

Call for Proposals for a Special Section of the British Journal of Educational Technology

Data Science Education Across the Disciplines

Guest editors: Shiyan Jiang, Victor R. Lee, and Joshua M. Rosenberg

Rationale for Publications

Data science is often described as the integration of computational and technological tools, statistical knowledge, and disciplinary expertise, and is a rapidly growing topic for dedicated study during post-secondary education (e.g., National Academies of Science, Engineering, & Medicine, 2018). Increasingly, we are seeing new efforts are underway in many places to bring data science to primary and secondary education. Yet, it is still unclear what should constitute a data science education for these grade levels and how data science would be integrated into a very densely packed curriculum. Educational technology is central to these questions, as digital tools are implicated in the production, collection, and analysis of data (Jiang & Kahn, 2020; Lee & Wilkerson, 2018). This special section of the *British Journal of Educational Technology (BJET)* will showcase and critically examine current approaches using technology to support the teaching and learning of primary and secondary school data science education within and across multiple disciplines.

This special section on data science education across the disciplines will feature an international collection of papers on topics including but not limited to the following:

- The design of technologies and technology-rich contexts for teaching and learning data science
- The integration of technology-enriched data science across subject areas for primary and secondary-aged learners
- Synthetic literature-based reviews and critical arguments regarding the role of technology in pre-collegiate data science education
- Rigorous evaluations of novel technology-enhanced learning activities for data science education
- The use or development of theory for pre-collegiate, technology-enhanced data science education

Submission and Inquiries:

BJET invites submissions related to the above topics or broadly to pre-collegiate data science education across the disciplines. Interested authors should submit a title, a list of authors and their affiliations, and a brief abstract. Abstracts should demonstrate that the paper fits the special section focus, has a rigorous methodology, is innovative, makes a significant contribution to the field, is relevant to an international audience, and takes a critical approach. Full papers are subject to the existing manuscript requirements for *BJET* and will undergo the standard reviewing process. Therefore, if based on your

abstract, you are invited to submit a full paper, this invitation is just that and should not be taken as an indication that the final paper will be accepted.

Abstracts should be approximately 250 words, clearly and concisely written, and generally include the following:

- A statement of the research aims and educational context (e.g. primary or secondary school, out-of-school, professional learning communities) and fit for the special section
- For empirical reports, a summary of the data collection methodology.
- A summary of the findings or outcomes
- Concise conclusions and implications in two or three sentences. What new insights does this research provide? What is its unique and significant contribution to the field? How is it relevant for a diverse international audience?

Important Dates

- Abstract submission emailed to the guest editors: August 31st, 2021
- Full paper submission: November 15th, 2021
- Issue Publication: July 2022.

Guest Editors

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