

« CODE Special Education Project 2005-2008, continued

Conclusions

Application of Knowledge and Skills

- **Year 1:** One year following Schools Attuned® training, teachers increased the use of Schools Attuned strategies in their classrooms, particularly in the areas of neurodevelopmental constructs and student profiles.
- **Year 2:** Following Schools Attuned® training, the majority of teachers used the strategies either sometimes or often, and found that the strategies were very helpful when working with students with special education needs.
- **Year 3:** Six months following Schools Attuned® training, teachers increased the use of several strategies with individual students who struggled with learning. Teachers also felt that Schools Attuned® positively impacted their teaching practices, particularly in the areas of understanding how students learn.

Student Learning

- **Year 2:** Grade 1 and 2 target students greatly improved their reading levels throughout the school year.
- **Year 3:** Teachers believed that Schools Attuned® strategies had a positive impact on their students, particularly in the areas of understanding their own learning, advocating for their needs, and managing their learning difficulties. Students knew their own learning strengths and weaknesses, knew they were using strategies to help them learn, and were positive about their learning.

Next Steps

The implementation of Schools Attuned® approaches continues to be a key element of effective instructional practice in Peel in 2008–09. Teachers, administrators, and professional staff are working within a collaborative climate that strives to integrate the knowledge, philosophy, and processes of Schools Attuned® with other key instructional elements to support school success planning and address the programming needs of all students. With the introduction of the *Learning for All Guide*, Peel will continue to use the lessons learned from the CODE special education projects to enhance professional development for staff and to further the development of UDL and differentiated instruction to support students with special learning needs.

A compilation of the full reports covering the three-year project will be available from the Peel District School Board in September 2009. ●

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Apple® Assistive Technology Project

Ann Blake, Superintendent of Education
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It's the classrooms where students can express themselves in ways that are natural to them—with technology that is already part of their lives....Motivation soars and students become engaged in new and deeper ways of thinking.

– Dr. Linda G. Roberts

Dr. Roberts' words encapsulate the experience of students and staff involved in the Apple® Assistive Technology Project in the Superior North Catholic District School Board. One-time, three-year funding flowed from the Ontario Ministry of Education through the Council of Directors of Education (CODE) and Northern Ontario Education Leaders (NOEL).

The following is a brief summary of the data collected during the first 10 months of the project.

Rationale and Vision

1. To investigate whether the use of specific technology improves students' literacy skills—specifically, writing.
2. To improve student achievement for all students, especially those with special needs:
Apple® technology supports equitable and accessible interdisciplinary projects inclusive of students with special needs respectful of differentiated learning.
3. To build capacity for effective and accountable use of technology in improving teaching strategies and achievement for all students:
Apple® technology provides coaching 'at the elbow.'

Overview of Project

During the 2007–2008 school year, four classrooms at three schools within the Superior North Catholic District school board investigated whether the use of Apple® technology improved literacy achievement for all students. The following are observations and anecdotal comments observed during the last 10 months.

The teachers involved in the project had varying degrees of technology experience and skills, as outlined in a self-reflective survey that began the CODE project. Few used technology as part of teaching practice.



The Apple® technology project provided professional learning whereby both the educators involved in the project and their students had professional learning in their classrooms.

By the end of the project, all the teachers involved made significant gains in terms of how they integrated technology into their respective curricula.

All teachers moved from the Entry stage, where teachers use technology to deliver curriculum content to students, to the beginnings of the Adaptation stage.

This is a significant accomplishment in just 10 months. Significant momentum was observed over the course of one year.

Greatest Benefits

The greatest benefit, evident in every classroom, has been the high level of student engagement on each task involving the use of Apple® technology.

According to administrators and teachers involved at the respective schools, there is positive recognition of the level of student engagement in the writing process.

Students using the Macbooks remain on task and focus on editing and revising work, especially in collaborative peer grouping.

Pedagogical Changes

Another benefit of this project has been its positive impact on pedagogy. Teachers involved in the project have been able to effectively teach cross-curricular projects. Instruction on the use of Apple's® iLife suite of tools enabled teachers to model website construction, movie editing, and DVD and music creation to benefit their students' achievement.

The use of applications such as iChat allowed professionals to connect and share ideas in order to build lateral capacity. Classrooms used iChat to share presentations with each other and to bridge geographical barriers. For example, students communicated in real time with scientists at Science North—experts from outside of the community.

Multiple Intelligences

As an extension of students' ability to use various modal responses to demonstrate learning, there appears to be an increase in student self-esteem and a positive approach to technology.

Teachers noted that students who had previously been challenged to feel included in the classroom became more willing to participate in classroom discussions and group-oriented activities. Visual-spatial and bodily-kinesthetic learners had outlets to express themselves clearly and openly.

Through the ease of use of several of the iLife applications, all students' learning styles were addressed. One teacher noted, "... an identified student who has IEP modifications was included into a number of class activities/projects that would have been impossible otherwise."

The Apple® Technology Project has made a difference in the ways that students respond to text and to learning.

Conclusion

As a result of the project, significant student achievement and teacher capacity building are anticipated.

All participants have enjoyed using the technology and software and have found it beneficial to their learning and practice. When students were polled as to the impact of the laptop project, more than 93% responded that they felt it did assist them. Students who were polled wrote that the technology helped them with three main areas in writing: editing, clarity, and length of written response.

The addition of the multimedia capability of the technology, coupled with its ease of use, added a uniqueness to the project that was quite unexpected for both teachers and students.

The project is successful in numerous ways but most notably in terms of how it assisted students to communicate in writing and to clarify ideas. Students are being engaged in higher-order thinking as a result. ●

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