## **Report to Academic Council on Scantron Marking of Tests**

28 May 2019

Robert Bailey – Provost & Vice-President, Academic

In November 2018, former Academic Council member Hannah Scott sent a message to Academic Council Executive member Tess Pierce to remind council of an issue she had previously raised at Academic Council, most recently at its June 2018 meeting:

## Enhancement of student assessment technology.

The first was posited in June of 2018. A question went out about what to do with extra funds found in surplus at UOIT. I asked if we could consider newer technology for multiple choice exams rather than the 1970's technology we currently use. The scanner we use has a memory of 128K.. (not Gigs, not MBs, I really mean K). There are programs that you can take scantrons which are scanned by a photocopier that go to a centralized server that would give you wonderful analytics that help us make better choices about MC questions, and how students answered, and so on. I had this technology 20 years ago at the U of G These programs are not that expensive, and would serve many faculties (if not all). It has been proposed that we should do MC exams online... However this is problematic as there is an error rate of about 1 in 50 to 1 in 100. In large classes this is anywhere from 2 to 5 students who experience an error that threatens the storage of the answers to the test questions. Time during assessment is then spent fixing the issue, but class time is often locked in and no extra time granted for the student(s) who have software bugs. There is also a need for an L2 IT person to be present at midterms to be on hand to fix computer errors should they arise. Cutbacks in IT do not always allow for this. However if the student has an error (and they all have different computers now, so this is increasingly likely depending on what software they have on their machines) then that student experiences anxiety and time loss. What people don't seem to acknowledge is that often many the other students around that student with the software bug issue also experience anxiety and time loss about potential errors testing software. Paper Scantrons are often chosen over online evaluation as the technology produces less anxiety for students.

In response to this, the Provost's Office asked the Teaching & Learning Centre to undertake a study of alternatives to "Scantrons". This was carried out in fall 2018 and early 2019 and then reported on at the March 2019 Academic Council meeting. Consideration of alternatives to scantron, including engagement with several faculty users from across the university, resulted in two recommendations:

- Continue to identify viable, cost-effective bubble-sheets (e.g. word document that can be printed in-house) that can be employed until faculty are fully integrated into online testing;
- 2. Strongly advocate for more instructors to use online testing through the Learning Management System which has benefits beyond immediacy of marking (i.e. grade integration)

Questions were raised at the April 2019 Academic Council meeting regarding the formation, mandate, and procedures of the "committee" considering alternatives to Scantron. Specifically, there seemed to be concern from one member that administrative staff were overseeing the analysis of Scantron alternatives. Given that this is an academic support issue, I feel that the approach described here, including consultation with faculty members, was appropriate for the issue identified by the Academic Council member. There were no questions or comments raised at Academic Council regarding the content of the report or recommendations.