

LETTER OF INFORMATION / CONSENT – INTERVIEW

Generative Artificial Intelligence and Assessment: Design Principles for the Future of Teaching and Learning in Higher Education

Principal Investigator:

Ben Lee Taylor
The MacPherson Institute
McMaster University
Hamilton, Ontario, Canada
E-mail: taylob36@mcmaster.ca

Co-Supervisor:

Kim Dej
Department of Interdisciplinary Science
McMaster University
Hamilton, Ontario, Canada
E-mail: dejkim@mcmaster.ca

Co-Supervisor:

Erin Aspenlieder
The MacPherson Institute
McMaster University
Hamilton, Ontario, Canada
Email: aspenled@mcmaster.ca

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Purpose of the Study:

You are invited to take part in this study on the impact of generative artificial intelligence tools like ChatGPT on student assessment design in higher education. We are hoping to learn more about how instructors are addressing and responding to the widespread availability and use of generative AI tools through (re)designing student assessments in the courses they teach. We hope to identify and describe a broader set of assessment design principles based on what we learn to help instructors continue to design effective assessments in the future.

This research is being conducted as part of a postdoctoral fellowship under the co-supervision of Kim Dej and Erin Aspenlieder.

This is a line of research that we hope to continue in the future, and your data may be used for this project as well as future related studies.

The following information is specifically applicable to the interview portion of the study.

Procedures Involved in the Interview:

The first phase of this research involved the survey you completed, in which you submitted an assessment from one of your courses and gave consent to be considered for a follow-up interview about this assessment. You were selected for a follow-up interview based on (among other criteria) the innovations of your submitted assessment, the assessment's potential value to other areas of assessment design inquiry, and the goal of adequate disciplinary representation among interview participants.

For this phase of the research, we will schedule an interview with you through an online videoconferencing platform, such as Zoom or Microsoft Teams. The interview will take 60-90 minutes. At the beginning of the interview, you will be read a consent statement and be given the option to remain anonymous in any published

findings resulting from the interview. During the interview, I will ask you the following questions with some improvisation depending on the direction of your answers:

1. At which institution (or institutions) do you teach and in which discipline(s)?
2. What is your employment status (full-time tenured, full-time tenure track, full-time teaching track, contractually limited, sessional, other)?
3. How many years of teaching experience in higher education do you have?
4. Describe the assessment(s) that you submitted to us in the fall for this study.
5. What specific kinds of knowledge or skills do you want students to demonstrate through their completion of the assessment?
6. In what ways do you see the submitted assessment(s) addressing the widespread availability of generative artificial intelligence (such as ChatGPT) and its use by students in their university or college courses?
7. Does the assessment explicitly allow or prohibit the use of generative AI by students? Please share what factors influenced this decision.
8. If the assessment allows the use of generative AI, can you describe the specific criteria for its use by students (i.e., for what components is its use allowed, are students required to cite its use and how, etc.)?
9. If the assessment does not allow the use of generative AI, have you designed any components in the assessment specifically to prevent or at least reduce its unauthorized use? If so, please tell me more about these components and their design.
10. Do any of your design choices for the assessment explicitly address or take into consideration inclusivity and equity concerns? If so, please tell me more about these design choices.
11. Do any of your design choices for the assessment explicitly address or take into consideration accessibility concerns? If so, please tell me more about these design choices.
12. Did you recently design or redesign the assessment, or have you already used it more than once in the form that you submitted to us?
13. Did you end up implementing the assessment in a course this year? If so, in which course and at what point during the course (specific week or general answer of beginning/middle/end will suffice).
14. In your course, did you address generative AI in some fashion beyond what is included in the language of the assessment instructions (through other course documents/announcements, lecture material, in-class discussion, etc.)? If so, please explain what you shared and what your goals were in sharing this information.
15. Was the assessment done in class (quiz, exam, in-class activity, presentation, etc.) or at home and submitted by a specified date?
16. Describe any student responses prior to completing the assessment that you recall. Did students seem excited, enthusiastic, nervous, indifferent, confused, etc., about the assessment? Why do you think this was the case?
17. How did students perform on the assessment? You can answer this question based on scores (if the assessment was evaluated with a traditional grade) or based on your impression of how well students completed the assessment and demonstrated the target skills and knowledge.
18. If the same assessment has been used prior to this academic year (either in the exact same form as that submitted to the study or a different form, if recently redesigned), do you think its implementation this year was more, less, or equally as effective as its prior implementation(s)? Please tell me more about why you think this might be the case.
19. Did you ask students for any feedback on the assessment? If so, were there any recurring themes or patterns in this feedback that you can recall?
20. Is there anything you would change about the assessment before implementing it in future courses? If so, please explain.
21. If the assessment allowed or required the use of generative AI, do you think this portion of the assessment aided in student learning? Please explain why or why not.
22. If the assessment did not allow the use of generative AI, do you think it might be possible incorporate some aspect allowing or requiring the use of generative AI in the future? Why or why not?
23. Do you see value in actively redesigning assessment practices either to incorporate generative AI elements explicitly or to ensure better protection against unauthorized use of generative AI? Please explain.

24. Would you like to share anything else related to your assessment and/or the impact of generative AI on your approach to teaching and learning in higher education more generally?
25. Would you be interested in being considered for a co-authored publication on which you, other participants, and the researchers from this study would collaborate to produce?

