Conseil scolaire catholique de district des Grandes Rivières: 2015 - 2016

Project Title	Transforming Pedagogical Practice in Order to Increase Student Engagement in Learning and Develop Their 21st Century Skills
Description	The primary goal of this project is to use a variety of technology tools to change our teachers' pedagogical practices and transform student learning, while developing their 21st Century skills (communication, collaboration and critical thinking).
Context	*Number of students:* 442 *Number of teachers:* 23 *Number of schools:* 3 *Grades/Program:* K-8
Impact on Learning	The survey conducted at the beginning of the project revealed student perceptions of technology in the classroom. Initially, 72% of students agreed or completely agreed that technology would be useful to them in their future career. At the end of the project, this percentage was 78%. The final survey completed by the students revealed that coaching had had a major impact on the contribution of technology for learning. After coaching, the data revealed a distinct increase in the use of technology in reading (+34%), writing (+21%), numeracy (+26%), and self-regulation (+30%). <u>Impact on participation</u>: It is now apparent that the coaching contributed not only to the use of a broader range of tools in the classroom, but also to an increase in the students' active participation in their learning. The use of technology led to an increase in collaborative participation and engagement in assignments. Using an interactive white board to make lessons interactive led to an increase in student participation and engagement in their learning. Collaborative work, exchanges, and sharing information using applications in the Cloud are three examples of tools that had an impact on participation. We noted that technology is used primarily for oral and written communication and is used much less frequently for reading and numeracy. <u>Impact on learning</u>: Tools such as Padlet, ePublishing, and the Cloud applications make it possible to document what students are actually learning on a continuous basis. Through play, technology such as robotics provides students with opportunities to solve problems and discover mathematical and scientific concepts. With the use of coding, this technology also enables them to develop their spatial thinking. Other tools, such as ePublishing and video, help students to improve their oral communication, which enables them to assess their own work and improve their

	final product. In addition, technology fosters the development of their 21st skills. There was an impact on communication, collaboration, and problem-solving throughout the project. Offering a variety of activities and tools made it possible to meet a wide range of student needs. For example, we were able to meet the needs of our male students who like learning through play. Impact on student achievement: The use of technology enabled students with special needs to increase their independence and achievement. Technology made support resources available to these students and to various key people around them, including their parents. Using the Cloud, students were able to share their work and, in return, they received timely descriptive feedback from their teacher or peers. In addition, tools for self-assessment (e.g., video, images, forms) provided another opportunity for self-improvement.
Impact on Instruction	Impact on teaching practices: At the beginning of the project, 60% of teachers believed that technology had an impact on their teaching practices; at the end, 72% reported that this was the case. Technology had the greatest impact on teaching strategies. Tracking tool for measuring technology integration (TIM): The technology integration matrix (TIM) is a task-checking tool to help teachers transform their pedagogical practices by providing them with options for making progress in the digital age. We chose the 21st skills of communication, collaboration, and critical thinking/problem-solving. Transformation of teaching practices: We noted occasional integration, with no clearly-defined pedagogical intention for technology for learning. In March, we noted that 24% of activities were transformative. The Padlet site opened up possibilities for collaboration, and ePublishing (epub) made it possible to develop creativity and communication. Activities such as sharing tasks in the Cloud and various apps available on iPads made it possible to create videos that required creativity. These activities required targeted skills such as communication, collaboration, and critical thinking. In May, the percentage of activities that were transformative had risen to 63%. General observations about the TIM, exchanges, and observations: Our primary data indicate that, with technology coaching, pedagogical practices are gradually growing in number; we see a progression from “general” practices (e.g., less use of the interactive whiteboard as an overhead projector) toward more targeted interactive practices that have a clearly-defined pedagogical intention.

	Another component of the project that people really like is the time set aside for support and exploration of various tools and applications in the classroom. The TIM enables stakeholders to evaluate themselves and regulate themselves so that they can determine where they need to go next in their interventions. The coaching provided by the technology-pedagogy coaches provided them with opportunities and tools to make significant changes in their teaching practices and have a greater impact on student learning.
Impact on System	Consultants have been involved in planning and implementing organizational processes and structures for coaching us as we transition smoothly to a Cloud environment. The project supported the development of policies and procedures for secure use of 21st Century technology (preparation of policies on responsible use). A technology committee (IT manager, supervisory officer, pedagogical services and student services heads, the technology-pedagogy coach, the eLearning contact) was created to develop a plan for implementing the transitions and training needs around the Cloud initiatives. This committee also developed a long-term plan for our technology needs so that we could make the transition to the digital age. At a system-wide level, the project helped with the migration to a Cloud environment (Office 365). This change enabled the education stakeholders to collaborate and communicate more effectively. This initiative also made it possible to implement a system-wide practice for *Creating Pathways to Success* for the entire Board. This project helped us to realize that the Board is ready for the transition to the digital age; we have the desire, the motivation, and the commitment to achieve our objectives. We will need to address the challenges posed by the infrastructure to ensure and support the growing demand for new technology. In addition, we will need to develop a plan to make the technology directly accessible for students.