



Number	Poster Title	Author(s)	Description
1	A game to share the story of LGBTQ+ pioneers and influential computer scientists	Karina Mochetti	The lack of diversity in STEM (especially Computer Science) is an important issue to be addressed. Although a lot has been done regarding the gender gap, the same cannot be said for LGBTQ+ representation in the field. This work aims to handle this problem by creating a game that will help to share the story of influential computer scientists who are role models for this minority community within the Computer Science field.
2	Revolutionizing Autograding in Cloud Computing: A GenAI Approach for Comprehensive Assessment and Constructive Feedback	Maryam R.Aliabadi, Harshinee Sriram, Arman Moztarzadeh	A thorough analysis of various autograder systems used in courses and classrooms revealed that while these tools offer distinct features catering to specific needs, they commonly lack the capacity to effectively autograde open-ended, long-answer questions and provide students with meaningful feedback. Particularly in the context of grading assignments in a cloud computing course, the evaluation extends beyond mere correctness or accuracy of application output. It necessitates a comprehensive assessment of factors such as performance, cost, response time, and throughput, which are fundamental to efficient application deployment in the cloud. The diversity of storage and computational resources available to students further complicates the grading process, leading to a wide range of performance and cost variations, rendering manual grading costly and impractical. To address this complex challenge, we decided to harness generative AI, and integrate it into the popular Prairielearn platform. Our project is aimed at advancing the capabilities of autograding systems, empowering them to handle intricate, open-ended assessments, and provide students with constructive feedback. Ultimately, this endeavor contributes to the evolution of educational practices, enhancing the learning experience for students while addressing the multifaceted challenges of grading in a cloud computing course.
3	UBC Science Teaching and Learning Publications Collection	Alec Currie, Nathan Chan, Ivan Cheung	This is a collection of teaching and learning publications written by UBC Faculty since 2000. This collection has been manually tagged to show department and relevant teaching/learning concepts. A network graph and data visualizations were created from the publication authors.
4	Fostering Postsecondary Students’ Feelings of Connection to Place without a Site Visit in a Large Introductory Geoscience Course	Laura Lukes, Brett Gilley	This intervention study aimed to test whether or not students’ sense of place could be enriched without a course-led site visit through a place-centered independent research project in an introductory geoscience course for majors and non-majors at a research-intensive institution in Canada.



5	Opportunities and Considerations for Conducting Earth and Space Education Research Involving Human Subjects in a Landscape of Open Science	Laura Lukes	Guidelines for researchers often cite the opportunity for flexibility in human subjects data management plans, referring researchers to the “standards and best practices developed by the communities of practice in the area of research being proposed,” (National Science Foundation, 2017). What does this mean in the context of Discipline Based Education Research (DBER)?
6	How Students Report Using ChatGPT Tools to Support Their Independent Research Project Work in an Introductory Geoscience Course: Results and Implications for Instructors	Laura Lukes, Brett Gilley	Here we present the preliminary results from a descriptive case study involving a 4 part independent written research project assignment in an introductory geoscience course at a research intensive institution in Canada. Open-ended responses to a reflection question about why they did not use ChatGPT/how they did use it were qualitatively coded by the authors.
7	Earth Science Experiential and Indigenous Learning Initiative: Year 2	Laura Lukes, Silvia Mazabel, Shandin Pete, Bean Sherman, Brett Gilley	Here we provide an overview of a 3 year curriculum and faculty development initiative centred on reimagining how we teach science and engineering courses on the Land. The initiative broadly aims to provide students with more accessible and inclusive experiential field-based learning opportunities that incorporate community-engaged approaches and Indigenous perspectives, histories, and ways of knowing, and/or Knowledges.
8	Neuroeducation Intervention in Introductory Chemistry	Achol Jones, Jaclyn Stewart	This poster will outline a study that aimed to grasp the landscape of student attitudes towards chemistry during their introduction to the subject in university. Additionally, to promote positive attitudes, the efficacy of a supplementary neuroeducation intervention which teaches CHEM 123 students about how the brain learns, was assessed.
9	Geological Mapping at Field School in the Virtual Environment	James Scoates, Ken Hickey, Nichole Moerhuis, Dylan Spence, Andrew Steiner, Joel Saylor	Geological mapping provides undergraduate students with an immersive experiential learning experience where being outdoors and making real-time decisions to test and refine multiple working hypotheses is the primary pedagogical learning goal. What happens when this training is brought into the virtual environment?
10	Example of a Participatory Approach in Developing Analytics Work at Skylight	Zohreh Moradi, Nouredine Elouazizi, Warren Code, Gülnur Birol	This poster outlines the process of employing a participatory approach to develop learning analytics goals and processes within the Faculty of Science at UBC. Through collaborative efforts with faculty members and departments, three successive needs analyses, in the period from 2015 to 2022, were conducted to identify opportunities for making use of learning and academic analytics to foster student success. Interacting with our departments and programs



			through meetings, consultations and a workshop we facilitated a participatory approach that fostered engagement.
11	Enhancing equity in the first-year chemistry laboratory through a targeted pre-term laboratory foundations event (LFE)	Anna Zeleny, Anne Thomas, Emma Davy, Anka Lekhi	High school chemistry lab experiences are variable, leading some students to lack confidence in the laboratory environment. To increase equity and decrease student stress, we are piloting the laboratory foundations event (LFE), an unassessed pre-semester introduction to the lab.
12	Crafting a Sustainable Editorial Process for the Future of the UBC Student Journal of Cell and Molecular Biology	Tyler Thomson, Maryam Moussavi	The UBC Student Journal of Cell and Molecular Biology (SJCMB) aims to foster scientific identity and career longevity by providing undergraduates with a platform to publish their research. In this study, supported by a Skylight Development Grant, we explored AI tools like ChatGPT to streamline the editorial process, ultimately promoting the sustainability of this journal within UBC's biology community.