

Kenora Catholic District School Board: 2015 - 2016

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| Project Title | Assessing the Impact of an IdeaLab Project |
| Description | <p>General Description – The IdeaLab is a unit within the Instructional Services Department composed of 15 staff members, 10 of whom actively serve to steward internally ideated Learning Projects. Since 2013 we have supported over seventy projects providing ‘human’ supports (i.e. consultation, organization assistance), resources/materials, funding, and training/professional development for the individuals or groups undertaking Learning Projects.</p> <p>We are focusing on one Learning Project for our Innovation Research Initiative this year assist[ing] in transforming all Grade 7 and 8 classrooms in our High School into environments that are optimal for 21st Century Learning. The applying group believes that in redesigning learning spaces (both physical and digital) there will be a direct correlation to improving 21st Century Competencies and subsequently boosting student engagement. We have started working with four grade 7 teachers this school year, and will continue our work with the grade 8s during 2016-17.</p> <p>Project scope – Includes our Board’s first 1:1 device deployment (Chromebooks), a complete environmental transformation of 9, extensive professional development (environmental and technology-based), expert 3rd party consultation, daily available in-class supports from our Innovative Technology Teacher, and a unified instructional model.</p> <p>Purpose – [Collect] evidence to identify the extent that varied IdeaLab supports may impact learning.</p> <p>Focus – Our focus is on the transformation occurring within Grade 7 classrooms. We expect an evolved classroom experience that [supports] both students and teachers to become more competent 21st Century Learners.</p> <p>Role of Technology – We’ve deployed our first enrolled Chromebooks in a 1:1 implementation with this group. Allowing for the creation of digital spaces, enabling the broader development of 21st Century skills, and providing flexibility in learning.</p> |
| Context | <p><i>Number of students:</i> 105</p> <p><i>Number of teachers:</i> 6</p> <p><i>Number of schools:</i> 1</p> <p><i>Grades/Program:</i> Gr.7</p> |
| Impact on Students | <p>[T]his research initiative yielded an observable increase in student utilization of 21st Century Competencies. It also had a positive impact on student engagement, learning, and achievement. We collected impact evidence relating to student usage of the following 21st Century Competencies: Communication,</p> |

Collaboration, Critical Thinking, and Creativity (4Cs). The evidence collected revealed that student use of the 4 identified 21st Century Competencies increased slightly between February and June of 2016. However, there were some very significant gains in certain areas.

It is clear that student **communication** with digital tools is one of the stronger competencies of this specific cohort of grade seven students. Receipt of digital feedback from others within their classroom increased substantially; in February 47% of students reported never doing this, that figure was reduced to 20% in June. In June 49% of students reported receiving feedback from others monthly and/or at least weekly. There was also a notable improvement in students being asked to receive feedback online from someone other than a teacher.

Our data relating to student **collaboration** indicated that there with some very meaningful gains made. In February, nearly two thirds of all students reported never collaborating online with teachers that was reduced to 47% by June. As of June one third of students reported that they are asked to collaborate with teachers online at least weekly and/or monthly. Online document sharing and storage is a standard practice, in June 2016 89% of grade 7 students reported that they do this monthly or more frequently. 47% of students in June reported at least weekly use of digital sharing and storage tools, up from 33% in February.

It is quite evident that students are applying **critical thinking** skills on a regular basis. According to June data 82% of students are asked to conduct experiments or perform measurements with digital tools. In February, 31% of students had reported never doing this. As of June, only 3% of students report never using technology to conduct research. Two thirds of students indicate that they do this at least weekly.

The majority of students are involved in **creating** and uploading art, music, movies or webcasts in some form. June data indicates that two thirds of students are actively involved in this type of creativity with digital tools.

Over time students became much more engaged when using technology in their learning. By May, the majority of students indicated that they enjoyed learning activities more when using technologies ... was evident that students felt their learning was being reshaped by available technologies. A strong majority of students indicated that they either agreed or strongly agreed that technology enabled them to be creative and constructive in their learning. In late February (only two weeks after receiving a Chromebook as a part of a 1:1 deployment) students were quite unsure about if technology use would lead to higher achievements levels. However, by May the perception of technology resulting in higher achievement had changed substantially. At that time more 60% strongly agreed that technology was enhancing achievement levels. It is clear from

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| | <p>student field logs that there is a strong belief that 1:1 technology was impacting achievement; student comments such as “...grades going up,” and “...huge difference in school work and grades” suggest this very clearly.</p> |
| <p>Impact on Instruction</p> | <p>Our impact evidence revealed that the technology-enabled instruction strategies applied resulted in an increased capacity to improve the use of 21st Century competencies for both teachers and students.</p> <p>Our impact evidence indicates that both teacher and student use of the 4Cs increased overall, but the teachers use of the 4Cs moved from ‘Proficient’ to ‘Advanced’ on the Clarity ‘Classroom’ aggregated index scores which were generated from teacher surveys administered in February and June respectively.</p> <p>June data did not reveal significant growth relating to the Communication competency compared to data retrieved in February data. Teachers exhibited strength in the Communication competency in February, however, June data revealed that 66% of teachers ask students to use web tools to receive online information, up from only 33% in February.</p> <p>June data indicates that 100% of teachers asked students to conduct experiments or perform measurements utilizing technology tools monthly and/or at least weekly. This represents a significant improvement as according to February data 66% did this only monthly or never. Teachers also showed substantial gains in asking students to identify and solve authentic problems. According to June data 100% of teachers do this monthly and/or at least weekly.</p> <p>[G]ains made by teachers regarding use of 21st Century competencies between February and June can be at least partially attributed to the professional development and ‘hands-on’ support for participating teachers. Comments from teachers’ field logs did reveal they felt the 1:1 Chromebook deployment created better conditions for learning and that student engagement was apparent; they believe that students had heightened levels of engagement. However, there was no commentary about a direct impact on student achievement.</p> |
| <p>Impact on System</p> | <p>[O]ur intent for Round 5 [was] to intentionally structure project work and research to assisting us in answering some complex questions about the future direction of our IdeaLab. Our research was directly focused on the impact this project has on learning. Our impact evidence strongly suggests that learning outcomes were improved as a result of this project. Both teachers and students increased their use of the 4Cs and both reported growth in student engagement and learning.</p> <p>The following system actions for 2016-17 are tangible results from Round 5:</p> <ul style="list-style-type: none"> • The 1 to 1 ‘fully supported’ Chromebook will continue in grade 7 and will also expand into grade 8 for September 2016. • We will also be beginning mirrored 1:1 Chromebook deployments at the |

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| | <p>elementary level. In terms of attention, support, and encouragement these implementations will be very similar to the deployments that occurred this school year.</p> <ul style="list-style-type: none">• KCDSB’s Instructional Services Department has officially become “IdeaLab” and is being rebranded for the 2016-17 school year.• We will continue to offer funded, supported, and organized IdeaLab projects and professional learning experiences. |
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