

Conclusions

As technology use in British Columbia classrooms has been on the rise, the need for digital literacy education has also increased. Emphasized by Zuccato, & Al-Shamari (n.d.) when they wrote “[r]ather than relying solely on protective measures, an approach to online safety that includes digital citizenship will help young people safely interact in the online world. Teaching them about digital literacy and digital ethics and etiquette is no longer merely an option; it is an imperative” (p. 5), the need for lessons in digital principles has now become essential. The possibility for harm coupled with the potential long-term impacts of inappropriate technology use must be guarded against, specifically when technology is used as a tool to support student learning in the classroom. Thus, the need has arisen for teachers to develop high standards for the acceptable use of technology in the educational setting and instruct students on the importance of adopting such values.

Having recognized this need in my own practice, I embarked upon this project intending to develop a set of lesson plans tied to the digital citizenship outcomes found in the British Columbia Ministry of Education’s Digital Literacy Framework. Though my focus was quite narrow, the framework opened my eyes to other potential digital literacy issues, which then broadened the scope of my project to include more than just digital citizenship lessons. By building a resource collection around a variety of technology related themes, I felt that I could share my knowledge and experiences using technology in the classroom. In this way I could support other educators to develop their own effective practices that would, in turn, help to ensure the safety of their students while learning online. Using the framework as a guide, my goal was to develop lesson plans that promoted critical thinking skills and allowed for individual creativity, while developing a deeper understanding of safe and acceptable online practices.

As my project progressed, I developed a total of 60 lesson plans covering topics ranging from preventing cyberbullying to determining the reliability of online sources, and then built a website to house all of my work (<http://ksviudigitalcitizenshipdlf.weebly.com/>). Upon the completion of the development phase, I published my work and requested a peer review, depending on my experienced colleagues to provide me with critical feedback and judge the relevance and functionality of the lesson plans and resources that I had compiled. I received both constructive feedback and praise for my work with many reviewers noting that they felt it would be a valuable addition to existing resources and a useful tool to share with educators across B.C.

The suggestions garnered during the peer review identified a number of formatting and grammatical errors, as well as a number of important alterations that needed to be made, such as claiming copyright of the materials I had produced and including a community blog page where teachers would have the opportunity to share their own lesson plans and support each other in their experiences using the resource. Each of the suggestions highlighted a valid concern and will guide the revisions and further development of my work.

The testing phase reiterated the need for such a resource and the overwhelmingly positive response I received from my peer review confirmed the value of the collection that I had developed. Other digital literacy resources are available online, in fact, they proliferate the internet, however this work fills a need for a resource base for local educators by housing a collection of activities, resources and lesson plans specifically defined by a proposed curriculum in British Columbia. It will also serve as a functional starting point for students and teachers embarking on a journey of learning with technology and help to encourage its safe and effective use along the way.

One of the biggest drawbacks of the entire project was the amount of time and effort that went into developing each individual lesson plan. Through years of experience using some aspects of digital literacy in the classroom, a few of the lesson plans simply involved outlining the process that I generally follow, and therefore took only an hour or so to create. However, a vast number of the lesson plans required hours of research, reflection and fine tuning to end up with a unique and usable method to achieve the specific outcome. Working on my own, close to 100 hours of this project were spent on the lesson planning portion alone. Given the timelines I set for finalizing the project, this severely restricted the number of lesson plans that could be completed. It is recognized that with unlimited time, manpower and support, a dynamic and comprehensive collection of resources that is tied directly to the Ministry of Education's Digital Literacy Framework could be developed to support digital literacy instruction in all levels of B.C. classrooms.

A further perceived drawback of this resource would be the time required to maintain it, once completed, and to ensure that it continually remained up to date. Expired links to resources that have moved or been replaced would need to be tracked, new tools and resources would need to be researched, and lesson plans would continuously need to be developed as new and exciting technologies were created. If modifications were made to the curriculum itself, changes would also need to be made to the resource to reflect new or omitted items. As well, the proposed community collaboration blog area would need to be monitored with new posts being vetted or responded to as necessary. This in itself would be a huge job and a time consuming responsibility.

My focus on outcomes tied to the intermediate level also leaves this resource largely unfinished for the primary and middle/high school levels. Though these levels are out of my area of expertise, in order to make this an entirely representative resource, lesson plans for all outcomes would need to be completed prior to the full implementation of this curriculum.

In conclusion, even when considering the potential drawbacks and difficulties that have been identified, I do feel that this project was a huge success. Though challenging and exhausting at times, my dedication and perseverance allowed me to reach my goal of creating a variety of lessons for the intermediate grades and resulted in a collection of effective and useful resources to support each lesson. The resource that I have developed can be used as a broad curriculum covering many topics, or lesson by lesson covering individual themes depending on teacher preference and need. It is thorough, unique and able to be implemented in the classroom immediately. My work provides a necessary resource for teachers in British Columbia, a handy reference tool for all educators who are exploring concepts related to digital literacy, and a starting point for those who are planning to use technology in their classrooms.

Recommendations

As the development and testing phases of this project have now come to a close, there are a number of specific recommendations that I would suggest for the further development and implementation of this project.

