Gender Equity in Physics Education: Modeling a Future for Canadian Physics Education Research

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Abstract:
The purpose of this early-stage study is to determine if and how Canada's physics education researchers are working to solve the problem of women's underrepresentation in physics education, and to develop an expert opinion-based model for institutions to address gender equity issues in physics education (at all levels). The study will: 1) identify physics education practices that physics education research (PER) experts have found to be supportive of gender equity; 2) identify Canada's PER experts and their research focuses; (3) conduct a Delphi study with Canada's PER experts to gain consensus on how PER can inform and support gender equity in physics education; and (4) develop a model to guide ongoing PER in Canada to support the achievement of gender equity in physics education. Results of preliminary phases of the study include emergent themes from interviews with international PER experts on gender-equitable physics education practices and initial descriptions of the landscape of PER in Canada. These are based on content analysis of online biographies for all individuals working in Physics or Education departments across all Canadian universities. The presentation aims to generate discussion on these results and the proceeding phases of the study.

Keywords: gender; equity; women; physics education; higher education; Delphi

Biographical Note

Lindsay Mainhood is a PhD candidate in the Faculty of Education at Queen's University. Her primary research interests are gender and equity in the context of physics education. Her PhD research focuses on supporting and guiding the Canadian physics education research field to address gender inequities in physics education.