

CODE CHRONICLES LES CHRONIQUES DU CODE

ISSUE NO. 4
MAY 2009



WELCOME TO ISSUE FOUR! BIENVENUE À LA QUATRIÈME ÉDITION!
Read on and enjoy the contributions of our many writers from school districts across Ontario. Prenez connaissance des contributions de vos collègues de par tous les conseils scolaires de l'Ontario. Bonne Lecture!

CONTRIBUTORS

Thanks to the following boards for participating in this issue

Collectif des administrations scolaires catholiques du Nord de l'Ontario (CASCNO)
Dufferin-Peel Catholic District School Board
Durham Catholic District School Board
Huron Superior Catholic District School Board
Northern School Resource Alliance (NSRA)
Peel District School Board
Superior North Catholic District School Board

PowerPoint Presentations

Building Capacity Project

The Brant Haldimand Norfolk Catholic District School Board staff have created a PowerPoint presentation which incorporates interviews with students, teachers, and administrators involved with their CODE project. These interviews, presented in the form of video clips, illustrate how the project has affected the learning and teaching of those who were part of this project over the past three years. For more information, please contact:

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Professional Learning Teams Project

The Superior-Greenstone District School Board staff have created a PowerPoint presentation highlighting their CODE project, which involved establishing professional learning teams in their schools with a focus on literacy and numeracy. For more information, please contact:

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Letter from the Editors

Brian Finnigan, Nancy Tully-Peever

NANCY AND I are most pleased to present to you our fourth and final edition of CODE Chronicles. In this edition, you will find articles representing excellent work from across the province. We want to give a special thank you to all the contributing school districts featured in this edition for their patience in waiting for our fourth edition to be published. We are called upon as educators to do our utmost to ensure that a quality education is provided to all students in Ontario, within the context of their own individual unique skills and abilities. As you read through these articles, you will see that your fellow professionals from across the province are using creativity, skill, available resources, and ingenuity to do amazing things to meet those diverse needs!

The real strength of our capacity to meet such wide ranging needs lies, at least in part, in our collective willingness to learn from one another and to share best practices in a context that goes well beyond the borders of our own school district. Perhaps too often we look to 'afar' to find solutions to our challenges; maybe there are real solutions much closer at hand. We continue to urge you to mobilize the knowledge you

have learned, share it with one another, and make your personal investment reap returns you never would have previously imagined.

We want to give a special thank you to Frank Kelly, our Executive Director at CODE, and to Debbie Hazlewood and Carolyn McNamara from Curriculum Services Canada, for their outstanding support throughout the year in helping us publish our four editions of CODE Chronicles. We also want to give thanks to our committee co-chairs, Michelle Forge and John Fauteux, who are our guest editors in this edition, for their leadership and support throughout the CODE project. Please feel free to respond to us, or to any author of an article in this edition, to help make our collective investment in *Education for All* a continuing success story for all the students in Ontario.

Respectfully,

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Letter To the Editors:

John Fauteux and Michelle Forge
Co-Chairs, CODE Special Education Leadership Team

AS CO-CHAIRS of the CODE Special Education Project, we wish to express our gratitude to all who have brought about significant change in student achievement and staff capacity in special education in Ontario. CODE is committed to provide ongoing support to Boards for their CODE

Continued on Page 2



CONTENTS

CONSCIENCE PHONOLOGIQUE (COLLECTIF DES ADMINISTRATIONS SCOLAIRES CATHOLIQUES DU NORD DE L'ONTARIO - CASCNO) 2

NOURISHING, SUSTAINING AND GROWING CATHOLIC LEARNING COMMUNITIES: CONTINUOUS IMPROVEMENT FOR ALL (DUFFERIN-PEEL CATHOLIC DSB) 2

WORKING AND LEARNING TOGETHER (DURHAM CATHOLIC DSB) 4

RECURTURING FOR CHANGE (HURON SUPERIOR CATHOLIC DSB) 5

THE CODE CHRONICLE OF THE NORTHWEST SCHOOL AUTHORITIES (NORTHERN SCHOOL RESOURCE ALLIANCE - NSRA) 5

CODE SPECIAL EDUCATION PROJECT 2005-2008; IMPLEMENTATION OF EDUCATION FOR ALL, A SCHOOLS ATTUNED APPROACH (PEEL DSB) 6

APPLE ASSISTIVE TECHNOLOGY PROJECT (SUPERIOR NORTH CATHOLIC DSB) 8

« Letter to the Editors, continued

Special Education Projects. It is essential to mobilize the knowledge of lessons learned by Boards over the past four years.

Boards were asked to share their learnings from their projects through a number of venues. Some Boards chose to write articles for the CODE Chronicles. Four editions of the Chronicles have been released and are available on the CODE website. We are grateful for the efforts of our editors Nancy Tully Peever and Brian Finnigan. Over thirty Boards that shared their projects through workshops and interactive displays at the CODE Special Education Leadership Summit held last November.

With the assistance of Curriculum Services Canada, CODE has also prepared a DVD and accompanying study guide for Board use. The DVD highlights the various components of the summit and is designed to promote further dialogue and reflection. The Guide will encourage conversation around the key elements of: student achievement, leadership, the whole child, change process, teacher capacity relationships/communication/community, and school and system organization.

In the fall, a series of four webinars were launched to support leadership in special education throughout the province. Copies of these webinars are also available on our website.

In addition, CODE provided funding to Boards to support their professional development day activities related to special education. We are very proud of the work that has been completed this year to continue the momentum that was generated by all involved in the CODE Special Education Project.

CODE along with ten school boards has begun collaboration with Andy Hargreaves and Henry Braun from Boston College to complete research. The project entitled Essential for Some, Good for All that has the following goals.

- To understand and articulate the model and theory of action undergirding the CODE project, so they can be communicated clearly to project participants and diffused more effectively to other jurisdictions.
- To gather perceptions of the projects' strength and limitations, impact and effectiveness from samples of individuals and focus groups who participate in the project and whose districts demonstrate varied degrees of effectiveness.
- To connect these findings to an analysis of the existing evidence—base of measured student achievement in the selected districts, in order to determine associations between variations in the intervention model and the conditions of implementation on the one hand, and student achievement scores on the other.
- To share the interim and final results with participating Boards in a manner that supports Board improvement planning.

During the past four years the CODE Special Education Leadership Team has had the privilege of working with Ministry of Education staff and special education leaders from across the province. The results of that work have been exemplary. CODE Projects have indicated that the achievement of students with special needs has improved and that leadership and teacher capacity have grown. These successes are due in large measure to the work of all school board staff involved in the project and the leadership provided by Supervisory Officers with responsibility for Special Education.

As Co-Chairs we acknowledge and commend the significant contribution made by the CODE Expert Leadership Team: Liliane Laforest, Joan Fullerton, Ruth Swan, Brian Finnigan, Nancy Tully-Peever and Erica van Roosmalen.

