizer@aixeducation.com



Dr. Kristen DiCerbo
*Chief Learning Officer
Khan Academy*



Dr. Stephen Wolfram
*Founder and CEO
Wolfram Research*



Dr. Chris Dede
*Senior Research Fellow
Harvard Graduate School of Education*

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Conference Overview & Recordings

Welcome to the AI x Education Conference, a student-led international online event that explored the transformative impact of Artificial Intelligence (AI) on the education sector. With over **5000+** registrants, we had educators, administrators, AI experts, and students across the world engaged in a rich and insightful dialogue.

Our objective was to create a platform that demystified AI, enhancing our collective understanding of its role and potential in education. Through the conference, we aimed to address the challenges and potentials of the time, share innovative solutions, and listen to unique experiences, with a particular emphasis on student voices in the conversation. Our speakers and panelists offered practical insights and strategies that educators could directly implement in their classrooms. You can find all session recordings on our Youtube channel here:

<https://www.youtube.com/channel/UCSC-68dMI1CyqDDuJC0s3UA/>

Following the conference, our student volunteers will continue to provide free events and resources to foster a progressive dialogue and collaboration among educators and students, further enhancing a deeper understanding of AI's impact on education. Thank you for joining us on this exciting journey!

Conference Software Sponsored by Zoom:

zoom
Events

Supported by non-profit student organizations: Zero2One and AI Consensus



Support This Conference & Future Events

Our student volunteer team is dedicated to making resources on AI in education freely accessible for all educators, irrespective of their institutions' financial capabilities. We believe that equitable opportunities for knowledge sharing and innovation is especially crucial for AI in education, and we need your help to sustain and expand our efforts. Here's how you can contribute:

- **Subscribe to our newsletter:** We will share free events and resources through our newsletter, which you can freely subscribe to [here!](#)
- **Share the event recordings:** Circulate our conference recordings amongst your professional network and on social media. This ensures that we can reach a wide audience, including educators from institutions that historically lack resources. You can find the recordings [here](#).
- **Support our future initiatives:** If you would like to sponsor or volunteer for our future events, please reach out to our email at organizer@aixeducation.com.

The AI x Education Team



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Organizer
UIUC ECE 23' | Stanford CS 25'



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Operations Team
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Aryan Gosaliya
Speakers & Content Team
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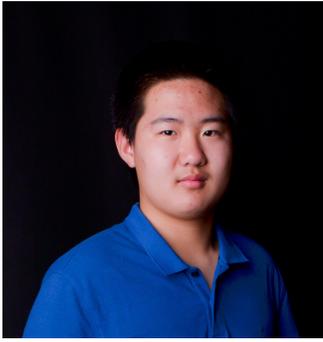
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Speakers & Content Team
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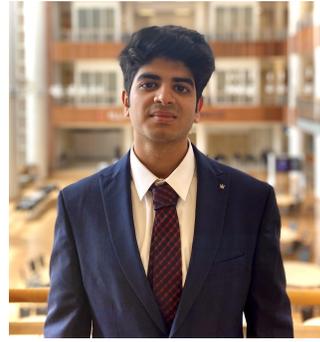
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Opening Note: Generating the Future of Education with AI

Recording Link: [📺 AI x Education Conference: Opening Note \(Generating the Future of Education with AI\)](#)

Overview: Day 1 of our conference begins with highlighting the purpose and unique approach of our event at this pivotal moment in AI-driven education. We will offer a peek into real-world examples of students and educators utilizing AI tools, while simultaneously discussing the inherent limitations and challenges associated with AI in education. The session will encourage open dialogue between students and educators, introduce our future events, and acknowledge the efforts of all who've made this conference possible. After a brief overview of the conference schedule and a guide on the event logistics, we'll invite our sponsors to share insights.



Johnny Chang, an incoming Computer Science graduate student at Stanford University, is dedicated to creating solutions for global challenges. An alumnus of UIUC, Johnny co-founded Covalence, a student movement battling the impacts of COVID-19 worldwide in 2020, and Zero2One, a 501(c)(3) student-run incubator fostering student non-profits and startups. Initially immersed in robotics research, Johnny has transitioned to the AI realm with a special focus on education due to its urgency. Presently, as the organizer of the AI x Education Conference, his mission is to maximize the positive impact of AI in education, benefitting both students and educators.

Johnny Chang
AI x Education Team
Organizer
[Linkedin](#)



Keziah Gopalla is a rising senior at Burlingame High School. She is passionate about the potential of AI in the future of education, and how AI will boost the attainability and accessibility of education. She hopes to bridge the gap between students and teachers, concerning perspectives on how AI will evolve the way we teach and learn. At BHS she is the Mock Trial Club President, Multicultural Club co-founder and President, plays on the school volleyball team, and is the lead Baritone Saxophone in the Jazz Ensemble. Outside of school she is zealous about giving back to the community via National Charity League and is an enthusiastic Girl Scout.

Keziah Gopalla
AI x Education Team
Speakers & Content
[Linkedin](#)



Sharanya Bhardwaj is a rising junior at UIUC, majoring in Information Sciences and is a part of the Operations Team for AIXEducation. She is involved in research on topics like Machine learning through the Office of Undergraduate Research at UIUC and is also the Community Director of Zero2One, a student organization that runs an incubator program for budding student entrepreneurs. Alongside her academic pursuits, Sharanya is the co-founder of Swaranya, a women-centric consulting firm aimed at empowering women in various industries through professional mentoring. Her fascination with the intersection of social work and AI has inspired her to be a catalyst in making education more accessible by enabling interactions through the AIXEducation Conference.

Sharanya Bhardwaj
AI x Education Team
Operations
[Linkedin](#)

Session Summary

- **Conference Overview:** Organized by a dedicated team of 11 student volunteers, the conference successfully garnered attention with nearly 5,000 participants from across the globe. The core emphasis of this event was to highlight the profound potential of artificial intelligence (AI) in revolutionizing the education sector.
- **Importance of Collaboration:** In a world where technological advances can sometimes deepen divides, the conference's principal aim was to foster collaboration. The vision was clear: bridge the gap between students and educators through inclusive AI discussions. The mission echoed this sentiment, focusing on the safe and equitable integration of AI in educational settings. It was emphasized that a student-centered approach would be pivotal in ensuring this seamless integration.
- **Current State of AI in Education:** The landscape of AI in education reveals both opportunities and challenges: A significant 72% of educators reported a void in structured guidance when it comes to implementing AI in the classroom. Meanwhile, an eye-opening 89% of students aged over 18 confessed to leveraging AI tools to aid with their homework.
- **Implications of AI in Education:** The myriad benefits of AI in education were highlighted throughout the conference. AI tools, with concrete examples explained in the presentations, have shown their prowess in brainstorming, researching, summarizing, and analyzing. Furthermore, they've demonstrated value as personal teaching assistants, providing immediate feedback, and even assisting educators in lesson planning. While the promises of AI are vast, it's equally important to tread with caution. The potential for biases, an over-reliance on technology, and the exacerbation of existing inequities were cited as concerns that need addressing.
- **Conference Highlights:** The conference was a mosaic of insightful sessions ranging from impactful keynotes, such as the one delivered by Dr. Kristen DiCerbo, to diverse panel discussions that enriched the discourse on AI in education. Day two, in particular, delved deep into the realm of AI literacy, featuring esteemed speakers like Dr. Chris Dede and Dr. Stephen Wolfram.
- **Future Endeavors and Resources:** Plans were unveiled for subsequent initiatives like newsletters, wikis, webinars, and summits, all centered around AI in education. Moreover, a rich tapestry of resources, currently available for educators within the AI community, was highlighted, ensuring the momentum of the conference continues long after its conclusion.

Keynote: Building AI Applications at Scale

Recording Link: [▶ Keynote: Building AI Applications at Scale](#)

Overview: The rush is on to build new applications of AI in education. This webinar will look at how decades of research help inform efforts to integrate the latest large language models into Khan Academy. You will get a behind the scenes look at how AI features were built into a platform used by millions of learners a year, and hear what is being learned from the rollout of these features to a small group of schools and districts.



Kristen DiCerbo is the Chief Learning Officer at Khan Academy and was the vice-president of Learning Research & Design at Pearson. She drives the pedagogical strategy for Khan Academy: ensuring research-backed offerings that improve learner outcomes. She also leads the content and product management teams. She will overview Khan Academy's progress in integrating the latest large language models and other AI features into their platform.

Dr. Kristen DiCerbo
Keynote Speaker
[Linkedin](#)



Sophia Timm, a senior at Lake Forest College, is currently working towards her BS in Neuroscience and BA in Philosophy; she is driven by her desire to connect science with the complexities of the mind. With a deep-rooted passion for healthcare, Sophia looks forward to beginning PA school after finishing college, uniting her medical expertise and empathy to fulfill her lifelong purpose of serving others.

Sophia Timm
Student Moderator
[Website](#)

Session Summary

- ❖ **Khan Academy's Journey with AI:** Around a year ago, Khan Academy gained access to GPT-4 for training in AP biology questions. An interesting historical anecdote: In the 1970s, a concept was introduced where students were rewarded with candy for correctly answering multiple-choice questions, highlighting the longstanding efforts to gamify learning.
- ❖ **AI's Role in Learning Enhancement:** Active engagement and boundary pushing are pivotal for successful learning. Immediate feedback and learning's relevance are of paramount importance. The GPT-4-powered Khanmigo chatbot assumes the roles of interactive book characters, enhancing student comprehension and involvement. Acting as a tutor, Khanmigo skillfully leads students through challenges, akin to a teacher's guidance. AI-facilitated writing assists students in endeavors such as

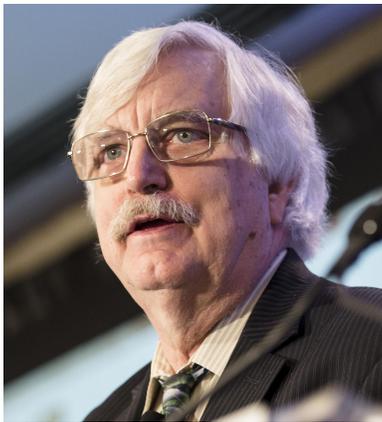
crafting college essays. The AI adeptly addresses profound inquiries, cultivating heightened understanding and engagement.

