

Windsor-Essex Catholic District School Board – Project 1: 2014 - 2015

Project Title	Leading Student Achievement and Supporting Pedagogical Documentation in Grade 7 and 8 Numeracy
Description	<p>In the Windsor-Essex Catholic District School Board there is an inquiry based initiative for grades seven and eight math teachers and some grade nine applied math teachers dealing with assessment and student engagement in mathematics (MathTalk). These teachers were supported with technology in order to capture student learning. This was done by video recording as a way to identify misconceptions and exemplary thinking with mathematical problem solving. Traditionally, a teacher only sees the end product or is able to talk to one or two groups about their work. With MathTalk, teachers can see the entire learning process from beginning to end for all groups as the work is being recorded.</p> <p>Capturing student learning (thinking) has traditionally been done by individual meetings between a teacher and student(s). When technology is used to capture what students think it is much easier to identify misconceptions that students have and thus makes it easier for teachers to intervene and redirect student learning on a more regular basis. The iPads are an ideal device to capture and record the learning process. By using apps like Explain Everything, students can create their solutions on the device while simultaneously narrating their thinking throughout the process. The interface on the iPads makes it easier for students to capture and record all the steps as they problem solve.</p>
Context	<p><i>Number of students:</i> 600</p> <p><i>Number of teachers:</i> 20</p> <p><i>Number of schools:</i> 7</p> <p><i>Grades/Program:</i> Grades 7 and 8 math students, Grade 9 MFM1P and select Grade 9 MPM1D students</p>
Impact on Students	<p>The students were naturally drawn to using the iPads. The iPads made it easier for students to problem solve. The students were not reluctant to participate since the recordings were not meant to be a polished presentation but a reflection of their actual thinking process (which is usually non-linear). Beyond using Explain Everything, students were comfortable using other apps in class.</p>
Impact on Instruction	<p>Teachers struggled at first to incorporate the iPads as they were unsure about how to seamlessly use them in class. As comfort level grew, many teachers claimed that the movement was positive: “We changed from a teacher approach to a self-learning approach” and “I could tell the students appreciated that I mixed up the structure of our math classes.”</p> <p>With support, teachers started to let students work with the iPads more independently. For example, in this task, grade nine students were given several equations of graphs. They were asked to graph them and sort them in any way they saw fit. As observed, students were more than capable in performing the task and teachers were able to pick out things that were incorrect and speak with students directly to address student errors.</p>

	Continued support and training will increase teacher proficiency and confidence in the instruction leading to the teacher driving the project and not the facilitator.
Impact on System	In year one of the program four schools and 12 teachers were involved. This year we increased to seven schools and 20 teachers. Next year, we plan to double the number of schools involved, increase the number of iPads available to students in order to reduce sharing and provide more training for teachers. This process has jumped to the pedagogical documentation.

NOTE: Information in the summary is taken directly from the data contained in the final project report.

Windsor-Essex Catholic District School Board –Project 2

Project Title	Leading Student Achievement and Supporting Pedagogical Documentation in Kindergarten
Description	We would like to grow the capacity of Full Day Kindergarten Teams to document the learning evident in a kindergarten classroom through capturing thinking using technology. Such documentation will enhance the ability for the educator teams to analyse the learning evident in their classroom allowing them to respond and modify the environment to enhance further learning.
Context	<p><i>Number of students:</i> 2159</p> <p><i>Number of teachers:</i> 91 teachers, 77 Early Childhood Educators</p> <p><i>Number of schools:</i> 35</p> <p><i>Grades/Program:</i> Grade K</p>
Impact on Students	When students become aware of the learning that they are engaged in the kindergarten classroom they develop an enthusiasm and ownership of their own learning. That enthusiasm is infectious and they share their enthusiasm with their classmates and educators very freely. The pedagogical documentation that has taken place as a result of this initiative has promoted an awareness of the individual interests of the students in the classroom allowing educators to adapt the environment to include and extend these interests. Such modifications allow for a more robust learning environment that engages students in more meaningful, rich learning opportunities.
Impact on Instruction	Educator Teams have engaged in the gathering and analysis of artefacts and learning moments in the Kindergarten classroom. Educators have become aware of the need to deeply observe, deeply listen while young children are engaged in play and inquiry in the kindergarten classroom. Gathering these artefacts and evidence using technology has “lifted” learning moments in the kindergarten classroom for a deeper analysis by educator teams - Early Childhood Educators and Teachers. Capturing these moments has been made much more efficient and impactful using technology which allows educators to deeply analyze the learning that has taken place. This analysis allows the team to identify gaps in student learning as well as the need for enhancement which informs modifications to the learning environment. It also allows educators to deepen their knowledge and understanding of the expectations in the Full Day Kindergarten Program.
Impact on System	The pedagogical documentation iPad project has afforded us the opportunity to deeply explore the process of documentation. This has allowed us to develop policy and procedures that will support the gathering and archiving of documentation of student learning. This learning will inform our direction in the Creating Pathways - All About Me Portfolio as well as capturing student learning in classrooms Grade One through Grade 12 which will impact assessment and evaluation of student learning.

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