Capping Paper

By Susan Holmes

Introduction

"So that's how you find something in the library". These were not the words of an ecstatic little boy, upon being shown how to find his favourite book. They were, in fact, the incredulous words of an emerging teacher, Ms. D., starting her internship at the school where I was a new teacher-librarian. She continued to tell me that she had never used the library in four years at university and seldom in high school. I will admit I did a bit of tongue biting. The process involved in educating teachers has always fascinated me. The impetus to begin my Master's degree was fuelled, in large part, by my discussions and interactions with student teachers. I grabbed every opportunity to learn from them. I think sometimes I was learning as much from them as they were from me.

I have been a teacher-librarian for two and a half years. Prior to that, I was a classroom teacher for many years. I was fortunate to have an incredible variety of teaching assignments from Preschool to Grade 8. I shared my classrooms with emerging teachers at all stages of their pre-service education - those who were in their first experience in the classroom through to those who were in their final semester before becoming full-fledged teachers. At each step of the way, I spoke about the school library, how the librarian was part of the school and how they could work together. I realize, in hindsight, that I didn't truly recognize the full potential. Sadly, now that I am a teacher-librarian, I have been virtually cut off from this interaction with student teachers.

The lack of interaction has implications for pre-service teachers as they enter the teaching profession. Esther Rosenfeld and David Loertscher (2007) state "teacher librarians are educational leaders who are facilitators for professional learning in their school community" (p. viii). While this might be common knowledge in some schools, it is not always communicated effectively to pre-service teachers. If emerging teachers view the teacher-librarian as a non-entity, there is certainly reason to believe David Loertscher's prophecy from 20 years ago that "school libraries must make a difference in public education or face extinction" (as cited in Asselin, 2000, p. 72).

When my own young-adult children questioned my desire to become a teacher-librarian - the worst job in the school - they clearly didn't share my vision. Although I felt chagrined by their perceptions, it occurred to me their views bore a striking similarity to those shared by Ms. D. They did not see the library as the central hub of the school that was figuring prominently in my vision, but more the library as the repository for books. The librarian was the person who said, "Shush!" This led me to wonder what Ms. D. and other pre-service teachers had actually learned about the library, the teacher librarian and information literacy in their teacher education program.

To meet the needs of the 21st century learner it is crucial that teachers understand all aspects of the library. It is important to address outdated perceptions of the silent, book repository and equally silent book custodian. Instead, we must recognize the teacher-librarian as educational partner and leader. Education students bring their own experience as learners to their new role as teachers. Many of their own skills and understandings must be enhanced to meet the challenges that they will face in the 21st century classroom.

How are we preparing emerging teachers to meet the information literacy needs of their future students? Further to this question - how can we help pre-service teachers to understand the role of the teacher-librarian as both a collaborative partner and educational leader? I will look at the issue from both a theoretical and practical perspective. From the literature it is quite clear that "pre-service teachers are a greatly overlooked group of instructional partners" (Asselin, 2000, p.72). From informal conversations with university instructors, my experience as a facilitator at internship seminars and my 'get-togethers' with new interns in my schools in the past two and a half years, I would reconfigure that statement. Teacher-librarians are a greatly overlooked group of instructional partners. If we are truly to embrace educational reform, we must consider how we educate future teachers. If we continue to view teacher education with teachers as the sage on the stage, disengaged from learning partnerships, we are doing a disservice to both those new teachers and the students with whom they will work.

In this paper, I will explore the literature regarding pre-service teacher's understanding and knowledge of the library and the role of the teacher-librarian. I will focus, although not exclusively, on the Canadian perspective. Finally, based on the literature and my own practice, I will recommend some practical recommendations that could be used in the school setting to help prepare our future teachers to embrace their role with 21st century learners.

Review of the Literature

"For the first time in history our job as educators is to prepare our students for a future that we cannot clearly describe" (Warlick, 2004, p.15). Although Warlick was

speaking about students presently in school, his statement has equal, possibly greater, implications for pre-service teachers. The next generation of teachers, those who are new to the profession or those presently studying to become teachers, will have a great influence on modern schools. To meet these challenges we must focus on pre-service teachers, a "greatly overlooked group" (Asselin, 2000, p. 72). This focus involves helping pre-service teachers meet the needs of the information age student by developing information literacy skills through authentic learning experiences, infusing technology into the curriculum and building collaborative relationships. In each of these areas, there is a role for the teacher-librarian.

