Addressing the shortfall in Mathematics achievement: Instructional videos and teachers' perceptions

Tess Miller (PI) *),Faculty of Education, UPEI*; Mary Catherine Compton Montague Regional High School; Paul Koberinski, École Évangéline; Kim Redmond, Glen Stewart Primary School.

The proposed action research aims to close the achievement gap in numeracy by developing pedagogically sound instructional videos for the mathematics classroom and piloting these videos in PEI. Given that Newfoundland and Nova Scotia have also underperformed in mathematics as measured on the 2015 PISA (CMEC, 2016), this study can be applied to other Atlantic provinces in subsequent phases of this study. The primary research question posed in this study is: To what extent do teachers value instructional mathematics videos? To explore characteristics shaping what teachers value, the following video characteristics will be explored: duration, cognitive load, the need for scaffolding, and technological/animation features.