

Dear editorial board,

Thank you for considering our submission to your special issue “Teaching Reproducibility and Responsible Workflow”. In our manuscript titled “Opinionated practices for teaching reproducibility: motivation, guided instruction and practice” we describe the pedagogical strategies we employ when teaching reproducibility in the Master of Data Science program at the University of British Columbia (UBC).

While reproducibility is core to our definition of data science, students are often not as intrinsically motivated to learn this topic as other data science skills such as predictive modelling or data visualization. The technical nature of the industry standard reproducibility tools and the fact that students also need to unlearn pre-existing current computational workflows, further impedes their ability to easily master reproducible workflows. At the same time, the need for proper reproducible practices in data science have never been greater, which we highlight in our program by showing students examples of how the lack of reproducible practices can lead to negative real-world consequences for a large number of people (detailed in our manuscript).

The experiences we have gained from teaching reproducible workflows in the Master of Data Science at UBC have shaped the pedagogical strategies that we present in this manuscript. We have been able to incorporate feedback from diverse student and instructor groups over several iteration of the program, which we believe has been substantial in progressing our perspective on how to teach reproducibility effectively. This has been an educational experience for us and we believe that communicating our findings can provide valuable insights to our colleagues in the field from several years of field tested reproducibility teaching practices. We also contribute our perspective on new pedagogies that we are excited to implement in the near future and describe why we believe these hold benefits for the field. For these reasons, we believe that our manuscript is an ideal fit for your special issue on teaching reproducible and responsible workflows.

There are several prominent data science educators who we believe would be suitable reviewers for our manuscript, including the following four:

- Roger Peng
- Jeff Leek
- Fernando Perez
- Ben Marwick

Thank you again for considering our submission and we look forward to hearing from you soon,

Joel Ostblom
Department of Computer Science
University of British Columbia

Tiffany Timbers
Department of Statistics
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