As we concentrate on the needs of the *millennial student* (Henri & Asselin, 2005), which includes most pre-service teachers and the students they will teach, we must examine the concept of information literacy. The impact of information availability, via technology and telecommunications, was being recognized in the early 1970's. Paul Zurowski, in a 1974 paper to the National Commission on Libraries and Information Services, coined the term, *information literate*. According to Zurowski, people who had the skills and techniques to use a wide range of information tools and could use the information to solve problems were information literate (Eisenberg, Lowe & Spitzer, 2004). Since that time information literacy has been defined and redefined. However, one definition which is commonly used, was adapted almost two decades ago from the *Final Report of the American Library Association's Presidential Committee on Information Literacy* (1989), says in part:

To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed

information... Ultimately, information literate people are those who have learned how to learn (para. 3).

Asselin, Branch and Oberg (2003) state "... schools are responsible for teaching children how to adapt to change and how to make decisions and solve problems based on accurate and authentic information and to apply information creatively and responsibly to solve problems" (p. 4).

A review of the literature is not without challenges. While there are many studies regarding pre-service teacher preparation, there is little that relates that education to the role of the teacher-librarian. Additionally, while there is discussion of the information literate school, the role of the library and the teacher-librarian is largely ignored. By examining themes in the literature, several key areas in the preparation of teachers emerge – an understanding of information literacy, the value of collaboration, technology-enhanced learning and constructivist resource-based learning. These skills and attitudes are central to the role of the teacher-librarian and could - or should - be mentored and modeled in partnerships between teacher librarians and pre-service teachers. However, teacher librarians do not often figure in the equation. It is unfortunate that faculties of education have forgotten about teacher-librarians and the value of school libraries (Asselin & Doiron, 2003). While each of these areas will be discussed separately, they are not separate entities. Together they provide a cohesive picture of education in the 21st century.

Pre-service teachers and teacher librarians

There is a difference between the preparation and evaluation of teacher candidates in Canada and the United States (Branch, 2003). While there is a national certification process in the United States, there are various levels at which teachers are certified. In Canada, each province is responsible for the certification of teachers. Regardless, there is a commonality of thought in the research about the relationship between pre-service teachers and school libraries and the teacher-librarian (in Canada) or the school library media specialist (in the United States).

Rosenfeld & Loertscher (2007) ask two prescient questions "What is the place of the school library in the 21st century school?" and, "How can the school library program become the center of teaching and learning?" (p. vii). Similar concerns have been explored with pre-service teachers on numerous occasions from both the Canadian and American perspective. Several authors (Asselin & Lee, 2002; Branch, 2003; Doiron, 1999; Wolcott, Lawless & Hobbs, 1999) have questioned if pre-service teachers recognize the teaching and learning role of the teacher-librarian. While each study has looked at the role of the teacher-librarian from different perspectives, there is little doubt that there is a lack of understanding of what the teacher-librarian does. Pre-service teachers' lack of understanding is caused by, among other things, little or no exposure to teacher-librarians in their own education; little mention of the role of the teacher librarian by faculties of education; no practicum placements in school libraries and no explicit education in the role of teacher librarians (Asselin & Doiron, 2003). "A student teacher could go into a school and teach for the whole practicum and get a pass without ever having gone to the school library" (p. 24). As well, pre-service teachers often view the

teacher-librarian as the resource manager and information provider, with the library as a warehouse for books (Asselin, 2000; Asselin & Naslund, 2000; Wolcott et al., 1999).

Wolcott et al. (1999) analyzed three roles of the Library Media Specialist - learning and teaching, information access, and delivery and program administration. The participants recognized that the Library Media Specialist should create an atmosphere that encourages use of the library, but did not recognize the Library Media Specialist's role in guiding teachers in the effective design of instruction. Nor did they view learning and teaching as integral responsibilities for the Library Media Specialist. These findings defy the vision of the Library Media Specialist as a collaborative partner and leader in information literacy.

Asselin & Doiron (2003) and Branch (2003) examined pre-service teachers' attitudes and understanding of the role of the teacher librarian and the school library. Through a process of pre- and post-test analysis of these attitudes, they determined that after working with a teacher librarian, the pre-service teachers gained a greater understanding of the role of the teacher librarian. As well, they developed new knowledge regarding how collaborating with the teacher librarian could benefit them and their students.

Pre-service teachers and information literacy

Professional organizations for Kindergarten to grade 12 education recognize the need to include information literacy in pre-service training (Asselin & Doiron, 2003; Henderson & Scheffler, 2003). Information literacy skills are embedded in the curriculum of many provinces. However, integration of information literacy skills into teacher education has not occurred (Henderson & Scheffler, 2003). While there may be

a myriad of reasons for this, the most basic is the knowledge and understanding of faculty members.

