

Upper Canada District School Board: 2015-2016

Project Title	Tech Coach Project 2015-2016 (Round 5)
Description	<p><b>Purpose:</b> Our Tech Coach Project in Round 5 is a continuation and expansion of our Round 4 project founded on the following IF/THEN statement:  IF 21st Century competencies are leveraged through the use of technology in a student- teacher co-planning/co-facilitating model in the classroom, THEN teacher comfort level with the aforementioned will result in a change in pedagogy that will positively impact student learning.</p> <p><b>Focus:</b> We are scaling-up the Tech Coach project in Round 5 in the following manner:  In Round 4 our Tech Coach project involved 4 secondary schools, 142 participating classroom students and 8 participating classroom teachers. There were also 4 Tech Coach teachers and 26 Tech Coach students.  In Round 5, we are scaling up the project to include 24 participating classroom teachers (3 at the secondary level and 21 at the elementary level), 575 participating classroom students (57 secondary students and 518 elementary students).</p> <p>The classroom teacher, Learning Partner (a centrally assigned Learning Partner Teacher from [the] Program Department), the school’s Learning Resource Coach and 2-3 students (chosen as Tech Coaches) from each class are co-planning/co-facilitating lessons.</p> <p><b>Outcomes:</b>  The classroom teacher’s role will shift to one of co-learner – learning alongside the students. The teacher’s comfort level with technology will bring about a change in pedagogy that will positively impact student learning as measured by our research.  Specific teacher outcomes include the following:  Improved comfort level related to:</p> <ul style="list-style-type: none"> <li>• The use of 21st Century technology and associated shift in pedagogy</li> <li>• Students co-planning/co-facilitating lessons enabled by technology</li> <li>• Students demonstrating curriculum expectations in a way of their choosing (not prescribed by the teacher)</li> </ul> <p>Specific student outcomes include the following:</p> <ul style="list-style-type: none"> <li>• Increased student interest/engagement in the subject matter</li> <li>• Improved comfort level associated with peer-to peer collaboration</li> <li>• The positive impact that student choice has on learning</li> </ul>

<p><b>Context</b></p>	<p><i>Number of students: 575</i>  <i>Number of teachers: 24</i>  <i>Number of schools: 22</i>  <i>Grades/Program: Gr.3-10</i></p>
<p><b>Impact on Students</b></p>	<p><i>Student engagement</i> was measured by pre and post project surveys, where students self-assessed their engagement levels based on questions about participation, motivation and gratification. A random sample of the students involved in the project participated in post project interviews. Common themes related to student engagement that emerged from student interview data were:</p> <ul style="list-style-type: none"> <li>• Students indicated that collaboration amongst peers not only increased student engagement and motivation, but increased understanding of content.</li> <li>• Students felt that they were more comfortable and willing to participate by learning alongside teachers and in collaboration with their peers than solely learning from the teacher.</li> </ul> <p>Common themes related to student engagement which emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>• Teachers felt that embedding technology into their instruction and utilizing Tech Coaches increased student confidence and student-guided learning in such a way that it became a motivating factor.</li> <li>• Teachers observed a direct correlation between student voice and student engagement. By leveraging student voice during planning and implementation, student engagement was significantly enhanced.</li> </ul> <p>Impact on <i>student learning</i> was also measured by pre and post-surveys, and students involved in the project participated in post project interviews. Common themes related to student learning that emerged from student interview data were:</p> <ul style="list-style-type: none"> <li>• Students indicated learning from their peers had a positive impact on their understanding of content and concepts being taught.</li> <li>• The added layer of student Tech Coaches available in the classroom allowed for differentiated approaches to learning and raised comfort levels when students asked for clarification.</li> </ul> <p>Common themes related to student learning that emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>• Teachers believed there was a direct correlation between student choice and student learning. By leveraging the Tech Coach collaborative model, allowing student choice, student learning was positively enhanced.</li> <li>• Teachers felt that through the aid of technology, the TCP enabled high-needs students to fully participate in a comfortable environment.</li> </ul> <p>Impact on <i>student achievement</i> was measured by pre and post-surveys as well as</p>

