This paper explores the experiences of recent graduates from a Master of Education program in Teacher-Librarianship at the University of Alberta in Edmonton, Canada. Recent graduates were asked to provide information about the educational needs of 21st-century teacher-librarians and to think about what topics in the current program were important and which were no longer relevant. Technology and leadership emerged as the most important issues and graduates indicated that the evolving nature of the profession required both formal and informal learning opportunities. These findings will help faculty and instructors to revision the program and the curriculum.

Programs that educate teacher-librarians need to be responsive to the needs of both students and the profession and it is important to gather feedback on the experiences and perceptions of newly graduated teacher-librarians. These experiences and perceptions are crucial to our understanding of the role of the 21st century teacher-librarian. The purpose of this research was to learn about the experiences of students who have recently graduated with a Master of Education degree from the Teacher-Librarianship by Distance Learning (TLDL) program.

The TLDL program has been in existence at the University of Alberta, in Edmonton, Alberta, Canada for more than ten years in an online format and for more than 40 years altogether. Over this time it has grown to include more than 40 students in the Master of Education program and 40 students in the Diploma program. The program currently includes 14 online courses that are available to students who live across Canada and around the world.

The purpose of this research was two-fold. First, we investigated former M.Ed. students’ experiences with and attitudes about the TLDL program. Second, since the TLDL program is now more than ten years old, we asked these recent graduates of the M.Ed. program to look back and reflect on what topics, issues, and content seem to be missing from the program and suggest new topics or issues that should be addressed. We also asked our former students to tell us more about what topics are no longer relevant or should be given less or a different focus. This kind of information had not previously been collected when students graduate from the program but was valuable for gaining
insight into students’ experiences of completing an online program. Survey data also helped to inform program planning, curriculum revisions and support systems available to students in the program.

Review of the Literature

No other studies have been found that broadly investigate students’ reflections of and experiences with an online graduate degree program after the completion of their degree. Other studies have focused more extensively on instructor preparation and student learning experiences (Lao & Gonzales, 2005); student perceptions of the quality of a distance education courses (Ortiz-Rodriguez, Telg, Irani, Roberts, & Rhoades, 2005); graduate students’ perceptions of community in online courses (Conrad, 2005); and the reasons why students enroll in online graduate courses (Braun, 2008). This study, conducted by the coordinator of the TLDL program and a TLDL instructor, sought to better understand how students experienced their online M.Ed. program and how it prepared them for work in 21st century schools and libraries. Although there is no research on this topic, the vast number of professional standards, documents and handbooks that guide teacher-librarians and school library media specialists are an indication of current and future trends effecting teacher-librarianship education.

The International Society for Technology in Education (ISTE) recently published the *National Educational Technology Standards for Teachers* (NETS-T). These standards have implications for teacher-librarians and for current and future practices in teacher-librarianship education. For example, the NETS-T encourage teachers, and by extension teacher-librarians, to “model digital-age work and learning” by demonstrating fluency in technology systems, and collaborating with and communicating information and ideas to colleagues, students, parents, and community members using different digital technologies (ISTE, 2008, para. 3). Similarly, the standards require teachers to

- design digital-age learning experiences,
- promote and model digital citizenship and responsibility,
- and, engage in professional growth and leadership.

This final standard about professional growth and leadership indicates that teachers and teacher-librarians should “continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources” (para. 5). For teacher-librarians, participating in professional learning networks with colleagues at local, national, and international levels is made easier with the advent of online social networking sites that promote conversation and collaboration. Education for teacher-librarians should continue to promote this kind of communication and collaboration, while also focusing on “current research and professional practice…to make effective use of existing and emerging tools and resources” (para. 5).
The American Association of School Librarians (AASL) also published new standards recently. The document, *Standards for the 21st-Century Learner*, describes a set of common beliefs about students, including the notion that “reading is a window to the world, inquiry provides a framework for learning, ethical behavior in the use of information must be taught, technology skills are crucial for future employment needs, learning has a social context, and school libraries are essential to the development of learning skills” (AASL, 2007, pp. 2-3). These standards emphasize that students of all ages use skills, resources, and tools to

- inquire, think critically, and gain knowledge
- draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge
- share knowledge and participate ethically and productively as members of our democratic society
- and pursue personal and aesthetic growth (p. 3).