Faculty members don't always have a clear understanding of information literacy skills (Godwin, 2003). Not only do they lack awareness of information literacy, they may not understand the accompanying technology (Henderson & Scheffler, 2003). This lack of understanding and knowledge makes it difficult for them to include these skills in their own courses. If faculty members are unable to impart the information to pre-service students, in turn it makes it difficult for pre-service teachers to extend these skills to the students with whom they work. "Teachers cannot prepare their students to be information literate unless they themselves understand how to find and use information" (Hinchcliff, 2003, p.14).

Asselin and Doiron (2003) questioned how Faculties of Education prepare preservice educators for their role in developing information literate citizens. They found that little is done with pre-service teachers to help them learn to use these skills with their students. "The push is on to use a diverse set of resources by students in their programs, but even then the school library as a source of these materials is basically ignored" (Asselin & Doiron, 2003, p. 24).

Branch (2003) observes that pre-service teachers do not have a clear understanding of the need for information literacy skills for their students. While they may recognize their own needs to be information literate, disappointingly, these preservice teachers are often not cognizant of the necessity to teach these skills to their own students. "The failure to connect information literacy skills to teachers' future students is the fatal flaw in our current pre-service education programs" (Branch, 2003, p 43).

Constructivist Theory and Authentic Learning

Because our vision of education in the 21st century is changing, learners must be active participants in constructing their own knowledge. If we are to encourage preservice teachers to develop constructivist practices in their classrooms, they must first experience what it 'feels and looks like' to be active learners, constructing their own knowledge, and reflecting on what they have learned. When learners are encouraged to construct their own understanding by investigation, analysis and reconstruction of ideas they are empowered as learners (Asselin & Lee, 2002). Without this experience in acquiring knowledge, it is difficult for pre-service teachers to use these skills, or understand their importance in their own classroom. It is crucial, also, that pre-service teachers understand the importance of student-centered learning. To do this, authentic learning must be demonstrated and practiced. At the same time, pre-service teachers must be taught to use process-based learning. They must themselves be immersed as learners (Witt & Dickinson, 2003).

Goubeaud and Wenfan (2004) contend that the use of constructivist teaching methods and performance-based assessments are critical in the preparation of future teachers. They note that pre-service teachers, who have not experienced constructivist learning in their own background, have difficulty utilizing these strategies in their classrooms. Moreover, as Asselin (2000) notes, past experiences act as filters for how teachers teach.

Goubeaud and Wenfan (2004) recommend that constructivist strategies, used at all levels of higher education, would result in more student-centered learning. In Canada, there have been several studies conducted that examine constructivist approaches

(Asselin & Doiron, 2003; Branch, 2003). Students' knowledge and attitudes were assessed before they participated in authentic learning experiences. By evaluating posttest results, the researchers were able to conclude that pre-service teachers gained valuable knowledge for constructivist approaches. However, Asselin & Lee (2002) note that students were better able to use their knowledge while still in the university setting than when they were immersed in their full time practicum.

Using technology to enhance student learning

It is difficult to discuss information literacy without an examination of technology-enhanced learning and information technology. Although there is a relationship in the terms, they are not synonymous. As well, there is a difference between technology training and information literacy skills instruction (Godwin, 2003; Witt & Dickinson, 2003). While technology training focuses on the use of the tools, information literacy skills instruction focuses on building knowledge. Often, there is a disconnect for pre-service students. While we sometimes assume that computer savvy, millennial students have gained the skills for information literacy, it is not always the case. A recent study (JISC, 2008) states "the information literacy of young people has not improved with the widening access to technology. In fact their apparent facility with computers disguises some worrying problems" (p. 12). The report continues that little time is spent evaluating information for relevance accuracy or authority.

The millennial or *Google generation*, (JISC, 2008) those who have grown up with technology, comprise a large proportion of pre-service teachers. These students, who are accustomed to having information available, simply by the click of the mouse, often have limited experience evaluating information or applying information to new situations. As

well, although pre-service teachers may be tech savvy at home, they don't necessarily have the skills to work with their students in the classroom. As Branch (2003) notes, students may understand the use of computers, but not their implication in student learning. A pre-service teacher in Branch's study stated that there was an emphasis on computers, but not with the thinking and learning that accompanies them. Because of their extensive use of certain technology skills, particularly communication and entertainment technologies, apathy often results. These tech-savvy students feel they know it all (Godwin, 2003).