- ❖ **Learning Progression: Passive to Interactive:** Learning advances through a sequence: passive, active, constructive, and interactive stages. Interactive learning experiences are further enhanced by generative AI.
- ❖ **Balancing AI with Human Teaching:** AI's potential as a full tutor replacement faces hurdles due to its potential lack of empathy. A thoughtful strategy involves limitations on LLM use, crafting assignments demanding human reasoning, and permitting AI under appropriate acknowledgement and documentation. Vital conversations on upholding academic integrity need to remain open.
- ❖ **Ethical Considerations:** The Institute for Ethical AI in Education underscores the importance of responsible AI application. Striking a balance between safeguarding data privacy and curating inclusive, unbiased datasets presents a complex challenge. Parents and educators possess the ability to oversee the utilization of Khanmigo among students below 18 years old. The overarching objective should be to leverage AI to amplify human potential and intelligence.
- ❖ **Q&A Highlights**
 - Q1: **Translating to Humanities and Language** - Students should be motivated to pose thought-provoking questions, fostering active engagement. AI can serve as a catalyst for stimulating critical thinking, but it should complement, not substitute, this cognitive process.
 - Q2: **Learning Beyond Training Data** - Promote a culture where students question AI's viewpoint actively. Encouraging them to inquire about the data sources used by AI is essential for fostering critical understanding.
 - Q3: **Educator Concerns with AI** - Initiate the adoption of AI gradually, allowing comfort to grow through individual experimentation. A valuable approach involves contrasting AI-generated work with one's personal efforts, facilitating a comprehensive grasp of AI's role and capabilities.
 - Q4: **Availability of Khanmigo** - Beta testing for Khanmigo is accessible within districts working with Khan Academy. Individual access is attainable through donations. Anticipate a reduction in costs over time, contributing to expanded availability and accessibility.
- ❖ **Relevant Links**
 - [The Ethical Framework for AI in Education](#)
 - [AI Risk Management Framework](#)
 - [Khanmigo, Khan Academy's AI-powered guide](#)

If AI is the Answer, What is the Question: Thinking about Learning and Vice Versa (Plenary Talk)

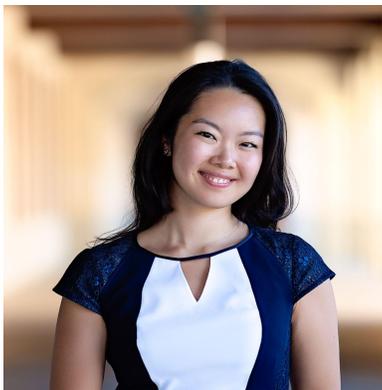
Recording Link: [▶ If AI is the Answer, What is the Question: Thinking about Learning and Vice Versa](#)

Overview: The global economy is moving into an era of Intelligence Augmentation (IA). Science fiction often portrays “intelligence” as involving complementary roles of reckoning and judgment. For example, In the Star Trek series the judgment and decision making of ‘Captain Picard’ are enhanced by the reckoning skills (calculations, analysis of multidimensional information, predictions) of the android ‘Data’, a machine without human capacities like emotions. The human and machine work synergistically together to be better than their individual abilities. In the next few years, most occupations will shift to require working with a generative AI-based agent that has complementary skills and knowledge to the human worker. This talk will discuss what types of learning are most valuable for students to prepare for these IA interactions in work and life.



Chris Dede is a Senior Research Fellow at the Harvard Graduate School of Education and was for 22 years its Timothy E. Wirth Professor in Learning Technologies. His fields of scholarship include emerging technologies, policy, and leadership. Chris is a Co-Principal Investigator and Associate Director of Research of the NSF-funded National Artificial Intelligence Institute in Adult Learning and Online Education. His most recent co-edited books include: Virtual, Augmented, and Mixed Realities in Education; Learning engineering for online education: Theoretical contexts and design-based examples; and The 60-Year Curriculum: New Models for Lifelong Learning in the Digital Economy.

Chris Dede
Plenary Speaker
[Linkedin](#)



Angela Chen is pursuing a Master’s of International Policy at Stanford and exploring the intersection of policy, innovation, and technology. She is heavily involved in the entrepreneurial ecosystem on campus as a venture fellow, accelerator vice president, and innovation grant recipient. Angela was also a Stanford Institute for Human-Centered Artificial Intelligence research associate, investigating the impact of AI on the future of work and learning. Before Stanford, Angela was the founder of an edtech startup. She was also a management consultant and AI policy advisor. Angela is from Toronto, Canada and graduated magna cum laude from the Huntsman Dual Degree Program at the Wharton School and the University of Pennsylvania, with a BA in International Studies and BSc in Economics.

Angela Chen
Panel Moderator
[Linkedin](#)

Session Summary

- ❖ **AI and Education - Opportunities and Challenges:** Starting with the broader concept, the discussion touched upon the need to understand the fundamental difference between human intelligence and artificial intelligence. AI is an enabler but can never replace the human aspect of learning, which is

about the journey, not just the destination. Misconceptions, primarily driven by popular culture, further exaggerate the capabilities of AI.

- ❖ **Breakthroughs with Language Models:** While large language models (LLMs) have enabled a better understanding of natural language, they operate in a vastly different manner from humans. Described as a digital parrot, LLMs generate responses without true comprehension, lacking depth and understanding.
- ❖ **Generative AI - Its Limitations:** Highlighting generative AI's limitations, the talk emphasized its lack of true understanding of human experiences, culture, and reasoning. Its tendency to drift or even misrepresent information necessitates a controlled approach to training.
- ❖ **Applications in Education:** Generative AI, while promising, also bears potential pitfalls in education. From perpetuating biases to hallucinating data, its use requires careful moderation. However, its potential is undeniable, especially when combined with human intervention.
- ❖ **Intelligence Augmentation:** With the rapid advancement of machine learning and AI, education should equip individuals with the tools for judgment and practical wisdom. AI's reckoning abilities, when paired with human judgment, form a powerful synergy.
- ❖ **The Significance of Learning Languages:** Diving into language learning, Dr. Chris Dede discussed the value of understanding different cultures and perspectives. AI has the potential to revolutionize language learning by offering immersive experiences.
- ❖ **Rethinking Assessment Models:** The session concluded with a thought-provoking take on how assessment models should evolve in the age of AI. Moving beyond traditional psychometric tests, the focus should shift to formative, diagnostic evaluations, ensuring equitable access to resources and learning tools.
- ❖ **Q&A Highlights**
 - Q1: **What should students be learning?** - Students should focus on empathy, cultural understanding, and a solid moral and ethical foundation. Personalized learning is crucial in this endeavor.
 - Q2: **How can teachers enhance their curriculum?** - Dr. Chris Dede's recent paper titled "[NAVIGATING A WORLD OF GENERATIVE AI: SUGGESTIONS FOR EDUCATORS](#)" offers comprehensive insights on this matter.
 - Q3: **How can we transition away from reckoning-based assessments?** - We achieve what we measure. Assessments should adopt a stealthy approach, integrating directly into the learning process.
 - Q4: **How can we address educational inequity now with AI in the conversation?** - Many independent schools emphasize teaching judgment while underfunded public schools in marginalized areas focus on reckoning. With AI potentially exacerbating this gap, it's imperative to address this disparity actively.
- ❖ **Relevant Links**
 - [Blog post from Dr. Chris Dede that summarizes his plenary talk](#)
 - [Slides from Dr. Chris Dede](#)

Fireside Chat with Stephen Wolfram: Demystifying AI and the Future of Computational Thinking

Recording Link: [📺 Fireside Chat with Stephen Wolfram: Demystifying AI and the Future of Computational Th...](#)

Overview:

- What Should Educators Teach in the AI Era?
- AI and Computational Thinking in Education
- Envisioning the Future of Classrooms with AI



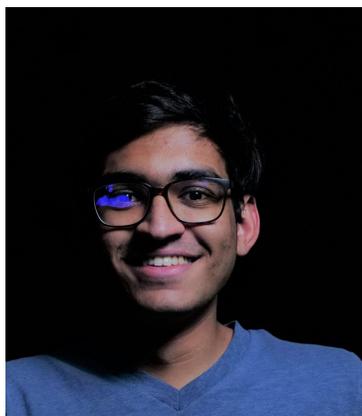
Stephen Wolfram is the creator of Mathematica, Wolfram|Alpha and the Wolfram Language; the author of *A New Kind of Science*; the originator of the Wolfram Physics Project; and the founder and CEO of Wolfram Research. Over the course of more than four decades, he has been a pioneer in the development and application of computational thinking—and has been responsible for many discoveries, inventions and innovations in science, technology and business.

Dr. Stephen Wolfram
Distinguished AI Expert
[Linkedin](#)



As a Learning, Design and Technology master student at Stanford, **Chinat Yu** has been exploring potential of AI in education. Recently, he spoke at the Johns Hopkins DELTA Symposium panel about AI's impact on the future of education, and is currently an applied science researcher intern at Microsoft in AI. CTEI, JHU - Welcome to the 2023 DELTA Symposium Student Panel on Teaching (panopto.com). He also developed his own AI digital twin, Chinat AI, <https://chinatai.app> which offers an experiential perspective on AI's use in personal and educational environments. You can learn more about him here: Chinat Yu | MLH's Top 50 Hackers, Hopkins Life Hacker - JHU Engineering Magazine

Chinat Yu
Student Moderator
[Linkedin](#)



Aaryaman Patel is a senior in Mechanical Engineering from the University of Illinois. His interests extend far beyond the walls of just engineering. From coding his own website and writing a newsletter, to composing music and spending time working on some of today's most pressing environmental challenges, he is always finding exciting new projects to work on. He is the co-host of 'The UIUC Talkshow' - an initiative that seeks to engage in deep conversations with some of the most interesting people from the Illinois campus. A curious person by nature, he thoroughly enjoys learning from his peers and seeking new challenges to pursue.

Aaryaman Patel
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **Role of AI in Shaping Classroom Future:** AI is anticipated to play a pivotal role in shaping the future of classrooms, with a primary focus on cultivating computational thinking. This evolution will involve the integration of technology into the teaching realm, ensuring its usability throughout life. Dr. Wolfram emphasized that computational thinking offers a more refined method for individuals to articulate their thoughts and perceptions about the world.
- ❖ **Significance of Computational Thinking:** Dr. Wolfram underlined the value of teaching computational thinking and the art of framing ideas in a computational form. He pointed out that writing in computational language has become more intuitive with advancements in natural language processing. Moreover, the inception of LLM-based tutoring offers the potential for more individualized and project-driven learning experiences.
- ❖ **Computational Thinking vs. Coding:** While teaching coding is essential, Dr. Wolfram highlighted that it doesn't equate to teaching computational thinking. Computational thinking revolves around comprehending the application of tools in real-world scenarios, rather than delving deep into how these tools or "cars" function internally.
- ❖ **Computational Thinking Beyond STEM:** Dr. Wolfram shared intriguing insights into how computational thinking could be employed in subjective domains such as arts and literature. From understanding a play through its characters' social network to evaluating the evolution of an artist's palette, computational tools offer a plethora of analytical possibilities.
- ❖ **Power of LLMs in Computation:** LLMs, as per Dr. Wolfram, possess the capability to perform unprecedented computations and derive statistical information from global data. LLMs could potentially help us decipher new discoveries made by computational models.
- ❖ **Promise of LLM Tutoring:** LLM tutoring offers a glimmer of hope in the realm of personalized education. Dr. Wolfram discussed how LLMs can adapt the educational content according to a student's existing knowledge base. Furthermore, he underscored the relevance of prompt engineering and the interdisciplinary nature of computational thinking.
- ❖ **Integrating AI in Teaching:** Dr. Wolfram suggested tangible steps for educators to incorporate AI and computational thinking into the classroom, ranging from using computational language code to employing LLMs for generating content summaries.
- ❖ **Pivotal Role of Language Models:** Concluding his talk, Dr. Wolfram shed light on how LLMs can play a defining role in report generation and explaining complex concepts. He highlighted the need for vigilance as LLMs can sometimes produce misleading information, emphasizing the importance of randomized steps in tutoring mechanisms.