By recognizing that the school library has an important role to play in the development of these skills, the AASL standards document highlights the importance of teacher-librarianship education programs that emphasize the teaching, technology, and leadership skills that teacher-librarians will need to facilitate this kind of learning for students and their teachers.

The Ontario Library Association’s new study on *Exemplary School Libraries in Ontario* also provides insight into future trends for school libraries and teacher-librarians. This study found that a key characteristic of exemplary school library programs is “the exemplary teaching skills of the teacher-librarians, coupled with their enthusiasm and ingenuity…the most successful programs are characterized by teacher-librarian and classroom teacher collaboration in terms of teaching, learning, and library use” (p. 36). As well, exemplary school libraries in this study had the support of principals who “viewed the teacher-librarian as a key teacher or lead teacher in the school” (p. 8). The researchers also found that the teacher-librarians in these exemplary programs embraced innovation, were engaged with and enthusiastic about their roles in the school, and “stressed the importance of building relationships with students and staff and they created opportunities for this to happen” (p. 14). As the researchers state, “the teacher-librarians are leaders in their school and outstanding teachers” (p. 36). While many of these personality traits of teacher-librarians in exemplary school library programs are impossible to create through education alone, the findings from this study suggest that teacher-librarianship education should emphasize leadership skills and practices and provide teachers and teacher-librarians with opportunities to design innovative programs that could be implemented within their schools.

In 1995, the Association for Teacher-Librarianship in Canada (ATLC) and the Canadian School Library Association (CSLA) began work on the competencies for teacher-librarians in the 21st century. The document highlighted both professional and personal competencies necessary to be an effective teacher-librarian. In the area of professional competencies, the key theme emerging from this document is the development of leadership skills in a variety of areas including managing change, developing and maintaining relationships with staff and students, selecting and evaluating
of resources, cooperative program planning and teaching, curriculum, learning needs of students, information technology, and the management and evaluation of programs, services and school library staff. Personal competencies include flexibility, commitment to lifelong learning, seeking challenges, building alliances and working well with others, seeing the big picture and making school library goals fit with broader school, district and provincial goals (Competencies for teacher-librarians in the 21st century, 1998).

Achieving Information Literacy: Standards for School Library Programs in Canada (CSLA & ATLC, 2003) indicated that teacher-librarians should have “the following specialized abilities:

- Expertise in a variety of instructional strategies
- Knowledge of the curriculum and the learning outcomes developed for all students
- Skill in the accessing and ethical use of traditional and electronic/digital resources
- Strong connections to a full range of human and community resources for use in school library programs
- Expertise in the collaborative planning process
- Ability to team-teach to ensure that students develop the necessary skills to access, interpret, evaluate, and communicate information while they learn subject area curriculum. (p. 57-58).

The purpose of Rosenfeld and Loertscher’s (2007) Toward a 21st-Century School Library Media Program is to support teacher-librarians as they “move [the] school library’s program forward so that it serves the needs of 21st-century students” (p. vii). This book is a compilation of articles, mostly from Teacher Librarian, and serves as a guide to some of the key issues/themes emerging from this respected professional journal about the role of the teacher-librarian. The book is divided into seven sections with the key theme being leadership in each area. The topics selected by the editors are: collaboration, curriculum design and assessment, technology integration, 21st-century skills, literacy and reading, partnerships, and issues and management.

In summary, the themes emerging from these documents include the need for teacher-librarians to develop both personal and professional competencies. Personal competencies include developing dispositions including a desire to engage in life long learning opportunities, an ability to communicate effectively with a wide variety of stakeholders, an interest in building partnerships, and an ability to see the big picture and to ground your school library program in a larger school, district and regional context. Clearly, teacher-librarians are school leaders. Professional competencies include an understanding the role of technology, a willingness to continually explore emerging technologies, and the ability to think critically about their place in teacher and learning. Teacher-librarians are called upon to collaborate with teachers and students, model instructional strategies and be curriculum leaders. Traditional roles of teacher-librarians also continue to play a central role in school library programs. Teacher-librarians are responsible for evaluating, selecting, managing and organizing a diverse collection of
resources to meet the needs of their school community. They also are literacy leaders and promote both traditional and new literacies.

