School libraries and eLearning:

Answering the call for access and equity

Michelle Campbell and Alanna King

Upper Grand District School Board

Learning beyond school walls

School is no longer just a 9:00am to 3:30pm activity. With the increased use of technology and the growth of online learning, our children have an opportunity to learn anytime and anywhere. Upper Grand District School Board (UGDSB) has spent a great deal of time and money purchasing and curating excellent digital resources for our students to access 24/7 from school and from home or travelling between both. With the addition of UG2GO (our Virtual Learning Commons) and UGCloud (our Google Apps for Education environment) more and more homework and learning activities are being provided digitally. This works well for students who have ready access to technology in their home but provides a significant disadvantage to those students who have limited or no access to internet or devices in their homes. As well research studies have shown that children with internet access at home do better in school.

> "There is agreement among teens and their parents about the role that the internet plays in teens' education. Eighty-six percent of teens, and 88% of online teens, believe that the internet helps teenagers to do better in school. Eighty percent of parents and 83% of parents of online teens agreed with that proposition." (Pew Research Center, 2005).

At Upper Grand we also offer a number of eLearning courses for our adolescent and adult students that rely heavily on access to our excellent digital resources e.g. video streaming content. Staying connected is essential for student success in eLearning courses.

School libraries as safe spaces for eLearning

In general, the success of eLearning is due in large part to the flexibility it offers to its students to learn on their own time and in the setting of the student's

choice. The opportunity for learning in the school library with its reliable hours, equipment and staff support pulls eLearning students into the space as regular patrons. For marginalized students and eLearning students, who are working within the school system but in alternate modes of learning, both school and public libraries are safe spaces. Safety comes from the security, the reliability, the privacy, the equity of access and the hospitality of libraries. Especially in small or rural communities, as in the UGDSB; the "benefits of [these] shared spaces are numerous, and include economic, networking and collaboration, and safety reasons. An added advantage is that in a small community shared spaces support privacy and confidentiality" (County of Wellington, 2011, p. 29) to meet the needs of eLearning students after school library hours, we have added improved access to digital resources through the physical addition of reliable equipment in community libraries.

Embedded school librarianship in online classrooms

Embedded librarianship is part of the eLearning experience at the post-secondary level but has yet to emerge in school libraries in a systemic approach. For post-secondary students, embedded librarians are available, helpful and consistent in their approach to student queries ranging from technical understanding to research approaches. My experience as a student with embedded librarians has influenced the work that I do as an embedded teacher-librarian in the eLearning classes I have access to.

There are two main scenarios where I act as an embedded librarian: 1) through Google Classroom in our Google Apps for Education suite and 2) by creating an active space through our eLearning classrooms in Brightspace D2L. In the first scenario, I often have the opportunity to meet the students face-to-face at least once but I provide resources, reminders or even assessment of skills online

through Google Classroom. The home teacher simply invites me as a secondary teacher to the environment. Through our collaboration, I can help the teacher diagnose weaknesses in the students' readiness for inquiry, respond to student discussions or invite the student to a face-to-face discussion where we can work through difficulties that they are having.

The highest level of achievement I have to date of being an embedded librarian though comes through our local Digital Historian program (http://www.digitalhistorianproject.com/about/). Our school is home to this travelling 4-credit program for grade 11 and 12 students, in which students research the histories of local veterans to build an e-book of their lives to be housed at our local museum. I often get to meet these students once before we are separated by distance. This second scenario of embedded librarianship is managed through a persistent link I created within their digital classroom inside Brightspace D2L which has resources and also my contact information, should they need assistance.   The persistent link allows me to create resources in a public space, in my case a Google site, and link resources specific to their program and direction. With these students the help I provide is often a series of pathfinders that lead students through increasingly complex historical and genealogical work. We use many of the government websites, databases, Ancestry software public licenses and military records. I am also able to link to a bank of instructional videos for research, but also any inquiry topic like MLA formatting. The distance and isolation that these students feel in taking a risk by becoming an online student is decreased through the support I offer as an embedded librarian.

