**Developing Online Master’s Programs for Teacher-Librarians:**

**Connecting Inside and Outside the Virtual Classroom**

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**Abstract**

*This paper explores the development of the Teacher-Librarianship by Distance Learning Program at the University of Alberta in Edmonton, Alberta, Canada. It explores the development of the program from 1997 onwards, discusses the challenges and opportunities of Learning Management Systems, and explores key changes in the program over time. One key change has been the impact of technological changes and advances on teaching and learning. Participatory Culture and Connectivism are explained and the implications for this program are discussed. The authors understandings of teaching and learning in online environments have changed over the past 15 years. Key lessons learned and future plans are also highlighted.*

**Keywords**: teacher-librarianship education, connectivism, participatory culture, online education, Web 2.0 social media

**Context**

Teacher-Librarianship by Distance Learning (TLDL) at the University of Alberta has been providing online educational opportunities for teachers and teacher-librarians for more than 17 years. To be accepted into the Master of Education program, students need to be qualified teachers (Bachelor of Education degree) and have a minimum of one year of successful teaching experience. Most of our students are already working in school libraries and come into the program to gain the knowledge and skills necessary to build successful school library programs. A few students every year come into the program wanting to be teacher-librarians but not working in a school library. This is a drastic shift from twenty years ago when the majority of students were not working in school libraries when they enrolled in our teacher-librarianship education programs.

The Master of Education program consists of ten courses - each course requires the equivalent of approximately 39 hours of class time. Included in the requirements for all students in the program are a course in educational research and a rcourse in curriculum foundations. Those students wanting to focus on teacher-librarianship can take the following courses:

EDEL 540 Introduction to Teacher-Librarianship

Explores and critically evaluates the management of school libraries programs and services.

EDEL 541 Introduction to Resource Organization and Management

Explores and critically evaluates the management and organization of print and digital resources in a school library collection.

EDEL 542 Inquiry-based Instruction

Explores and critically evaluates the nature and culture of inquiry and the integration of inquiry in teaching and learning.

EDEL 543 Introduction to Contemporary Literacies

Explores and critically evaluates the foundations of contemporary literacies, literacy in the 21st century, and literacy leadership for teachers and teacher-librarians.

EDEL 544 Introduction to Emerging Technologies

Explores and critically evaluates the use of emerging technologies in schools and school libraries with an emphasis on how they might be used in personal, professional and teaching and learning situations.

EDEL 545 Integration of Emerging Technologies

Explores and critically evaluates the integration of emerging technologies into schools and school libraries with an emphasis on the trends, issues, and challenges associated with living and working in digital age classrooms and libraries.

EDEL 546 Introduction to Resource Selection and Evaluation

Explores and critically evaluates the selection and evaluation of print and digital resources for children and young adults in school libraries.

EDEL 549 The Leadership Role of the Teacher-Librarian

Explores and critically evaluates current trends and issues in school library leadership.

As an online program, technology is woven into the fabric of each course, with students completing all of their coursework and assignments online.

More information about the program can be found at <https://sites.google.com/a/ualberta.ca/tl-dl/>. The program currently has 59 students with one faculty member. Sessional instructors also teach in the program - Dr. Dianne Oberg, Dr. Joanne de Groot, and Dr. Lois Barranoik. Courses are $1000.00 USD each plus non-instructional fees and are available for International Study.

**Development of the Program**

Dr. Dianne Oberg moved the teacher-librarianship specialization online in 1997. The foundation of the specialization was “high structure and high touch” - courses would follow a traditional 13-week model and students would work together to socially construct their understandings and build relationships with the instructor and their peers. TLDL started out very small with just a few Master of Education students, a few diploma students and students from other institutions picking up a few courses through a collaborative partnership between universities in Western Canada. It has grown exponentially in the last ten years. As the number of students and the number of courses we offered grew, we decided to focus solely on the Master of Education (MEd) degree.

