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Special Issue on Equity of Artificial Intelligence in Higher Education

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In this special issue, we center opportunities and challenges in the rapid development of artificial intelligence (AI) for promoting the equitable design, implementation, and use of technologies within higher education. Equity is meeting people where they are with what they need to be successful (Levinson, Geron, & Brighouse, 2022). Issues related to equity are multiple and complex, involving but not limited to the choice of learning goals in the design of technologies, facilitating broader access to emerging technologies, and ensuring that technologies are responsive to the needs of individuals and communities from historically and systematically excluded populations. We are looking for articles that engage meaningfully with topics related to equity as part of their research questions, design and implementation focus, data analysis, and/or discussion when considering AI systems in higher education. We are interested in articles that address the impact of AI technologies on psychological experiences, processes (e.g., sense of belonging, self-efficacy), and/or domain knowledge. How can we use AI to know what people are learning? How can we use AI to support a diversity of learners and teachers? How should AI technologies in education differ across different populations of learners?

As AI technologies become more sophisticated, there are increasing opportunities for human-AI partnerships in service of learning. There is a need for increased understanding of what might be involved in these partnerships, grounded in the learning sciences, educational psychology, assessment, and related fields. Alongside this work there is a need for technological advancements that ensure these technologies are designed and implemented in ways that advance equitable outcomes for historically and contemporarily underserved groups. Core questions in this space revolve around the roles for humans and AI systems in higher education; how should each contribute within these partnerships, what should humans take away from these partnerships, and what does learning look like in environments where AI is being widely used? Specific to the JCHE, what is the role of higher education in the evolution of more equitable human-AI partnership? We define equitable human-AI partnerships as one where humans of varied backgrounds and identities are included in the design and deployment of the technologies, have agency during use of the technologies, and all see positive outcomes that meet their individual and community goals as they use the technologies for learning and life.

Technologies offer extensions to human abilities but also areas where traditionally human skills might be lost or replaced, yielding opportunities and pitfalls. AI-based advancements can yield new opportunities for educational settings, including an improved ability to model learning across contexts, support learning in individual and group settings through personalized adaptations, and enhance learners' and teachers' ability to engage in learning environments. On the other side, the use of AI-based technologies can invite concerns related to privacy and overly prescriptive models of learning. They are often implemented inequitably, sometimes due to lack of equal access to the technologies, but also due to a lack of culturally relevant design for communities that are often most harmed by bias encoded in new technologies, and a misalignment between the goals of the technologies and the goals of the communities they serve. AI systems might also replace things students have been asked to do in the past and it is not clear what the implications are of new approaches, and what is lost and what is gained with these changes?

Unique Collaboration with CIRLCS
To support this important agenda related to foregrounding equity and inclusion in the design and understanding of AI technologies for Higher Ed, we are partnering with CIRCLS to host a series of three support sessions for authors submitting to this special issue that will provide additional resources for

doing this effectively, as well as convening an Advisory Board to support the authors of submitted articles. Authors are strongly encouraged to participate in these sessions and engage with the Advisory Board as part of their submissions to this issue.

Key Topics
Papers considered for this special issue will report ground-breaking empirical research or present important conceptual and theoretical considerations on the conjunction of equity, inclusion, and AI. In general, papers may pursue one or several of the following goals:

- Innovating new assessments, technologies, modeling, and pedagogies as we use more AI for learning across a variety of content domains.
- Exploring the impact of AI technologies on marginalized communities
- Investigating AI literacy, education, and awareness building
- Defining equitable human-AI partnerships
- Exploring the impact of AI technologies on domain knowledge and psychological experiences and processes (e.g., sense of belonging, self-efficacy)
- Aligning goals of learning in this new AI-enhanced landscape with the diversity of goals held by students as they pursue higher education.
- Engaging with topics such as but not limited to privacy, security, transparency, sustainability, labor costs, ethics, learner agency, learner diversity, and cultural relevance as they intersect with more equitable learning processes and outcomes.
- Developing accountability metrics for researchers and educational technology development teams

Timeline
November 2023 (Date TBD) – CIRCLS Information Session on the Special Issue
December 15, 2023 — Abstracts of proposed papers due to the editors.
January 15, 2024: Authors notified of initial acceptance of abstracts.
February 2024 (Date TBD) – CIRCLS Support Session A
April 1, 2024 – Papers due in the Editorial Management system
June 1, 2024 — Reviews completed & authors notified of decisions
June 2024 (Date TBD) – CIRCLS Support Session B
October 1, 2024 — Revised manuscripts due
December 1, 2024 — Reviews completed & authors notified of decisions
February 15, 2025 — Final manuscripts due
March 15, 2025 – Final manuscripts sent to the publishers

Submission to the Special Issue
Indicate your interest in participating in the special issue by submitting your abstracts here at <<https://pitt.co1.qualtrics.com/jfe/form/SV_bBpc2DTNPk5P7nM>>

Reference:
Meira Levinson, Tatiana Geron, and Harry Brighouse. 2022. Conceptions of Educational Equity. AERA Open 8: 23328584221121344. https://doi.org/10.1177/23328584221121344