

## District School Board Ontario North East: 2014 - 2015

<b>Project Title</b>	<b>Making Student Thinking Visible Through iPads</b>
<b>Description</b>	<p>Both the math, and literacy goal, in our board improvement plan focus on students' ability to make their thinking visible. Our team wondered if the iPad could serve as a catalyst for changing pedagogy to make more space for student critical thinking in the classroom. If we used the SAMR model to guide our integration of the iPads, would our tasks change enough so students' thinking would be more visible? We decided to pilot 3 classrooms in a 1-to-1 iPad project. We decided to target grade 7 and 8 classrooms. Our three classroom teachers had a range of ability with technology. This range of teacher familiarity and comfort with technology would also give us a sense of how our range of teaching staff might respond to such a program.</p> <p>We brought the team together, and reviewed the deliverables for the initiative, and introduced SAMR, the Technology Integration Matrix [TIM], and the ISTE standards. At our next meeting, we brainstormed a list of applications that we could use that were aligned with the work of the BIPSA, and SIPSA. We brought in an Apple Distinguished Educator to facilitate some capacity building. This proved to be an important catalyst as this training showed what was possible, and gave the teachers some concrete ideas of how to use the iPad in literacy and in numeracy.</p> <p>From this point on, we brought the entire team together twice a week to monitor progress and determine next steps. Every other meeting we met via video-conferencing and the alternating meetings were face to face. As we were co-planning, we found our ideas were richer, and the resulting tasks were much better at showcasing student thinking. We also found that we had quite a few technological challenges that we had to overcome. In particular, we had issues with our bandwidth, WiFi density, Airplay, and our internet filtering rules. Working closely with teachers, helped IT to better understand the problem by realizing how the policy they had implemented actually hampered how the technology was used.</p> <p>Because we had co-developed the theory of action, we had an excellent plan in place for gather pre and post data on the students. We had a pre and post assessment task for literacy and numeracy. We also had a series of pre and post interview questions for students and teachers. Unfortunately, the work-to-rule campaign hindered our ability to complete all these assessments.</p>
<b>Context</b>	<p><i>Number of students: 68</i></p> <p><i>Number of teachers: 3</i></p> <p><i>Number of schools: 3</i></p> <p><i>Grades/Program: Grade 7 and 8 Literacy and Numeracy</i></p>
<b>Impact on Students</b>	<p>Early data has shown an improvement in the area of literacy, as measured by a pre and post literacy assessment. The labour situation prevented us from being able to administer and collect our post math assessment. Student voice videos,</p>

	<p>and teacher observations, reveal a significant increase in student engagement, which results in more assignments being completed by students, and no student opting to not complete an assignment. Given these results, we firmly believe that a 1-to-1 iPad program has the ability to be a catalyst to improve student achievement and to be a catalyst for teachers to make significant pedagogical shifts.</p>
<p><b>Impact on Instruction</b></p>	<p>Our teachers really focused on shifting their pedagogical practices to try and get at student metacognition. For example, they made extensive use of the “Explain Everything” app. They pull a completed assignment, via a picture, document, or video, into “Explain Everything” and they would justify where, in the work, they felt they met the success criteria, and would summarize by stating how well they think they achieved the learning goal. The teachers found this type of task pivotal in actually seeing/hearing each student’s understanding of their own learning. Teachers could then quickly give precise feedback.</p> <p>Our pilot projects made some small steps on metacognition, but it needs to be developed further. Our pilot teachers clearly experienced a shift in beliefs where they no longer felt they need to provide all the content knowledge, but rather facilitate the acquisition of content knowledge through carefully constructed tasks.</p>
<p><b>Impact on System</b></p>	<p>The success of this project has allowed the system to make the decision to invest in establishing a 1-to-1 iPad program board wide. For the 2015-16 school year, all students in grades 7 through 10 will receive an iPad to be used for learning. All teachers will be supported by an iCoach to ensure the iPad is integrated in a meaningful way which is aligned with making student thinking visible. The focus will be on student inquiry, and facilitating that inquiry with an iPad. The iCoaches will support teachers in using those applications to facilitate rich tasks, and student inquiry. We have a plan for supporting three types of teachers:</p> <ul style="list-style-type: none"> <li>• Those that need the “Foundational iPad 101” training.</li> <li>• Those that need to develop integrating the technology with effective pedagogy.</li> <li>• Those that are innovators. (Teachers will be used to support the other groups, but will also be connected to one another to push each other’s thinking.)</li> </ul> <p>We will work with principals so they understand the “why?” behind this tool, and have a clear picture of what effective practice looks like. For this, we will use the Technology Integration Matrix and SAMR. To ensure alignment, we have taken steps to revise our strategic plan, BIPSA, and SIPSA to show the connections between those three documents and effective technology integration &amp; innovation.</p> <p>As a result of this project, we have also made major investments in upgrading our WiFi density, and bandwidth in schools. IT has also changed several policies that will make it easier for staff and students to use the technology.</p>

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