

## “UNPACKING HOW STUDENTS MAKE MEANING WHILE READING: AN EXAMINATION OF READING STRATEGY USE AND COGNITIVE FUNCTIONING”

This research is being conducted by Ian Matheson under the supervision of Dr. Derek H. Berg in the Faculty of Education at Queen's University in Kingston, Ontario. This study has been granted clearance by the General Research Ethics Board according to Canadian research ethics principles (<http://www.ethics.gc.ca/default.aspx>) and Queen's University policies (<http://www.queensu.ca/urs/research-etgics>).

**What is this study about?** The purpose of this research is to examine how students build comprehension with different formats of text, and how cognitive functioning influences reading comprehension.

**What is involved to participate in this study?** For each participant, the study will require two 60-minute sessions at the Queen's University Mathematical Cognition and Instruction Lab, or a location more convenient for the participant and agreed upon by both parties (e.g., school), to take place outside of school hours. Participants will meet criteria for one of two groups, low-achieving and typically achieving, where low-achieving refers to difficulties in reading comprehension but not word reading or fluency, and typically-achieving refers to typical achievement in each reading area. These group labels are in no way a reflection of participants' achievement in areas outside of reading. In session one, participants will complete three short reading tests (fluency, comprehension, word reading), several tasks designed to measure cognitive functioning (executive functioning and working memory), as well as one reading task (narrative text). In session two, participants will complete two more reading tasks (expository text and graphic text). For each reading task, participants will “think-aloud” while reading the text by verbalizing all cognitive activity during reading. Upon completion of each text, participants will complete ten multiple-choice comprehension questions while again thinking aloud. Following each of the reading tasks, participants will be asked to describe how they read the text passage. In total, participating in this study will require no more than two hours for each participant. Data will be recorded using an audio-recording device.

There are no known physical, psychological, economic, or social risks associated with this study. It is possible that participants may find the reading tasks frustrating if they encounter difficulties. The benefit to the participants of this study is to gain a better understanding of how they make meaning with different types of text.

**Is participation voluntary?** Yes. Participants should not feel obliged to answer any questions that they find objectionable or that make them feel uncomfortable. They may choose to withdraw from the study at any time with no effect on their academic record. If they wish to withdraw, they can contact Ian Matheson ([ian.matheson@queensu.ca](mailto:ian.matheson@queensu.ca)) or Dr. Berg (using the contact information below) to indicate that they wish to withdraw, and they may request removal of all or part of their data from the study.

**What will happen to participants' responses?** Their responses will be kept confidential. Only Ian Matheson and Dr. Berg will have access to this information. Their confidentiality will be maintained to the extent possible. Results from this study may be published in professional journals or presented at scientific conferences, but any such presentations will maintain individual confidentiality. In accordance with the Faculty of Education's policy, data will be retained for a minimum of five years. If data are used for secondary analysis they will contain no identifying information. To protect participants' identities, the researcher will create a file that matches each participant to a pseudonym in order to ensure data matching between session one and session two. Upon completion of session two for all participants, the file will be destroyed in order to ensure that data cannot be traced back to participants. For this reason, participants will no longer be able to withdraw their data when all data have been collected.

**What if you have concerns?** Any questions about study participation may be directed to Ian Matheson at [ian.matheson@queensu.ca](mailto:ian.matheson@queensu.ca) or Dr. Derek H. Berg at 613-533-6000 x77413 or [derek.berg@queensu.ca](mailto:derek.berg@queensu.ca). Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at [chair.GREB@queensu.ca](mailto:chair.GREB@queensu.ca) or 613-533-6081. Thank you for your interest in assisting with this research study.