**Method**

Data collection for this study involved surveying students who had recently graduated with a Master of Education in Teacher-Librarianship from the TLDL program. Information letters were sent to every graduate of the TLDL program in spring, 2008, explaining the research project and asking them to complete the online survey. A total of 30 invitations to participate were sent. The survey was available through SurveyMonkey, a software program that creates surveys and then collates the responses. The survey consisted of a series of open-ended questions asking about the students’ motivation for enrolling in the program, current position, experiences in the program, advice for new students, suggestions for topics in the program that were particularly useful, outdated or irrelevant, reactions to online learning experiences, and suggestions for specific support to help with online learning. The survey also asked students to tell us about the issues, topics and challenges that they felt were going to be important in their work for the next ten years as teacher-librarians.

Twenty-eight of the 30 graduates of the TLDL program participated in the survey. After data collection was complete, reports based on each open-ended question were generated and printed. The researchers then read each report recursively, looking for themes and trends that emerged within and across questions. The data from the surveys were analyzed for common patterns and themes related to the research questions (Bogdan & Biklen, 1992; Miles & Huberman, 1998). Data from two of the survey questions are presented in this report using representative quotes to support the patterns and themes. Throughout this paper, we have chosen to refer to the participants in this study as teacher-librarians, in recognition that their degree provides them with the credentials to be fully qualified teacher-librarians. However, we also recognize that not all of them were working in school libraries as teacher-librarians at the time they were responding to the survey questions.

**Findings**

This paper focuses on recent graduates’ responses to two broad questions from the survey. The first question was, “As you think about your work for the next ten years, what issues/topics/challenges do you see needing to learn more about? Could or should these be offered in some way in the TLDL program? Please explain.”

The responses from teacher-librarians can be categorized into a variety of themes. First, the teacher-librarians who responded to this survey indicated that they need to learn more about technology. One teacher-librarian stated, “Technology! I feel inadequate in this area, yet I am completely cognizant of its importance in the 21st century. I think that this is ongoing but know that many districts do not offer ProD (professional development) that is helpful for most of us.” Another teacher-librarian commented,
“technology seems to play a larger and larger role in teacher-librarianship, with inquiry learning being bound up in literacy with information and communication technology.”

In particular, teacher-librarians wanted to know more about Web 2.0. “I wished I could have taken the technology course now because I really want some direction when it comes to Web 2.0.” This quote refers to the fact that we have recently created an Exploration of Web 2.0 for Teaching and Learning course in place of an older technology course that focused on older technology (de Groot & Branch, 2008). Another teacher-librarian also stated a need to know more about “all things Web 2.0 and how to integrate them into teaching.” One teacher-librarian commented, “social networking, virtual worlds, and mobile computing are issues I'm seeing in my library on a daily basis.” The teacher-librarians also indicated that they wanted to know more about evaluating, selecting, and searching databases. One teacher-librarian indicated she would like to know more about school library webpages, while another stated, “building web pages was useful, but now we have gone beyond that into Web 2.0 - help could be given to navigate the confusing array of choices.”

Another need that was identified by a number of the TLDL graduates was to learn more about creating electronic pathfinders, which are useful to help students and teachers access the variety of resources available both in print and online. As one teacher-librarian commented, “Students will need to know how to access, manage and evaluate information from a multitude of resources.” Teacher-librarians also indicated that they needed to know more about specific hardware such as interactive whiteboards (e.g. Smartboards) or handheld devices (e.g. ipods and e-book readers) and the software that goes with this hardware.

Along with learning more about specific new and emerging technologies, teacher-librarians indicated that they also needed to know more about issues related to technology and technology integration in schools. These issues included digital citizenship, copyright, privacy, intellectual property, and electronic publishing.

We have identified the second theme that emerged from the responses leadership. The issues that teacher-librarians indicated they needed to know more about included change, future trends in teacher-librarianship and advocacy. There was also interest in learning more about action research and evidence-based practice. One teacher-librarian wrote, “encouragement for continued research in school librarianship such as action research/evidence-based practice should be included either as part of regular coursework or in continuing education.” Another area of need for one teacher-librarian was assessment for learning. “I would like to see courses in assessment for learning offered in the future, as I think this something that most districts are really focusing on and an area where teacher-librarians could take a leadership role.” Teacher-librarians also indicated they would like to know more about supervising support staff in the library, working with teachers, and moving them forward in their thinking.