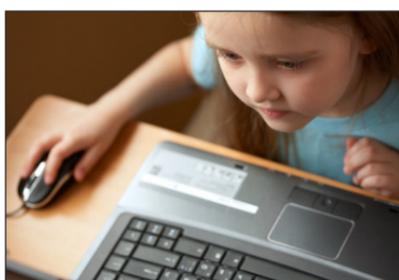
We appreciate the efforts of all who have been involved in the project and thank the Ontario Ministry of Education for funding this initiative. We also wish to extend our gratitude and congratulations to those who work so diligently on behalf of students with special education needs.

It is our intention to continue to provide you with regular updates of exciting developments that are occurring in our districts and schools. We invite you to continue to share your stories with us about significant achievements of students and staff.

John Fauteux and Michelle Forge
Co-Chairs, CODE Special Education Leadership Team

Conscience Phonologique

Marc Dionne, direction de l'éducation
Diane Lozier, agente de supervision de l'enfance en difficulté
Collectif des administrations scolaires catholiques du Nord de l'Ontario (CASCNO)



Les administrations scolaires comprenant six écoles de six communautés éloignées (Moosonee, Dubreuilville, Gogama, Hornepayne, Red Lake, Foleyet) se sont données comme mandat de cibler un projet répondant aux besoins de ses élèves tout en particulier ceux en difficulté. Nous devons également considérer que la plupart de nos écoles offrent des cours multiples, et ce, dès la maternelle. Comme tous les conseils scolaires, notre but ultime est

de s'assurer que tous les élèves réussissent. Comment y arriver tout en incluant toutes les initiatives en littératie tout en répondant au rapport *L'Éducation pour tous*?

L'organisation des administrations solaires fait en sorte qu'il y a peu de ressources humaines disponibles. Pour arriver à nos fins, nous devons recourir entre autres à d'autres organismes en province. C'est alors que nous avons fait appel à l'expertise du conseil CEPEO en nous basant sur un projet qui avait fait ses preuves auprès de leurs élèves, soit celui en conscience phonologique basée sur de la recherche et de l'évaluation des élèves.

Notre défi était de le tailler à notre réalité tout en considérant le personnel, les distances, le nombre d'élèves, la répartition des classes.

Nous avons donc privilégié l'acquisition des préalables pour l'apprentissage de tous les domaines en littératie, et ce, à travers le jeu, premier langage de l'enfant. Le projet misait en cette troisième année, sur la conscience phonologique en 1re année pour créer le pont entre le cycle préparatoire et la première année tout en s'assurant que les interventions pour le cycle préparatoire étaient maintenues. La mise en œuvre de cette démarche a été amorcée durant les deux années précédentes au cycle préparatoire. Nous voulions donc nous assurer que les élèves qui éprouvaient encore de la difficulté avec le langage oral puissent parfaire leurs connaissances et ainsi éliminer, le plus possible, les retards potentiels.

La formation initiale pour les enseignantes et les enseignants de la première année a donc été offerte. Le projet réussit à incorporer l'enseignement explicite à chaque étape pour consolider les concepts. Ces mêmes enseignants ont reçu les élèves ayant suivi la démarche pendant un ou deux ans selon le cas au cycle préparatoire. Ces personnes ont pu témoigner des résultats de leurs élèves au début de l'année scolaire 2007 puisque dans les écoles ciblées les élèves avaient suivi la démarche systémique de l'enseignement de la conscience phonologique au cycle préparatoire. En effet, les enfants étaient mieux préparés à transférer de l'oral à l'écrit. Par la suite, les participants ont reçu un appui taillé à leurs besoins. C'est en quelque sorte la clé du succès : le suivi. Quelle que soit la forme, il est important d'avoir, en effet, un plan de suivi et d'accompagnement. Le matériel de soutien, très simple, peu dispendieux, sinon que des livres retrouvés dans la littérature jeunesse, a été remis aux participants afin qu'ils puissent débiter à utiliser la démarche proposée.

Notre plus grand succès auprès du personnel enseignant fut de former une enseignante qui maintenant sert de modèle pour les enseignantes et les enseignants du cycle préparatoire. Elle a également suivi la formation pour les 1ère années ce qui lui donne le portrait global du projet. En fait, cette enseignante a reçu dans sa salle de classe, durant l'année scolaire 2007–2008 des enseignantes et des enseignants d'autres écoles afin de répondre à leurs questions et en modelant les différentes étapes de la conscience phonologique et en démontrant comment le tout s'intègre à la littératie. Elle a servi également de mentor indirectement auprès des collègues de son école en présentant brièvement les différentes étapes de la conscience phonologique lors de rencontre de communauté d'apprentissage professionnel (CAP) sans omettre sur une base individuelle. Par la suite, avec son aide, une trousse de formation a été montée afin de faciliter l'accompagnement du personnel ultérieurement. Ceci permettra aux administrations scolaires d'être autosuffisantes dans ce domaine c'est-à-dire qu'un des leurs peut former les nouveaux et même appuyer les gens en place.

Toutes les personnes à la direction, avec leurs enseignants et leurs enseignantes ont également suivi la session de formation initiale ce qui fait en sorte que l'on utilise le même langage. Ceci facilite l'appui ainsi que la supervision de ce projet. Plusieurs agents étaient également de la partie. À leur tour, ils ont pu expliquer aux conseils rattachés aux administrations scolaires en quoi consistait le projet.

Les élèves de jardin des écoles ciblées furent évalués deux fois durant l'année en cours. Après chaque session, l'enseignante titulaire ainsi que la personne à la direction accompagnée d'une consultante ont examiné les résultats des élèves. Ceci a permis de constater ce qui était acquis et ce qui restait à travailler de plus près. Également, les résultats donnaient les pistes à suivre afin de ne pas sauter des étapes dans la démarche proposée. L'an prochain, les écoles seront en mesure d'utiliser le matériel proposé afin d'évaluer les élèves pour ensuite prendre les décisions appropriées concernant les besoins de ces derniers.

Un de nos objectifs était également d'engager les parents dans ce processus. Dans un premier temps, lors d'une rencontre de parents en soirée, l'enseignante leur proposait des pistes de jeux possibles à faire à la maison pour faciliter l'acquisition de la langue. Dans une école, on a remis aux parents une brochure présentant différentes activités langagières visant à appuyer ce qui est fait à l'école. Dans un deuxième temps, on a pu utiliser les résultats des élèves avec les parents afin de conscientiser le bienfait des activités faites à la maison et ainsi contribuer au succès de la réussite de leurs enfants.

La communication orale est la base en littératie. En solidifiant cette base, on maximise les chances de réussite du jeune apprenant. Ce projet se veut une étape importante dans l'acquisition de la langue française en fournissant une chance égale à tous et chacun et en fournissant pour certains l'appui nécessaire de surplus. ●

✉ Comments about this article? Email dianel@lozier.anikast.ca

Nourishing, Sustaining and Growing Catholic Learning Communities: Continuous Improvement for All

Sheila McWatters, Superintendent of Special Education and Support Services
Micki Clemens, Author
Dufferin-Peel Catholic District School Board

The principles of *Education for All* continue to be the deep and intentional focus within the Dufferin-Peel Catholic District School Board. The image of cultivation conveyed through the phrase "digging deeper" has become the defining concept for further discussion, planning, capacity building, assessment, and reflection as we move forward with improved practice in our schools ensuring that our vision, "Each one called by name (Isaiah, 43:1)..., to be nourished, to be sustained, to grow, to the fullest extent of his/her gifts and abilities" becomes a reality for all of our students.