Imperative support for at-risk eLearning students

Our UGDSB experience has shown that fully online learning is usually first accessed by students in grades 11 or 12 and that the most requested courses tend to be in the university-stream. In the 2016-17, I was part of a group of librarians and eLearning teachers who ran an action research project (sponsored by an Ontario Teachers' Federation grant) to examine student engagement in online spaces. We found that some of the reasons that students are compelled to choose online courses are because: a) the course they want is full at their base school; b) the course is needed to upgrade a post-secondary application average or c) the online learning environment suits the lifestyle of these students who have schedules or geographical challenges that make face-to-face learning challenging. Tragically, more and more students are forced into an online class because the course they want to take is not available at all in a geographically accessible, face-to-face school. This factor is the primary reason why students are not successful in online learning (Feick, King, Downe and Unger, 2017). Our action research indicated through a survey of 109 active online learning students that the following factors affected students ability to learn:

- More trouble staying motivated in online learning versus face-to-face (27%)
- Difficulty managing time (20%)

The greatest indicator of whether an online student felt supported or not, was having the opportunity to ask for help. (Feick et al, 2017).

In my experience as a college preparatory English teacher, students often need my course to graduate. Many of my students are returning to the secondary school learning environment just to complete my course and graduate. This readiness and motivation to succeed is one of the reasons that I believe at-risk

students can be successful in the online environment. Many of my students are experiencing social challenges or lifestyles, similar to this report on youth homelessness in our area:

The primary group [at risk of becoming homeless] includes:

• Large families (with 3+ children), particularly given the scarcity of affordable family housing units in the County

• Youth, especially 16 to 18 year-olds (There is much confusion re when youth are "kicked-off" the child welfare system and the rules about youth accessing social assistance).

• Young and/or single parents

• Individuals/families experiencing job loss and credit problems (bankruptcy)

Secondary populations who are also vulnerable include:

• Young adults with limited job prospects who return to their home communities when they have nowhere else to go

• Those who come from families with a history of poverty and/or transience

• Long-time locals with inadequate shelter (e.g. poorly heated farm houses)

• Men living on their own" (County of Wellington, 2011, p. 23).

Not only are their prospects of graduating secondary school challenging, but so is their access to reliable computers, print and digital resources, technical and academic support and functioning skills in organization and time management. As their teacher, these challenges between reader/user, and software and hardware are often insurmountable without a third party stepping in to assist the learner. In our

board, that third party is often a guidance counsellor for emotional support and a teacher-librarian for academic support.

Pedagogy of eLearning with at-risk youth

Students who are both at-risk and ambitiously taking on eLearning classes are more at risk than their peers in face-to-face learning environments. These students who are often verging on adulthood require a special pedagogy of their own. In Handbook of Research on K-12 Online and Blended Learning, Repetto and Spitler apply a framework of "5Cs" (as cited in Ferdig and Kennedy, 2014) to online learning with at-risk students. According to the 5Cs framework students need:

● to be able to connect current learning in school to the knowledge and skills they will need post-school...

● to be provided with a safe and supportive climate for learning....

● to understand and learn how they are in control of their own learning and behaviors....

● an engaging curriculum grounded in effective instructional strategies and evidence-based practices to support their learning....

● to be part of a caring community that values them as learners, as well as individuals

(p. 115). The success of eLearning students at this precarious moment also often relies on moving eLearning students from adolescent reliance to adult independence through explicit training of time management, accountability and organizational skills. Our research and practice demonstrates that school librarians are valuable partners in helping each student achieve this independence. However the limited access to school library staff and spaces has challenges for eLearning students.

Equity and student success

The decision to bring technology to students in the community was based on an initiative from the Upper Grand Technology Council, an internal board group that brings together representatives from the board's IT department, board administration, school support and program services. The intent of the technology council is to plan and strategize ways in which technology can support student success. Understanding that many students are at a disadvantage in terms of access to technology, the members of the technology council discussed many possible reasons why a student might not have access to the Internet or technology — no Internet in the home by parent choice, no Internet in the home because of low income, no Internet in the home because you cannot get Internet service in a rural area, Internet in the home but no or very limited access to devices in the home.

"In Canada, 83% of households have access to the internet at home, but a closer look at the numbers shows a stark divide between the top and bottom quartiles of family income - 98% of families in the top quartile have internet access, compared to only 58% of those in the bottom quartile (with average family incomes below $30,000)"(People for Education and Statistics Canada, 2012, p. 4).

