

Research Assistant Opportunity Casual Position

Start Date: April 21, 2025

End Date: Aug 21, 2025

Overview:

Data for this study of Online Learning was collected from students in PSYC 228, 289, and 290 for their course research participation activity. While the survey included sections on demographic information, academic background and current study, online course experiences and educational technology use, general technology use and video game play, and study strategies related to annotation and note-taking this project mainly involves the analysis of the note-taking data.

Background information

While studying course materials students may annotate the text or take notes. In so doing, they may use more elaborative approaches such as summarizing the text in their own words and additionally adding personal comments or reflections to the notes. Alternatively, they might simply copy text verbatim (e.g., copy term definitions that appear in the main text or margin) or forgo making notes at all. The last section of the survey includes ten items about note-taking tactics to determine the nature and extent of these activities.

Research on student's study strategies have generally found that some activities tend to support learning and comprehension better than others though there is some debate about these regarding when they should be used, for what, and by whom (Blasiman, Dunlosky, Rawson, 2017; Fiorella & Mayer, 2016; Miyatsu, Nguyen, & McDaniel, 2018). As students will not be providing learning outcome data (e.g., test scores) no predictive analyses will be performed to determine which strategies are related to improved learning outcomes. Instead, we have included items about note-taking so as to characterize or describe the students who take these introductory psychology courses. Essentially, we intend to use these data to describe common note taking tactics and patterns of use. As well, the items will be assessed collectively to determine how they are correlated and whether they can be grouped using principal components analysis.

References

Blasiman, R. N., Dunlosky, J. & Rawson, K. A. (2017). The what, how much, and when of study strategies: comparing intended versus actual study behaviour, *Memory*, 25 (6), 784-792.

Fiorella, L. & Mayer, R. E. (2016). Eight ways to promote generative learning, *Educational Psychology Review*, 28 (4), 717-741.

Miyatsu, T., Nguyen, K., & McDaniel, M. A. (2018). Five popular study strategies: their pitfalls and optimal implementations. *Perspectives on Psychological Science*, 13 (3), 390-407.

Specific activities include, but are not limited to:

This project will involve the analysis of the data about the note-taking tactics that students use and communicating those findings in 1) a conference presentation and 2) a paper for submission to a journal.

The primary job duties for the Research Assistant will include data analysis using SPSS, reporting those results, development and delivery of a student conference presentation, and assistance with the writing of a journal article about the same analyses: a total of about 40 hours of work over approximately 4 months.

The research assistant will learn to use SPSS for data analysis and conduct several descriptive and correlational analyses of the data about note-taking tactics that students use. Additionally, the research assistant will be introduced to principal components analysis and will report the results with some assistance.



Finally, the research assistant will help with reporting these results, completing the literature review, and drafting other sections (e.g., discussion) that would then be used in a presentation and paper. Specifically, the work would be presented by the research assistant at a student conference: Connecting Minds: Undergraduate Research Conference in Psychology on May 30-31, 2025. A paper for submission to a journal would also be prepared and ideally submitted in August.

Month	Time commitment for RA	Work stages to be completed	Deliverables and deadlines
Mid April to May, 2025	6 meetings (1.5h each) + individual follow-up work (1h) = 15h	<ul style="list-style-type: none">• Conference proposal (abstract)• Presentation outline• Presentation development: slides, graphs, etc.• CONFERENCE presentation dry-run	Presentation slides and notes Presentation at Conference on May 30-31
June, 2025 to mid August, 2025	10 meetings (1.5h each) + individual follow-up work (1h) = 25h	<ul style="list-style-type: none">• Lit review• Method• Results• Discussion	Submission ready article (~Aug 15th)
Total =	40h		

The successful candidate will work with, and directly report to, Dr. Chiarella at Athabasca University. Dr. Chiarella will provide adequate training in data analysis using SPSS, interpretation of the results of those analyses, and in the development of the conference presentation. The journal article will be written in stages with the research assistant contributing to it in various ways: preparing tables and graphs, composing drafts of specific results, drafting summaries of prior work (i.e., for the literature review and discussion), preparing the list of references, etc.

Qualifications:

Ideally, the research assistant would be a third- or fourth-year psychology major who has successfully completed the statistics and research methods courses; MATH 215/216 and PSYC 304 or equivalents. MATH 315 would also be an asset. The student should have some facility with completing analyses with computer software such as SPSS (or similar) and a desire to learn SPSS specifically.

The student will develop statistical analysis skills – conceptual and practical – and academic communication and reporting skills (i.e., oral presentation and journal article).

How to apply:

Qualified individuals are encouraged to submit their application by email to Dr. Chiarella at andrewc@athabascau.ca. Applications should include (as a single PDF file) a brief cover letter that



summarizes your skills, interests and experience, a current resume or curriculum vitae, an unofficial copy of your transcript and the contact information for 1-2 references.

Evaluation of applications will begin immediately and will continue until a suitable candidate is found. All applicants are thanked for their interest in this position; however, only candidates selected for an interview will be contacted.

Athabasca University and the researchers are committed and seek to support equity in employment and research opportunities. We strongly encourage applications from Indigenous people, people of colour, people with disabilities, 2SLGBTQ+ people, women, and other historically marginalized groups. Applicants are welcome, but not required, to self-identify in their letter of application.

For more information on this Research Assistant Opportunity, please contact Prof. Chiarella at the coordinates below, on or before April 14th.

Prof. Andrew Chiarella
Assistant Professor, Educational Psychology
andrewc@athabascau.ca
1-866-450-4460

Hours per week are approximate and may vary based upon activity. This position has a maximum of 40 hours.

This Research Assistant opportunity is only available to Athabasca University students.