**Needs Assessment/Curriculum Review**

Many teacher-librarians in Canada do not have a Master’s level degree. This is unlike Britain, the United States and Australia where most, if not all, of the teacher-librarians/school library media specialists (SLMS) will have a Master’s level degree. Most will have a Master of Library (and Information) Science/Studies (MLS/MLIS) degree while others will have a Master of Education degree with a specialization in school libraries. In the US, many states have certification requirements for SLMS and these usually expect a Bachelor of Education (BEd) and a MLS/MLIS degree. The same is true in Australia. From my experience in Britain, many of the school librarians will have a MLS/MLIS degree but not necessarily a teaching certificate and or BEd.

In western Canada, however, we have many “teachers in the library” with no further education in librarianship and some teacher-librarians with a post-graduate diploma. The diploma courses tend to be at the 300-400 undergraduate level. In Ontario, the highest qualification is a School Library Specialist; three courses completed after a BEd and some teaching experience in a library. We believe that this is NOT enough for teacher-librarians in the 21st century. In *Librarians as Learning Specialists: Meeting the Learning Imperative for the 21st century*, Zmuda and Harada (2008) present the idea that teacher-librarians are, in fact, learning specialists.

These specialists generally have no official classroom assignments per se because they work with the entire school population. They may include reading specialists, writing coaches, mathematics coaches, science coaches and instructional technology specialists. Learning specialists are strategically positioned to be teacher leaders. Zmuda & Harada, 2008, p. xvi)

To be a teacher leader, you need to have the same degree as other school leaders. In 2008, did a formal curriculum review and examined the role of the teacher-librarian in the 21st century schools and what knowledge, skills and attitudes would be the focus in our courses. With an advisory group we engaged in lots of talk, reading and throwing ideas around and then the opportunity we had been waiting for arrived. We were successful in an application for a Fulbright Senior Specialist and Dr. Marcia Mardis joined our faculty for three weeks in October of 2008. Dr. Mardis has been instrumental in the writing of American Association of School Librarians’ new *Standards for the 21st-Century Learner* and is a prolific researcher and conference presenter in the area of school libraries. This was our chance to work with a leader in the field and take a good hard look at our courses. In preparation for Dr. Mardis’ visit, we surveyed all of our recent Master of Education in Teacher-Librarianship graduates to find out more about what they were doing in schools and school libraries, how well prepared they felt they were based on their education, and what trends and issues they saw emerging in their work.

Our graduates told us that:

· The M. Ed degree empowered them to take on greater leadership roles in their schools and districts.

· The program was transformational – both personally and professionally.

· The online format provided them with flexibility and the opportunity to succeed while managing their diverse work and home responsibilities.

· They would highly recommend the program to others.

· They developed professional contacts and friendships across the country and in several other countries around the world.

· They enjoyed focusing on global issues of teaching, learning and the school library while having the opportunity for choice in assignments that could be tailored to unique situations and professional learning needs.

· They enjoyed the thoughtful, high quality discussions.

· They appreciated the quality instruction and the support of the TL-DL administration and community.

· This program will make you a better teacher not just a teacher-librarian.

· “What is learned and discovered in TL-DL is for all teachers, not just teacher-librarians.”

· The program is reasonably priced compared to similar programs in Canada and is a deal compared to programs from the US.

**Pedagogical Approach**

Using this foundation we developed the courses listed at the beginning of this paper. We also determined that for teacher-librarians to be effective educators in the 21st century, they need to be familiar and comfortable with Web 2.0. Also known as the Read-Write Web, Web 2.0 refers to the web-based tools that are readily available and used to create, communicate and collaborate with others. Blogs, wikis, photo and video sharing sites (Blogger, PBWiki, Flickr and Youtube), production tools (Animoto, Voicethread, Prezi) and social networking (e.g. Facebook and Twitter) are all examples of Web 2.0 tools. Our approach became one in which we purposefully exposed students (practicing teachers and teacher-librarians) to a variety of Web 2.0 tools in their program and provided activities, assignments, and assessments that helped them become active participants in online environments. The Pew Internet & American Life Project “has found that 64% of online teens ages 12-17 have participated in one or more among a wide range of content-creating activities on the internet, up from 57% of online teens in a similar survey at the end of 2004” (Lenhart, Madden, Rankin Macgill, & Smith, 2007, para. 2). Helping teachers and teacher-librarians understand the digital experiences of young people must be a part of graduate education in teacher-librarianship. These online experiences are part of participatory culture and are defined by Jenkins et al. (2006) as:

A culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one’s creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to the novices. A participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one another (at the least they care what other people think about what they have created). (p. 3)

The foundation of participatory culture is the connections made with and between others. Siemens (2005) proposed connectivism as a new learning theory for the digital age. The principles of connectivism are as follows:

* Learning and knowledge rests in diversity of opinions.
* Learning is a process of connecting specialized nodes or information sources.
* Learning may reside in non-human appliances.
* Capacity to know more is more critical than what is currently known.
* Nurturing and maintaining connections is needed to facilitate continual learning.
* Ability to see connections between fields, ideas, and concepts is a core skill.
* Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
* Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision. (Connectivism section, para. 3)

These two ideas, participatory culture and connectivism, form the foundation of the practice we have implemented at the University of Alberta to prepare teacher-librarians for their work in schools and school libraries in the 21st century. These two ideas are layered on top of the strong foundation of social constructivism that is evident in our course content, readings, activities, discussion topics and assignments.

**Learning Management System**

Because this specialization has been online for seventeen years, we have seen many changes in terms of Learning Management Systems (LMS). We began with WebCT – one of the first LMS options- and now use Moodle. We did not move to another LMS (although instructors in TLDL have taught in Angel, Desire2Learn and Blackboard) until the University of Alberta went to a new centrally supported LMS in 2011 when WebCT was discontinued. TLDL instructors were early adopters of Moodle and worked with our eLearning colleagues to pilot and test the new LMS. It is our position that, at this time, there is no one perfect LMS.

**Supports and/or Obstacles to Development**

The biggest support for the teacher-librarianship specialization’s move to online was Dr. Dianne Oberg and she continues to be a champion for the program. Obstacles to development include faculty members who do not support online learning, who are threatened by the success of the program and its students, and who are fearful of the university’s push for more online and blended courses. There has been very little money needed to build this program. An initial grant to pay for a programmer and the development of courses by a handful of practitioners was used in 1997 but the program has been run on a shoestring ever since.

**Changes in the Program over Time**

One of the biggest changes over time have been the move from courses that were full of content (written lectures) to a more graduate seminar model where the course is socially constructed by the students and the instructor. Because we were pioneers in online education, we have seen radical changes in the power of the LMS, the availability of chat, podcasting and videocasting, streaming video, synchronous tools, Web 2.0 tools. Challenges now include how to provide access to this shared content outside of the locked-down LMS.

One of the monumental changes was the development and implementation of a new course in emerging technologies. Over the last few years the course has continued to evolve to reflect the most current trends and to incorporate our own changing understandings of ‘best practice’. While we made changes to the emerging technologies course over time, including the assessment of student work, it didn’t take long for us to notice other changes. Students who had completed the emerging technologies course were using their new knowledge and experience to collaborate with other students in other courses (e.g. wikis and Skype), present their new understandings (e.g. Voicethread, Animoto, Prezi, Slideshare), share resources (e.g. course Delicious or Diigo links, Evernote) and develop connections with others (e.g. blogging, Twitter and RSS Feeds). These students who had completed the course were demonstrating the power of Web 2.0. They were no longer passive consumers of information, they were now producers, collaborators, communicators, and creators who were becoming active participants in this new online culture. Students who hadn’t taken the emerging technologies course were seeing their fellow students sharing ideas, resources, content and new Web 2.0 tools to try. It became apparent that the emerging technology course was changing how we were teaching and learning across the rest of the TLDL courses.