The Dufferin-Peel Catholic DSB participated in the CODE Project (2005–2008) with a focus on improving assessment and instruction for K–8 learners and especially for students supported by special education programs and support services. Our project included work with classroom and special education teachers, as well as support services personnel, in the areas of literacy and mathematical literacy, where the importance of assessment to inform and guide instructional practices was a key principle.

« Nourishing, Sustaining, and Growing, continued

The Dufferin-Peel Catholic DSB is a school board of 123 elementary schools and 23 secondary schools. Students with special education needs, supported through program and support services, represent approximately 11% of the total student population of 88,000, and this percentage has been consistent over the past three years.

The CODE project was embedded within the philosophical framework of the Dufferin-Peel Catholic District School Board's *Board Plan to Improve Student Achievement, 2006–2009*, (BPISA), which is founded on *Breakthrough*, the work of Fullan, Hill, and Crévola, and with the Seven Belief Statements inherent in the *Education for All* document. In addition, the CODE project and associated funding were woven together with both board and The Literacy and Numeracy Secretariat supports.

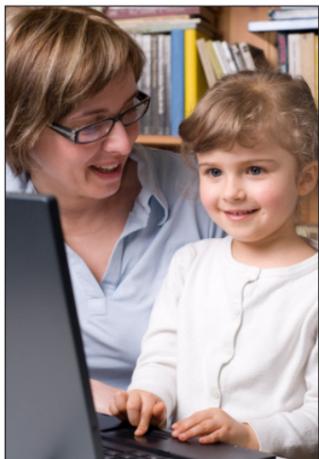
Approach

The Program and Special Education and Support Services Departments focused on all schools through differentiated support. This approach was based on identified needs, which were arrived at through an analysis of available evidence of student learning and achievement. As the CODE plan was reviewed and informed by system evidence in Year 1, the focus moved from large, system awareness of the foundational principles of *Education for All*, to more focused, precise evidence of practice for Years 2 and 3. System initiatives were identified and organized around the following key components: professional learning, instructional leadership, classroom teaching strategies, resources; assessment, school/system organization, and communication.

System Initiatives and Results

a) PROFESSIONAL LEARNING

For the duration of the CODE Project, there was a planned and sequenced system strategy for improving literacy and mathematical literacy. This strategy addressed enhanced classroom practices and processes to ensure that assessment and instruction were increasingly precise and data-driven. All schools received in-service on the revised provincial curriculum documents for Kindergarten and Language. All SK teachers were in-serviced with the Kindergarten Assessment Portfolio. Primary teachers continued balanced literacy capacity building, while in Junior literacy there was a focus first on shared and guided reading strategies followed by writing strategies and assessment through teacher moderation. 'Good for all, essential for some' became the lens for shaping shared evidence-based practice and professional learning across the system, while a strategy for differentiated intensive support guided the local-level teaching-learning experiences.



In mathematics, a plan for professional learning utilizing PRIME (Professional Resources for Instructors in Mathematics Education – Pearson) was launched for a team of educators. In 2006–2007, resource staff from every school received in-service. This was supplemented with a concentrated focus in one intensive support school, where all teachers and support staff were trained on PRIME. Summer institutes enabled greater capacity building. With the "digging deeper" focus in Year 3, a group of intensive support math schools established learning teams: SERT/SERC teachers paired with classroom teachers to investigate how to obtain more personalized data on students' numeracy skills, how the PRIME diagnostic assessment linked to instructional strategies and universal lesson design in the classroom, and how this information could be communicated more

precisely to parents and classroom teachers. This inquiry process allowed for further exploration of the use of PRIME in conjunction with the Nelson Mathematics core resource to differentiate math instruction in the classroom based on student evidence and practice. The following reflection illustrates educator feedback:

"The PRIME in-service sessions were a fantastic opportunity to work collaboratively with our fellow colleagues in a proactive manner that has and will continue to benefit all students in our school. The in-service has been PRICELESS! All teachers need to hear the inclusive message and be trained to open up their curriculum to include all students in their classroom, so that they can achieve academically, socially, and emotionally."

–Classroom teacher

Next Steps: While there has been considerable focus and support for professional learning communities/teams within the board, continued inquiry that deepens the quality and nature of the professional exchanges between teachers as they relate to the key messages of Education For All is an emerging need. This pursuit will involve expanded understanding and shared ownership for the collaborative work of teaching students with special learning needs. For example, our learning with PRIME inquiry speaks to the power of and the essential need for classroom and resource teacher collaboration in the area of mathematics instructional practice.

Efforts have been made to build time for teacher collaboration within schools and, as the dialogue goes deeper, the inclusion of special education teachers and support services staff in this dialogue with classroom teachers will continue to be an intentional focus. The anticipated release of the revised Learning for All: Kindergarten to Grade 12 will allow for review and deepened professional learning on how the principles in this document are actualized within schools.

b) INSTRUCTIONAL LEADERSHIP

Throughout this three-year period, Dufferin-Peel continued to enable and strengthen distributive leadership supporting differentiated professional learning opportunities at system and local levels.

Administrators had access to a menu of professional development opportunities to reinforce the instructional leadership capacity necessary to engage actively in school improvement processes. Leading and Learning leadership networks focused on instructional practice, teacher moderation, and on data analysis and interpretation within the schools' teaching and learning cycles for improvement.

Explicit integration of supports for students with diverse learning needs within program implementation included appropriate experiential learning; intervention supports and/or strategies for differentiated instruction; assistive and adaptive technology and other learning materials aligned to literacy, mathematics, and school improvement planning; and the systematic support of data literacy through the MISA initiative. This required intentional planning and focused exchange and reflection at multiple leadership levels: supervisory officer, administration, consultant, and central and school staff.

Next Steps: The outcomes of the work on instructional leadership have been encouraging and will be strengthened. This effort will involve continued attention to the urgency for change on behalf of students with diverse needs. In order to improve the achievement of these students, we need to continue to involve leaders in ongoing capacity building in such areas as assessment for learning, of learning, and as learning; appropriate assessment tools for all students, including assistive technology; differentiated instruction for literacy and math; appropriate and varied resources for all students, including boys and English Language Learners; and comprehensive balanced literacy programs characterized by varied and precise instructional strategies. This aim, coupled with the reciprocal support for staff, is nested in our response to student learning needs.

c) CLASSROOM TEACHING STRATEGIES

As part of the qualitative data gathering and monitoring within the CODE project, teachers at each of four designated schools were involved in professional conversations following the learning of 10 students receiving special education supports and services. Teachers were invited to dialogue and explore the instructional and assessment strategies that they were using and to reflect on the effectiveness of those strategies and classroom practice in improving the achievement of their students over time.

Observations indicated that when some classroom teachers were invited to talk about instructional practices, they tended to focus on:

- the resources they were using; e.g., levelled books, high-interest/low-vocabulary texts, teacher-created materials; modified assessments and tests;
- the organizational tools they supplied to the students; e.g., use of planners, time-tables, graphic organizers, step-by-step procedures;
- the use of software; e.g., Smart Ideas, Inspiration, Kurzweil; and
- their focus areas of study; e.g., "I'm doing guided reading" or "balanced literacy" or "I'm focusing on comprehension or word study."