Fireside Chat with AI Experts: Capabilities and Limitations of AI in Education

Recording Link: [📺 Fireside Chat with AI Experts: Capabilities and Limitations of AI in Education](#)

Overview:

- What educators need to know about AI
- Addressing AI's Limitations, Potentials, and Ethical Considerations
- Future Trends and Opportunities with AI in Education



Dr. Jinjun Xiong is an Empire Innovation Professor with the Department of Computer Science and Engineering at University at Buffalo. He also serves as the Scientific Director and Co-Director for the National AI Institute for Exceptional Education (NSF), and Co-Director for the SUNY-UB Institute for Artificial Intelligence and Data Science. Prior to that, he was a Senior Researcher and Program Director for AI and Hybrid Clouds Systems at the IBM Thomas J. Watson Research Center. He co-founded and co-directs the IBM-Illinois Center for Cognitive Computing Systems Research. His research interests are on across-stack AI systems research, which includes AI applications, algorithms, tooling and computer architectures. Many of his research results have been adopted in IBM's products and tools. He published more than 150 peer-reviewed papers in top AI conferences and systems conferences. His publication won 8 Best Paper Awards and 8 Nominations for Best Paper Awards.

Dr. Jinjun Xiong
AI Expert
[Linkedin](#)



Julia Hockenmaier is a Professor in Computer Science and an Affiliate with the Linguistics Department and CSL at the University of Illinois at Urbana-Champaign. She works on Natural Language Processing and has served in a number of leadership positions, including as past chair of the board of the North American chapter of the Association for Computational Linguistics (NAACL).

Dr. Julia Hockenmaier
AI Expert
[Linkedin](#)



Fien Van Den Hondel is a Dutch UWC East Africa alumnus and a current social sciences student at Minerva University. She is interested in economics as well as AI. She is a part of AI Consensus: an initiative that aims to incorporate student perspectives in discussions surrounding AI in education and is supported by the Responsible Technology Youth Power Fund.

Fien Van Den Hondel
Student Moderator
[Linkedin](#)



James Collett is a Senior at NYU Stern studying Business and Political Economy with a Minor in Data Science. On campus, James is heavily involved as a student leader, serving as the student representative for the Stern undergraduate college, the Chair of the college's judiciary committee, and the director of NYU's Student Initiative Fund. In these capacities James strives to develop strategic plans for understanding, accommodating, and promoting generative artificial intelligence so that this technology might augment and improve education.

James Collett
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **AI Capabilities and Limitations in the Education Landscape:** AI has shown promise, especially in speech and language services for children, but it's essential to consider elements such as human connection, biases, fairness, and the inherent limitations of technology.
- ❖ **AI Solutions for Special Education:** There is great potential in using AI for special education, especially given the disparities in access to specialists. With 6.5 million children in the US requiring special education but only 61,000 speech-language pathologists available, AI tools, such as screeners and personalized intervention systems, can significantly bridge the gap.
- ❖ **Tailoring Educational Content Through AI:** Using AI for analyzing children's language development can lead to the creation of stories and pictures suited for individual needs. However, AI's current capabilities might not always align with the specific requirements of educators, revealing a room for improvement.
- ❖ **The Power and Challenges of Generative AI Models:** Generative AI models, bolstered by extensive data and computational capabilities, can produce convincing outputs. Yet, educators and students must be cautious, as these outputs, though sounding credible, might not always hold factual accuracy.
- ❖ **The Importance of AI Literacy:** Both students and educators must possess a deep understanding of AI's strengths and weaknesses. Using AI tools without this knowledge can lead to questionable results, making critical thinking and discernment vital in the education sector.
- ❖ **Incorporating AI in Educational Curriculum:** Evading AI in modern curriculums is not feasible. Educators must craft curriculums with an acknowledgment of AI's growing presence. The broader educational community should collaborate, sharing best practices for AI tool utilization while considering ethical implications.

- ❖ **Exercising Caution and Critical Thinking with AI Tools:** While AI can be an invaluable ally in education, it's crucial to approach it with caution and knowledge. Users must be wary of privacy issues, commercial interests, and always be informed about AI's true capabilities and shortcomings.

Higher-ed: Student Perspective and Interaction with AI

Recording Link: [Higher-ed: Student Perspective and Interaction with AI](#)

Overview:

- Understanding Students' Experiences and Perspectives: Insights, Applications, and Observations on AI in Education
- Fostering Collaboration between Students and Educators in the AI Era



Jan Bartkowiak is a rising junior at Minerva University, selected by WURI as the most innovative university in the world. Jan is also the Founder & CEO of E converse, a youth-led NGO that supports Polish high school students in developing entrepreneurship skills and network through startup crash courses, workshops, and ideathons. E converse garnered the support of LEGO, Baker McKenzie, and Google, with Jan recognized as Transcend Network Fellow, and Finalist of the Emerging Europe Awards, supported by the European Commission. This past year, Jan has also spoken at AIM Conference in Abu Dhabi, European Financial Congress in Sopot, and Global Youth Trends Forum in Taipei.

Jan Bartkowiak
Student Speaker
[Linkedin](#)



Chinat Yu: a Learning, Design and Technology master student at Stanford, has been exploring the potential of AI in education. Recently, he spoke at the Johns Hopkins DELTA Symposium panel about AI's impact on the future of education, and is currently an applied science researcher intern at Microsoft in AI. [CTEI, JHU - Welcome to the 2023 DELTA Symposium Student Panel on Teaching \(panopto.com\)](#). He also developed his own AI digital twin, Chinat AI, <https://chinatai.app> which offers an experiential perspective on AI's use in personal and educational environments. You can learn more about him here: [Chinat Yu | MLH's Top 50 Hackers](#), [Hopkins Life Hacker - JHU Engineering Magazine](#)

Chinat Yu
Student Speaker
[Linkedin](#)



Sophia Timm, a senior at Lake Forest College, is currently working towards her BS in Neuroscience and BA in Philosophy; she is driven by her desire to connect science with the complexities of the mind. With a deep-rooted passion for healthcare, Sophia looks forward to beginning PA school after finishing college, uniting her medical expertise and empathy to fulfill her lifelong purpose of serving others.

Sophia Timm
Student Speaker
[Website](#)



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Fien Van Den Hondel
Student Speaker
[Linkedin](#)



Mike Yao is an interdisciplinary researcher and thought leader on digital media, human-computer interaction, and technology-mediated social behavior. His research focuses on the societal and behavioral impacts of emerging technologies such as AI, immersive media, and the Internet of Things (IoT). He teaches on topics like online privacy, technology-driven marketing and advertising, human-machine communication, and digital consumer behavior.

Dr. Mike Yao
Faculty Moderator
[Linkedin](#)

Session Summary

- ❖ **Speaker:** Jan Bartkoviak
 - The current business education model leans heavily towards being theoretical and can feel passive or outdated. AI can enhance areas such as research, ideation, business strategy, and pitching.
 - Implementing AI in your classes:
 - Set clear standards and principles when incorporating AI in classes
 - Proactively gather, assess, and implement student feedback
 - Develop an AI resource hub to enable students to experiment
- ❖ **Speaker:** Chinat Yu

- ❖ Chinat designed an AI-driven professor, and its outcomes astonished his own professor.
- ❖ Tasks that took over 5 hours in Excel were completed in 2 minutes using the ChatGPT code interpreter.
- ❖ By enabling students to utilize ChatGPT, educators can promote sharing of AI interactions.
- ❖ Encourage the use of advanced GPT Plus features like code interpreting and visual aids.
- ❖ Immediate Action: Initiate dialogues about the future impact of AI with your students.
- ❖ **Speaker:** Sophia Timm
 - The central question is: How might generative AI be used to foster equity? Potential scenarios with generative AI include:
 - The birth of new disparities.
 - Retention of current disparities without the addition of new ones.
 - The resolution of existing disparities.
 - Ways GenAI can contribute:
 - Enhance accessibility to course-tailored skills, focusing on specialized queries. A prerequisite is AI proficiency among students.
 - Offer dynamic feedback.
 - Facilitate college and post-college guidance.
 - Offer complimentary, accessible tutoring.
- ❖ **Speaker:** Fien Van Den Hondel
 - ❖ AI tools can break language barriers for students, ensuring they receive equitable opportunities, including internships.
 - ❖ Counterpoint against AI detection: Such tools tend to be biased and students can often bypass them.
 - ❖ Essential learnings for students include:
 - Critical thinking: Educators should emphasize that AI's outputs might not always align with expectations.
 - Recognizing AI biases: It's crucial to cultivate students' ability to discern biases in AI responses.
 - Iterative improvement: Students must be adept at refining their questions based on AI feedback.
 - Open dialogue: Professors can gain insights by engaging in conversations with their students.
- ❖ **Q&A Session**
 - Q1: **How can educators guide students to utilize AI ethically and effectively, beyond merely completing assignments, especially during academic periods like finals?** - Educators can instruct students on the responsible use of AI, giving them sample prompts for practice. By turning traditional homework into in-class activities, classrooms can be more engaging.
 - Q2: **How can students ascertain the reliability of AI outputs, and how can this skill be honed?** - Educators can mandate the inclusion of source links in AI-based assignments. Encourage the use of AI's capability to explain its reasoning process. Future AI enhancements are poised to offer automatic source referencing.

Higher Ed: Redefining Education in the AI Era (STEM)

Recording Link: [▶ Higher-ed: Redefining Education in the AI Era \(STEM\)](#)

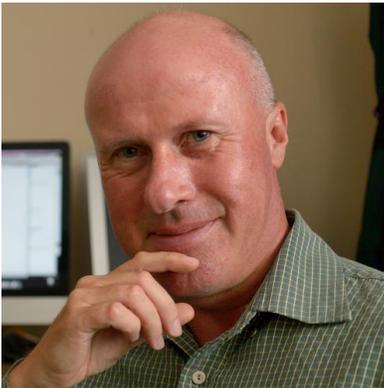
Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Dr. Lawrence Angrave is an award-winning Teaching Professor in the computer science department at the University of Illinois Urbana-Champaign. His research includes innovative teaching, playful learning, security, and creating opportunities for accessible and inclusive equitable education.

