



This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document, This article has been accepted for publication in Journal of Educational Computing Research, 2025 following peer review, and the Version of Record can be accessed online at <http://dx.doi.org/10.1177/07356331251318891> ©The Author(s) 2025 and is licensed under Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0 license:

**Allison, Jordan ORCID logoORCID: <https://orcid.org/0000-0001-8513-4646> (2025) Introductory Editorial: Shaping the Future of Educational Computing Research. Journal of Educational Computing Research, 63 (3). pp. 527-531.  
doi:10.1177/07356331251318891**

Official URL: <https://doi.org/10.1177/07356331251318891>  
DOI: <http://dx.doi.org/10.1177/07356331251318891>  
EPrint URI: <https://eprints.glos.ac.uk/id/eprint/14725>

#### **Disclaimer**

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

## **Introductory Editorial: Shaping the Future of Educational Computing Research**

### **Abstract:**

This introductory editorial outlines the vision and priorities for the Journal of Educational Computing Research (JECR) under new editorial leadership. Emphasising the interdisciplinary nature of educational computing, the editorial highlights the journal's commitment to advancing research at the intersection of technology and education. Critical challenges for the field are identified pertaining to the ethical and societal consequences of educational computing technologies, such as the ethical implications of AI, the digital divide, and equity in technology access. Proposed initiatives for the journal include an expansion of scope, refining article categories, expanding the editorial board for international representation, and enhanced communication through editorials. By addressing the societal impacts of educational computing and promoting rigorous scholarship, JECR aims to remain a leading platform for impactful research.

### **Keywords:**

Educational Computing; Editorial; Computing Research; Educational Technology

As I step into the role of Editor-in-Chief for the *Journal of Educational Computing Research* (JECR), I am both honoured and excited by the opportunity to guide this esteemed publication. For decades, JECR has been a leading forum for innovative research at the intersection of technology and education, fostering a vibrant dialogue among scholars, practitioners, and policymakers. It is a privilege to continue building on this foundation as we navigate the complexities of an ever-evolving field.

The role of technology in education has never been more critical. The post-pandemic era has led to an acceleration of educational technology adoption, reshaping teaching and learning practices worldwide (Zhang, and Wasie, 2024). This rapid integration has introduced both opportunities and challenges, particularly as schools and universities embrace tools powered by artificial intelligence (AI). While these technologies can promise personalised learning and increased efficiency, they also raise significant ethical concerns (Tacheva and Ramasubramanian, 2023). This includes issues of data privacy, algorithmic bias, and the potential to exacerbate inequalities in access to quality education (Zembylas, 2021). The widening and ambiguous nature of the digital divide also remains a pressing challenge (Mirazchiyski, 2024), as many learners, particularly in under-resourced regions, lack the infrastructure and devices necessary to participate in this digital transformation. Hence, researchers in our field are not only tasked with exploring how emerging technologies shape learning and teaching but also with interrogating their implications for equity, inclusion, and access.

One of the defining features of educational computing research is its inherently interdisciplinary nature. As technologies such as generative AI, extended reality (XR), and adaptive learning systems infiltrate classrooms, workplaces, and informal learning environments, our scholarly conversations must draw from education, computer science, psychology, sociology, and beyond. This journal stands uniquely positioned to bridge these domains, fostering collaboration across disciplines to address the most pressing challenges in educational computing research. Indeed, recent articles published in the journal are addressing these newer technologies. Wei, Wang, Lee and Liu (2024) explored the use of generative AI enhanced pedagogical agents within the context of augmented reality for science education and found that the approach enhanced learning outcomes for students and reduced cognitive load. It is therefore clear that scholars are increasingly utilising these new technologies to enhance

learning, and JECR is at the forefront of being able to showcase methodologically rigorous empirical research in this field. Nonetheless, JECR is also publishing relevant review articles. For instance, in late December 2024, a review article by Türkmen (2024) considered the role of explainable AI within educational research from across 35 studies and highlighted the implications for practice when using explainable AI methods. In my role as editor, I believe these review style articles are beneficial to the academic community, providing there is a clear justification for the review, the results are synthesised and there are clear implications for practice and or policy.