One solution that is often proposed is to go to the public library to access technology, but we also hear from our students that the technology at the public library is limited and in high demand. "Given the digital divide, it is unsurprising that poorer Canadians rely more heavily on public access points such as libraries to use the Internet. The biggest user of library Internet access are Canadians aged 16 to 24, where 21.5 per cent used Internet library access in 2012"(Geist, 2013).   After much discussion we decided to approach one of our local public library systems - Wellington County

Public Library - with a unique pilot project to see if we could increase access to devices for UGDSB students by having the public library loan out our Chromebooks to our students through their library system. Wellington County Library was chosen for the pilot because their jurisdiction covers most of the rural areas of our board. Wellington County Library was very receptive to the idea and willing to move ahead immediately with this project in 3 of their branch libraries. We worked together to create a [Memorandum of Understanding (MOU)](#) that outlined the roles and responsibilities of each party as they relate to the project. For example we determined that Upper Grand DSB would be responsible for loss or damage to the Chromebooks without any cost to the public libraries.

Bridging the digital divide by partnering with public libraries

"Not all students have the same kinds of access to digital technologies. The "digital divide" refers to the gap between the privileged and underprivileged members of society in terms of their ability to access digital tools and the Internet." (People for Education, 2014, p. 4). After a successful pilot project with Wellington County Library we moved forward with approaching the rest of the public library systems in our board jurisdiction in an attempt to bridge the digital divide. In addition to increasing the project at Wellington County Library to include 11 more branches (total of 14 branches) we added Guelph Public Library (7 branches), Shelburne Public Library (1 branch), Grand Valley Public Library (1 branch) and Orangeville Public Library (2 branches). The school board donated 5 Chromebooks for each branch library to circulate to Upper Grand students only. There were a total of 25 branch libraries between the 5 different public library systems that were given Chromebooks as well as given protective cases and Chromebook charging bins.

This project has been and continues to be extremely successful in terms of circulation statistics. The use of the Chromebooks in house and the circulation outside the library has continued to increase over time. During the 2015-2016 school year Guelph Public Library circulated 744 chromebooks and Wellington County Library circulated 1204 chromebooks. During the 2016-2017 school year circulation increased as GPL circulated 964 chromebooks and Wellington County Library circulated 1298 chromebooks. We expect this upward trend to continue for the upcoming school year.

Marketing and promotion was essential to ensure that students and parents were aware of the chromebook project. We used social media (school board and public library), school newsletters, public library newsletters, television and radio advertising, and online and newspaper articles to promote the project over a period of time. Here are a couple of examples of our marketing efforts:

http://www.ugdsb.ca/blog/Chromebooks-available-at-all-Guelph-Library-locations-for-Upper-Grand-students/

https://www.guelphmercury.com/news-story/5551299-upper-grand-school-board-links-up-with-libraries-to-provide-student-internet-access/

In cooperation with Guelph Public Library we also had an opportunity to present the Chromebooks in our public library project as a poster session at the 2016 OLA Superconference. The goal of the session was to spread the idea to other school boards and public libraries in the province. The title of the poster session was "Five Public Libraries and a School Board" and you can see the poster here:

https://docs.google.com/document/d/1nFmji_CTcN3dHd6EOP-Qk48ucxJDj99B2o-w5oe1jvo/edit?usp=sharing

Chromebook circulation has been so popular at Guelph Public Library that we were able to allocate an additional 16 chromebooks for circulation through their branch libraries in the 2016-2017 school year. Other positive stories came from Shelburne Public Library who let us know that the addition of the Chromebooks allowed them to start a creative writing program for teens program. At Wellington County Library the addition of the devices prompted them to purchase and circulate "wifi to go" devices for their rural communities. Many of our UGDSB students have taken advantage of this new addition and will borrow both a wifi hotspot and Chromebook for home use. We also heard from a number of parents that this program has alleviated family stress because they only have one computer in the home and two or more children that need to use it at the same time.

Next steps

We will continue to support all of the libraries with replacing lost and damaged Chromebooks and any other support they require. In the next couple of years we anticipate that the Chromebooks will all need to be replaced and we plan to support this by ensuring that necessary budget is allocated. We anticipate that we will continue to provide additional devices to the two larger public library systems as there never seems to be enough. Overall we feel that this has been a very positive and unique partnership with our local public library systems and the high circulation statistics justify the need. We hope we have helped to bridge the digital divide for our rural students and our low income students by providing equitable access to Chromebooks through public libraries.