Special education resource teachers tended to offer specific and robust descriptions of the evidence of student learning and the strategies used with the students for whom they were responsible. Classroom teachers tended to talk about their students with special learning needs more in terms of their personal and family histories, their physical and cognitive abilities, and the management of their behaviours rather than the nature of the precise and specific pedagogical practices that they were using to help foster engagement and to promote the growth of their achievement.

Next Steps: Our next steps will be to establish stronger connections between the interpretation of student assessment results, the clear identification of the learning needs, and the precise instructional strategies that the teachers are using to engage and foster improvement. Monitoring student progress is key to improvement planning, with the provision of timely support and interventions as part of the teaching/learning cycle. Precise evidence of student work over defined teaching learning cycles through the use of teacher moderation for these students will guide the professional exchange.

d) RESOURCES

There has been considerable capacity building with the provision of PRIME resources and the extensive in-service for teachers and SERTs on mathematics across the board. As well, the implementation of other diagnostic and formative assessment tools, such as ABLLS and Brigance for SERTs, SERCs (Special Education Resource Classroom Teachers), and itinerant ASD team teachers, has strengthened assessment practice. Substantial literacy and numeracy resources have been provided to all schools for use by classroom teachers and resource staff. Provision of instructional and assessment resources for diverse learners and job-embedded supports for teachers on the use of these resources need to be enriched and expanded.

Next Steps: A survey of educational assessments used by special education and classroom teachers was conducted in Year 2 of the CODE project, and this information has helped to guide our system-wide use of assessments that inform IEP development. Many schools have formed study groups with professional texts that support their informed use of new student resources. The provision of tools for learning, including assistive technology for students with learning needs, continues to be a strong focus as we work to expand our technology capacity and make these supports universally accessible.

e) ASSESSMENT

Dufferin-Peel Catholic DSB advanced the data literacy skills of its staff to promote a culture of evidence-based responses to student needs. The central collection of student data has reinforced the vision of assessment for learning.

Key result areas include:

- using assessment and evaluation data to implement school-wide approaches to literacy and mathematics instruction (e.g., Junior teachers collaboratively assessed and analyzed CASI results and planned teaching to address comprehension skills with non-fiction texts; the practice of using data tracking walls in the Primary division increased across the board, accompanied by more precise inclusion of strategies for all student learners);
- analyzing and interpreting assessment results within the context of the school's professional learning community, and then setting goals and developing and implementing school action plans that involve rich assessment activities and exemplars of quality student work (e.g., use of student work and assessment results to inform the cycles of improvement);
- supporting teachers through the provision of staff development sessions focused on assessment tools that determine student learning needs and inform IEP development and reporting of progress;
- expanding the awareness and implementation of the Continuous Cycle of Assessment for Learning (EFA, p. 20) linked to both the Ministry of Education/Ontario Psychological Association Project and the board assessment and evaluation directions (e.g., being

« Nourishing, Sustaining, and Growing, continued

explicit about the use of the Continuous Cycle of Assessment for Learning so that all educators will have the same shared reference point);

- reviewing and refining the critical role of the in-school and out-of-school team as part of the continuous cycle of assessment, which includes both Special Education and Support Services staff.

Next Steps: Work with the classroom assessments and tracking of student results has yielded the realization that we need to go deeper. For example, overall scores for CASI, gathered in data cycles, are not sufficiently sensitive to individual student progress on discrete expectations which are focused on throughout the teaching learning pathway. This specificity is particularly critical for understanding growth of diverse learners. Recording and tracking overall aggregate scores over these learning cycles masks important data related to individual students' growth or gaps. Our local and central data gathering processes have been refined to respond to more specific data gathering as needed and, hence, more precise decisions on planned interventions and support.

f) SCHOOL/SYSTEM ORGANIZATION

Central to the success of the organizational structure are learning team processes incorporated into all capacity-building initiatives. Dufferin-Peel focused on Ministry initiatives and board directions responding to system needs through guidance, support, and direction in matters of student learning and achievement. Schools were engaged in innovation through research activities and inquiry projects to enhance the learning and achievement of all students, e.g., teacher moderation, the CASI project, (Junior); and the Assessment of Basic Language and Learning Skills Project (ABLSS). Schools as communities of learners engaged in professional learning networks within focused school improvement planning. Differentiated supports, particularly with intensive support schools, targeted literacy and mathematical literacy, thus allowing us to provide more personalized and precise intervention.

Next Steps: The board is continuing to refine the critical role of the school team as part of the teaching learning assessment cycle, which includes Special Education and Support Services. Resource guides on the continuum of the team process for schools and teachers are currently under development, embedded within the School Effectiveness Framework initiative. The system focus on building networked communities of learning with a focus on all learners will deepen our work in student achievement and continue to narrow the gap.

g) COMMUNICATION

Dufferin-Peel enhanced collaborative relationships between parents, community, and educators through ongoing communication with the system and our community partnerships, including the Special Education Advisory Committee. Our messaging, system practice, and supports for all learners are rooted in a vision of integrated practice with the Program/Special Education and Support Services Departments at a system level aligned with Family of School and school-based practice.

Next Steps: Our Special Education and Support Services website, with integrated links to Ministry and board resources, is undergoing refinement and, when completed, will enhance the communication and resource support both to the system and to the greater community.

Future Directions and Next Steps

The CODE Special Education Project in the Dufferin-Peel Catholic DSB has supported schools as they work to address the principles of Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6 (2005) and to assist schools to develop capacity-building projects to improve teachers' professional practice and to raise achievement for students with diverse learning needs.

DPCDSB affirms its support for greater integration between and amongst educators and support staff teaching diverse learners and will continue to focus on improving classroom practices and adopting processes for ensuring that assessment and instruction become increasingly precise and data-driven. Moving forward this year, the Board Plan to Improve Student Achievement: 2006–2009 authentically integrates key Special Education and Support Services and Program initiatives aligned to Dufferin-Peel's commitment to our Catholic faith, literacy, mathematical literacy, student success, and school improvement planning.



These initiatives are all offered within the context of Dufferin-Peel's Safe, Caring, Healthy, and Inclusive environments, reflecting the specific strategic goals outlined by the Ministry of Education: Reach Every Student: Energizing Ontario Education (Winter 2008). ●

Comments about this article? Email sheila.mcwaters@dpcdsb.org or micki.Clemens@dpcdsb.org

Working and Learning Together

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Mariah O'Reilly, Author, Consultant for Elementary Education
Durham Catholic District School Board

Background

In Durham Catholic District School Board, many innovative CODE-sponsored Action Research Projects occurred in 2006. Schools involved in these projects noted increased teacher capacity as well as sustained gains in student learning. Unfortunately, projects were limited to just some schools, and several schools did not have the opportunity to

engage in in-depth, focused efforts to improve student learning based on Education for All and Differentiated Instruction.

The CODE project provided an opportunity to address gaps and inform Junior teachers and Program Support Teachers regarding best practices described in the Guides to Effective Instruction and Education for All. Classroom-based diagnostic assessments had been introduced in the Junior and Intermediate grades, and program support teachers articulated a need to understand these tools and the implications of their results.