	<p>post project interviews. Common themes related to student achievement that emerged from student interview data:</p> <ul style="list-style-type: none"> <li>• Students remarked that feedback was more instantaneous and working with peers on problem solving developed critical thinking and communication.</li> </ul> <p>The Tech Coach model allowed for differentiated instruction as well as differentiated demonstration of learning. Since student voice and choice increased, it gave students more ownership over what and how they learned. Teachers felt there was a clear correlation between this model and student achievement.</p> <p>Common themes related to student achievement which emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>• Teachers felt that the TCP gave them the opportunity to alter their assessment approaches which positively impacted student achievement.</li> <li>• Many teachers expressed that they are further committed to pedagogical documentation as part of their assessment practices.</li> </ul>
<p><b>Impact on Instruction</b></p>	<p>The common themes related to technology-enable instruction (TEI) which emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>• Teachers became more open to the concept of TEI, and in some cases, to regularly using technology as part of their daily lesson planning.</li> <li>• Teachers felt that participating in the TCP allowed them to observe how technology can be used to enhance their teaching practice in a way that positively impacts student learning.</li> <li>• Many teachers became more aware of how technology gave students choice in how they demonstrated their learning.</li> </ul> <p>The impact of learning partnerships was measured by pre and post-surveys and post project interviews. The survey results indicated that teachers see the benefit Tech Coach model because of its positive impact on enhancing teacher-to-student and teacher-to-teacher learning partnerships. However, because Tech Coach model is a relatively new practice it requires additional time on behalf of the teacher to implement.</p> <p>87% of teachers in the post-survey overwhelmingly agreed that the Tech Coach model enabled them to teach in a way that they aspired to teach and 93% agreed that the model supported their curricular goals. Many of the participating teachers reported that they experienced a shifting role from teacher to co-learner, a change they were now committed to incorporating into their practice.</p> <p>Common themes which emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>• In most cases, teachers indicated that their role shifted more frequently to that of co-learner alongside their students. Teachers reported being quite comfortable with their role shifting once they observed students collaborating</li> </ul>

	<p>to problem solve and complete tasks.</p> <ul style="list-style-type: none"> <li>Teachers observed many instances where students developed learning partnerships with each other in order to problem solve and explore new technologies.</li> </ul> <p>Because the Tech Coach model is an innovative instructional approach, teachers felt that they sometimes lacked the knowledge needed about some technologies and thus felt unprepared in implementing the lessons. Most teachers also felt that the workload of trying innovative techniques during the TCP was an obstacle for them. For some, giving control over to students was a novel approach and their comfort level decreased.</p> <p>Common themes related to the connection between curriculum implementation and assessment which emerged from teacher interview data were:</p> <ul style="list-style-type: none"> <li>Many teachers felt that their approach to sharing information with their students, and how students shared information with each other, was positively enhanced by technology and the Tech Coach model. They felt that when students were given the opportunity to choose what and how they learned, student “buy-in” was remarkably improved.</li> <li>Teachers reported that they were still able to assess student learning even though students demonstrated their learning in unconventional ways (through technology).</li> </ul> <p>Some teachers commented that when students knew they would be showing their work to their peers, they produced work of higher quality. They sought out partners that they felt would give them an academic benefit, rather than just a social benefit. This in turn, had a positive effect on their achievement.</p>
<p>Impact on System</p>	<p>Our ability to “scale-up” the TCP from 182 participants in 2014-15 to 675 participants in 2015-16 was not dependent on additional staffing resources, but that our model is easily replicated and sustainable. In a few cases, we found that the Tech Coach model is growing “organically” across the district as some schools who were not involved with the project are establishing their own student tech clubs to support teacher adoption of technology enabled learning and teaching.</p> <p>By leveraging Learning Partners’ knowledge and presence in the schools, we were able to offer job-embedded support and professional development to the participating classroom teachers. Technology was then integrated into the implementation of the lessons by using the knowledge and voice brought forth by the Tech Coach students.</p> <p>We are continuing to experience shifts in teacher practice and positive gains with student achievement. We are also experiencing shifts with some of our district policies and procedures, as evidenced by our new BYOD policy for students to bring their own devices to school, called “Use of Personal Electronic Devices in the Classroom and School”– Policy 303, adopted June 2013.</p>