

Conseil scolaire de district catholique Centre-Sud: 2014 - 2015

Project Title	Techno-pedagogy and Inquiry-based Learning in Centre-Sud
Description	<p>This year, in the process of validating the impact that the addition of various digital tools has had on learning (e.g., portable computers, ChromeBook, Nexus tablets, tactile screens), we experienced collaborative learning situations involving multidisciplinary teams. The aim was to develop knowledge of inquiry-based learning and document the progress of students who were successful in following the steps of the inquiry-based learning process and developing a 21st century skill or skills.</p> <p>This project involved the junior division teams and some of the intermediate division teams.</p> <p>The Board team consisted of a group of professionals from various departments: Techno-pedagogy, the virtual learning environment (VLE) support administrator, the school technician, the school principal, key staff in the junior and intermediate divisions, the TactIC Team, and the coordinator for the technicians.</p> <p>The project was carried out over the year in six-week cycles consisting of 10 steps.</p> <p>During the year, students and teaching staff used their personal account and the Google tools to document examples of learning.</p> <ul style="list-style-type: none"> • Teaching staff used the technology integration matrix to place activities in context and then attempt to place them in the matrix, using a variety of digital tools; • Inquiry-based learning situations integrating high-performance strategies for differentiated learning were used; • Teaching staff provided descriptive feedback based on the learning outcome and the assessment criteria. They used digital tools to provide this feedback; • A model digital classroom was created. The physical environment of the classroom was modified to engage the students and encourage participatory pedagogy. <p><u>Other notes:</u></p> <ul style="list-style-type: none"> • The Board team with the school team: co-planning based on the teacher's current planning; • The use of platforms suggested by the Board, Google, and VLE as spaces for collaboration. (In the past, we would start with pre-prepared training modules. We would then ask participants to identify ways in which these modules could be used, how these modules could work with what the teachers were already doing or how they could be modified. When we start where they are, their engagement is more palpable and we feel as though we are addressing a real need.)

Context	<p><i>Number of students:</i> 300</p> <p><i>Number of teachers:</i> 24</p> <p><i>Number of schools:</i> 8</p> <p><i>Grades/Program:</i> students in the junior division; intermediate division Social Studies courses</p>
Impact on Students	<p>With everything that relates to inquiry, online research, and the stages of the inquiry process, the students saw a distinct improvement in their skills. For many, it was the first time that they had been explicitly taught how to do a search on a question for which they couldn't do a Google search.</p> <p>No notable difference, pre- and post-project, where the students' results were concerned. Observation: the students already had very good technical skills; they didn't need the technical component as much as the teachers did.</p> <p>Extensive work on giving the students a voice: enabling them to choose the research question; guiding them in group exploration; giving them the time they need for communication/collaboration; and equipping them to use online platforms that are user-friendly and easy to access at school and at home. The students were more engaged with their learning thanks to the work they accomplished in the Cloud (GAFE [<i>Google Apps for Education</i>]). When they received feedback, it enabled them to make adjustments more quickly and to go farther with their learning.</p> <p>The students used Google and VLE platforms for their homework and for communicating. We noticed that shy students were better able to express themselves with the Cloud tools; they were active in their learning and even had opportunities to have contact with community partners.</p>
Impact on Instruction	<p>In terms of teaching practices, we saw an impact on:</p> <ul style="list-style-type: none"> • The pedagogical strategies used: teachers were less inclined to pick a research topic for their students. Students were more involved, choosing topics that reflected their ideas, questions, tastes, and interests; • The number of opportunities for sharing between students and between students and the teacher; • Active listening in the classroom. Teachers really cut down on the time they spent teaching the steps in a lesson, with more time devoted to student co-learning. Students build understanding based on the responses of their peers. • There was a pronounced decrease in disruptive behaviour in the classroom; the students were very engaged when they had opportunities to work with the technological tools and in the Cloud; • It is very clear that the virtual learning environment (VLE) mobilized the knowledge and understanding of both students and teachers. The students accessed documents using any web-based tool. Several instances of collaboration were noted. • There was a change in the collaborative planning approach in the schools that

	<p>received support. Following the coaching sessions, they were all able to contribute to planning equitably, which made planning more meaningful. This resulted in stakeholders feeling that they had added value. They expressed a sense of engagement with the digital age. As a result, we noted a certain degree of accountability (“each of us has a role to play”), validation of the acquisition of skills by each person, and an atmosphere of trust.</p>
<p>Impact on System</p>	<p>In terms of the impact on system-wide activities, we noted that:</p> <ul style="list-style-type: none"> • The Board looks at technology from a system-wide perspective. Our service plan for the various departments (Pedagogy, Special Ed, IT) contains several joint actions; • Videos documenting what we observed and what we learned are informing the Board’s actions; • An increasing number of school plans include technology for learning; this is especially true of schools receiving intensive support from the Board; • When combining techno-pedagogy and inquiry-based learning, we need to teach students differently, involving them in lesson planning and in their own learning; • Interest is growing. Even though, this year, we focused on Social Studies [<i>in the junior and intermediate divisions</i>], engagement is increasing among staff in other departments and grades; • Some teachers are using Google for feedback between students and some principals are using it with their teaching staff. Increasingly, department heads are using the Cloud for planning, surveys, and file-sharing. Our work methods are really changing. There is a lot of collaboration; • Interest is growing in the community, with workshops for parents to alleviate their anxiety over the use of technology by primary, junior, and intermediate division students. Parents are receiving tools to increase their understanding and enable them to ask questions; • Modelling for teachers; creating an atmosphere of trust between the teacher and the student and between students; • Close co-operation between the pedagogical department and the IT department.

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