Henderson and Scheffler (2003) assert that teacher educators must develop strategies to use technology in their own instruction and help pre-service teachers understand the complexities of information literacy. Further, because technology is often used to teach traditionally it does little to help critical thinking skills (Ching, Basham & Pianfetti, 2005). It is necessary to drive teachers toward innovative uses of technology for learning. Ching et al. (2005) state "the technology-related lived experiences of future teachers – their technological biographies, so to speak – and their personal beliefs can profoundly impact what they take away from their pre-service education" (p. 226). They argue that instead of focusing on specific technology skills, pre-service education must focus on how pre-service teachers 'value' technology. Rather than using 'technology' or 'computers', teacher preparation should instead focus on the integration of these tools. Technology, in a constructivist climate, is infused in the curriculum across multiple learning environments.

Collaboration plays a part in the understanding of technology-enhanced learning.

Snider (2002) evaluated the Learning and Integrating New Knowledge and Skills

(LINKS) project at Texas Women's University. This program addressed the technology needs of pre-service teachers and also skills acquisition for both the co-operating teachers and university instructors. Although this study neglected to include the teacher-librarian, several partners experienced collaboration and shared learning to enhance student achievement through technology.

Doiron (1999) describes a similar project-based, collaborative learning situation to integrate information technologies (IT) into authentic, resource- based learning activities. In this study, notably, the teacher-librarian was a partner in the project. Classroom teachers, teacher librarians and pre-service teachers were involved in collaborative projects using communication (Internet, email) and construction technologies (CD-ROMs and web-based technologies) that were correlated to the Prince Edward Island curriculum. Pre-service teachers recognized that IT will be an integral part of teaching in the future and that the teacher-librarian plays a lead role in implementing IT and information literacy strategies.

Collaboration

In many school settings, teachers close their doors and teach their class. This can be both frustrating and counter-productive for student achievement. In a collaborative environment, the sharing of ideas, resources and time can greatly benefit teachers and students alike. Pre-service teachers exposed and involved in this type of teaching atmosphere gain the knowledge to continue this way in their own practice. If pre-service teachers are educated to believe in collaboration they can promote the benefits enabling them to continue to use these skills in the classroom (Crouse & Kasbohm, 2004).

Often pre-service teachers enter university with little or no experience with teacher-librarians. Modeling of collaboration at the university level for pre-service teachers might easily begin with the academic librarian. As discussions are always ongoing regarding who is responsible for ensuring pre-service students gain critical thinking and problem solving skills, partnering with the university librarian can help equip students with these skills (Witt & Dickinson, 2003). Collaborative activities among academic librarians, school media specialists and other faculty are essential (Henderson & Scheffler, 2003).

Several studies have taken place on Canadian campuses examining collaboration with both academic librarians and teacher-librarians. Asselin & Naslund (2000) question how pre-service teachers are educated regarding the nature of the school library program and the collaborative role of the teacher-librarian. They reiterate the American Association of School Libraries (AASL) standards "that collaboration is essential as library media specialists work with teachers to plan, conduct, and evaluate learning activities that incorporate information literacy" (p. 89). They contend that advocacy efforts toward pre-service teachers have been overlooked.

Asselin & Lee (2002) describe a study, over several years, of pre-service teachers engaged in a language arts and information literacy project. To begin, pre-service teachers were teamed with teacher-librarians to plan a resource-based unit to be used in their practicum. The initial phase was deemed successful in increasing the pre-service teacher's understanding of collaboration and information literacy and how the teacher-librarian facilitates learning.

During the final phase of the project, when the pre-service teachers were in the actual schools, a second question was studied. Were pre-service teachers enacting the new knowledge and if so how? Based on open-ended questions, the findings indicate that the pre-service teachers gained an increased understanding of collaborative planning, resource-based learning and information literacy. The researchers found greater growth while the pre-service students were in the university environment than when they were actually teaching in the school. Scaffolding of skills and not having enough practice is mentioned in much of the literature as reasons for the lack of transfer of this knowledge to the school setting (Asselin & Lee, 2002; Branch, 2003; Crouse & Kasbohm, 2004: Henderson & Scheffler, 2003). As teachers, we recognize that our students required the opportunity to build on previous skills and knowledge. Without doubt, just as we enable students in our schools to build on their skills, we must afford this same opportunity to their future teachers.