There was also a desire for collaboration between the Program Services and Student Services Departments at the system level in order to best serve all students. The need for vertical alignment between schools and family of schools, within schools and at system level, was evident. Best practices from the CODE project schools, as well as lessons learned from schools implementing The Critical Learning Instructional Pathway, would be foundational in this initiative.

Project

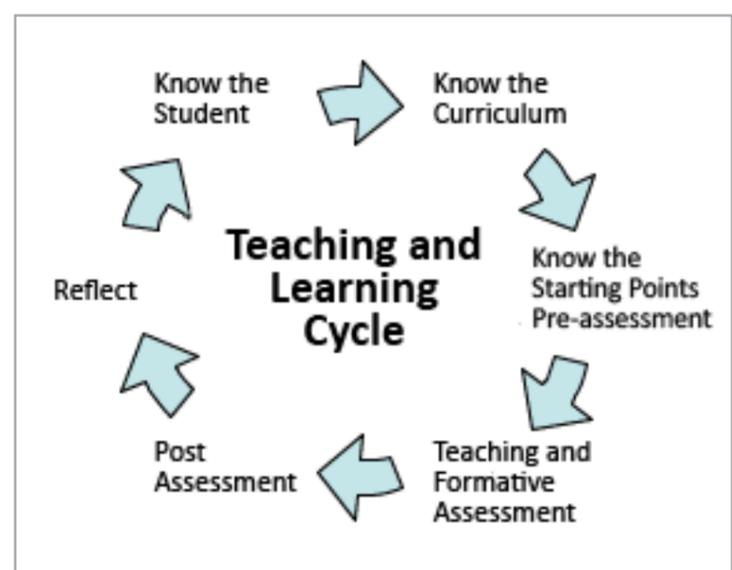
On October 7, 2007, this initiative began with a Professional Activity Day focused on building system capacity around Education for All. Teachers and support staff from both the elementary and secondary panels came together to hear Cindy Strickland deliver a foundational message regarding differentiated instruction. The day provided an inspirational jumping off point for the CODE project that would follow. This project brought together school teams of junior teachers as well as program support teachers. Approximately 220 teachers were involved in this initiative.

Guiding Principles

- Building professional learning communities
- Teacher inquiry
- Job-embedded learning
- Use of student data to inform teacher practice

Key Concepts

- Know the student – student profiles
- Know the curriculum
- Know the starting points – diagnostic data
- Implement effective teaching practices – exploring Education For All and the Guides to Effective Instruction (4–6)
- The teaching learning cycle would be the process through which these concepts were investigated.

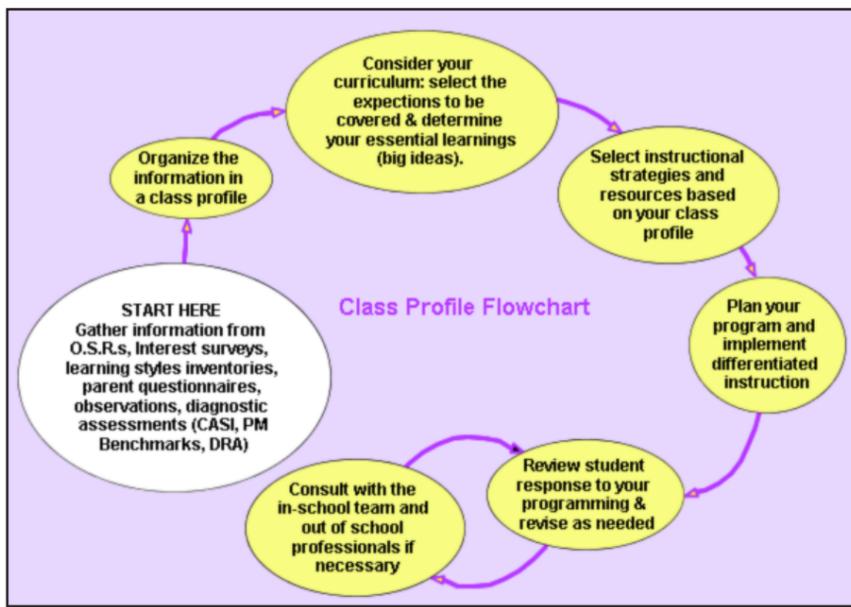


Our Journey

Each school assembled a team comprised of Junior teachers, program support teachers, and administrators. School teams met with other teams in the Family of Schools' structure to share and network. Teams examined diagnostic assessments, delved into curriculum expectations, explored best practices in the Guides to Effective Instruction and Education for All, and choose an area of focus. Some of the areas of focus were:

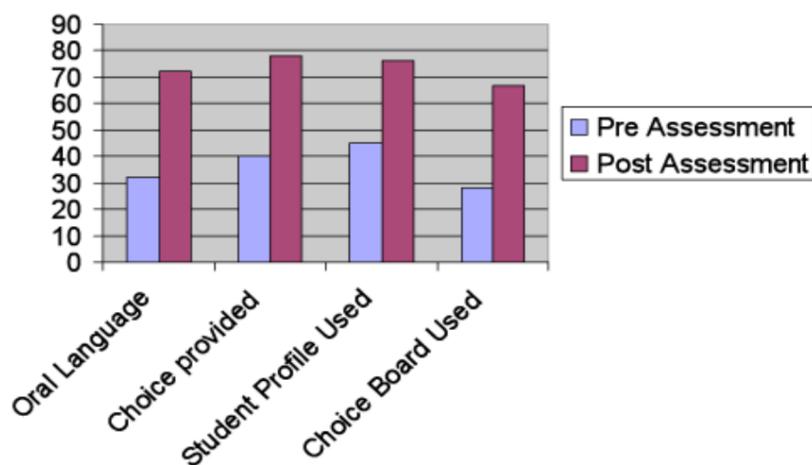
- Building Understanding of Differentiated Instruction: teachers deepened their understanding of differentiated instruction and identified powerful strategies for differentiating instruction; teachers planned and implemented one or two strategies; teachers met and discussed progress based on student work.
- Exploring Class Profiles: teachers developed or extended learning/class profiles; teachers focused on how these profiles would be used to plan for instruction.
- Discovering the Importance of Oral Communication: teachers used oral language and accountable talk to teach and assess student's knowledge of the curriculum; teachers collaboratively planned, implemented, and reflected on lessons.
- Creating a Multiple Intelligence Choice Board and Rubric: school teams designed a task, created an MI choice board and rubric, and implemented this activity; teacher teams examined student work based on the rubric.

« Working and Learning Together, continued



Evidence of Success

- Increased collaboration among program support teachers and junior teachers
- Increased support by program support teachers of research-based strategies
- Alignment of knowledge and practice between classroom teacher and program support teacher
- Clear evidence that the Ontario curriculum is forming the basis of instruction
- Continuous improvement in student achievement, as evident in CASI data
- Consistent implementation of high-yield strategies from Education For All and Guides to Effective Instruction
- Gains noted in teacher capacity in the areas of oral language, providing students choice in both the process and the product of learning, the use of class profiles, and the implementation of Choice Boards
- Continued collaboration between Program Services and Student Services Departments
- Increased principals' capacity as instructional leaders



Conclusion

A key component to the success of this project was the team approach to improved student learning. Professional learning communities focused on the success of all students by collaboratively navigating the data, investigating curriculum expectations, exploring best practices, and using assessment to drive instruction. The teams reflected and revised as necessary.