School libraries are pivotal to the success of online learning programs, especially in rural communities. The profile of an online adolescent student in combination with the context surrounding their choice to learn online puts the library

at an optimal position to support this learning. "Constructivist tenets of online learning match those of inquiry and problem-based learning associated with information fluency and library instruction" (Boyer and Kelly, p. 367). As online students often are transitioning for the first time from face-to-face environments, they realize that they need to develop new strategies for their studies and a new skillset for success. As with face-to-face learning, school libraries have the flexibility, security and tools to meet the needs of online learners. The reliable nature of the public library in conjunction with the partnership of school libraries has allowed all youth to access online learning support across our rural community.

References

Ash, K. (2011, August 24). At-Risk Students Face E-Learning Challenges.

Education Week, *31*(01), s16. Retrieved from Academic OneFile database.

Barbour, M. K., & LaBonte, R. (2015). *State of the nation: K-12 online learning in*

Canada. Retrieved from Manitoba First Nations Education Resource Centre

website: http://www.openschool.bc.ca/pdfs/state_of_nation-2013.pdf

"Canada Internet Use Survey, 2012." *The Daily*, Statistics Canada, 11 Nov. 2013,

www.statcan.gc.ca/daily-quotidien/131126/dq131126d-eng.htm. Accessed 22

Sept. 2017.

County of Wellington. (2011, September). *Rural homelessness study* (E. Grodzinski,

R. Sutherns, J. Londerville, & C. Bentham, Authors). Retrieved from

https://www.wellington.ca/en/socialservices/resources/wellingtoncountyruralho

melessnessstudy.pdf

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and

education: The self-determination perspective. *Educational Psychologist*,

26(3 & 4), 325-346. Retrieved from

http://sdtheory.s3.amazonaws.com/SDT/documents/1991_DeciVallerandPelle

tierRyan_EP.pdf

"Digital Learning: The 'new normal.'" *People for Education*, 2014,

www.peopleforeducation.ca/wp-content/uploads/2014/03/digital-learning-

2014-WEB.pdf. Accessed 22 Sept. 2017.

Feick, R., King, A., Downe, K., & Unger, L. (2017, May). *High school student*

engagement in eLearning environments. Erin, Canada. Accessible through:

https://docs.google.com/document/d/1QbI_JX8P-

HLihgYiPLhetN_WO_jpj1OlRuczT_Xxk7s/edit?usp=sharing

Ferdig, R. E., & Kennedy, K. (Eds.). (2014). *Handbook of research on K-12 Online*

and Blended Learning. Middletown, DE: Carnegie Mellon University.

Fisher, D.,& Frey, N. (2008). The gradual release model [Illustration]. Retrieved from

http://www.glencoe.com/glencoe_research/Jamestown/gradual_release_of_re
sponsibility.pdf

Flynn, E. (2016, March). Should at-risk students take online courses? *College*

Student Journal, *50*(1), 130+. Retrieved from General OneFile database.

Geist, Michael. "Statscan data points to Canada's growing digital divide: Geist."

thestar.com, The Toronto Star, 1 Nov. 2013,

www.thestar.com/business/tech_news/2013/11/01/statscan_data_points_to_c

anadas_growing_digital_divide_geist.html. Accessed 22 Sept. 2017.

Graham, J. (2015). *Improving e-learning retention rates* (Doctoral thesis, Memorial

University of Newfoundland, St. John's, NL).

Lehman, R. M., & Conceicao, S. C. O. (2014). *Motivating and retaining online*

students: Research-based strategies that work. San Francisco, CA: Jossey-

Bass.

Plowman, E., Anderson, J., & Douglas, J. (2017, August). Adapting online learning to

overcome disadvantage in rural Australia. *Australian Nursing & Midwifery*

Journal, *25*(2), 38. Retrieved from General OneFile database.

Rainie, Lee, and Paul Hitlin. "The Internet at School." *Pew Research Center*, 2 Aug.

2005, www.pewinternet.org/2005/08/02/the-internet-at-school/. Accessed 22

Sept. 2017.