Dr. Lawrence Angrave
Faculty Panelist
[Linkedin](#)



Michael Twidale is a professor in the School of Information Sciences, University of Illinois at Urbana-Champaign. His research interests are at the intersection of computer supported cooperative work, computer supported collaborative learning, human computer interaction, and sociotechnical systems design. He is interested in how people learn technologies, and how they do this individually, together and online. He is also interested in metaphors, mental models, misconceptions and metadata. He is currently applying these interests to understanding how people make sense of new technologies that they encounter including conversational user interfaces and Large Language models.

Dr. Michael Twidale
Faculty Panelist
[Linkedin](#)



Shayan Doroudi is an assistant professor at the University of California, Irvine School of Education and (by courtesy) Department of Informatics. His research is at the intersection of the learning sciences, educational technology, and educational data science. He is particularly interested in how artificial intelligence can give us insights into how people learn and how to improve the design of learning environments. Doroudi received his B.S. in Computer Science from the California Institute of Technology, and his M.S. and Ph.D. in Computer Science from Carnegie Mellon University.

Dr. Shayan Doroudi
Faculty Panelist
[Linkedin](#)



Lily Lee is a rising junior at Northwestern University studying Engineering and Music Education with a minor in Data Science. She is passionate about education and is the founder of TechUpTeachers, a free weekly newsletter that updates educators on the latest news, resources, and tools in AI and Edtech.

Lily Lee
Student Panelist
[Linkedin](#)



Vinitha Marupeddi is a student at Purdue University majoring in computer science and data science, and is currently a machine learning intern at John Deere. She has been working on AI applications for a couple of years and is super excited about its potential, especially in the education space!

Vinitha Marupeddi
Student Panelist
[Linkedin](#)



Aditya Syam is a rising junior studying Mathematics and Computer Science at Cornell, and is currently a software engineer intern at rapStudy. He is really interested in the domain of AI and also has multiple experiences with its applications both in academic and non-academic settings. He looks forward to sharing and learning perspectives about the rise of AI in Education.

Aditya Syam
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **Redefining Education in the AI Era:** The session began with an exploration into how ChatGPT can be utilized for educational purposes. Speakers shed light on the critical importance of confronting educational inequities, fostering student engagement, and ensuring a discerning approach when implementing AI tools in educational settings.
- ❖ **The Purpose and Evolution of Assessments:** Assessments, at their core, serve three principal functions: to facilitate formative learning, to qualify for certifications, and to highlight areas of ignorance. The integration of technology—spanning digital assessments, AI, and generative tools—allows assessments to be more streamlined and accessible. The speakers advocated for setting elevated standards for students and promoting the adoption of innovative technologies in learning.

- ❖ **Understanding AI through Metaphors:** Metaphors offer an accessible avenue to elucidate complex technological concepts. Over time, a range of metaphors has been coined to describe large language models, with each metaphor offering a unique perspective. An enlightening auto ethnographic study by a doctoral student unveiled three distinct metaphors associated with ChatGPT: the dependable sidekick, the creative storyteller, and the whimsical court jester. The chosen metaphors should align with the target audience and the underlying intent. While these models can be profound, it's crucial to acknowledge their limitations, such as their propensity to deliver commonplace responses.
- ❖ **AI in Pedagogical Practices:** The importance of understanding the constraints and potentialities of AI tools for effective pedagogical execution cannot be overstated. Analogies, like comparing AI to autonomous vehicles, can provide insights into their accuracy and human-like behaviors. Recognizing the constraints and possible inaccuracies of AI ensures a comprehensive grasp of their application in student learning.
- ❖ **Potential of AI in Elevating Teaching and Learning:** AI holds the promise of revolutionizing teaching and learning by simulating teaching scenarios, accurately teaching and testing concepts, and aligning with pedagogical practices. A historical perspective can offer insights into the contemporary utilization of AI in education.
- ❖ **Shifting Student-Knowledge Dynamics with Large Language Models:** As large language models reshape the student-knowledge interface, educators must take the initiative to evaluate AI's educational implications. Ensuring transparency and establishing clear guidelines become indispensable, particularly in framing academic integrity policies.
- ❖ **Educational Application and Evaluation with AI Language Tools:** It's vital to be cognizant of potential biases in AI language tools, especially concerning non-native English speakers and dyslexic students. Empowering students to transcend the outputs generated by these tools and spotlighting critical thinking are paramount. These AI tools can also set benchmarks for assessments and help delineate criteria for substantial responses.

Higher Ed: Redefining Education in the AI Era (Humanities & Social Science)

Recording Link: [Higher-ed: Redefining Education in the AI Era \(Humanities and Social Sciences\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Jeff Schatten is an associate professor of Business Administration at Washington and Lee University and was also once a high school teacher. His areas of expertise include Negotiations, Organizational Behavior and Artificial Intelligence. He even hosts a podcast: "Demystifying Organizations".

Dr. Jeff Schatten
Faculty Panelist
[Linkedin](#)



Antony Aumann is Professor of Philosophy at Northern Michigan University. He has also held positions at the Ohio State University, St. Olaf College, and Fordham University. His research and teaching primarily focus on existentialism and aesthetics, but he also has interests in the effects of AI on education. His views on ChatGPT made front-page news in the New York Times in January 2023, and he has discussed the topic on numerous TV and radio shows, including NBC News Now, CNN, Fox News, NPR, Dr. Phil, and the Mitch Albom Show.

Dr. Antony Aumann
Faculty Panelist
[Linkedin](#)



John Haberstroh is an Assistant Professor-in-Residence of Ancient World History in the History Department at the University of Nevada, Las Vegas. His teaching emphasizes interaction with ancient documents, critical reflection, information literacy, and active learning. John uses specifications grading and "ungrading" in his courses to inspire authentic engagement with the ancient world.

Dr. John Haberstroh
Faculty Panelist
[Linkedin](#)



Ami Patel is an applied psychology graduate from McMaster University and a master's candidate studying psychology and education at the University of Toronto. Ami is passionate about applying psychological research to enhance student mental health, create transformative learning experiences, and cultivate thriving institutions using a positive psychological framework.

Ami Patel
Student Panelist
[Linkedin](#)



Leo Wu is a Rising Junior at Minerva University, where he studies systems design and economics. He also co-founded AI Consensus, a similar student movement advocating for the ethical use of AI in education. He is passionate about learning and thinks inclusive conversations are essential to move education forwards.

Leo Wu
Student Panelist
[Linkedin](#)



Shawn Poncha is a second year student in University of Toronto's Management Specialist Rotman Commerce Program. He is particularly interested in AI within the field of business/social science, and also had a business development internship at Navya: a healthcare company using AI for assistive cancer diagnosis. He aims to continue exploring AI applications for business optimization. His hobbies include jump rope, squash, and playing with his dog and cat. He also has a YouTube channel [CareerZ](#) for educating students about college/career options around the world.

Shawn Poncha
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **Bridging Educational Inequalities:** AI plays a pivotal role in addressing prevalent educational disparities. Personalized AI-powered tutoring initiatives like 'To Your Stories' and 'Century' offer tailored learning experiences and promise more equitable access to quality education.
- ❖ **Promotion of Individualized Instruction:** Technological strides in AI empower educators with automated grading systems and intuitive teacher dashboards. Rapid identification of students needing aid and the global reach of AI tutoring platforms are groundbreaking; however, the potential redundancy of teaching roles and the emerging necessity for reliable AI detection tools are concerns worth noting.
- ❖ **AI Ethics in Classrooms:** While AI stands as an invaluable tool, its integration should prioritize the preservation of human creativity. It's imperative that educators equip students with the knowledge to employ AI responsibly.

- ❖ **Setting Clear Generative AI Expectations:** In the evolving educational landscape shaped by generative AI, open dialogue between educators and students becomes essential.
- ❖ **Pledge for Ethical AI Use:** To ensure AI's ethical application, instructors can leverage a tailored pledge—attached as an assignment cover sheet. The challenges include ensuring pledge authenticity and effectively addressing violations.
- ❖ **Prospects of Soft Skills Training with AI:** While AI tools, including ChatGPT, show promise in fostering soft skills, their comprehensive development for meaningful human relationship and communication training is pending. AI's implementation should be equitable, not overshadowing core literacy skills, and educators can achieve curriculum diversification and student engagement through active, student-focused learning methodologies.
- ❖ **A Supplement, Not a Panacea:** While AI offers a plethora of advantages, including simplifying complex texts and aiding writing, it's not universally applicable. The environmental implications of AI and tailoring assignments to cater to varied learning styles further emphasize its role as a supplement rather than a complete solution.
- ❖ **AI's Far-reaching Potential:** Beyond education, AI's transformative impact spans healthcare, green energy, and genetic research. Incorporating AI prepares students for a future teeming with AI-infused domains. Educators should remain adaptive, ensuring course designs encapsulate student viewpoints.
- ❖ **Relevant Links**
 - From Dr. John Haberstroh: [\[Public\] Sample Gen-AI Non-use Pledges](#)

Recording Link: [Higher-ed: Redefining Education in the AI Era \(Language and Literature\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Marc Watkins is a lecturer of Writing and Rhetoric as well as the Director of the AI Institute for Teachers at the University of Mississippi. He has been teaching for over a decade, while pursuing research in OER (Open Educational Resources) and Open Pedagogy as a part of the WOW fellowship. Some of his areas of expertise include artificial neural networks, machine learning, and digital humanities. He also is a writer and editor and has published work in over a dozen magazines.

Marc Watkins
Faculty Panelist
[Website](#)



Sid Dobrin is Professor and Chair in the Department of English at the University of Florida. He is the Founding Director of the Trace Innovation Initiative. He has been named a Digital Thought Leader by Adobe. He serves as a member of the Florida Institute for National Security. He is the author and editor of numerous books and articles, including Talking about Generative AI: A Guide for Educators and AI and Writing.

Dr. Sidney Dobrin
Faculty Panelist
[Linkedin](#)



Lance Eaton is the Director of Faculty Development & Innovation at College Unbound, a part-time instructor at North Shore Community College, and a PhD student at the University of Massachusetts, Boston with a dissertation that is focusing on how scholars engage in academic piracy. He has given talks, written about, and presented at conferences on artificial intelligence generative tools in education, academic piracy, open access, OER, open pedagogy, hybrid flexible learning, and digital service-learning. His musings, reflections, and ramblings can be found on his [blog](#).

Lance Eaton
Faculty Panelist
[Linkedin](#)



Mashiko Lortkipanidze, a student from the Republic of Georgia, is a rising junior pursuing a double major in Computer Science and Social Science at Minerva University. After her involvement in the First Global Challenge as a member of Team Georgia, Mashiko discovered a keen interest in the direct societal impact of technology. Her commitment to this field led her to join the AI Consensus Organization, where she actively works toward the responsible integration of AI tools within education systems to enhance the learning experience.