This interview will be audio recorded with your permission and transcribed to text. You will receive a copy of the transcription to review and approve before its use in any part of the study. Once you have approved the text transcription, the audio recording will be destroyed.

Potential Harms, Risks or Discomfort:

For the interview portion of the study, a risk of discomfort and unease exists. If you consent to and are chosen for a follow-up interview, you do not need to answer questions that you do not want to answer or that make you feel uncomfortable. You may also end the interview at any time and request that the data collected be destroyed and not used as part of the study. If you complete the interview, you will be provided with a copy of the interview transcription and be given the opportunity to amend or redact any of your responses.

Due to this study's focus on higher education faculty and the work they do in and out of the classroom, it is also important to disclose the risk of workplace reprisal. You will have the option of remaining anonymous in the interview.

Finally, there is the possibility of data breach, which is minimized in this study through data security best practices (detailed below).

Potential Benefits:

If you consent to being interviewed, there is the potential for a co-authored publication as part of the study, the details of which would be discussed among you, other selected participants, and the research team after interviews are complete. This might involve you contributing your narrative alongside other participants and collaborating with the research team to frame these experiences within the overall goal of developing good assessment design principles and best practices for the future of teaching and learning in higher education.

More broadly, this research will enrich teaching and learning scholarship in higher education and result in published findings that could help inform policy decisions around the use of generative AI in universities and colleges. The assessment design principles that emerge from the research could guide university and college instructors in altering existing assessments or creating new ones for a future in which generative AI use is normalized as another digital tool (similar to the normalization of search engines, for instance). The public data repository of assessments submitted by participants who consent to inclusion also represents one of the major benefits of the study to the broader academic community as well as other researchers involved in the scholarship of teaching and learning. All of the above benefits could potentially apply to you as an instructor in higher education.

Incentive/Payment or Reimbursement:

There is no incentive being offered for your participation in this study.

Confidentiality:

You are participating in this study confidentially. I will not use your name or any information that would allow you to be directly identified unless you give permission to be identified by name in any use of the interview data. In this case, published findings might reveal your name, your institutional affiliation and other demographic characteristics, and/or the assessment you submitted to the study.

Once the study is complete, an archive of the demographic data, without identifying information, will be maintained for three years, as it may be requested by scholars for verification. If you are interviewed, a

transcription of your interview will be stored securely and accessible to me for five years, as this form of data may be useful for future research. If you do not give consent for your assessment to be included on a public website or in a public data repository, the assessment will be stored securely and accessible to me for five years, as this form of data may also be useful for future research. All other assessments will be made publicly available on a website and in one more public data repositories (for example, McMaster University Dataverse or ICPSR).

Interviews will take place either via Zoom or Microsoft Teams videoconferencing software, so please refer to the Zoom Privacy Statement (<https://explore.zoom.us/en/privacy/>) and Microsoft Teams Privacy Statement (<https://learn.microsoft.com/en-us/microsoftteams/teams-privacy>) to inform yourself about what kinds of data each platform collects before agreeing to an interview in this format.

Participation and Withdrawal:

Your participation in all parts of this study is voluntary.

You may choose to end the interview at any time and withdraw from the study. You may choose to have all recorded data from the interview deleted or to retain what has been recorded up to the point of withdrawal. Once the interview is complete, the audio recording will be transcribed and sent to you for approval. You will have 7 days to approve the transcript, request redactions or amendments to the transcript, or to withdraw from the study completely, in which case you may request that the transcript and audio recording be deleted and excluded from the study. If you do not respond within 7 days of receiving the transcript, we will consider the interview approved as-is, and data analysis will begin. Requests for withdrawal within the 7-day period should be made by email to me at taylob36@mcmaster.ca.

If you decide to withdraw from the study, there will be no consequences to you.

Information about the Study Results

I expect to have this study completed by approximately May 2024. A summary of the results will be posted at <https://www.genaiteach.ca>, along with the assessment submissions from any participants who gave permission to have their assessments included on a public website. Results may also be published in appropriate scholarly journals, and efforts will be made to publicize the results of the study across communications channels with which you may be familiar as an instructor at a Canadian institution of higher education.

Questions about the Study: If you have questions or need more information about the study itself, please contact me at:

Ben Lee Taylor taylob36@mcmaster.ca
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This study has been reviewed by the McMaster Research Ethics Board and received ethics clearance under **project #6636**. If you have concerns or questions about your rights as a participant or about the way the study is conducted, please contact:

McMaster Research Ethics Office
Telephone: (905) 525-9140 ext. 23142
E-mail: mreb@mcmaster.ca

CONSENT

The following questions will be asked orally before beginning the interview. Questions and answers will be audio recorded.

1. Have you reviewed the Letter of Information – Interview, and do you understand its contents?

2. Do you agree to being audio recorded during this interview?
3. Do you wish to remain anonymous in the results of this study?
4. If you do not wish to remain anonymous in the results, how would you like to be identified (institutional affiliation and name are preferred)?
5. Do you agree to allow the use of your anonymized transcript data for training purposes within a course?
6. Do you understand that you may withdraw from the interview at any time by asking that we end the interview or up until 7 days after receiving the interview transcript, and in such a case, you may request that all data from the interview be destroyed?