

DATE: August 7<sup>th</sup>, 2015

TO: Katy Mateer, AVP Academic Planning  
Sarah Blackstone, Advisor to the Provost on Special Projects

FROM: Teresa Dawson, Chair of the Math Working Group.

RE: Annual report 2014/15 from the Math Working Group

### **Background, purpose and membership**

As you know, you asked me to chair the Math Working Group (MWG) on behalf of your office. This is a brief annual report for last academic year for your information.

The MWG was originally established (by Katy) with the goal of increasing effective communication and problem solving between the various departments and faculties who have a strong interest in student success in mathematics and statistics as part of their programs. Since its inception, the MWG has tackled issues ranging from failure rates in the largest first-year math courses to physics students' statistics course choices. Membership includes the Dean of the Faculty of Science and the Dean of the Faculty of Engineering, the two faculties whose students are most represented in first-year mathematics courses, as well as the Chairs of the departments of Mathematics and Statistics, Economics, and Computer Science. Additional members are faculty members from the departments of Mathematics and Statistics, Physics and Astronomy, and Psychology. There are currently 12 members:

Jane Butterfield - Department of Mathematics and Statistics and Learning and Teaching Centre  
Teresa Dawson - Director, Learning and Teaching Centre (**Chair**)  
Roderick Edwards - Chair, Department of Mathematics and Statistics  
Kathryn Gillis - Acting Dean, Faculty of Science (2015/16)  
LillAnne Jackson - Associate Dean, Undergraduate Programs, Faculty of Engineering (on leave 2014/15)  
Mark Laidlaw - Department of Physics and Astronomy  
Kin Li, Acting Associate Dean, Undergraduate Programs, Faculty of Engineering (2014/15)  
Rob Lipson - Dean, Faculty of Science (on leave 2015/16)  
Gary MacGillivray - Department of Mathematics and Statistics  
Andrea Piccinin - Department of Psychology  
David Scoones - Chair, Department of Economics  
Ulrike Stege - Chair, Department of Computer Science  
Tom Tiedje - Dean, Faculty of Engineering

While members are invited to serve, other colleagues are welcome to bring issues to the chair for consideration and discussion and guests are also invited on occasion depending on the expertise the committee requires to assist it in its deliberations.

### **Administration**

The LTC provides administrative support for the committee, which includes scheduling the meetings, providing our seminar room as a meeting space, writing and distributing the minutes and distributing other information prior to meetings. As Chair, I gather and consult on possible agenda items before each meeting. After the meeting, we follow up to clarify action items and provide support where needed. In addition, Jane Butterfield follows up within the Math & Stats Department, to assess any new initiatives

the MWG proposes or approves and to compile reports in answer to questions that arise during the MWG meetings.

Meeting minutes are stored and distributed through a protected SharePoint site hosted by VPAC (<https://share.uvic.ca/VPAC/mathwg/>). The LTC has also generated a landing page on its new website for the group, which can be found at <http://www.uvic.ca/learningandteaching/faculty/resources/index.php>. This page includes a brief description of the purpose and membership of the group in order to support transparency and accountability.

### **Meetings and activities 2014/15**

Meetings were held on October 17<sup>th</sup>, 2014, April 8<sup>th</sup>, 2015, and May 6<sup>th</sup> 2015. The MWG generally meets four times each academic year, but the February meeting was cancelled to allow members to attend the VPAC candidates' presentations. Meetings were well-attended, in spite of the busy schedule most of our members have, and those who could not attend generally sent representatives, or provided notes ahead of time. Meetings are characterised by being productive, collaborative and student focused.

In the 2014/15 academic year we discussed, among other things, the following (please see minutes for more details):

- 2014 HeadStart pilot program for MATH 102 students and associated study designed to improve student success
- 2015 HeadStart program design for MATH 102 students and associated study designed to bring in improvements from the previous year.
- Meeting with the Ministry of Education where we were consulted on aspects of the new high school curriculum and had a very positive and far ranging discussion with our guest Ms. Melissa Horner, Curriculum and Assessment, Ministry of Education
- Curricular changes in the Calculus and Differential Equations sequence to increase alignment and improve flow through
- Enrolment and optimal timing of STAT 254
- Increasing the flexibility of the summer Math and Stats offerings available to physics students
- The CSC/MATH and CSC/STAT joint programs
- Math & Stats Assistance Centre growth of usage during the 2014/15 academic year
- Possible MATH 100 offerings for students with prior calculus experience

Some of the questions raised at the MWG require more extensive research studies and reports and generally involve student data. Such studies have been funded twice by competitive, peer-reviewed Learning and Teaching Development Grants to support the scholarship of teaching and learning in mathematics and statistics, and have therefore included a full ethics process. Because of the student data issues however, the results presented to the group are generally considered confidential unless members agree to provide an external summary for public consumption.

I wish to end by thanking all members of the MWG for their hard work this year. Kin Li stood in for LillAnne who was on leave and Svetlana Oshkai stood in for Jane Butterfield's role until Jane was hired. Jane has contributed enormously to the committee's work since she was hired.

*Respectfully submitted, August 7<sup>th</sup>, 2015*