Mashiko Lortkipanidze
Student Panelist
[Linkedin](#)



Chinat Yu: A Learning, Design and Technology master student at Stanford, has been exploring the potential of AI in education. Recently, he spoke at the Johns Hopkins DELTA Symposium panel about AI's impact on the future of education, and is currently an applied science researcher intern at Microsoft in AI. [CTEI, JHU - Welcome to the 2023 DELTA Symposium Student Panel on Teaching \(panopto.com\)](#). He also developed his own AI digital twin, Chinat AI, <https://chinatai.app> which offers an experiential perspective on AI's use in personal and educational environments. You can learn more about him here: [Chinat Yu | MLH's Top 50 Hackers](#), [Hopkins Life Hacker - JHU Engineering Magazine](#)

Chinat Yu
Student Panelist
[Linkedin](#)



Chinkhuslen (David) Batbayar is an industrious CS major with a unique journey, having started as an art major before making a decisive shift midway to pursue computer science. David has co-founded the App Dev Club at Hamilton College, fostering a vibrant community of aspiring developers and spearheading innovative projects.

David Batbayar
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **AI for Summarization and Synthesis:** The era of sifting through endless source materials may be behind us. Platforms like wordtune and Anthropic's Claude leverage AI to summarize and synthesize texts, aiding researchers in collating information from various resources. But as AI aids in skimming, concerns about selective reading and potential biases become paramount.

- ❖ **AI's Assistance in the Writing Process:** Beyond mere correction, AI is now an active collaborator in the writing journey. Through a pilot project at the University of Mississippi, student feedback on AI's role was collected. The DEAR framework (Define, Evaluate, Explore, Reflect) was proposed to best integrate generative AI tools, likening AI's assistance in writing to the foundational tracing in drawing.
- ❖ **Generative AI Tools for Research and Writing:** The academic sphere is no stranger to AI tools. Whether it's keyword finders and summarizers providing real-time feedback or the Otter AI tool transforming voice recordings into text, AI is redefining the very fundamentals of research and writing.
- ❖ **Generative AI's Implementation at College Unbound:** College Unbound stands as a testament to the practical application of AI in education. Their course on AI and education not only broached the subject theoretically but also saw students actively formulating a policy on generative AI's role in assignments.
- ❖ **Revisiting the Cover Letter:** An essential part of job applications, the cover letter, was critically analyzed. Its conventional format, seen as performative and inaccessible, especially for multilingual and neurodiverse individuals, was questioned. The role of AI tools, while facilitating comprehension, was also scrutinized for potentially curbing linguistic diversity.
- ❖ **Active Exploration of AI Tools:** It's not just about having AI tools; it's about how they're used. Educators were urged to champion a proactive approach towards these tools, guided by curiosity rather than apprehension. The onus is also on ensuring accessibility, especially for students with disabilities.
- ❖ **Striking a Balance in AI's Educational Use:** Concluding the panel, the essence was transparency and balance. While AI promises to be a transformative force, its usage needs to be equitable, with feedback mechanisms in place. Every context, from research to productivity, will dictate its unique AI footprint.
- ❖ **Relevant Links**
 - [From Marc Watkin: Free OER teaching resources](#)
 - [From Dr. Sid Dobrin: Generative AI – Resources from Broadview Press](#)
 - [From Lance Eaton: Crowd-sourced Classroom Policies for AI Generative Tools](#)

Higher Ed: Redefining Education in the AI Era (Educational Research and Experimentation)

Recording Link: [▶ Higher-ed: Redefining Education in the AI Era \(Educational Research and Experimentation\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Torrey Trust, Ph.D. is a Professor of Learning Technology in the Department of Teacher Education and Curriculum Studies in the College of Education at the University of Massachusetts Amherst. Her scholarship and teaching focus on how technology shapes educator and student learning. In 2018, Dr. Trust was selected as one of the recipients of the ISTE Making IT Happen Award: recognizing her efforts to improve "digital learning opportunities for students." More recently, Dr. Trust has been a leading voice in exploring ChatGPT in education and has been featured by several media outlets in articles and podcasts, including U.S. News & World Report, WIRED, Tech&Learning, THE HILL, and NewScientist.

Dr. Torrey Trust
Faculty Panelist
[Linkedin](#)



Nick Haber is an assistant professor at the Stanford Graduate School of Education, and by courtesy, Computer Science. After receiving his Ph.D. in mathematics on Partial Differential Equation theory, he worked on Sension, a company that applied computer vision to online education. He then co-founded the Autism Glass Project at Stanford: a research effort to incorporate computer vision in wearable technologies to help children with autism. He and his research group develop artificial intelligence systems for optimizing human learning--most recently, looking at automatic code generation-based pedagogy as well as machine learning-enabled analyses of video and smartphone data.

Dr. Nick Haber
Faculty Panelist
[Linkedin](#)



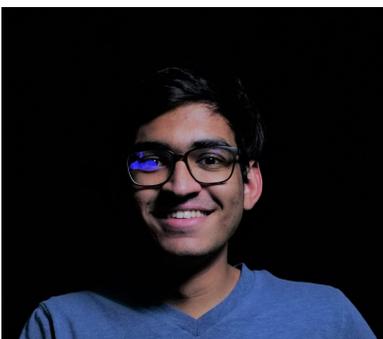
Kari Marken is a group lead of the Law & Business Communications Group and a lecturer of the Entrepreneurship & Innovation Group at Sauder School of Business, University of British Columbia. Her areas of expertise include educational design, creativity & innovation, and public speaking & writing. She is also the lead consultant and founder of Edie: an organization that helps teams build quality education services into their business models.

Dr. Kari Marken
Faculty Panelist
[Linkedin](#)



Sophia Timm, a senior at Lake Forest College, is currently working towards her BS in Neuroscience and BA in Philosophy; she is driven by her desire to connect science with the complexities of the mind. With a deep-rooted passion for healthcare, Sophia looks forward to beginning PA school after finishing college, uniting her medical expertise and empathy to fulfill her lifelong purpose of serving others.

Sophia Timm
Student Panelist
[Website](#)



Aaryaman Patel is a senior in mechanical engineering from the University of Illinois. His interests extend far beyond the walls of just engineering. From coding his own [website](#) and writing a [newsletter](#), to composing [music](#) and spending time working on some of today's most pressing environmental challenges, he is always finding exciting new projects to work on. He is the co-host of '[The UIUC Talkshow](#)' - an initiative that seeks to engage in deep conversations with some of the most interesting people from the Illinois campus. A curious person by nature, he thoroughly enjoys learning from his peers and seeking new challenges to pursue.

Aaryaman Patel
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **Opportunities with AI in Education:** Students today need to be equipped with both the skill to utilize AI tools effectively and the knowledge to critically assess these tools. The focus is not just on learning with AI, where students are exposed to personalized learning opportunities through AI but also about learning about AI, which encompasses an understanding of AI's limitations, biases, and ethical considerations.
- ❖ **Combatting Cheating Through Redesigning Assignments:** It is essential to have clear academic integrity guidelines, especially in a world where AI-generated content is prevalent. The potential for cheating using AI can be mitigated by redesigning assignments. Transparency, real-world applications,

universal design for learning, social knowledge construction, and trial and error can motivate genuine learning while reducing students' reliance on AI for deceitful shortcuts.

- ❖ **The Evolving Landscape of Coding:** The future of coding is rapidly moving towards the integration of code language models and reasoning. Tools like GitHub Co-Pilot provide autocomplete features for coding but also introduce challenges like potential bugs. The essential skill for coders will be the ability to break down problems and use abstractions for implementation.
- ❖ **AI's Role in Creative Exploration:** AI can immensely enhance both teaching and research in higher education. Beyond just being a computational tool, AI's implications extend to personal written identity and expression. Classrooms of the future could see AI being integral in assignments, driving discussions on its creative and societal implications.
- ❖ **Integrating AI in the Creative Process:** When it comes to software engineering and programming, established models for the creative process exist. Emphasis on reflection as a part of the learning process, combined with AI's capabilities, can redefine how students perceive and approach writing. Integrating AI in the writing process while maintaining academic integrity will be crucial.
- ❖ **The Future of Coding:** The next generation of coding will see individuals collaborating more with AI agents, working on higher-level designs, and leveraging tools to explore new horizons. It will be imperative to impart skills like advanced computational thinking and the social aspects of coding to students.
- ❖ **Relevant Links**
 - From Dr. Torrey Trust: [Essential Considerations for Addressing the Possibility of AI-Driven Cheating, Part 1](#), [Essential Considerations for Addressing the Possibility of AI-Driven Cheating, Part 2](#)

Higher Ed: Navigating Educational Policies for AI Adoption

Recording Link: [Higher-ed: Navigating Educational Policies for AI Adoption](#)

Overview:

- Developing and Implementing AI Integration Policies
- Ensuring Ethical and Equitable AI Adoption
- Role of Stakeholders in AI Adoption



Dr. Lawrence Angrave is an award-winning Teaching Professor in the computer science department at the University of Illinois Urbana-Champaign. His research includes innovative teaching, playful learning, security, and creating opportunities for accessible and inclusive equitable education.

Dr. Lawrence Angrave
Faculty Panelist
[Linkedin](#)



Dr. Tawnya Means is the Assistant Dean for Educational Innovation and Chief Learning Officer at Gies College of Business at the University of Illinois Urbana-Champaign. With more than 20 years of experience in higher education, course design, and educational consulting, Tawnya has led teaching and learning teams and taught residential, online, and blended courses in entrepreneurship, strategy, technology, and leadership in remote teams. Her research interests include online and blended learning, active learning, learning space design, technology innovation in teaching, access to digital learning resources, and faculty preparation to teach.

Dr. Tawnya Means
Faculty Panelist
[Linkedin](#)



Dr. Jina Kang is an Assistant Professor in the Department of Curriculum and Instruction at University of Illinois Urbana-Champaign. She received a Ph.D. in Educational Technologies from the University of Texas at Austin. She also holds a M.S. and a Bachelor's in Astronomy and Space Science. Her research centers on three interrelated areas: data science, data-driven design, and STEM education. Her work examines different data science approaches to understanding learning and teaching in STEM. Another research strand centers on data-driven design and pertains to the design of technology-enhanced learning environments for science learning using data science methodologies.

Dr. Jina Kang
Faculty Panelist
[Linkedin](#)



Bill Cope is a Professor in the Department of Education Policy, Organization & Leadership, University of Illinois, Urbana-Champaign. His recent research has involved the development and application of AI in education, including generative AI with the support of a number of major grants from the US Department of Education, the Bill and Melinda Gates Foundation and the National Science Foundation. The result has been the [CGScholar](#) multimodal writing and assessment environment. With Mary Kalantzis, he has co-authored or co-edited: [New Learning: Elements of a Science of Education](#), Cambridge University Press, 2008-23 (3 editions); [e-Learning Ecologies](#), Routledge, 2017; and the two volume grammar of multimodal meaning: [Making Sense](#) and [Adding Sense](#), Cambridge University Press, 2020.

Dr. William Cope
Faculty Panelist
[Linkedin](#)



Rohan Gudipaty is a rising junior at The University of Illinois Urbana-Champaign studying Computer Science. + Mathematics and minoring in Business. He is currently interning at Cisco as a Software Engineer, and his interests are in AI, Robotics, and Networking. He is also a software engineer in Disruption Lab at UIUC.