One teacher librarian indicated that there was a need for more about literacy in general, and in particular new literacies, in our program. One teacher-librarian wrote,
perhaps a course could be developed on “literacy and literacies” but focusing on basic literacy – as a lot of teacher-librarians, especially in elementary schools, are literacy leaders for their school and need to have a strong underpinning on how students become literate.” Although only one other teacher-librarians indicated this need in the survey, we have noticed that an increasing number student capping papers (a final paper of approximately 25 pages done as a last course in the program) have often been about new literacies and promoting literacy through the school library. This indicates to us that students see a need to learn more about literacy and new literacies and are choosing to complement their courses with in-depth work in this area for their final projects.

Teacher-librarians also indicated that they were interested in continuing education and asked about taking courses that were not part of their program or taking some of our newly developed courses to keep current on topics in teacher-librarianship. One comment was “Staying abreast of the latest research into school librarianship is a challenge. Perhaps continuing education courses could be offered for graduates of the program at a reduced rate (lower than regular tuition).” Another teacher-librarian asked, “Can graduates continue to take courses in Open Studies?”

This paper also focuses on a second question from the survey that was sent to recent graduates of the TLDL. That question asked the recent graduates to “Think about the courses you took as part of the program. What were the topics or issues covered in these courses that have been particularly helpful to you as a 21st century teacher-librarian? What topics or issues seem outdated or irrelevant as a 21st century teacher-librarian?” The responses have been broken down into several broad categories.

First, teacher-librarians indicated that several specific courses were of use and needed to continue to be a part of the program. These included our courses in graphic novels and comic books and in Canadian children’s literature which was taken by a number of the teacher-librarians who responded to the survey. Another very popular course is one that we offered on campus in a face-to-face version for two summers. This course is taught by Dr. Toni Samek and Dr. Dianne Oberg and is called Issues in Teacher-librarianship: Intellectual Freedom and Social Responsibility. One student was lucky enough to take a course in the School of Library and Information Studies called Multimedia Literacies and taught by Dr. Margaret Mackey. This course provides an introduction to the theories, practices and implications of multimedia literacies. A combination of this course and another course taught by Dr. Mackey called Contemporary Theories and Practices of Reading would provide our students with a solid grounding in reading and new literacies.

One of our most popular and relevant courses, according to teacher-librarians is our Inquiry-based Instruction course. Several teacher-librarians indicated that it was a very important course and one commented that there continues to be a need for understanding “inquiry based learning that infuses critical thinking throughout” the curriculum. Another teacher-librarian commented that “the inquiry process is highly valuable. This is what we should be practicing in schools.”
Teacher-librarians were also clear about what was no longer relevant. One course that they highlighted was our School Library Information Materials course, which has a strong focus on traditional print reference sources. One teacher-librarian commented, “The physical collection – the research portion [reference], not the fiction section, is becoming obsolete. Rarely do I see classes use books for their research anymore. This is not something we should oppose, but instead embrace and move with the population. If teachers and students don’t see a need for books, then we need to help them with what they do use.” Another comment was, “From my direct experience, print reference materials are going the way of the dodo. I was raised on print reference, but even I go online for reference. You may want to consider having a course that deals with database acquisition, use and promotion.”

Another course that teacher-librarians felt was irrelevant or needed a change of focus was our Organization of School Library Materials. This course also includes basic cataloging. One teacher-librarian wrote, “I think some of the students in the cataloging course could seem to see the broader issues. I think the professor could have used her position of authority to push them a bit more, to confront the ‘I need to catalogue the books myself and how software is designed is beyond my job description’.” Another student commented, “I have never had to create a MARC record, and probably never will. I think that a full course in cataloguing is more than enough. In fact, I would revamp that course to focus less on cataloguing books and more on searching in library catalogues (or on teaching students to search in library catalogues) -- a skill that is very different from searching the Internet.”

Teacher-librarians also commented on our Leadership Role of the Teacher-Librarian questioning the purpose of the course. This course explores leadership and also allows students to focus on a central question and do an integrated professional and research literature review. The course was developed to help prepare students to complete their capping paper when this was done independently. Since the development of the course, we now have a capping course with an instructor to support students as they write their capping paper. As one student noted, “I felt that the ‘leadership’ course was really two courses -- one on educational leadership and one a literature review/preparation for capping. Perhaps it could become two courses -- many times teacher-librarians become educational leaders or administrators after they leave the library -- teachers with those kinds of aspirations could benefit from an entire course in educational leadership and educational change theory. (And of course, those doing a research-based capping paper can benefit from the guided literature review period).” Another student commented, “I use the information I learned in the leadership course a lot. It gave me the confidence I needed to advocate for my program.”