In response to the experiences of students who had completed the emerging technologies course, the EDEL 540 *Introduction to Teacher-Librarian*) was revised to include an expectation that students follow a core selection of blogs and Twitter feeds written by leading thinkers in the areas of school libraries, technology, inquiry, resources for children and young adults, leadership, and multiple literacies (see http://tldl.pbworks.com/w/page/4059591/FrontPage). Links to TED talks, webinars, online conferences and live feed videos were shared as part of course content in many of our courses. It was no longer enough for students to support ideas with research and professional articles and books. It became an expectation that students also integrate a variety of social media into their discussion posts, written assignments and presentations. This meant changing our assessment rubrics and expectations. New rubrics were created to ensure that social media was included in assignments and in general discussions. For example, we now use a common participation rubric across all courses in TLDL to evaluate how well students incorporate social media into their overall participation in the course.

As our students followed blogs and Twitter as part of courses, we saw connectivism start to be lived in our program. Discussions about how to build and maintain personal learning networks started to happen. The amount of beginning content (e.g. formal lecture notes) in our online courses started to decrease and we moved to a more connectivist approach. Classes were “emergent, distributed, chaotic, fragmented, non sequential and contextualized” (Anderson, 2010, slide 35). We modelled to our students that our personal professional learning networks, both face-to-face and virtual, were becoming more and more important in the way we learned. We blog, follow Twitter feeds and tweet out ideas, read blogs, participate in the conversations on those blogs, and add those ideas to our courses as they happen. We talk about how to manage our feeds, prune our blog list, and create a positive digital presence to help build social capital. While we did this we also made it an expectation that our students needed to be creating personal learning networks to be successful in the program. We hoped the knowledge and skills built in the program would enable our students to sustain their personal learning networks after they graduated.

By providing these experiences to our students (as learners), we believe that they will be better able to act as technology leaders in their schools and school libraries. In this way, we model and demonstrate our belief in the importance of connectivism and participatory culture as one way of thinking about learning and knowledge.

 **Evaluation of Program**

We have completed a variety of different exit surveys and research projects to better understand the experiences of the students and needs of the profession. Our Associate Dean - Graduate Studies is also involved in creating a faculty-wide exit survey for students and this data can help us better understand our students’ experiences within the context of the larger graduate program in the faculty. We learn a lot from our students who tend to stay in touch with us after graduation.

**Lessons Learned and Future Plans**

Being nimble and flexible is very important. Technology is essential to online learning and technology changes quickly. Be mindful of how technology in integrated into teaching and learning and how it might change experiences in an online program.

Getting outside help is crucial. Having an expert come to dig into your curriculum and the experiences of students can provide you with new directions and exciting ideas. Learn from the mistakes of others.

Sharing the load is important and building capacity is essential. This takes time and support from others.

Our hope is to build connections to other online programs in the Faculty of Education. Jennifer would love students to be able to choose either an online Master of Education or an online Master of Library and Information Studies degree with a teacher-librarianship focus. This would allow for more diversity of options, sharing of the teaching and course development load, and make teacher-librarianship more sustainable within the faculty.

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**Biographical Note**

Dr. Jennifer Branch: Jennifer is the Coordinator of the Teacher-Librarianship by Distance Learning program and an Associate Professor in the Faculty of Education at the University of Alberta.  She worked as a junior high teacher and teacher-librarian in Inuvik, Northwest Territories for 6 years and as a teacher in Northern Ontario and did research in Aberdeen, Scotland. Jennifer teaches courses in inquiry-based learning, teacher-librarianship, technology in schools and libraries and foundations of library and information studies. Jennifer's areas of research are information-seeking processes, information literacy education, inquiry teaching and learning, and teacher-librarianship education.   Please contact jbranch@ualberta.ca for more information.

Dr. Joanne de Groot: Joanne de Groot is Manager of the Highlands Branch of the Edmonton Public Library and an Adjunct Assistant Professor in the Department of Elementary Education, University of Alberta, Canada  Joanne has also been an online instructor for the University of British Columbia and San Jose State University.  Her teaching areas include Web 2.0, educational technology, children's literature, school librarianship, services for children and young adults in libraries, and collection development.  Joanne's research interests include teacher-librarian education, technology in schools and libraries, and summer reading programs in public libraries.  Please contact degroot@ualberta.ca for more information.