Rohan Gudipaty
Student Panelist
[Linkedin](#)



Konark Dhingreja is a junior studying electrical engineering at the University of Illinois Urbana-Champaign and a member of the Outreach & Planning team for AIxEducation. He is a dynamic speaker with a passion for diverse subjects. His enthusiasm and outspoken nature give him an innate ability to connect with audiences. He is also a student advisory board member of the Technology Entrepreneur Center and the Corporate & Networking Director of ECE (Electrical and Computer Engineering) Pulse at UIUC.

Konark Dhingreja
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **AI Integration Policies in Education:** The panel delved into the challenges and progress of AI's incorporation into the education sector, emphasizing the need for policy adaptability due to rapid advancements in generative AI. Notably, faculty projects are pioneering the innovative use of AI, shedding light on its potential in education.

- ❖ **AI Feedback in Education:** Despite AI's comprehensive capabilities, the panel acknowledged its limitations, particularly in discerning facts. A collaborative approach between AI and humans is deemed essential, with an increasing demand for students familiar with AI in various professional avenues.
- ❖ **AI's Transformative Potential:** Tools powered by AI hold the promise of revolutionizing education by fostering inclusivity and engagement. With innovations like books generated from videos, AI's potential is vast, albeit with a caveat about its current output quality. The future trajectory of job markets, given AI's integration, remains a subject of speculation.
- ❖ **Importance of Critical Thinking:** Emphasizing the irreplaceability of human intellect, the discussion stressed the imperative for students to cultivate and hone critical thinking skills, asserting that while AI can guide, the onus of understanding remains human.
- ❖ **Ethics in AI Utilization:** The ethical quandary surrounding AI's use, especially in assignments, necessitates explicit guidelines from educators. The panel highlighted the importance of information literacy, calling for robust policies to ensure AI's principled usage in education.
- ❖ **Combatting Unethical GPT Use:** Traditional plagiarism checkers fall short against sophisticated AI tools. To rectify this, the adoption of elaborate review processes, incorporating prompt engineering, emerges as a possible solution. By fostering an environment of open resources and accentuating motivation, educational institutes can potentially reduce cheating incidences.
- ❖ **Personalized Learning:** Generative AI, exemplified by tools like ChatGPT, holds the promise of tailoring instruction to individual student needs. As AI tools continue to gain traction, ensuring their accessibility remains paramount, necessitating collaborations for funding and comprehensive training for users.
- ❖ **AI's Classroom Implementation:** A successful AI transition in classrooms hinges on effective communication and teaching strategies.
- ❖ **Relevant Links**
 - From Dr. Tawnya Means: [Gies Generative AI Guiding Principles](#)

Higher Ed: Brainstorming & Networking Session

Overview: In this interactive and dynamic session, we invite all attendees to engage in a brainstorming and networking opportunity tailored to their specific educational fields. Recognizing that educators across different domains face unique challenges and utilize AI in diverse ways within their classrooms, we have organized discussion groups under the following themes:

- STEM (Science, Technology, Engineering, and Mathematics)
- Humanities & Social Sciences
- Language & Literature
- Art, Music, and Drama

STEM Session Notes

- ❖ AI's Role in STEM: AI is viewed as a transformative tool in STEM education, significantly enriching students' learning experiences and outcomes.
- ❖ Simulations and Real-world Scenarios: AI has potential in simulating real-world STEM situations, providing students with tangible experiences.
- ❖ Adaptive Learning: AI-powered educational platforms can dynamically modify content, pace, and resources to cater to individual student requirements.
- ❖ Concerns with Over-reliance: There's a worry that excessive dependence on AI might lead to diminished critical thinking and problem-solving abilities in students.
- ❖ Ethical Implications: The ethical ramifications of using AI in STEM education, particularly concerning data privacy and inherent biases, are highlighted.
- ❖ Holistic Approach: Educators accentuate the necessity of integrating AI tools with traditional teaching methods to ensure a well-rounded STEM education.

Humanities & Social Sciences Session Notes

- ❖ There's a growing interest in harnessing AI to analyze historical data, which can aid in predicting future events and understanding past occurrences.
- ❖ AI can potentially be used in social sciences to study patterns in human behavior, societal trends, and to provide insights on cultural shifts.
- ❖ Incorporating AI in humanities education can offer personalized learning experiences, tailoring content based on individual student needs.
- ❖ However, there's a concern about AI potentially oversimplifying complex human experiences and history.
- ❖ Educators stress the importance of combining AI tools with traditional research methods in humanities to maintain a holistic approach.
- ❖ AI's role in ethical considerations is also highlighted, especially in maintaining transparency and avoiding bias in analyzing human-centric data.

Language & Literature Session Notes

www.aixeducation.com

AI x Education Conference Report

- ❖ AI's Role in Language Learning: AI has shown potential in language acquisition, offering personalized lessons and real-time feedback to students.
- ❖ AI Tools in Language: There's notable enthusiasm around tools like chatbots and translators, which can amplify the language learning experience.
- ❖ AI in Literature Analysis: AI can be employed to dissect textual patterns, themes, and even forecast possible narratives based on existing literary works.
- ❖ Concerns: There's apprehension that the essence and depth of literature might be diluted if AI-generated content becomes mainstream.
- ❖ Balancing Act: Preserving a balance between technology and traditional literary analysis is pivotal to uphold the authenticity of the subject.
- ❖ Bridging Gaps: AI in language and literature has the potential to bridge educational disparities, making learning available to diverse learners globally.

Art, Music, and Drama Session Notes

- ❖ Midjourney is recognized as an effective tool in visual arts education, allowing users to upload art samples.
- ❖ Ethical considerations in AI-generated art focus on the source of the images and the honor towards artists' livelihood. There's a concern about AI's ability to duplicate existing artworks, with the image of Obama cited as an example.
- ❖ AI in music compositions can alter the creative process and may lead to job losses, but it's also seen as a solution to overcoming creative blocks.
- ❖ AI tools like Bing and StableDiffusion can curate and recommend artworks to students based on the input of images.
- ❖ Scorecloud offers a unique way for students to express their voice by converting it to musical notes.
- ❖ Educators emphasize the importance of balancing AI tools with traditional artistic techniques, recommending sharing prompts and experiences among peers.

K12: Student Perspective and Interaction with AI

Recording Link: [▶ K12: Student Perspective and Interaction with AI](#)

Overview:

- Understanding Students' Experiences and Perspectives: Insights, Applications, and Observations on AI in Education
- Fostering Collaboration between Students and Educators in the AI Era



Sebastian Rao is a rising senior in the Commonwealth Governor's School, a STEM magnet program in Virginia. Sebastian has studied the use of AI by students and high school debaters and contributed to the March 2023 book *Chat(GPT): Navigating the Impact of Generative AI Technologies on Educational Theory and Practice*. He is co-founder of his school's chapter of the International Youth Neuroscience Association and is a nationally ranked high school debater.

Sebastian Rao
Student Speaker



Parthiva Tamma is a rising senior at Dougherty Valley High School. As an aspiring software programmer, he currently works as an intern at Nebulon. He finds anything tech related to be interesting and loves to challenge is varying skillset.

Parthiva Tamma
Student Speaker
[LinkedIn](#)



Dr. Jady Laixely is an abolitionist education scholar with a Ph.D. in Curriculum & Instruction from the University of Illinois Urbana-Champaign and 17 years of combined university and PK-12 teaching experience. An exclusively collaborative researcher, she examines the connections and disconnects that affect social equity in education, specifically for children of color in public schools. Her research has included work with Black girls in alternative school who wished to rewrite narratives they felt had been written for them; examining mindfulness programs in public schools and making space for Black children's refusal; and exploring the benefits of interdisciplinary arts-based learning projects in elementary school. Dr. Laixely currently lives in Ohio with her wife Korina and "super senior" furbabies: their cats Boo and Tiki and their dog Howler.

Dr. Jady Laixely
Faculty Moderator
[LinkedIn](#)

Session Summary

- ❖ **Integrating Generative AI into Education:** Emphasizing the value of fostering collaboration between students and teachers, Sebastian painted a vivid picture of the classroom of the future, one where AI is not a replacement but a collaborator.
- ❖ **Collaborative Model of AI-Driven Education:** The model revolves around a synergy of teacher-student collaboration and AI-guided learning. Under this approach, AI serves as an equalizer, ensuring continuity between classroom and at-home education. Sebastian specifically mentioned the success witnessed in the debate instruction model that successfully incorporated AI. The preservation of traditional educational skills is maintained while preparing students for a future dominated by technology.
- ❖ **AI's Role in Academia:** While AI has made significant inroads into the academic landscape, aiding in tasks like writing, thesis work, and logical reasoning, it hasn't been without controversy. The challenge primarily arises from concerns over the quality and reliability of AI-provided information and its potential misuse. However, the right AI tools, if integrated thoughtfully into lesson plans, can transform the learning experience.
- ❖ **Ethics and AI:** There is a pressing need for a codified set of ethics surrounding AI use in the classroom. With increasing misuse leading to bans in some institutions, AI's potential as a personal tutor and an instrument for personalized learning cannot be understated. Ethical considerations are pivotal, especially with AI taking over tasks like grading and assignment creation.
- ❖ **The Need for AI Literacy:** Current students often grapple with the correct and effective use of AI, largely due to a lack of proper guidance. AI literacy, if introduced both to students and educators, can ensure a responsible and effective incorporation of AI into education. A measured approach, especially for younger students, is imperative to ensure AI's seamless integration.
- ❖ **Ethical and Practical Implications:** As AI becomes a staple in the classroom, emphasizing its ethical and productive use becomes paramount. Drawing parallels with past debates over new educational technologies, AI's role can be dual - as a content delivery tool and a rich empowering tool for skill development. However, this integration should be in tune with student needs, promoting human thinking and addressing complicated topics.
- ❖ **AI's Role in Literature and Language:** The integration of AI, especially in literature and language classes, continues to be a contentious issue. While AI's potential in content learning is undeniable, its role in essay analysis and writing invites scrutiny due to concerns over academic integrity. However, a paradigm shift in evaluating student learning and structured AI usage can provide a balanced solution.

K-12: Redefining Education in the AI Era (STEM)

Recording Link: [▶ K12: Redefining Education in the AI Era \(STEM\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Steve Dembo is the Director of Digital Innovation for Western Springs District 101. Known for his innovative approaches to integrating technology into classrooms, Dembo recently served as the middle school Computer Science and Artificial Intelligence Teacher at Quest Academy, as well as their Director of Technology. Prior to that, he was the Director of Learning Communities and Social Media Outreach for Discovery Education for over a decade, where he helped educators around the world harness the power of the digital world to improve student engagement and achievement. He is also proud to serve as the President of the Board of Education for Skokie/Morton Grove District 69 in Skokie, IL.

