

Office of the Minister

February 10, 2010

Ms. Wendy Juergens Chair Springbank Community High School Parent Council 32226 Springbank Road Calgary, Alberta T3Z 2L9

Dear Ms. Juergens:

Thank you for your recent letter regarding the removal of the written response portion of the mathematics and science Diploma Examinations.

As the Ministry of Education seeks to prepare the education system for the future through the *Inspiring Education* process, and as we consider the potential impacts of Alberta's current fiscal challenges, we need to consider whether our activities all contribute to student success, and whether they are too resource-intensive to justify the results that are achieved.

Over the past year, my staff heard from students, teachers and school authorities that the Diploma Examination schedule was too long, imposed too much of a burden on students and reduced instructional time. In response to these concerns, we looked into what could be done to reduce the number of examination days and provide more instructional time for teachers. As there is a high correlation between achievement on machine-scored and written response items, the most reasonable solution was to remove the written response portion of the mathematics and science examinations.

I am confident the removal of written response items will not jeopardize the high quality or validity of the Diploma Examinations. This does not "dumb down" the exams. Diploma Examinations undergo a detailed and comprehensive development and validation process designed to ensure their validity, reliability and appropriateness. A significant amount of expertise and work goes into the creation of exams, which are valid and reliable. Multiple choice and numerical response questions have been thoroughly authenticated in this regard.

The suggestion that a "multiple guess" exam does not properly test students' knowledge is not accurate. A broad range of learning outcomes, but not necessarily all learning outcomes, can be fairly assessed with a machine-scored examination. While multiple choice questions are not capable of testing production skills such as writing or abilities such as creativity, the inclusion of numerical response questions ensures a broader range of learning outcomes, as well as higher-order thinking skills, can be measured. You may be interested to know that other significant tests, such as the professional engineering certification exam, are all multiple choice.



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Students' writing skills will continue to be assessed in the language arts and social studies Diploma Examinations. The changes being made to the examinations, along with teachers' ongoing formal and informal assessment of students in areas not covered in the examinations, will continue to provide a fair and comprehensive picture of student achievement in math and science. For this reason, Diploma Examinations are still worth 50 per cent of the final course mark. As part of the *Inspiring Education* process, however, Education is reviewing its processes, including the weighting of Diploma Examinations, to ensure the best education possible for students.

Moreover, concerns about students being able to "show their work" and "get part marks" for written responses are misplaced. A properly crafted test will appropriately determine whether a student has grasped the concepts being tested. Diploma Examinations are exit exams — the results are not used to aid the learning of students writing the exams — and therefore it is the result for the student that is important. The crucial question that a test must answer is whether students truly know the subject. If they do not, there is no test format that helps, be it multiple choice, numerical response or written response. The point is to achieve the curriculum outcomes in their entirety, not to partially learn the subject.

Government acknowledges the importance of Alberta students being well-prepared for life and work in the 21st century. Mathematics and science Diploma Examinations will remain 100 per cent aligned with Alberta's world-class curriculum and will continue to appropriately challenge students to demonstrate content knowledge and their ability to solve complex problems.

I trust this information is helpful. Thank you for writing to me about this important issue.

Yours truly,

Dave Hancock, Q.C.

Minister