As we look forward, my vision for JECR centres on transparency, inclusion, and ensuring that educational computing research considers the ethical and societal implications of technology. I am particularly committed to ensuring that JECR continues to serve as a platform for rigorous, impactful research that addresses both theoretical advancements and real-world applications for practice and policy.

To achieve this, I aim to:

1. Foster dialogue on the ethical and societal consequences of educational computing technologies, by adding this as an explicit aim within the description and aims and scope of the journal. This addition would position the journal at the forefront of addressing critical issues such as equity in access to technology, the digital divide, data privacy, and the responsible use of AI in education. By encouraging explicit research on these topics, the journal can play a more pivotal role in fostering discussions around the ethical and societal consequences of educational computing.
2. Enhance the peer review process for transparency and efficiency by refining the journals' accepted article types. Currently, submissions are broadly categorised as "research articles," but introducing more specific subtypes, such as 'Review Papers', and 'Systems and Tools', would allow for more tailored peer review and clearer

expectations for authors. Different article types would better reflect the broad and multidisciplinary nature of educational computing and help ensure each article is evaluated in a manner that aligns with its scholarly contribution.

3. Internationalise the journals reach through diversification of the editorial board membership. Currently, most of the editorial board members are based in the U.S., which, while providing strong leadership, limits the ability of the journal to fully engage with the international nature of educational computing which has varied regional challenges and innovations. As Editor, I will work to expand the editorial board by inviting distinguished scholars and practitioners from regions such as Europe, Africa, and Asia.
4. Improve transparency and communication of the journal progress through editorials. Editorials can report on journal updates and progress, highlight the articles in each issue, whilst simultaneously identifying emerging trends and ongoing debates, helping guide both researchers and practitioners toward topics that have the greatest potential for impact.

Whilst this is my own vision for the journal moving forward, I would like to extend my deepest gratitude to my predecessor, Dr Robert Seidman, for their exceptional leadership and vision in guiding JECR to where it is today. Their contributions have set a high standard for scholarly excellence and editorial integrity, which I will strive to uphold. Additionally, I am fortunate to be joining a journal with a talented editorial board whose expertise will be instrumental in shaping the journal's future.

Finally, I invite our readers, authors, and reviewers to join me in this exciting new chapter for JECR. Whether you are submitting original research, providing constructive feedback as a reviewer, or engaging with published articles, your contributions are vital to the

success of this journal. Together, we can ensure that JECR remains at the forefront of educational computing research, driving the field forward in meaningful and impactful ways. I look forward to working with all of you to ensure that JECR continues to thrive as a journal of scholarly excellence.

### References:

- Mirazchiyski, P. V. (2024). Contemporary gaps in research on digital divide in education: A literature review. *Universal Access in the Information Society*.  
<https://doi.org/10.1007/s10209-024-01166-3>
- Tacheva, J., & Ramasubramanian, S. (2023). AI empire: Unraveling the interlocking systems of oppression in generative AI's global order. *Big Data & Society*, 10(2).  
<https://doi.org/10.1177/20539517231219241>
- Türkmen, G. (2024). The review of studies on explainable artificial intelligence in educational research. *Journal of Educational Computing Research*, 0(0).  
<https://doi.org/10.1177/07356331241310915>
- Wei, X., Wang, L., Lee, L.-K., & Liu, R. (2024). Multiple generative AI pedagogical agents in augmented reality environments: A study on implementing the 5E model in science education. *Journal of Educational Computing Research*, 0(0).  
<https://doi.org/10.1177/07356331241305519>
- Zembylas, M. (2021). A decolonial approach to AI in higher education teaching and learning: Strategies for undoing the ethics of digital neocolonialism. *Learning, Media and Technology*, 48(1), 25–37. <https://doi.org/10.1080/17439884.2021.2010094>
- Zhang, Z., & Wasie, S. (2024). Educational technology in the post-pandemic era: Current progress, potential, and challenges. *Proceedings of the 15th International Conference*

*on Education Technology and Computers (ICETC '23)* (pp. 40–46).

<https://doi.org/10.1145/3629296.3629303>