

PEEL DISTRICT SCHOOL BOARD

Minutes of a meeting of the Instructional Programs / Curriculum Committee of the Peel District School Board, held in the Brampton Room, the H.J.A. Brown Education Centre, 5650 Hurontario Street, Mississauga, Ontario on Wednesday, February 15, 2012 at 18:00 hours.

Members present:

Rick Williams, Chair
Meredith Johnson
Steve Kavanagh
Sue Lawton
Harinder Malhi

Trustees also present:

Stan Cameron
Jeff White

Trustees absent: (apologies received)

Suzanne Nurse

Also present:

Brian Grandy, OSSTF

Administration:

Shawn Moynihan, Superintendent, Curriculum and Instruction Support Services
(Executive Member)

Rebecca Crouse, Superintendent of Education, Secondary School Support

Pam Tomasevic, Associate Director, Instructional Support Services

Lorelei Fernandes, Board Reporter

1. Approval of Agenda

IP-08, moved by Steve Kavanagh, that the agenda be approved.

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2. Declaration of Conflict of Interest

There were no declarations of conflict of interest.

3. Minutes of the Instructional Programs / Curriculum Committee Meeting, January 18, 2012

IP-09, moved by Meredith Johnson, that the Minutes of the Instructional Programs / Curriculum Committee meeting, held January 18, 2012, be approved.

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4. Celebrating Faith and Culture Backgrounder – February 2012

IP-10, moved by Harinder Malhi, that the report re Celebrating Faith and Culture Backgrounder – February 2012, be received.

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5. Peel District School Board 2012 Spotlight on Black Heritage

IP-11, moved by Sue Lawton, that the report re Peel District School Board 2012 Spotlight on Black Heritage, be received.

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6. Overview of Professional Learning in Mathematics 2011-2012

Shawn Moynihan, Superintendent of Curriculum and Instruction Support Services, invited Jill Ott, School Effectiveness Leader, and Mary Fiore, Instructional Coordinator for Mathematics, to present the report.

Mary Fiore gave a brief overview of mathematics, outlining the use of Collaborative Inquiry, Growing Success and Inclusive Education using classroom tools and differentiated instruction. She noted that the teacher responds to the needs of the student using open questions and parallel tasks. Effective instruction involves a balance of conceptual understanding and procedural knowledge. Students are invited to reflect, investigate and explore, thereby encouraging a deeper level of thinking. The Collaborative Inquiry process was demonstrated by providing some thinking tools to Committee members who worked with a partner to solve a mathematical problem. Answers and various approaches to the problem such as repeated pattern, algebraic, or fraction strips were discussed.

A trustee stated that, sometimes, the availability of answers through a mathematics text book could help the parent assist a child in solving a mathematical problem by using the strategy of working backwards. Mary Fiore stated that various approaches may be used depending on the student's comfort level and understanding of the problem.

IP-12 moved by Stan Cameron, that the oral report re Overview of Professional Learning in Mathematics 2011-2012, be received.

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7. Teaching Mathematics Through a Social Justice Lens

Joanne De Melo, Principal of Edenbrook Public School, stated that the school is focused on embedding social justice into the mathematics curriculum. She referred to a printed resource guide published by the Ministry of Education, titled 'Teaching Mathematics Through a Social Justice Lens'. Joanne De Melo invited two teachers from Edenbrook Public School, Alicia Gunn and Jonathan So, to share how social justice mathematics is being taught in schools, offering students the opportunity to use social justice issues as a context for math problems.

Alicia Gunn explained that when students solve problems using social justice issues as a context, they integrate mathematics and language programs. Students have the opportunity to become engaged and empowered using current global issues. Social justice mathematics looks at the curriculum through a different lens while working on the same expectations, but using real problems related to articles and current issues. Alicia Gunn referred to the Attitudinal Survey of Students, results of Student Achievement for 2010-2011 and shared information from the Halton Arithmetic Survey which showed an improvement in basic computational skills of students over a school year.

A video on student reflections on the social justice mathematics class was shown. Students explained where the problems originate and how it helps them to make a change. Some examples used were fundraising events, minimum wage, and child labour.

Jonathan So distributed handouts on Cyber Rules. Using the problem of cyber bullying on Facebook, he explained how students work with partners in a mathematics classroom. Expectations of the curriculum are met while solving mathematical problems. Jonathan So spoke about assessment and evaluation of the student as well as individualized next steps. A social justice aspect is always included in the mathematics problem. A mathematics problem on decimals and fractions related to Facebook users around the world was reviewed, and students' comments and conclusions were noted.

IP-13 moved by Harinder Malhi, that the oral report on Teaching Mathematics Through a Social Justice Lens, be received.

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8. Evaluation of Full Year and Semestered Mathematics

The report was based on the Evaluation of Full Year and Semestered Mathematics program which was offered in two Peel schools. Shawn Moynihan commented that the program drew a lot of interest in exploring the opportunity to facilitate student success in mathematics. Cameron Hauseman and Rochelle Zorzi of Cathexis Consulting Inc. were introduced as presenters.

