

EDMONTON PUBLIC SCHOOLS

March 9, 2004

TO: Board of Trustees

FROM: A. McBeath, Superintendent of Schools

SUBJECT: ASBA Emergent Directive for Action – Math Transitions 101

ORIGINATOR: B. Holt, Executive Director Instructional and Curricular Support

RESOURCE

STAFF: Anne Sherwood, Stuart Wachowicz

RECOMMENDATION

That the following Directive for Action regarding Math Transitions 101 for forwarding to and consideration by the Alberta School Boards Association Board of Directors as an emergent directive for action be approved:

Directive for Action: The Alberta School Boards Association believes that the course now called Math Transitions 101 should become a basic education funded course, to be offered to students who have taken Applied Math 30 within the Basic Education program, permitting high school students to articulate smoothly to post secondary programs.

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The ASBA Board of Directors may adopt policy positions on matters that arise between general meetings of the Association and submit these for ratification at the next general meeting. The next general meeting will be held this spring June 7, 2004. As outlined in the background information which follows, it is important for this matter to be quickly considered and submitted to Alberta Learning for approval to allow districts to inform students registered in Grade 10 for September 2004 of their options.

Background:

When the province implemented the Pure and Applied Math programs, Alberta Learning assumed that Applied Math 30 would be more broadly accepted than was Math 33. The minister stated in his memo to all Board Chairs in December 2000 that applied math courses were created for three reasons:

- To provide more students with access to a variety of post-secondary programs that do not require the study of calculus;

- To respond to concerns voiced by business and industry representatives that young people need to improve their ability to apply their mathematical knowledge;
- And the incorporate classroom teaching methods that encourage more active involvement from students in mathematical problem solving.

While there has been a slight improvement in acceptance of Applied Math at some universities other than the U of A, the reverse has been the case at the major technical institutes. At NAIT for example, 22 programs which accepted Math 33, now accept only Pure Math 30. At the U of A they are requiring pure math 30 even in programs that don't require post-secondary math as a required course.

Today, as in the days of Math 13/23/33, the majority of students who opt for the Applied Math route are not targeting university programs but they are expecting to be accepted at our technical schools.

We are in a time in Alberta's history when the province has a growing shortage of vital trades such as electricians, oilfield and engineering technologists. Many students wanting this kind of career choice are now forced to take Pure Math 10/20/30, where formerly they would have enrolled in a 13/23/33 alternative route. Increasing numbers of students are undertaking Pure Math unsuccessfully, when Applied Math would be the more suitable route. As a result the students don't have the qualifications necessary to enter a post-secondary technical school.

For the students of Applied Math, high school will not prepare them to smoothly articulate into a post secondary program of choice, unless they add an additional course after completing high school, Math Transitions 101. This they require before they can apply for post secondary acceptance, often causing them to miss a semester of post secondary instruction.

In order to make Applied Math more useful to students and parents, and to enable students to confidently select the courses best for them, we recommend that Math Transitions 101 be made a fourth course in the Applied Math sequence. Such an arrangement is not new. For many years students who wished to end high school with a higher level of math enrolled in Math 13/23/33/30. This proposal would be no different, and would make Applied Mathematics a more credible program and an option Grade 9 students and parents would view as viable. The Math Transitions 101 could be renamed something like Applied Math 31.

We understand there may be some contractual issues with Athabasca University, but we are reminded that the current Math 31 and Math 100 (University of Alberta) are essentially the same course. The student can opt to take it in Basic Education or in the post-secondary system. This would also work with Math Transitions 101.

It is important that this be quickly considered and approved by Alberta Learning, allowing districts to inform students registering in Grade 10 for September 2004. Such an innovation would be in the best interest of our students, our schools and our economy.

SW/AS