To: Dr. Erika Paterson

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Subject: Proposal for Making Lecture Capture Systems More Effective for Statistics Students at UBC

**Background**

The Statistics Department at UBC is continuously modernizing lectures provided to students with the introduction of a variety of technologies, including the use of mixed-content notebooks, I-clicker systems, and online discussion forums. Although Lecture Capture systems are not currently used in Statistics courses, they have been introduced to other faculties and are likely to be a part of future lecture halls.

**Purpose**

There are many benefits that these systems could bring, but also risks involved, so it is important to guide the use of these systems to provide maximal utility for teaching and learning. Examples of benefits include the ability for students to revisit content they did not understand, improved access for students with temporary illnesses or disabilities, and better support for individual learning styles. Risks may include reduced student attendance, privacy concerns, and underutilization of the systems.

This report will provide recommendations to guide the use of lecture capture systems, in order to maximize the aforementioned benefits while minimizing the risks. Following these recommendations, the Statistics Faculty at UBC will have guidance in modifying the structure and content of existing lectures with the introduction of lecture capture systems.

**Scope**

This project aims to investigate how the implementation of lecture capture systems has impacted student learning in other Faculties at UBC, then provide recommendations based on existing evidence.

The following factors will be considered, in order to deliver the most effective ways of using Lecture Capture systems:

* Ways of delivering lectures that have been tested at UBC (e.g. reverse classroom model at the department of Computer Science);
* How these methods of lecture delivery have impacted student participation, student performance, and student satisfaction
* How a course’s structure impacts the effectiveness of the systems, and which types of courses benefit from the system the most
* What changes can be made to courses to best-utilize the systems
* Will there be an extra burden on lecturers in providing access to the recorded content, and how can this be reduced?
* How often recordings need to be updated to ensure they are up-to-date

**Methods**

The data for this report will originate mainly from primary sources via interviews and surveys. Unsolicited inquiries will be sent to Statistics and Computer Science professors, as well as students at UBC, in order to answer the questions posed in the Scope section. Furthermore, Shaun Filwok, the Senior Manager at Audio Visual Services UBC, will be contacted. If possible, interviews will also be scheduled with these individuals. Secondary sources will include Data Access requests from PAIR UBC, as well as publications from educational institutions with Lecture Capture systems in use, in order to study the effects of these systems on students under varying conditions.

**My Qualifications**

My participation in a multitude of Statistics courses at UBC, and my 4th-year standing in the Statistics major for the Bachelor of Science make me suitably qualified to prepare this report. By participating in the many interactive teaching methods implemented in my courses, I have firsthand seen their impacts on student learning. Furthermore, I have experienced diverse implementations of Lecture Capture systems at UBC: I have taken CPSC 110, which has a reverse-classroom model with online lectures, as well as CPSC 320, the lectures of which are available for online viewing. Lastly, my networking experience will aid in data collection from primary sources.

**Expected Results**

This report will (1) divide Statistics Courses into 2-3 categories based on their lecture material and teaching strategies and (2) provide best-practice recommendations for the utilization of Lecture Capture systems for each identified category. Performance indicators, such as student grade performance, participation, and satisfaction will be examined to guide the recommendations. The results of this report can then be used to aid in the restructuring of courses in the Statistics department at UBC. For example, one recommendation may be to vary online video-lecture content from in-person lecture content to encourage participation and attendance.

**Conclusion**

The introduction of new technology to lectures at UBC has the potential to be beneficial to students, but it is important to ensure it is used effectively for the benefits to be seen. This report is designed to prepare the Statistics Faculty at UBC for the integration of Lecture Capture technology in lecture halls, to provide the best learning experience for students. With your approval, data will be gathered via interviews and surveys to identify best-practices for this technology. Statistics courses will be broken into categories, and an implementation strategy will be provided for each one. This report will target key performance indicators for student success, to the beneficial to both students and professors in the department of Statistics at UBC. With your approval, I will promptly commence research.

**Reference**

[1] Alden, Charlotte. “The Right to a 'Bad Hair Day': Will Lecture Recordings Catch on at UBC?” The Ubyssey, The Ubyssey, 24 June 2019, www.ubyssey.ca/news/should-ubc-install-lecture-capture/.