As a Catholic learning community, our overarching theme was the dignity and worth of all persons. This lens through which we approached our work truly guided us to keep each child's needs and successes in the forefront.

Future Directions

- Expand the initiative to all teachers in Durham Catholic District School Board
- Embed the spirit and principles of Education for All in the Critical Learning Instructional Pathway
- Continue to establish collaborative practices between Program Services and Student Services
- Move toward more consistency in the use of best practices system-wide
- Ensure all schools are actively using student learning styles and class profiles as part of universal design for learning

Comments about this article? Email anne.O'Brien@dcdsb.ca or mariah.O'Reilly@dcdsb.ca

Re-Culturing for Change

Maria Esposito, Superintendent of School Effectiveness
Val Nott, Author
Huron Superior Catholic District School Board

The project was designed to address universal design, differentiated instruction, the use of assistive technology, assessment for learning, and the development of literacy. A systematic plan was put into place which allowed for regular focused meetings of the staff on a regular basis.

Teachers embraced the opportunity to grow together as a Catholic professional learning community (CPLC). They worked towards a shared vision. Following the development of learning profiles, they were able to collaboratively determine the next steps for the target students. Constructive criticism was no longer perceived as negative, and teachers worked closely with one another giving input, providing encouragement and challenging each other. Schools began looking for their own solutions rather than waiting for someone on the outside to parachute in and give them the answer. Staffs recognized that they were a team of experts and very often had the solutions within their reach. Their confidence in dealing with challenging situations increased tremendously.

Regular CPLCs also allowed the teachers to make connections and to have the rich dialogue to determine which job-embedded practices and strategies would be used between meetings. Much time was spent dialoguing on what worked, what didn't work, and what improvements could be made. Time was spent reflecting on teaching practices and their impact on student achievement.

The Education for All document was an invaluable resource for the project, and the schools did an in-depth study of this report. They studied the belief statements and made them a part of everything they did at the school. The belief statements were posted in a prominent place so they were visible to the staff, students, and parents. The schools lived and breathed the belief statements.

Educational assistants, learning resource teachers, and student support workers were integral parts of the CPLC. They were given training and worked closely with the teachers and students.

What were the results of this project? There were so many positive ones, and these far outweighed the negative. Teachers began to use and understand differentiated instruction effectively. Student achievement improved for all students and not only the target students. Students were more fully engaged in the learning process and the target groups showed less frustration. Organizational skills improved and negative behaviours decreased. Students increased their understanding of learning styles, including the target students, and they were able to advocate for themselves by recognizing what they needed to do and what could be done to support their learning. They appreciated the variety of choices they were given to complete their work and the opportunities for engagement. They also liked the fact that they were not withdrawn from the classroom. Assistive technology became a very important tool in the classroom.

As one teacher commented while reflecting at the end of the project, "I saw myself as a good teacher before this project. I am amazed at how much I have grown as a professional, and as a result, my students have improved. I can honestly say that I am a much better teacher. Thank you for the opportunity to be part of this dynamic project."

In conclusion, this project allowed time for:

- Development of individual and classroom profiles
- Looking at students as our students rather than my students
- Reflective and professional dialogue at the school level
- Consolidation of many of the initiatives, with a focus on literacy
- Identification of our students who have the ability to achieve higher
- Development of regular Catholic professional learning communities (CPLCs)
- Tracking and monitoring of data of the target students
- Implementation of various job-embedded practices and strategies within the classroom, to benefit all students
- Increased knowledge of assistive technology and application software
- Increased professional development for both teachers and educational assistants
- Sharing of ideas and suggestions from one another
- Brainstorming to meet the challenges faced at a school level on a daily basis.
- Increased student awareness of their own learning styles
- Increased parental involvement in the learning process and understanding how they can better support their children at home
- Development of the foundations to allow for sustainability and capacity building

Comments about this article? Email mesposito@hscdsb.on.ca

The CODE Chronicle of the Northwest School Authorities

Fred Porter, Superintendent and CEO
Don Parsons, Author, Project Officer
Northern School Resource Alliance (NSRA)

The Northern School Resource Alliance is an educational consortium that supports isolated school boards, school authorities, principals, teachers, and community members in northwestern Ontario. The schools supported by the NSRA are isolated by distance, road and weather conditions. The member boards supported by CODE funding and the NSRA include the following:

- ATIKOKAN RCSSB, Atikokan, Ontario
- COLLINS DSA, Collins, Ontario
- CONNELL & PONSFORD DSA, Pickle Lake, Ontario
- CARAMAT DSA, Caramat, Ontario
- HORNEPAYNE RCSSB, Hornepayne, Ontario
- MINE CENTRE DSA, Mince Centre, Ontario
- NAKINA DSA, Nakina, Ontario
- NORTHERN DSA, Armstrong, Ontario
- RED LAKE RCSSB, Red Lake, Ontario
- UPSALA DSA, Upsala, Ontario

« The CODE Chronicle of the NSA, continued

The boards of the Northwest School Authorities are made up of one and sometimes two K–8 schools. Principals are often teachers as well as administrators and curriculum leaders. Teachers often teach multiple grades, with limited access to supports common to most teachers in the province.

The CODE project has had a profound impact on professional practice over the years. Instructional practice has improved. Gains have been made in student achievement. Teachers have access to current teaching and learning resources. Professional knowledge in areas key to student achievement continues to develop and progress, such as in oral language, Aboriginal learning styles, balanced literacy, differentiated instruction, universal design, assistive technology, and IEP writing.

In the first years of the project, one school was designated a demonstration school. The school received intensive support in implementing the evidence-based instructional strategies supported by *Education for All – The Expert Panel Report on Literacy and Numeracy Instruction for Students with Special Education Needs*. Conditional to this support was the agreement of all staff members to host, demonstrate, and share their professional experience with visiting teachers from the other isolated schools in the northwest. This facilitated the networking of teachers across the vast geographical expanse of northwestern Ontario.

Concurrent with support to teachers was a focus on developing a professional learning community of principals. Investing in the professional development of the principals was key to the implementation of strategies that supported improved student achievement for all students but especially those with special education needs. The principals continue to be key to consolidating successful practices within and across the isolated school boards of the northwest.

The project was facilitated through the collaborative efforts of the project officers of the Northern School Resource Alliance. The expertise of the project officers across many educational domains was integral to the success of the project.