8. Evaluation of Full Year and Semestered Mathematics (Continued)

Cameron Hauseman reviewed the report in detail. He stated that full year mathematics was offered to Grade 9 students in the academic and applied pathways at Rick Hansen Secondary School and to a group of Grade 9 students in the applied course at Fletcher's Meadow Secondary school. The evaluation of the full year and semestered Mathematics programs was guided by: the impact on student mathematics achievement and engagement; attitudes toward and level of support for full year mathematics; some of the pros and cons of implementing full year mathematics, which included reviewing challenges in implementation, promising approaches to implementation of the full year program, and related costs. The evaluation was based on information received from a number of different data sources as well as perspectives of staff, students, administrators and federation representatives. The following data was analyzed to determine the impact on student achievement: results from the provincial Education Quality and Accountability Office (EQAO) Grade 9 Mathematics Assessment for Peel DSB and all Ontario schools from 2006-07 to 2010-2011; report card grades for Grade 9 mathematics students for the years 2008-09 to 2010-11; pass rates for Grade 9 mathematics students for the years 2008-2009 to 2010-2011.

Student attendance records and attitudinal data from the EQAO exam were examined to assess student engagement in both programs. Interviews were conducted with students, teachers and principals at both Peel schools. In addition, feedback from Board staff, representatives of the Ontario Secondary Schools Teachers' Federation and the Peel Principals' and Vice-Principals' Association, and representatives from some of the neighbouring boards, assisted in identifying advantages, challenges or concerns about implementing and continuing the full year mathematics program.

Summary of findings were reviewed, which indicated that the data showed little or no relationship between full year instruction and achievement for students in academic courses. Full year instruction may slow down high achieving students in the academic course and decrease their motivation. In applied courses within Peel DSB, a modest improvement in both report card grades and EQAO scores was evident. However, the same was not evident in provincial results. Graphs showing these results were reviewed. Within Peel DSB, full year instruction for applied classes was associated with a 5% increase in students reaching the provincial standard of Level 3 or above. For academic classes the results showed that 5% fewer Peel DSB students in full year mathematics obtained a Level 4 on the Grade 9 Mathematics Assessment. With regard to pass rates, the difference between the two types of engagement was minimal. Some challenges identified included scheduling, pairing of the mathematics course with another appropriate subject, and promoting the benefits of the full year program to students and parents.

Rochelle Zorzi noted that students would be best served by the full year mathematics program when there is need for mediation to make a difference in their learning. No major costs were involved in implementing the program other than a one-time expense of text books and teaching tools.

A trustee commented on the report stating that the findings are anecdotal, the study was limited to a very defined group, and the report is heavily weighted on staff feedback with a lack of parent involvement. It was clarified that parent involvement was not part of the scope of the project.

8. Evaluation of Full Year and Semestered Mathematics (Continued)

Questions of clarification included: students who fail full year mathematics and may not be able to attend summer school or credit recovery due to prior commitments; selection of only two schools for the program evaluation; pairing of subjects and offering a combination of Grade 9 and 10 credit courses.

Shawn Moynihan stated that the scope of the program was to complete the study in a timely manner so that schools would have information by September 2012. A committee will be struck at the earliest to develop formal guidelines by May 2012, to enable schools to implement the program in September 2012. Information will be sent to superintendents of education, and principals will have the option of offering the program at their schools.

IP-14 moved by Steve Kavanagh, that the report on Evaluation of Full Year and Semestered Mathematics, be received.

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9. Communications – For Action or Receipt

IP-15 moved by Jeff White, that the following communication items, be received:

- i) Removal of Course Profiles and Exemplars from Ministry Websites
- ii) Updated Welcome to Kindergarten Package

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Regarding Item 9. ii) Updated Welcome to Kindergarten Package, Superintendent Moynihan commented that parents were involved in the new attractive materials for this package and expressed appreciation for the work done by the Curriculum and Instruction Support Services and Communications staff. Updated packages were distributed to members.

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IP-15

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10. Question Period

There were no questions.

11. Public Question Period

Stan Taylor, whose children attended Brampton Centennial Secondary School and have since graduated, expressed his disappointment at the inconclusive results of the report regarding the Evaluation of Full Year and Semestered Mathematics (Item 8 of these Minutes), and the emphasis on EQAO into this report. His main concern was the large time gaps between semesters in Grades 9 and 10 and Grades 10 and 11 which sometimes results in a student having no mathematics instruction for a whole year. This creates some difficulty for students to successfully return to the program. Stan Taylor remarked that the number of unsuccessful mathematics students will affect the economy. He noted that no mention was made of the health benefits for students in full year physical education classes that are paired alongside the mathematics classes. He encouraged further study on the full year mathematics program and expressed interest in follow-up results on the progress of students at Rick Hansen Secondary School.

12. Adjournment

IP-16, moved by Harinder Malhi, that the meeting adjourn (19:45 hours).

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