

Background



Since the introduction of the new secondary curriculum in 1999, OSSTF has been concerned that students taking mainly Applied level courses in Grades 9 and 10 are at risk of failing to graduate. These fears were verified by Dr Alan King in his double cohort studies of 2002 and 2004. OSSTF decided to take action on behalf of our students and approved a research project that would not only identify specific reasons for the problems faced by Applied level students, but would also suggest solutions.

The problem

Dr King's two studies in 2002 and 2004, clearly outline the problem as a high failure rate in the Applied stream. The failure rate was particularly acute in math and science. King found that 60% of students in Applied math received a mark of 59% or less. As King reported, 65% of students in Applied courses did not complete 16 credits by the end of grade 10. There is a very high correlation between those who do not accumulate the expected 16 credits and those students who eventually drop out before graduation. This failure rate demoralizes students in Applied courses. Many realize that they are unlikely to graduate in four years and they are unable to accommodate preferred elective courses, like co-op, in their timetables because they must repeat core credits. The government has recently announced that it is



extending compulsory schooling until age 18. This is a very positive step. If the government hopes that these struggling students will graduate by the time they are 18, however, they must be more successful at the Applied level.

Dr King had clearly shown what was wrong. OSSTF wanted to know why it was wrong and what could be done about it. In March 2003, at their annual convention, OSSTF passed a motion which commissioned a research report, *From Applied to Applause*, to answer these questions.

From Applied to Applause

The study was based on questionnaires completed by 882 teachers, education assistants and professional student services personnel currently working in Ontario public high schools. The study was proportionate to the size of the community and the gender of the teacher. An advisory board comprised of Dr David Livingstone, Director of the Centre for the Study of Education and Work at OISE/UT; Dr Robert Macmillan of the University of Western Ontario and Dr Harry Smaller of York University. It was conducted by Fabrizio Antonelli a PhD candidate at OISE/UT.



The findings

The major findings of the study were:

As the number of students in Applied classes increases, so does the failure rate. Class size averaged just under 22 for the classes that were included in the study.

Failure rates are higher in large urban or inner city schools.

A relationship was also found between class size and other factors such as behavioural problems.

In Grades 9 and 10 combining learning levels in one class (e.g. Applied and Academic) is not perceived as a severe obstacle to learning. The exception is when it is conducted in large classrooms where together they become obstacles to student success.

Large class size was viewed as a severe obstacle to student success by more teachers than any other variable. Other variables that were listed as important included: lack of support staff, lack of parental support, lack of preparation in elementary schools and lack of available resources designed specifically for Applied level courses.



The recommendations

The Minister of Education has already announced a curriculum review for Grade 9 mathematics, the most obvious place to begin a thorough review of the Applied curriculum. OSSTF recommends, however, that:



All Applied level courses should be reviewed and rewritten immediately. The research makes numerous specific recommendations for changes necessary in English, mathematics and history courses.



Funding targeting in-class support, textbooks and other tools needs to be improved to ensure student success.



Class sizes in Grades 9 and 10 Applied level courses should be smaller. The research recommended that class sizes be reduced to below 20 students for these courses.

“Class size was large in Grades 9 and 10; hence a large number of repeaters and IEP students, consequently giving daily attention was very limited. Behavioural issues could have been addressed with more effectiveness if the class sizes were reduced. With a large number it becomes more of a survival issue. The Grade 11 workplace was much better because of having a lower class size. Individual help was more easily done and the working environment much more conducive to working and learning.”

Response 704: Full-time teacher, 29 years experience

The full report can be found on the OSSTF web site (osstf.on.ca)

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From Applied to Applause
Improving success in Applied level courses

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