Though these lesson plans were created for the purposes of a master's project, in reality the creation of such a resource hub would be completed under a contractual agreement with the Ministry of Education or a specific school district. It has been noted that the process of creating numerous activities, searching out many additional resources and seeking ways to approach each outcome from various different angles would take a substantial amount of time. Therefore, in order to ensure the creation of a truly comprehensive resource for the benefit of all B.C. educators, more time and energy would need to be allocated to the development of each specific lesson plan and numerous user groups should also be consulted during the planning and development phases. In

all likelihood, this support team of educators and technology experts would collaborate and spend a number of days researching and developing each individual lesson plan, creating activities that would reach a variety of different needs and grade levels in multiple ways. I recommend that the existing project and lesson plan template be used as a guide in the further development of a resource hub tied to the Digital Literacy Framework.

Though a lot of effort and creativity was put into the development of the website that houses my project, my skills in website creation are still somewhat limited. I envision a much larger website with links to entire pages for each topic that then include references, additional resources and outlined lesson plans on each page, as opposed to a .pdf file attached to a list of outcomes. The website I created is informational in that it outlines the process and product of my master's degree project. Therefore it was set up in a fairly straightforward and consistent manner. I did not require flash or fluff for the purposes of this project and so did not concentrate my efforts on making the website overly showy, but I do envision the finished product to be much more dynamic, with multiple media options, embedded videos, numerous links to follow and exciting graphics that would draw the user in. Even though I see my website as being well laid out, easy to use and esthetically pleasing, I recommend the use of some creative website designers to develop an even more exciting representation of my work.

Further, though a good start has been made in developing digital literacy lessons within the scope of this project, a number of outcomes remain unrepresented in my work. Due to my experience and interest in the grade 4-6 range and time constraints for the completion of the project, I chose to focus my efforts primarily on intermediate outcomes. The 1-3 and 10-12 grade levels, though briefly touched upon in some lessons, still have a number of outcomes that require research and lesson plan development for the project to cover all aspects of digital literacy. In order

to create the comprehensive resource initially outlined in my project proposal, I recommend that work continue on the development of lesson plans for all of the outcomes and grade levels contained within the Digital Literacy Framework.

Additionally, the resources gathered for each outcome here represent only a small fraction of those available to educators online. Numerous companies, ministries and organizations are helping to create awareness of digital literacy issues and promoting digital citizenship ideals on their own websites. As new resources are developed, lesson plans will need to be continually created, adapted and updated in order to consistently meet the needs of this digital generation. Just as there are many ways to solve an equation or find the answer to a problem, lesson plans could also be developed to reach each outcome in many alternative ways. There is a huge potential here to partner with companies and user groups to develop new and exciting resources and lesson plans to accompany them. It is recommended that connections be made to numerous user groups in order to co-develop and share resources and lesson plans. This will help to ensure that a consistent standard of digital literacy education is reached province wide and, potentially, nationwide.

Based on feedback collected during the peer review process, a number of minor adaptations to the project itself were also identified. A title block and a 'Required Resources' section where materials that are needed in the lesson could be listed will need to be included on the lesson plan template and all existing lesson plans will need to be updated to include that information. Links on the website will need to be regularly checked to ensure each resource is still active and fixed as necessary. Each file will need to be modified so that it opens into a new window for ease of use, and picture attributions need to be made at the bottom of each page on the website. Copyright permissions will also need to be posted for each lesson plan and for the website collection as a

whole. It is recommended that these changes be made prior to publishing the site for use and as an ongoing measure.

Once all of these conditions have been met, the project will also need exposure to be fully effective. I recommend that the Ministry of Education be made aware of the work already completed, and a partnership to promote the completion and distribution of the resource be formed. With the Ministry's guidance and funding, a more dynamic and comprehensive website could be crafted that is based on this work and the Ministry could also assist in the promotion and implementation of the curriculum in school districts across the entire province. I further recommend that links to the completed work be shared via multiple social media sites and groups so that educators across the country can make use of it.

On a personal note, I would also like to include two recommendations that could potentially increase my own expertise, as well as the overall value of my project for the school district in which I work. Initially, I would like to develop a presentation of my work to be shared at professional development sessions. This presentation would highlight the project and lesson plans that I have created and could be used to excite teachers about the potential uses of technology in education and help guide and encourage them through the process of effectively implementing it in their own classrooms.

During the testing and review phase it was also suggested that I write a book that included all of my lesson plans. Additional work developing further lesson plans to cover all of the outcomes in the Digital Literacy Framework, as well as the development of further chapters to explain and support the importance of each section of the framework, would be required prior to a book being ready to print. However, I would love to see this collection published in print form to bring as a resource to school districts and teacher training sessions where I presented the aforementioned

seminar. Though this may be somewhat redundant as it is a collection of online tools and should, therefore, remain online, I would love to join the ranks of being a ‘published author’ and would view that as being a huge personal, and professional, accomplishment.

The intent for this project was always that it would continue on after the completion of the coursework requirements for the MEDL program. The website and lesson plans that I developed suited my purposes for the scope and timing of this project, however, given additional time to research and develop further lesson plans, I believe that this project could become an indispensable resource for B.C. educators. By continuing to build upon this effective foundation to create a massive collection of tools and resources, my goal of helping to bring digital literacy skills and digital citizenship awareness into the classroom would be achieved.