Steve Dembo
Faculty Panelist
[Linkedin](#)



Kevin Brookhouser, M.Ed. is the author of *The 20time Project: How Educators can Launch Google's Formula for Future-ready Students* and *Code in Every Class: How All Educators Can Teach Programming*. He teaches computer programming, and design thinking at York School in Monterey, California and is a Google for Education Certified Innovator, Google Certified Trainer, Raspberry Pi Certified Educator, and National Association of Independent Schools Teacher of the Future. Kevin has delivered keynotes around the world about AI, the future of education, and how teachers can inspire students to do great work while having a positive impact on their community. Kevin serves as Chair of the Board for The International School of Monterey. He is a learning animal.

Kevin Brookhouser
Faculty Panelist
[Linkedin](#)



Amber Oliver is Managing Director of the Robin Hood Learning + Technology Fund, a collaboration between Robin Hood, Overdeck Family Foundation and Siegel Family Endowment to transform learning for low-income students with technology. Previously, Amber was the COO of GripTape, where she helped build a strategy to put 1M youth in the driver's seat of their own learning. Amber also served as the VP of Globaloria, now Proto and part of Carnegie Learning, which helped thousands of students become knowledge-producers as they learned to design and code their own educational games. Amber has also held positions at UNICEF, the United Nations Secretariat, The World Bank, the Economist Intelligence Unit, and led efforts in Bangladesh, France, India, Niger and Senegal. She holds a Master's degree in International Affairs from Columbia University and a Bachelor's degree from Brown University.

Amber Oliver
Educator Panelist
[Linkedin](#)



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Parthiv Tamma
Student Panelist
[Linkedin](#)



Keziah Gopalla is a rising senior at Burlingame High School. She is passionate about the potential of AI in the future of education, and how AI will boost the attainability and accessibility of education. She hopes to bridge the gap between students and teachers, concerning perspectives on how AI will evolve the way we teach and learn.

At BHS she is the Mock Trial Club President, Multicultural Club co-founder and President, plays on the school volleyball team, and is the lead Baritone Saxophone in the Jazz Ensemble. Outside of school she is zealous about giving back to the community via National Charity League and is an enthusiastic Girl Scout.

Keziah Gopalla
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **Computational Thinking:** Computational thinking has emerged as a pivotal skill for navigating our AI-centric world. At its core, computational thinking equips learners with the ability to question, problem-solve, and think critically and algorithmically. Furthermore, its essence lies in leveraging AI within the workforce and empowering students to design their own learning paths. It's a testament to the democratizing power of generative AI in education.
- ❖ **The Role of Computational Teachers and the Impending Inequities:** Teachers fortified with computational thinking and fluency are quintessential in this era, facilitating personalized learning and adeptly navigating swiftly evolving tech landscapes. Yet, as generative AI paves the way for groundbreaking shifts in education, inherent risks loom. The potential amplification of educational disparities and the reinforcement of poverty cycles underline the urgent need to bridge tech and knowledge access gaps.
- ❖ **Students, AI, and Ethical Considerations:** The omnipresence of AI in students' lives poses unique challenges—ranging from its utility in academic dishonesty to the ethical dilemmas surrounding its application in writing and research. Students, when engaged in debates about AI's role, underscored the importance of authentic work and voiced concerns over AI's reliability as a research tool.
- ❖ **AI and Its Double-Edged Sword for Teachers:** With AI poised to reshape the educational fabric, teachers find themselves at a crossroads. On one hand, AI promises democratized learning experiences, but on the other, it stands as a formidable force, potentially undermining the traditional teaching paradigm. Additionally, the increasing sophistication of AI tools raises alarm bells in academic honesty domains.

- ❖ **Reimagining Assessments in the AI Epoch:** The dawn of AI in education isn't merely about instruction; it promises to overhaul assessment methodologies. Beyond grammar and spelling checks, AI paves the way for timely feedback, urging a paradigm shift towards fostering trust, ethics, and life skills among students. Emphasize on balancing traditional and avant-garde tech tools, coupled with hands-on experiences and community involvement.
- ❖ **Q&A Highlights**
 - **Q1: Role of AI in STEM Education** - AI, with tools like ChatGPT, has potential, but its efficacy in areas like math remains a topic of debate.
 - **Q2: AI's Reliability and Student Skepticism** - It's crucial to instill a culture of critical thinking among students, making them discerning users of AI. Beyond blindly trusting AI-generated content, they should be trained to question and validate information, fostering responsible and informed consumption.
 - **Q3: Future of Assessment with AI** - As AI propels a shift in assessment methodologies, the spotlight turns to project-based learning. This approach not only deters dishonest practices but also catalyzes deeper comprehension and understanding.

K-12: Redefining Education in the AI Era (Humanities & Social Sciences)⁴³

Recording Link: [▶ K12: Redefining Education in the AI Era \(Humanities and Social Sciences\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Jon Gold is in his 18th year teaching history in the Middle School at Moses Brown School, an independent Quaker school in Providence, RI. Jon is currently the clerk of Moses Brown's Professional Development Committee and the AI Working Group. His writing has appeared at Learning for Justice and various other outlets. Jon has a BA in Religious Studies from Brown University and an M.A. in School Leadership from Teachers College, Columbia University. He loves reading, crossword puzzles, learning, and thinking about learning. He lives in the woods outside Providence with his wife, Julia, who works in climate change, their 2 children, Neko (age 11) and Remy (age 8), and two rambunctious kittens, Artemis and Moon.

Jonathan Gold
Faculty Panelist
[Website](#)



Sarah Cooper teaches 8th U.S. History & Civics and is Associate Head of school at Flintridge Preparatory School in La Canada, California. She is the author of two books, *Creating Citizens: Teaching Civics and Current Events in the History Classroom* (Routledge) and *Making History Mine* (Stenhouse), and writes for educational sites including MiddleWeb, Education Week and Well-Schooled. Earlier this year Open AI solicited her feedback in developing a white paper on educator considerations for ChatGPT. Sarah has two sons, one in college and one in high school, and lives just outside Los Angeles.

Sarah Cooper
Faculty Panelist
[LinkedIn](#)



Konark Dhingreja is a junior studying electrical engineering at the University of Illinois Urbana-Champaign and a member of the Outreach & Planning team for AIxEducation. He is a dynamic speaker with a passion for diverse subjects. His enthusiasm and outspoken nature give him an innate ability to connect with audiences. He is also a student advisory board member of the Technology Entrepreneur Center and the Corporate & Networking Director of ECE (Electrical and Computer Engineering) Pulse at UIUC.

Konark Dhingreja
Student Moderator
[LinkedIn](#)

Session Summary

www.aixeducation.com

AI x Education Conference Report

- ❖ **Transforming Landscape of K-12 Education in the AI Era:** The panel delves into the profound changes AI has introduced in education. Central to their discussion is the role of AI as a tool to facilitate learning and enhance the depth of classroom connections. By positioning AI within the broader trajectory of technological advancements in the education sector over the past decade, the panelists emphasize its potential to further redefine teaching and learning experiences.
- ❖ **Incorporating AI Tools in Classroom Pedagogy:** AI's potential shines when integrated into classrooms. Teachers can harness AI tools like ChatGPT to bolster curriculum delivery, enhance vocabulary development, and encourage creative language exploration. Such tools can also act as reasoning engines, promoting a hands-on, experiential approach to learning. To ensure academic integrity, students are encouraged to transparently document and reflect upon their tool usage.
- ❖ **AI's Multi-faceted Impact on Education:** AI's influence on education transcends mere utility. When wielded effectively, it fosters richer classroom interactions and discussions. It's paramount for educators to view AI as a supportive tool rather than a potential replacement. Incorporating AI necessitates robust reading and writing skills, ensuring students can effectively interpret its outputs.
- ❖ **Revitalizing Assignments with AI's Help:** Assignments need a revamp in this AI era, with a focus on promoting personal explanation, human connections, and honing critical thinking skills. Emphasizing storytelling, persuasive speaking, and critical thought are imperative in an age where AI can provide ready-made answers. By infusing elements of humor, play, and fun, educators can nurture curiosity and creativity in students, preparing them for a technologically advanced world.
- ❖ **Strategizing AI Integration in Humanities and Social Sciences:** A systematic, scaffolded approach is essential when integrating AI into humanities and social sciences classrooms. Teachers should stress upon integrity and the responsible use of AI, emphasizing the importance of foundational skills before introducing advanced tools. To prevent academic malpractices, tools such as individual Google folders can monitor student progress, ensuring genuine effort and discouraging plagiarism.
- ❖ **Balancing the Boons and Banes of AI for Educators:** While AI offers myriad benefits, it also presents challenges. The accuracy of AI detection tools is very low. Though AI might be a significant factor, students can still find alternate means to cheat, underscoring the importance of fostering an ethical mindset.
- ❖ **Customized AI Learning Experiences:** Tailored question-generation based on a student's academic prowess can enhance their learning journey. Access to standardized tools can level the playing field, promoting equity. Traditional assessments are poised for a transformation, necessitating a redefinition to synchronize with non-conventional learning methods. AI's introduction to younger students is a pivotal conversation, with a consensus leaning towards formal introductions by the eighth grade.
- ❖ **Ethical Considerations Surrounding AI in Schools:** Schools must ensure parental consent when deploying tools like ChatGPT for students aged 14-18. Regularly updating ethical use policies to address AI's evolving nature is vital. It's crucial for schools to provide clear guidance on AI's role in education. If absent, proactive educators should spearhead pilot groups to explore and determine its optimal use.

K-12: Redefining Education in the AI Era (Language & Literature)

Recording Link: [▶ K12: Redefining Education in the AI Era \(Language and Literature\)](#)

Overview:

- Transforming Education in the Age of AI
- Evaluating Learning Progress and Teaching Success
- Ethics, Plagiarism, and the Role of AI



Donnie Piercey, the 2021 Kentucky Teacher of the Year, is an innovative educator in Lexington, Kentucky. With a focus on technology-driven student engagement, he has represented Kentucky internationally, and his podcast, "Teachers Passing Notes," garners attention. Donnie's expertise extends to AI in education, with media appearances and a forthcoming book on the topic. As a Google Certified Innovator and Trainer, he leads the Google Earth Education Experts Network. Donnie's influence spans 33 states and five continents as a keynote speaker, and he co-authored "The Google Cardboard Book" for virtual reality-based education. He remains dedicated to empowering Kentucky's educators through regular professional development.

Donnie Piercey
Faculty Panelist
[LinkedIn](#)



Stefan Bauschard is the founder of Educating4ai.com and Debateus.org. He is an expert in AI-related educational disruptions, focusing on the rate of change, assessment disruptions, unpredictability, and bots. As the co-editor of Chat(GPT): Navigating the Impact of Generative AI Technologies on Educational Theory and Practice, Stefan contributes extensively to the field. He shares his insights on AI and education through his blog at stefanbauschard.substack.com. With a rich background in academic debate instruction, including online course development since 1994, Stefan brings a wealth of experience and knowledge to the intersection of AI and education.

