

Niagara Catholic District School Board: 2014 - 2015

Project Title	Equitable Access to 21st Century Resources
Description	<p>Two layers of access are being evaluated. The primary layer concerning access concerned Chromebook and Google Apps for Education (GAFE). In addition, we are evaluating the impact of VMWare licenses and whether the thin client approach can provide a seamless experience at the school and at home for educators and students.</p> <p>We are evaluating Chromebook and Google Apps for Education (GAFE) in light of the following questions;</p> <ul style="list-style-type: none"> • Does the utilization of the device and the GAFE accounts foster 21st century learning and promote sound pedagogical technology enabled learning? • Does Chromebooks integrate well with other technologies and are any incompatibilities negligible? • Can the introduction of GAFE address the equitable access to technology for all students in and beyond the classroom? • Does the device and the GAFE activities protect the privacy of students and teachers? • Can the devices and the GAFE platform be distributed without a significant requirement of training for students and/or teachers? • Does the device and the GAFE service provide an affordable alternative to the existing Microsoft platform for both teachers and students? • Can we prepare and deliver the Chromebooks to schools easily and with little IT intervention as compared to existing practices with Microsoft systems?
Context	<p><i>Number of students:</i> 90</p> <p><i>Number of teachers:</i> 61</p> <p><i>Number of schools:</i> 5</p> <p><i>Grades/Program:</i> Junior -FSL Grades 6-8, but we also did an evaluation in a secondary school</p>
Impact on Students	<p>Overall, the survey results for both educators and students indicated;</p> <ul style="list-style-type: none"> • They would like to see more Chromebooks in the classroom and they would like to use more Google apps. • They believed the Google platform works effectively on mobile devices. • Google apps are easy to use. • GAFE helps foster 21C skills. • GAFE is a good alternative to the Microsoft platform. • The Chromebook screen size is suitable and the keyboard is useful.

	<ul style="list-style-type: none"> • Chromebooks compare favourably to iPads or Android tablets. • Believed most teachers will prefer using Google classroom to the D2L vLE. • Google hangouts represents a positive experience. <p>Student collaboration was a major observation. Students can discuss and collaborate real-time on questions or projects and find answers amongst themselves and then share them with the rest of the class and their teacher. Tools such as chat within google docs or the version history that tracks who said and did what, provides accountability for all participants' Students were able to demonstrate their knowledge and coordinate activities using tools such as a shared calendar or doc or drive folder.</p>
Impact on Instruction	<p>The GAFE platform provided an opportunity for:</p> <ul style="list-style-type: none"> • Sharing – provide the students the information and resources they need • Communicating – can chat within Google Docs. Can pose questions virtually rather than having to pose the question in class. • Collaborate – the teacher can collaborate with the class or a group of students. Students can collaborate amongst themselves • Research – The apps have a built in research tool so students can see the contexts of words they may be unfamiliar with. • Facilitation and activation rather than presentation. The ability to share the context of information but students are involved in the learning process • Learning coming “from” students not just “to” students <p>Learning can be celebrated because it can be shared virtually as well as physically. For example, teachers can stream information from student Chromebooks through Apple TV or Chromecast not just stream information from their own device.</p> <p>Physical space is no longer a barrier for teachers and their professional learning. PLC's are easily created and best practices easily shared with individuals who are most relevant to their learning growth. Differentiation is possible for assessment and instruction. There are sufficient variety of apps which allow students to demonstrate success and the collaboration process provides feedback and validation of the student voice.</p>
Impact on System	<p>The inclusion of greater wireless connectivity, greater internet bandwidth and the switch to ORION provides the infrastructure required to support the peer to peer initiative of introducing more mobile devices. Access is now extended to Google ID's and hence all the apps associated with it. We intend to provide more devices next year to support the access to the Google IDs.</p>

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