

## Memorandum

## Office of the Dean of Students

Brown Student Services Building, Suite 4100 3600 McTavish

Tel: -4990 | Fax: -3857

TO: Senate

FROM: Morton J. Mendelson, Deputy Provost (Student Life and Learning)

**SUBJECT:** Use of Student Response System (SRS) or clickers for guizzes and examinations

DATE: November 16, 2009

**DOCUMENT #:** D09-25

**ACTION** INFORMATION DISCUSSION X APPROVAL / DECISION REQUIRED:

ISSUE:

A Student Response System (SRS), which involves the use of "clickers", has been implemented in a number of classes at McGill to promote student engagement. Although not its original purpose, the SRS can also be used to administer multiple-choice tests, but such use raises a number of problems. The Committee on Student Affairs (CSA), therefore, recommends that clickers not be used for graded guizzes or examinations.

BACKGROUND & RATIONALE:

The SRS identifies students by associating a unique ID number on each clicker with the ID of a particular student in the class, which enables the instructor to record and track each student's responses. However, using the SRS to administer tests raises several concerns.

- Use of clickers for multiple-choice tests can compromise academic integrity and exam security:
  - Only one version of a multiple-choice test can be used with the SRS. However, University policy stipulates that multiple versions of multiple-choice examinations be used for midterm and final examinations (1990 Senate Regulations on Examination Security).
  - If students do not cradle the clicker in their palms, then other students may see classmates' choices, particularly because people tend to point their clicker at the screen. Since test-takers are unable to choose their own pace in answering and have only one opportunity to respond to each question, they may be more focussed on answering correctly than on shielding the device properly.
  - Someone who is not registered in the course may answer on behalf of a registered student and someone who is registered may answer for more than one person.
- 2. There are pedagogical concerns as well:
  - Administering a multiple-choice test with SRS technology may contribute to undue anxiety or otherwise lead to less-thanoptimal learning, because students cannot answer at their own pace, which could be particularly problematic for students whose first language is not English.

- Test-takers do not have the opportunity of reviewing all questions before starting to answer and cannot return to their answers to review them afterwards (although they can click multiple times, with the last click registered as the final answer).
- Reaction time and speed become part of the assessment, which may not be relevant to the purpose of the evaluation, but which may negatively affect the result.
- 3. Technological problems may compromise test administration:
  - If SRS testing is held in adjacent rooms, the receiver and responder must use different channels, because a receiver in one room can pick up responses in the other room.
  - If there are hardware or software failures (e.g., spent batteries, software crashes), as has been reported at McGill and elsewhere, there is no backup or audit trail.

MOTION OR RESOLUTION FOR APPROVAL:	Be it resolved that Senate approve the following rule until a full review of the regulations applicable to examinations is completed:
	"The Student Response System may not be used for graded quizzes or examinations."
PRIOR CONSULTATION:	Science Undergraduate Society and SSMU, September 2008; CSA Academic Integrity Subcommittee, 22 September 2008; Committee on Student Affairs, 12 November 2008; APC Subcommittee on Teaching and Learning, 9 December 2008; Academic Policy Committee, 11 December 2008.
NEXT STEPS:	If the rule is approved, a memo will be sent to all instructors informing them of it and it will be added to relevant University and faculty-level regulations regarding examinations.
APPENDICES:	N/A