In the consolidating year of the project, schools used funding to provide release time for in school teams to meet in PLC teams to:

- Analyze student achievement data
- Develop programming for students with special education needs
- Make data-based decisions to identify and employ evidence based program instruction and interventions

The table below outlines some of the ways CODE project funding has addressed achievement for all students:

Principles	Strategies	Key Elements Addressed
Use of Student Achievement Data	<ul style="list-style-type: none"> • Implementation of the Web Based Teaching Tool from JK–1 • DRA implemented up to Grade 6 • CASI in senior elementary grades • Assessment schedule K–8 to inform instruction and determine interventions • Data walls developed • Analysis tools developed and distributed • Use of Tinker Plots to analyze and disaggregate student achievement data 	<ul style="list-style-type: none"> • Professional learning • Instructional leadership • Assessment • School organization • Communication
Teacher Capacity Building	<ul style="list-style-type: none"> • Common resources provided to all schools on differentiated instruction • Demonstration school supported by project officers • Teachers from other isolated schools visit the demonstration school to see strategies in action. • Training on use of assistive technology linking with Thunder Bay Catholic DSB • On-site coaching on best practices for teaching literacy and numeracy skills • Regional conferences focusing on evidence-based instructional strategies • Inclusion of special education teachers in all literacy and numeracy training 	<ul style="list-style-type: none"> • Professional learning • Instructional leadership • Assessment • School organization • Communication
Alignment <ul style="list-style-type: none"> • School effectiveness • OPA Student Assessment project (i.e., implementing the use of WBTT) • Literacy and Numeracy Secretariat initiatives • Aboriginal education • Model projects for student behaviour • Character education and safe schools • Student success 	<ul style="list-style-type: none"> • Development of a principals' network • Regular teleconferences with the principals' network • Use of data walls to analyze student achievement • "I Know Who I Am" Aboriginal storytelling • Participation in Oral Language Assessment Project • Use of Wikispaces to connect isolated communities for ongoing collaboration 	<ul style="list-style-type: none"> • Professional learning • Instructional leadership • Assessment • School organization
Sustainability	<ul style="list-style-type: none"> • Web-Based Teaching Tool used in schools to identify early learning needs and interventions • Assessment schedule developed for JK–8 * • NTIP focus on best practices for literacy and numeracy instruction • Coaching school teams in use of data walls to improve student achievement • School Effectiveness Leader supports ongoing use of successful practices • Small school PLCs ... bringing staff from the smallest schools (i.e., one or two teachers) together for collaborative professional development • Nurturing relationships with regional school boards to access specialized training (e.g., assistive technology) • Use of Adobe Connect, Skype, and Wikispaces to maintain communication and progress • Collaboration with Student Success Leader and initiatives 	<ul style="list-style-type: none"> • Professional learning • Instructional leadership • Assessment • School organization • Communication

* For information about the NSRA's "Student Assessment Schedule: Informing Instruction & Determining Interventions" ("Flagged" or "At Risk" Learners - JK to Grade 8), please contact Don Parsons, Project Officer at the email address below.

Intervention Planning Guide (Sample)

Student	Instructional Reading Level	Reading Behaviours What can the student do?	Goal What do you want the student to do?	Instructional Strategies What will we do? Strategies must align with goal(s).	Indicators of Success What will success look like?	Timeline How long will this intervention be?

Student Reading Profile (Sample)

Student Name	
Teacher / Grade	
Date	
Data Current Running Record	
Observable Reading Behaviours What <u>can</u> the student do?	
Primary Reading Concerns What does the student need?	<i>(Examples: fluency, decoding, comprehension, motivation)</i> 1. 2.
Intervention Strategies What have I tried so far?	
Instructional Strategies What does the group (team) suggest?	

The key to the success of the CODE project for the member boards and school communities supported by the Northern School Resource Alliance has been collaboration. Schools isolated by distance and weather conditions have demonstrated that with support, they can develop professional learning communities that have a positive impact on the achievement of all students. Schools are confident that with the ongoing support, the accomplishments outlined in the article will continue to progress. The skills, strategies, and networking abilities developed over the last four years will have a lasting impact on the achievement of all students. ●



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CODE Special Education Project 2005–2008; Implementation of Education for All, A Schools Attuned® Approach

Debra Krutila, Superintendent

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Peel District School Board

Introduction

Since 2002, the Peel District School Board has been a licensed provider for *Schools Attuned® to All Kinds of Minds*, a professional development program for educators. Based in North Carolina, All Kinds of Minds is a not-for-profit institute that provides educators and parents with up-to-date information and strategies related to the neurosciences. The *Schools Attuned* program consists of a 35-hour course and 10 hours of follow-up sessions or online modules related to the neurodevelopmental framework created by developmental pediatrician Dr. Mel Levine.

The Schools Attuned® program aligns with universal design for learning, differentiated instruction, and the development of student profiles, all integral aspects of the *Education for All* expert panel report (2005). The content of the course is based on eight neurodevelopmental constructs along with their functions and components. The philosophy includes beliefs which support strengthening and leveraging students' strengths, enabling students to better understand their own learning, infusing students and parents with hope and optimism, and embracing diversity among learners. Several processes and tools to support effective instructional practices are taught during the program

For further information about the Schools Attuned® program, see: www.allkindsofminds.org.

« CODE Special Education Project 2005-2008, continued

Project Overview

Funds from the CODE Special Education Project 2005–2008 were used to provide the Schools Attuned® program to teams of administrators, classroom teachers, and in-school support staff in selected schools in Peel to support implementation of *Education for All*. Many professional staff (psychology, speech/language pathology), consultants, and coordinators have also participated in the Schools Attuned® program.

The following themes were common to each project:

- Teacher capacity building
- Development of professional learning communities
- Common framework for understanding learning
- Development of student and class profiles
- Use of Schools Attuned® and Instructional Intelligence approaches—tools and processes
- Impact of teachers' use of strategies to improve student learning
- Students' understanding of their own learning profiles
- Student use of strategies to strengthen strengths and support weaknesses
- Student and teacher use of metacognition and reflection to support student learning
- Parental engagement

The purpose of the CODE Special Education Project 2005–2008 was to determine the impact of the Schools Attuned® professional development program. Each yearly evaluation employed Level 4 (application of new knowledge and skills) and Level 5 (student learning) of Guskey's *Five Critical Levels of Professional Development Evaluation* model (Guskey, 2000). As seen in Table 1, a variety of data collection techniques were used over the three years.

Table 1: CODE Special Education Project Methodology over Three Years

Year 1: 2005–2006 Schools Attuned training for five elementary schools	
Teacher pre- and post-program surveys (n=28) Teacher and administrator interviews	Application of Schools Attuned approaches Implementation enablers and challenges
Year 2: 2006–2007 Schools Attuned training for five elementary schools	
Teacher post-program survey (n=17) Teacher tracking form (n=9) Student reading assessment (n=10)	Application of Schools Attuned approaches Pre- and post- use of instructional strategies Alphakids reading assessment
Year 3: 2007–2008 Application and impact of Schools Attuned in the 10 schools	
Teacher pre- and post-program surveys (n=20) Student baseline/follow-up interviews (n=250)	Application and impact of Schools Attuned Knowledge/understanding of own learning Use of strategies

Results

Table 2 presents the extent to which teachers reported using various Schools Attuned strategies in Year 1 (with all students in the class) and Year 3 (with individual students who struggled with learning). In Year 1, over a one-year time frame, teachers reported an increase in the frequency of using several Schools Attuned® strategies, particularly strategies involving the neurodevelopmental constructs and student profiles. In Year 3, over a six-month time frame, teachers reported an increase in the frequency of using various Schools Attuned® strategies with individual students who struggled with learning. Increased use was seen most among instructional strategies used to further strengthen student strengths and target student needs.

