# Hamilton-Wentworth Catholic District School Board: 2014 - 2015

| Project Title | SAMR Learning Model |
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| **Description** | The purpose of this year's Innovative Research Initiative was to examine the impact of teacher issued digital technology on student learning within the primary and junior divisions. This initiative grew out of key learnings obtained through the HWCDSB 2013-2014 Innovative Research Project, and was in alignment with the goals identified within the HWCDSB Board Improvement Plan for Student Achievement and the overall goals of the Technology Learning Fund (TLF). *Part A – Junior Divisional Project* The Junior Divisional project involved twelve teachers ranging from grades 4 to 6. Each project participant received a technology package consisting of an iPad Air and case, an Epson speaker system, a lightning to VGA adapter, a stylus and iTunes card. Teachers participated in three collaborative learning sessions which incorporated basic iPad training, an introduction to OneNote, apps to make student thinking visible, apps and tools to support assessment, Educreations, and Skype. All sessions included focused discussions on 21st Century skills, the SAMR Framework, the use of technology in assessment, and embedded time for reflection. *Part B – Primary Divisional Project* The primary divisional project was comprised of two groups. The first group consisted of FDK educators from 26 classrooms in 10 elementary schools. Project educators participated in professional development sessions over a three month period during which they used iPads to capture evidence of student learning, apps to create and organize their pedagogical documentation, and desktop computers/laptops to share learning stories within a D2L based virtual learning environment (vLE). All participants were enrolled in the Sample FDK vLE which provided an online community for professional networking, the sharing of resources (QRCs, website links, etc.), and the demonstration of and experimentation with various vLE tools. The second primary divisional project group included additional FDK educators, as well as all Grade 1 teachers and special education resource teachers from all elementary schools. This allowed for capacity building for all FDK and Grade 1 teachers in understanding how documentation supports the implementation of the assessment continuum. |
| **Context** | *Number of students*: 6679 *Number of teachers*: 282 Classroom Teachers, 43 Special Education Resource Teachers, & 127 Designated Early Childhood Educators *Number of schools*: 48 *Grades/Program*: Grades K-6 |

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| **Impact on Students** | *Part A – Junior Divisional Project*<br><br>The impact on student learning was determined through the analysis of participant shared student tasks, involving the use of technology, in relation to the SAMR framework throughout the project (pre-project, mid-project, and post-project).<br><br>Project findings show that teacher involvement in the project led to increasingly more sophisticated integration of technology. This was evidenced by the decreasing percentage of students tasks deemed to be at the substitution level within the SAMR Framework over the duration of the project.<br><br>*Part B – Primary Divisional Project*<br><br>The main focus of the primary divisional project was to build educator learning partnerships and capacity in using technology to support the development of pedagogical documentation. During the project, survey data and the analysis of educator shared samples of pedagogical documentation provided some evidence of how the research initiative impacted student learning. Participant feedback highlighted that educators felt that the classroom iPad and vLE assisted in making student thinking visible to students, parents and educators. These tools allowed students the opportunity to revisit, reflect on, and extend their learning. |
| **Impact on Instruction** | *Part A – Junior Divisional Project*<br><br>92% (11 out of 12) of junior divisional project participants indicated that their involvement in the Innovation Research Initiative increased their comfort level in using technology to support teaching and learning. [Eight] of the 12 project teachers indicated through the post project survey that the introduction of the teacher iPad in the classroom has already impacted what students are doing in the classroom. Of the remaining 4 participant teachers, 3 indicated that they are still getting familiar with the technology. One teacher identified the iPad as a useful tool to collect student samples of learning and student data and that having the teacher iPad helped solve work flow issues.<br><br>All project teachers indicated that face-to-face small groups sharing and the Yammer group fostered the development of educator learning partnerships. Analysis of teacher feedback indicated that all teachers found the time designated for small group sharing of how the technology was being used in classrooms to support teaching and learning to be invaluable. It is interesting to note that 10 of the 12 participating teachers commented that the introduction of the teacher iPad into the classroom fostered the growth of teacher-student learning partnerships, even though this was not a focus of the project. Teachers shared that they were learning from their students as the students helped them problem solve with technology, while some shared that the technology was changing the learning environment in that students seemed more eager to participate, share their thinking, take risks and ask questions. In addition, half of the project teachers noted that the iPad allowed for better capturing of evidence of learning and determining next steps for instruction. |

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| | *Part B – Primary Divisional Project*<br><br>Through this project, participants discussed the use of iPads to capture evidence of student learning and a variety of apps to generate pedagogical documentation. Data collected from teacher surveys indicate that 77% of post-project survey respondents indicated increased comfort in using technology to support pedagogical documentation.<br><br>The marked increased in educator comfort level in using the technology to support pedagogical documentation, coupled with the growth in the use of the LMS to assist in making student thinking visible and support student learning led to conclusion that the proposed theory of action did indeed promote the more sophisticated integration of technology into instructional/assessment practices. |
| **Impact on System** | *Part A – Junior Divisional Project*<br><br>The junior divisional project's findings, showed that if we provide teachers with mobile technology, and support them in its use, digital technology will promote the development of educator learning partnerships and instructional/assessment practices that incorporate increasingly sophisticated use of technology. The expansion of the junior divisional project's professional development model will be a key step in supporting system scaling of pedagogically-driven, technology-enabled practices. As more and more teachers become comfortable with technology and engage in the development of deep learning tasks that support the acquisition of 21st Century learning skills we will build capacity among educators.<br><br>This new learning has driven system action to build awareness of the SAMR Framework and integrate technology into all professional development sessions in an effort to develop system-wide awareness and understanding that the purposeful integration of technology is not simply a classroom event, but a tool ignite and support deep learning.<br><br>*Part B – Primary Divisional Project*<br><br>The research initiative has provided clear evidence that pedagogical documentation remain a focus of primary divisional professional development opportunities.<br><br>The importance and impact of educator learning partnerships in developing educator comfort in using technology to support pedagogical documentation was a key learning from this initiative. As such, efforts will continue to be made to establish and support primary divisional educator learning hubs to further enhance technology enhanced assessment practices that reflect deep learning pedagogy.<br><br>The use of the LMS within the primary division continues to grow with more and more educators expressing interest in establishing a classroom vLE. As a result, additional small group professional development opportunities will be organized to assist new educator teams in establishing a classroom vLE. |

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