Stefan Bauschard
Faculty Panelist
[LinkedIn](#)



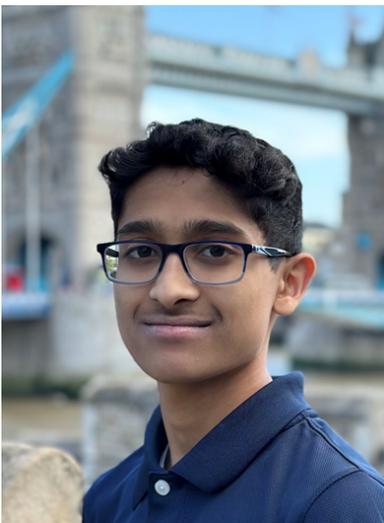
Arush Jain is a rising Junior in the Bay Area. He has a passion for new technology and wants to major in computer science in the future. He loves using artificial intelligence and learning about its various use cases.

Arush Jain
Student Panelist



Sebastian Rao is a rising senior in the Commonwealth Governor's School, a STEM magnet program in Virginia. Sebastian has studied the use of AI by students and high school debaters and contributed to the March 2023 book *Chat(GPT): Navigating the Impact of Generative AI Technologies on Educational Theory and Practice*. He is co-founder of his school's chapter of the International Youth Neuroscience Association and is a nationally ranked high school debater.

Sebastian Rao
Student Panelist



My name is **Yash Yardi** and I am a Junior at the Illinois Mathematics and Science Academy in the fall. Since my childhood, I have been passionate about computer science and I have studied numerous computer languages and their applications. Now, I am working with AI to understand the impact it makes on the world.

Yash Yardi
Student Moderator

Session Summary

- ❖ **AI in Learning Environments:** Incorporating AI into teaching methods can significantly adapt lessons and help bridge knowledge gaps among students. An emerging trend is the use of generative AI, notably in creating images that act as creative writing prompts. Such AI-generated images can be further refined using tools like Photoshop.
- ❖ **AI-Powered Classroom Engagement:** AI's capabilities transcend boundaries when you play with prompts. Whether it's stirring creativity through play scripts or enabling students to engage with historical figures, the opportunities are vast. It can set the stage for debates, guide coding projects, and even support students with special needs or reading challenges.
- ❖ **Challenges in AI Writing Assessments:** The advent of AI in writing has simplified the content generation process for students. As AI blurs the lines of originality, it brings forth essential discussions about academic integrity and ethics in AI-assisted writing evaluations.
- ❖ **AI as Collaborative Writing Partners:** Teachers, alongside students, can benefit from AI as collaborative partners in writing. While some institutions are transitioning away from traditional plagiarism detectors, students can shine in the AI era through improving expository writing and computational thinking skills.

- ❖ **Redefining Standards in the AI Landscape:** With the onset of AI, teachers at the K-12 level are often caught in a dilemma. The challenge lies in adapting to the AI era while adhering to stringent state-prescribed standards, which might not be entirely relevant in today's AI-driven world.
- ❖ **The Essence of AI Engagement in Education:** The onus of AI implementation doesn't solely lie on educators. Students, with their firsthand experiences, offer a unique perspective on AI's capabilities. By integrating AI, classrooms can witness a paradigm shift in feedback mechanisms and grading, enriching both teaching and learning experiences.
- ❖ **Enhancing Student Engagement Through AI:** Immediate feedback powered by AI allows students to assimilate more in less time. As AI molds the future job landscape, it becomes imperative for teachers to explore its inclusion in classrooms. Students, with their innovative AI-based projects, can serve as catalysts, inspiring educators in this transformational journey.
- ❖ **Striking the Balance: AI and Human Interaction:** While AI promises an educational revolution, the essence of traditional methods can't be sidelined. A balanced classroom, integrating AI while emphasizing critical thinking and human interaction, is the future. As educators harness AI for the greater good, they play a pivotal role in sculpting a brighter, more informed future.

K-12: Navigating Educational Policies for AI Adoption

Recording Link: [▶ K12: Navigating Educational Policies for AI Adoption](#)

Overview:

- Developing and Implementing AI Integration Policies
- Ensuring Ethical and Equitable AI Adoption
- Role of Stakeholders in AI Adoption



Greg Heidman is the Principal of Lone Star Middle School in Nampa, Idaho and has worked with middle level students for over 30 years. Through a culture of distributive leadership, Lone Star has been recognized as a leader in technology implementation. Collaboration with various organizations (Digital Promise, Khan Academy, Albertsons Foundation, NNU Doceo Center), has enabled teachers to create powerful and personalized learning experiences and is supported by the Nampa School District's Personalized Learning Initiative. Mr. Heidman holds a BA in Business Education and an MA in Educational Leadership from the University of Idaho. He also works closely with Idaho Digital Learning Alliance and is an Adjunct Faculty member at Idaho State University in their Early College Program.

Greg Heidman
Faculty Panelist
[Website](#)



David Chan serves as the Director of Instructional Technology at Evanston Township High School (ETHS). He taught math and science for 10 years and was the Technology Integration Specialist for 5 years at ETHS. David is an online instructor with Northwestern University's Center for Talent Development, an adjunct instructor with National-Louis University, the conference coordinator for IDEAcOn, and a Google Certified Innovator and Trainer.

David Chan
Faculty Panelist
[Linkedin](#)



Amanda Bickerstaff is the Founder and CEO of AI for Education. A former high school biology teacher and EdTech executive with over 20 years of experience in the education sector, she has a deep understanding of the challenges and opportunities that AI can offer. She is a frequent consultant, speaker, and writer on the topic of AI in education, leading workshops and professional learning across both K12 and Higher Ed. Amanda is committed to helping schools and teachers maximize their potential through the ethical and equitable adoption of AI.

Amanda Bickerstaff
Faculty Panelist
[Linkedin](#)



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Sebastian Rao
Student Panelist



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Keziah Gopalla
Student Moderator
[Linkedin](#)

Session Summary

- ❖ **AI's Pervasive Impact on Education:** The emergence of AI in educational settings has a profound influence on various stakeholders, including students, administrators, teachers, parents, and the broader community. The integration of AI into educational institutions is reshaping the entire landscape, impacting not only students but all key stakeholders.
- ❖ **Fostering an AI-Ready Environment:** Establishing an effective foundation for AI adoption in education hinges on creating conducive conditions and promoting open dialogue. Importantly, breaking down apprehensions and facilitating understanding of AI can lead to transformative outcomes. Highlighting the synergy between innovation and ethical AI usage is essential, ensuring alignment among all stakeholders..
- ❖ **Policy Development and Implementation:** Crafting AI policies for education is a complex endeavor, requiring the synthesis of existing protocols, lessons from previous implementations, and active input from educators. Prioritizing inclusivity by involving leadership, curriculum teams, teachers, and students enriches the strength of educational policies.
- ❖ **Ethical and Equitable AI:** Ethical considerations surrounding AI, especially in academic contexts, encompass issues like plagiarism and data sourcing. Ensuring equitable AI adoption guarantees access for every student and involves reshaping perceptions about AI tools. Engaging educators, school leaders, students, and families in the conversation enhances initiatives focused on equity.
- ❖ **The Promise and Perils of Generative AI:** Generative AI, notable for its conversational abilities, holds both potential and challenges. While it offers a platform for creative collaboration with technology, it also carries the risk of biases and necessitates clearly defined ethical boundaries.

- ❖ **Conscientious AI Integration:** Integrating AI into educational environments requires caution and an emphasis on nurturing critical thinking. Despite AI's contributions to the learning experience, traditional evaluation methods remain indispensable. Striking a balance, particularly with younger students, ensures a well-rounded learning journey.
- ❖ **Versatile AI Application:** Integrating AI into project-based and literature-focused teaching methods enhances learning outcomes. AI's capabilities shine in aiding brainstorming and assessing literary creativity. However, it's crucial to engage students appropriately for their age and consider ethical implications.
- ❖ **Navigating AI's Classroom Introduction:** Introducing AI to classrooms, from basic tasks like spell checks to complex activities like generating essays, demands careful guidance. Especially with younger students, clear ethical boundaries are imperative. Constructive dialogues involving parents, educators, and governing bodies are essential for responsible AI integration. The core principle is to harmonize the strengths of technology with human intellect, ensuring a balanced approach.

K12: Brainstorming & Networking Session

Overview: In this interactive and dynamic session, we invite all attendees to engage in a brainstorming and networking opportunity tailored to their specific educational fields. Recognizing that educators across different domains face unique challenges and utilize AI in diverse ways within their classrooms, we have organized discussion groups under the following themes:

- STEM (Science, Technology, Engineering, and Mathematics)
- Humanities & Social Sciences
- Language & Literature
- Art, Music, and Drama Educators

STEM Session Notes

- ❖ AI as a Teaching Assistant: AI can be employed as a teaching assistant in STEM, offering real-time feedback and support to students.
- ❖ Accuracy Concerns: Students might grapple with challenges in verifying the correctness of AI-generated answers, especially if there are gaps in their foundational knowledge.
- ❖ Feedback Mechanism: AI can furnish draft feedback based on predefined rubrics, making the evaluation process more efficient.
- ❖ Changing Landscape: With the advent of AI, the educational landscape is undergoing transformation, necessitating the adaptation of teaching methodologies.
- ❖ AI's Expanding Role: In STEM, AI's role isn't confined to content delivery; it can emulate real-world scenarios, offer tailored learning pathways, and provide data-driven insights.
- ❖ Holistic Education: It's vital to merge AI with hands-on experiments and conventional teaching approaches to ensure a well-rounded STEM education.
- ❖ Ethical Aspects: When integrating AI into STEM education, it's essential to address ethical considerations, particularly biases and data privacy.

Language & Literature Session Notes

- ❖ Brainstorming & Research: AI tools can aid in brainstorming and idea generation for learning and research in literature.
- ❖ Text Refinement: AI can help refine written content, providing suggestions for enhancement and pinpointing errors.
- ❖ Academic Integrity: AI-driven platforms can uphold academic integrity by detecting plagiarism and guaranteeing proper in-text citations.
- ❖ Human Touch: While AI offers assistance in literature studies, the human essence in understanding and interpreting literature is irreplaceable.
- ❖ AI-Generated Content: AI-generated content can serve as a literature resource, but the authenticity of human-generated content remains unparalleled.
- ❖ Peer Review: AI can support students in peer review processes by offering potential feedback and insights.
- ❖ Role of Educators: In a tech-augmented literature class, educators would predominantly mentor, guide, and lead discussions.

- ❖ **AI's Potential:** AI's ability to enhance teaching and learning in literature is acknowledged, but the depth of human comprehension remains unmatched.
- ❖ **Personalized Feedback:** AI can significantly help in providing tailored feedback and suggestions to students based on their writing style.
- ❖ **Bias Concerns:** There are concerns about bias in AI-driven literature tools, underscoring the need for impartial and equitable algorithms.