Lambton Kent District School Board: 2015 - 2016

Project Title	Impact of Professional Learning Focused on Technology Integration on Leadership Practices, Teaching Pedagogy and Student Learning
Description	*"In LKDSB, the first innovative project with a focus on the integration of technology into the hands of students and teachers occurred during the 2011-12 school year. A 1:1 Take-Home iPad Project within a rural Family of Schools (1 secondary school with corresponding feeder schools) with teachers and students of Grades 7-10 was introduced. The following fall the project was replicated in a neighbouring Family of Schools. The project was then expanded to include a FDK iPad project with a focus on pedagogical documentation engaging the FDK team and parent community as learning partners. These innovative projects resulted in the creation of the LKDSB Technology Enriched Learning Plan (TELP) in 2014-15. In the past five years, funds have been dedicated to devices, the expansion of bandwidth throughout the District and to professional learning opportunities. This project studied the Impact of professional learning focused on technology integration on leadership practices, teaching pedagogy and student learning."* **Purpose of TLF 21st Century Innovation Research Initiative, 2016:** **To examine:** "What impact, if any, does a professional learning program focused on technology integration have on leadership practices, teaching pedagogy, and student learning?" **Focus of TLF 21st Century Innovation Research Initiative, 2016:** **Tri-level research:** Student artifacts being studied pre/post professional learning opportunities, teachers' articulation of their beliefs regarding education and learning pre/post professional learning opportunities and evidence of change in teachers' pedagogy, and leaders' articulation and implementation of their vision for a culture of innovation. **Desired Outcomes:** • Artifacts reveal student learning environment and opportunities have been enhanced through authentic integration of technology • Teacher surveys reveal pedagogical changes according to the SAMR model • Leaders can clearly articulate vision for a culture of innovation and the steps to realize this vision within the school community
Context	*Number of students:* 461 *Number of teachers:* 20 *Number of schools:* 16 *Grades/Program:* FDK-8; Core French, French Immersion; Social Studies/History & Geography/Language Arts/Science

Impact on Students	**Impact on Student engagement, learning and achievement:**
	During a *Challenge Based Learning* project, students explored a challenge at great depth gaining a holistic understanding of a big idea vs. learning isolated facts of a topic. This process varied greatly from the students' past experiences in a Social Studies/History/Geography class where textbooks were the primary source of learning. As student voice is integral throughout the *Challenge Based Learning* process, the students were active learners in tasks that were authentic to them not passive recipients of knowledge. Students learned important leadership, organizational, and communication skills.
	The 6Cs were intentionally taught to students through the *Challenge Based Learning* process. Authentic experiences such as interacting with experts in the field of the focus of their project heightened the students' awareness of the importance of these skills. During the *Challenge Based Learning* process, students received feedback through many lenses – self, peer, teacher, parent, community members and/or global experts. Through receiving and reflecting on this feedback, students enhanced their critical-thinking skills as they learned to interpret the perspectives of the many voices.
	The students' learning environment changed as their teachers reflected upon the conditions to truly embrace the philosophy of *Challenge Based Learning.* Students moved from sitting in desks in rows in some classrooms to sitting in flexible groupings and/or at tables. Students were trusted to explore learning areas throughout the school – hallways, Learning Commons areas, and outside. Learning was no longer a solitary event but one in which all students could learn with and from one another as well as on behalf of one another.
	Impact of the integration of technology:
	• Through the use of technology, all students were able to participate fully in all aspects of the *Challenge Based Learning* projects. The confidence of students grew when their individual learning needs were not emphasized through overt accommodations or modifications. Unlike in the past, everyone in their classes was utilizing technology to facilitate their learning;
	• The portability of the iPad allowed the device to travel with the students wherever they were conducting their inquiry. Videos, pictures, audio recordings of their focus and notes were captured with ease on one device;
	• Students were able to archive their learning in creative methods and in the manner in which best fit their learning styles*;*
	• Students were able to explore concepts with different aspects of technology in Mathematics classes;
	• Technology facilitated the application of their knowledge into a creative final product utilizing a variety of media and

	• Through technology, students collaborated both within and outside the classroom walls forging partnerships across the globe.
Impact on Instruction	Through the professional learning opportunities teachers experienced, the following changes in practice were documented and/or articulated: • Teachers became co-learners with their students exploring the possibilities of technology together vs. teachers being "in control" of all aspects of the learning and teaching occurring in the classroom; • Teachers' depth of knowledge of an app was enhanced through the Apple Foundation Training. They were therefore able to introduce different opportunities to their students; • The "walls" of the teachers' classrooms came down as they and/or their students accessed experts in various fields through digital means; • A de-privatization of practice occurred when the like-minded teachers collaborated, shared successes/challenges and encouraged one another with their respective use of strategies with an digital underpinning; • This de-privatization of practice continued through the regular visits of a Learning Coach for Innovation; • Through the use of various digital means, pedagogical documentation became far more precise. Parents became key members in the assessment process*; and* • Teachers became knowledgeable about the SAMR framework and to realize the possibilities that technology holds to transform a learning task.
Impact on System	**System Scaling:** The Principals participating in this research initiative were strategically selected in order that their learning could be shared both informally and formally with others this year and in the future. The focus of the **LKDSB Leadership Symposium** was deepening our understanding of the authentic integration of technology into our classrooms. During the 2016-17 school year, a cross-panel Principal inquiry group will be formed with their learning replicating the process that was introduced to this year's Principal team. The *LKDSB BIPSA 2016-17* will have two overarching goals – one for Literacy and for Numeracy – both with a digital underpinning. Learning from this initiative has influenced the *professional learning opportunities* being planned for 2016-17 in support of the *LKDSB Technology Enriched Learning Plan.*