

Lakehead District School Board: 2015 - 2016

Project Title	Inspiring Technology Enabled Learning Teams
Description	<p>LPS will enhance student achievement and develop global competencies through the use of technology to expand how, when, and where learning takes place, authentically engage our students, and provide students with the skills to excel in a digital age. Focused training supports the use of technology to support teacher practice and student learning to:</p> <ul style="list-style-type: none"> <li>• Document student thinking and learning</li> <li>• Enhance anytime/anywhere learning and connect learning to students’ lives and the world around them.</li> <li>• Foster student inquiry</li> <li>• Increase collaboration</li> <li>• Support assessment for learning</li> </ul> <p>Specific tools used to support the above include:</p> <ul style="list-style-type: none"> <li>• Explain Everything App &amp; Reflector</li> <li>• SeeSaw</li> <li>• Office 365 – including: OneDrive, Yammer and OneNote</li> <li>• Skype and VROC</li> <li>• Desire2Learn Learning Management System</li> <li>• Web 2.0 tools including Padlet, Kahoot and MinecraftEDU</li> </ul> <p>Training will be led by school based IT Teams, comprising a minimum of two teachers on staff, program, supports and a school administrator. These teams will be supported to increase their knowledge in global competencies and modern teaching and learning models, understanding that pedagogy is driving change in classrooms with technology as a support. These teams will help all teaching staff learn the strategic use of technologies that support school improvement.</p>
Context	<p><i>Number of students: 8,971</i></p> <p><i>Number of teachers: 650</i></p> <p><i>Number of schools: 30</i></p> <p><i>Grades/Program: K-12</i></p>
Impact on Students	<ul style="list-style-type: none"> <li>• Students have commented that they are increasingly proud of their work, feel more connected with their parents or guardians, and are eager to learn more when technology helps them to connect their learning to the world around them. (Grade 8 Student - <i>“I like SeeSaw because I get to explain my work, in my last class I couldn’t explain my work because I was kind of shy. Now I get to record my voice and me showing people that I can do the work. My Grandma says that I am doing great and she likes that she can see my</i></li> </ul>

	<p><i>work when I am at school.”)</i></p> <ul style="list-style-type: none"> <li>• Students have documented their thinking and learning through technology and reported that using the technology to communicate has made it easier to explain their thinking. (Grade 9 Student - <i>“This year we used Explain Everything in our science labs and it was a great way to take photos and videos of our experiments. We were quickly able to share our work on the SMART Board and we were able to see how other teams were running the experiments. We would then use Office 365, and everyone was able to work together at the same time on writing our reports.”)</i>).</li> <li>• Teachers have reported higher engagement, task completion and increased success with encouraging student inquiry. (Grade 6 Teacher - <i>“Integrating tech and Office365, OneNote, and other tools has changed the way I teach, and the way students learn in my classroom. Good inquiry-based learning, is now possible and easy to do with technology. Students have become self-driven learners, with me as a guide or facilitator. Students get more work done because it means more to them and they are more in control of their own learning.”)</i></li> <li>• Students reported increases in achievement and learning after using online tools for peer feedback. (Grade 5 Student - <i>“I feel like I became a better writer reading and commenting on other people’s writing. I really know the parts of the paragraph better now that I have looked at so many of my friends. Now I have seen so many different hooks.”)</i></li> <li>• Students reported the use of technology helped make learning authentic and more relevant to their life goals. (Grade 10 Student - <i>“I find tech helps with my problem solving skills. When I’m doing online projects I use things like Prezi and Piktochart. With tech I can make it look better, I can make it unique and my own style, I have to figure out all kinds of things like text styles and how to fit everything in and how to make it look the best it can be. It makes me more motivated and proud.”)</i></li> <li>• Students have reported that the use of simulation and learning games have increased their engagement and task completion. (Grade 3 Student - <i>“Minecraft helped me multiply by 1, 2, 3, 6 and 9 by building arrays. Studyladder helps me learn my times tables, reading and subtracting and it's fun. These games make learning feel different and not always the same thing.”)</i></li> </ul>
<p><b>Impact on Instruction</b></p>	<p>A pre survey from May 2014, and post survey from May 2016 indicated significant changes in teacher practice with respect to technology integration:</p> <ul style="list-style-type: none"> <li>• Teachers have reported that technology is helping them to differentiate instruction to meet the needs of a variety of students. Survey data indicates</li> </ul>