Two courses which are out of the control of the TLDL program were also highlighted by students. Many students, not just those in teacher-librarianship, find the Introduction to Educational Research course to be challenging. It is not always apparent to students why they need this course. However, we strongly believe that being able to read and understand educational research is an important skill for all teachers. There were also a few students who highlighted the required curriculum course as one that did
not seem relevant to their work in school libraries. Again, this course is a foundational course for all the Master of Education students in our department. One student summed it up nicely writing, “The worst (and it wasn't all that bad) part for me was taking the two required courses (curriculum history and educational research). After the other courses which I had taken being really practical, I found it harder to do the theoretical kinds of courses.”

Discussion

Although there is no research specifically on recent graduates’ experiences in teacher-librarianship programs, we do have professional documents that indicate that there are personal and professional competencies required for developing exemplary school library programs. This research found that teacher-librarians see technology as an integral part of their schools and feel this needs to be reflecting in teacher-librarianship education. Our recent graduates identified technology in general and Web 2.0, in particular as key issues. The variety of technologies both hardware (e.g. Smartboards, data readers, ipods, and other handheld devices) and software (e.g. webpages, electronic finders, databases, and e-books) were of concern to many recent graduates. Many recognized that the changing nature of information and communication technology requires that courses need to evolve. As one student indicated, a technology course “will need to be constantly revamped as technologies change almost every year.”

Recent graduates also indicated that they need more opportunities in their education to explore and discuss the issues arising from the proliferation of new technologies. These issues included digital citizenship, copyright, privacy, intellectual property and electronic publishing. While our courses can offer students the opportunities to discuss a variety of issues, this also leads us to believe that there is a need for continuing education. This may explain, in part, why professional learning networks and social networking for teachers and teacher-librarians are growing. These findings support the direction of the Standards for the 21st-Century Learner (AASL, 2007) and the ISTE (2008) NETS for Teachers.

Another theme that emerged was that teacher-librarians are taking on a leadership role in schools and recent graduates felt that this needs to be reflected in teacher-librarianship education. We need to provide opportunities for teacher-librarians to explore, discuss and reflect on change, school reform, assessment, advocacy, action research and evidence-based practice. Teacher-librarians also indicated that they are taking on leadership roles in the area of literacy and need the background theory to support this role. The leadership role of teacher-librarians needs to be infused across all courses in the program. Toward a 21st-century school library media program (Rosenfeld and Loertscher, 2007) suggests this by focusing on learning leadership for each topic in their collection.

Recent graduates indicated that the role of the teacher-librarian in the 21st century is evolving quickly and even a Master of Education degree is not enough to keep up with the changing demands of the job. As a result, there is a need for formal and informal
continuing education opportunities. As leaders in schools, teacher-librarians need to model lifelong learning and should try to seek out personal professional development that complements and expands on their graduate education. Curriculum, assessment, literacies, instructional strategies, and differentiated instruction are examples of topics that might be of interest to teacher-librarians and might not have been part of their teacher-librarianship education. As one teacher-librarian stated, “Perhaps it is our responsibility to continue with professional development from other sources.” School districts and state/provincial associations also need to consider this research and develop professional learning opportunities that speak to the unique needs of teacher-librarians. All professional documents highlight the need for lifelong learning for teacher-librarians. “Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources” (ISTE, 2008, para. 5).

**Implications and Conclusion**

This research is significant for a number of reasons. The results of this research provide the TLDL coordinator and instructors in the program the opportunity to revise course content and focus. Based on suggestions from graduates of this program, the coordinator and instructors will develop new content and remove/rework content that is no longer relevant to teacher-librarians working in the field. Based on feedback from students we have already added a second technology course. The first course allows teacher-librarians to explore new and emerging technologies and the second course focuses on research and issues related to the integration of technology. We are also in the process of redeveloping our introductory course to focus more on leadership issues, change and school reform and action research/evidence-based practice. We are also redesigning our organization and management of resources course and our inquiry-based learning course to better meet the needs of our students. This research provides instructors in other programs with ideas for thinking about their own curriculum. It also allows for a starting point for IASL members to begin work on developing a curriculum framework for teacher-librarianship education worldwide.
References


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Statement of Originality

This statement certifies that the paper above is based upon original research undertaken by the author and that the paper was conceived and written by the author(s) alone and has not been published elsewhere. All information and ideas from others is referenced.