Table 2: Mean Survey Results For Year 1 and 3 - Extent to Which Teachers used Schools Attuned® Strategies In Their Teaching Practices

Survey Items	Year 1 Pre-Program Spring 2006 Mean (n=28)	Year 1 Post-Program Spring 2007 Mean (n=28)
With all students in my classroom...*		
I use ND terminology to describe observations of students.	1.96	3.39
I select/adapt accommodations and interventions for students based on an understanding of a ND framework.	2.36	3.50
I plan lessons in ways that have incorporated aspects of the ND framework.	2.64	3.43
I make changes to instructional decision making based on student profiles.	2.96	3.64
I use profiles of students in planning accommodations and strategies in teaching.	2.93	3.43
I am able to speak clearly with parents regarding their child's strengths and weaknesses.	3.57	3.89
I am confident in my ability to manage differences in student learning.	3.18	3.45
I plan lessons in ways that leverage student strengths.	3.46	3.68

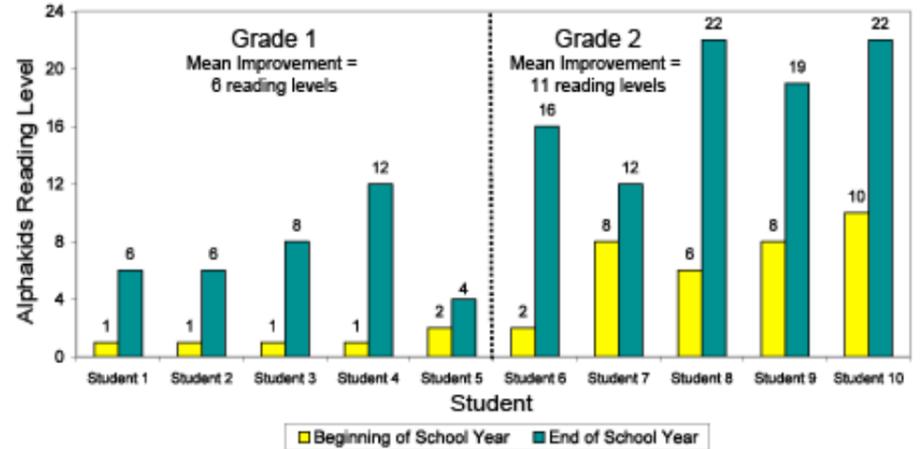
Survey Items	Year 3 Pre-Program Dec. 2007 Mean (n=20)	Year 3 Post-Program June 2008 Mean (n=20)
With individual students who struggle with learning, I use what I learned in Schools Attuned to...**		
differentiate instruction based on the student's strengths, needs and abilities.	3.05	3.30
provide specific opportunities for the student to strengthen his/her strengths.	2.95	3.10
implement strategies that target the student's needs.	3.25	3.40
seek input from the student when considering his/ her strengths, needs and affinities.	2.85	3.00
analyze the student's work samples based on the ND constructs.	2.10	2.25
consider how the ND demands of certain tasks or assignments may impact the student's performance.	2.90	2.95
monitor the impact of strategies I implement and modify them accordingly.	2.90	2.90
implement strategies that leverage the student's affinities.	2.85	2.85

* A four-point frequency-based Likert-scale was used (1–never, 2–rarely, 3–sometimes, 4–often).

** A four-point frequency-based Likert-scale was used (1–rarely, 2–sometimes, 3–often, 4–almost always).

Figure 1 presents the Alphakids reading assessment levels achieved by 10 target students in Year 2 of the project. It can be seen that every student in Grade 1 and Grade 2 improved their reading level throughout the school year. On average, Grade 1 students improved by six reading levels, and Grade 2 students improved by 11 reading levels.

Figure 1: Alphakids Reading Assessment Results for Year 2



Note: Possible reading levels range from 1–24. Higher scores indicate more advanced reading levels.

Table 3 presents the extent to which teachers thought Schools Attuned® had an impact on their teaching practices and their students' learning over a six-month time frame, in Year 3. It can be seen that teachers reported an increase in the impact of *Schools Attuned* on their teaching practices, particularly in the area of understanding how students learn. Similarly, teachers reported an increase in the extent to which Schools Attuned® had an impact on their students' learning, particularly in the areas of understanding their own learning, advocating for their needs, and managing their learning difficulties.

Table 3: Summary of Survey Results for Year 3 – Impact of Schools Attuned® on Teaching Practices and Student Learning

Survey Items	Pre-Program Dec. 2007 Mean (n=20)	Post-Program June 2008 Mean (n=20)
Schools Attuned has impacted my...*		
overall understanding of how students learn.	3.40	3.55
ability to help students understand their own learning.	3.20	3.35
belief that leveraging strengths and affinities is as important as remediating needs.	3.40	3.50
ability to address the learning needs of all students.	3.40	3.45
ability to form alliances with students as their partner in learning.	3.21	3.10

Survey Items	Pre-Program Dec. 2007 Mean (n=20)	Post-Program June 2008 Mean (n=20)
Schools Attuned has impacted my students'...*		
understanding of their own learning.	2.80	3.05
ability to advocate for their own needs.	2.60	2.85
abilities to manage their learning difficulties.	2.65	2.80
engagement in the learning process	3.05	3.15
motivation to learn and optimism about their success.	3.15	3.10

* A four-point Likert-scale was used (1–not at all, 2–slightly, 3–moderately, 4–greatly).

Additional Project Activities

Several professional development activities occurred to enhance understanding and deepen practice for participants who attended the Schools Attuned® program.

- Some schools planned and implemented after-school activities for students and parents, such as the All Kinds of Minds Fair and the Learning About Learning workshops for parents. The All Kinds of Minds Fair, held at one of Peel's junior elementary schools, was recorded on DVD and is available for viewing by staff, students, and parents.
- In the first year of the project, school staff attended focus groups, providing information to assist with further direction of the project. In the final year, selected staff in "CODE schools" attended a Schools Attuned® World Café, which provided opportunity for collaborative dialogue, sharing of ideas, and planning within school teams.
- One of our secondary schools developed and implemented a full-day All Kinds of Minds Student Fair for Grade 9 students. This workshop helped students to develop knowledge of the neurodevelopmental constructs; identify their own learning strengths, weaknesses, and affinities; and investigate how knowledge of their own learning profile could support development of their employability skills. A DVD that documents activities on this day is also available to Peel staff.
- In the final year of the project, Schools Attuned facilitators who had in-depth knowledge of Peel's Teaching and Learning Plan and school success planning process supported CODE schools through *consultation to school teams and delivery of professional development activities* related to Schools Attuned®. This model of support for professional development has continued into the 2008–09 year, with facilitators consulting to school teams and providing professional development sessions in collaboration with other Peel resource staff.

« 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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✉ Comments about this article? Email debra.krutila@peelsb.com or donna.zuccato@peelsb.com

Apple® Assistive Technology Project

Ann Blake, Superintendent of Education
Superior North Catholic District School Board

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. ●

✉ Comments about this article? Email ablake@sncdsb.on.ca