	<p>a 9% increase of teachers that use technology to differentiate lessons and activities with a total of 88% of teachers agreeing that they use technology for this purpose.</p> <ul style="list-style-type: none"> <li>• Teachers have reported increased use of technology (up 11% from 2014) to help students with critical thinking skills including searching, evaluating and organizing information from a variety of sources with a total of 79% of teachers agreeing that they use technology for this purpose.</li> <li>• Teachers have reported that the use of mobile devices and tablets has increased their ability to adapt their lessons to support student inquiry and exploration. Survey data indicates a 23% increase with a total of 87% of teachers agreeing that they use technology for this purpose.</li> <li>• Teacher attitudes towards student owned devices (BYOD) and their usefulness in the classroom to support learning have increased. Survey data indicates an 8% increase in teachers who allow the use of student owned devices for learning during class time with a total of 58% of teachers agreeing that they encourage the use of student owned devices in their classrooms for educational purposes.</li> <li>• Teachers have reported that technology has helped them change their assessment practice, and that it enables them to make specific observations regarding student work to collect and share evidence of learning. Survey data indicates a 28% increase with a total of 66% of teachers agreeing that they use technology for this purpose.</li> <li>• Teachers have reported that the use of social media as a discussion platform in the classes has helped students to collaborate and connect learning to the world around them. Survey data indicates a 17% increase with a total of 28% of teachers agreeing that they use technology for this purpose.</li> <li>• Teachers are reporting success with engaging their students through online learning games, simulations and apps. Survey data indicates a 12% increase with a total of 75% of teachers agreeing that they use technology for this purpose.</li> </ul> <p>Referencing a research study by Aporia Consulting (Katz, and associates) submitted June 2016 indicates a number of findings with respect to technology use and assessment practice:</p> <ul style="list-style-type: none"> <li>• A high number of teachers (62%) found the provincial virtual learning environment to be very useful in supporting their assessment practice.</li> <li>• Teachers in the focus group felt that the technology made their assessment practice more efficient.</li> <li>• Teachers also indicated that technology opened up opportunities to design assessments that they weren't able to before, and that they were now better</li> </ul>
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	<p>equipped to find out what students know.</p> <ul style="list-style-type: none"> <li>• Most teachers (88%) found provincial virtual learning environment to be the most useful in supporting their assessment practice.</li> <li>• Teachers reported that technology has allowed them to design assessments that allow students to demonstrate their understanding in authentic ways.</li> <li>• Most teachers (78%) reported that the use of online collaboration tools such as Office 365 has supported their assessment practices.</li> <li>• Although the teachers felt that there were many positive benefits to incorporating technology into their assessment practice, they also identified some significant challenges. Not all of the teachers in the group felt comfortable with incorporating technology into their practice. They felt that they had a lot to learn around the “how to” of the various applications and devices.</li> </ul>
<p><b>Impact on System</b></p>	<p>This year, a strategic choice was made to switch from individual school based champions to Technology Enabled Learnings Teams that included multiple educators as well as an administrator from each school. The Technology Enabled Learnings Teams have contributed to improving and sustaining of pedagogically-driven, technology-enabled practices by building leadership teams in every school. These teams have assessed school needs, identified areas in the school improvement plan where technology could be a vital support and launched training, and “at the elbow coaching.”</p> <p>Educators took advantage of additional voluntary learning opportunities through the board Inspire program. Through participation in this program, participants received a board-owned laptop or tablet for professional use. Part of the premise of this program is a commitment on the part of educators to transform their teaching practice through technology based training sessions. To date 384 Early Childhood Educators, administrators and teachers have participated in the program which represents nearly half of the staff who qualify for the program.</p> <p>A continuing theme throughout the various Technology and Learning Fund projects at Lakehead has been encouraging school based leadership in the area of technology enabled learning and teaching. Through I.T. Champions and now Technology Enabled Learning Teams we have enabled school based leaders to enhance student achievement and develop global competencies through the use of technology to expand how, when, and where learning takes place. This model of learning has led to long term and continuing growth and models the shift in learning that is necessary to prepare students for a digital world.</p> <p>As a result of our activities it is evident that student learning in our schools is being facilitated by skilled staff incorporating sound instructional practice in safe and caring learning environments.</p>