

## **RESEARCH ASSISTANT OPPORTUNITY: ASSESSING TEAM WORK AND ACTIVE LEARNING IN MATHEMATICS**

Simon Fraser University's Institute for the Study of Teaching and Learning in the Disciplines (ISTLD) invites applications for a Research Assistant for the Teaching and Learning Development Grant project, *Use of Team Work and White Boards in Mathematics Tutorials and Seminars: Assessing Various Factors Influencing Improved Quality of Learning*.

Based on some previous experiments, a new class model was utilized in mathematics course tutorials where students worked in teams on the whiteboards and the teaching assistant and instructor walked around and helped students. Preliminary surveys have indicated that in general, students considered these tutorials very helpful. This technique will be implemented in a pilot offering in the Fall 2019. This project will assess the outcomes of the course and research the effects of whiteboard-based active learning and team work on student grades and satisfaction.

### **Research assistant responsibilities include:**

- Undertaking literature reviews related to the project;
- Liaising with ISTLD team;
- Instrument design such as creating surveys, focus groups interview protocols, observation protocols/checklists, self-reflection tools;
- Administering feedback surveys;
- Coordinating and conducting focus groups and interviews;
- Taking observational field notes;
- Data collection, entry, and evaluation;
- Quantitative data analysis and summary of surveys and focus groups interview data including data visualization;
- Writing the project's final report;
- Attendance of meetings with project leader/team.

### **Required qualifications and skills:**

- Ability to undertake literature reviews beyond own research area and discipline;
- Ability to select and implement meaningful analyses, including appropriate statistical treatment, and effectively communicate the work to the project team;
- Experience with instrument design (especially surveys, rubrics, interview protocols, observation protocols/checklists, self-reflection tools);
- Academic research and writing skills, as demonstrated by prior completion of similar projects;
- Expertise in qualitative data analysis and coding, and use of NVIVO;
- Excellent interpersonal skills, including strong oral and written communication skills;
- Ability to work independently, productively, and creatively;
- Preference will be given to the graduate students currently enrolled in a graduate program at SFU in or related to mathematics, education, or statistics.

### **Experience and skills that would be an asset:**

- An interest in evidence-based teaching and learning, and education in the sciences.

**Rate of pay:** \$18 - 25/hr (incl. vacation and statutory holiday pay, no medical or dental benefits) - based on experience, qualifications and degree program (MSc, MEd, or PhD);

**Appointment duration:** April 2019 to Spring 2020; 80 – 100 hours

**To Apply:** Applicants should submit: (1) a 1-page cover letter structured to address the qualifications, skills, and role responsibilities as listed above, and (2) a 1-2-page resumé with two references listed. These two items should be organized as one PDF attachment and addressed to Dr. N. Kouzniak and emailed to [kouzniak@sfu.ca](mailto:kouzniak@sfu.ca). Note: Letters of reference will only be requested from short-listed applicants.

**Application deadline: April 15, 2019.** We appreciate all replies to this position posting, however, we will only contact short-listed applicants.