Summary of Findings

It is clear from the research that there is a need to educate pre-service teachers to meet the needs of the 21st century learner. Information literacy skills are crucial in the future of students. Pre-service teachers must develop an understanding of what these skills are and how to teach them to students. Teacher preparation courses, which consider learner-centered constructivist approaches to education, will provide emerging teachers with models to use in their own work. Pre-service teachers, familiar with technology, must learn to infuse technology into the learning experience for their students. Pre-service teachers, who work collaboratively with a teacher librarian, have

the best opportunity to learn the value of these partnerships in improving student achievement.

What is a pre-service teacher?

As teachers, we have all been there in one way or another. We have all experienced the trepidation of learning to teach or the anticipation of helping someone learn to teach. Whether or not we use the term, *pre-service teacher* the concept has meaning to us. Before I began studying teacher preparation, I used several terms like education students, practice teachers, or student teachers. As I began my research, I learned that although there are different terms used across Canada and the United States, pre-service teacher is the most widely accepted. Simply put, the pre-service program refers to the education and training provided to students before they qualify as teachers.

Teacher preparation courses vary across Canada because each province certifies teachers according to specific guidelines. In the United States there are many levels of certification and program lengths. *Practicum* or *Field Experience* describes the period of time students are practicing their skills in elementary or high school classrooms. The lengths and expectations of field experiences vary according to the teacher-preparation institution. A qualified, in-service teacher called a *co-operating teacher*, *host teacher*, *sponsor teacher* or *mentor* models teaching strategies and evaluates the pre-service teacher, thus guiding them in their practice. A university faculty *advisor*, *liaison* or *coordinator* facilitates this experience.

A missed opportunity

I have been a teacher librarian for about two and a half years. It has been a steep learning curve while I try to incorporate what I have learned in theory during my teacher-librarian courses and what has been the reality in my life as a teacher-librarian. Prior to becoming a teacher-librarian, I was a teacher, constantly looking for ways to help my students be successful and sharing that exploration with pre-service teachers.

Admittedly, I missed an invaluable opportunity to collaborate with a colleague in my school – the teacher-librarian. When I moved to a new school, from a grade one class to a new adventure in grade seven, I vividly remember the teacher-librarian approaching me and asking what kind of projects we could work on together. My response, because that's what teachers do, was, I won't need any help but maybe you could find some books on the subject. What a missed opportunity! If I knew then what I truly believe now...

So, what is the role of the school library?

Before we can expect pre-service teachers to understand the school library program, they must have a picture of what a library is and what the teacher librarian does. To some, unfortunately, the vision of the school library in the 21st century is not always clear.

Esther Rosenfeld and David Loertscher (2007) present a philosophy that is at one time, both informative and all encompassing. Their view of the 21st century library starts with the precept that that a "school library exists to provide a learning program and resources to improve student learning and achievement" (p.vii). They continue that a school library must focus on teaching information literacy skills essential to the success of the 21st century learner. Further, the library provides support for reading instruction

and promoting the love of reading. Rosenfeld and Loertscher succinctly note that teacher-librarians are leaders - leaders in curriculum development and delivery, leaders in technology and leaders in professional development. If, then, the library has such a pivotal place in student achievement and teacher-librarians are leaders in so many roles, why is this not readily visible to pre-service teachers?

A pivotal place in Student Achievement?

It is clear that I didn't know or fully understand the role of the teacher-librarian. Although I have been teaching since the 1970's, the role of teacher librarian as instructional leader is not one that I was exposed to until relatively recently- certainly not in own my teacher training. The research (Asselin 2000; Branch, 2003; Doiron, 1999, Wolcott et al. 1999) indicates that even into the 21st century, pre-service teachers and many of their instructors do not understand the role of either the school library program or the teacher-librarian. Although hardly analytical, my own experience and the experience of my colleagues indicates that pre-service teachers, our emerging professionals, have either not had access to libraries in their own schools or had never considered the role of teacher-librarians because they did not figure prominently in their own school experience.

Pre-service teachers, from small schools in rural areas, often do not have a library in their schools; others do not have a teacher-librarian. This is one explanation for the lack of background experience. It does not, however, explain the deficit on the part of students from larger urban areas, who have, for the most part, had some level of teacher-librarian and library program support. These variations have been to their detriment.

If we accept the notion that pre-service teachers have had little experience with the library program in their elementary and secondary years, we must begin to question how they use the library at the post-secondary level. An apparent question is how can university students progress through their courses without once setting foot in the library and, in many cases, never speaking to a librarian? The answer is, of course, very simple with complex ramifications. Since the advent of the computer, and more specifically the Internet, students do not have to touch a book to get information. (Being of the premillennial generation, I would not have thought this possible if I hadn't done a large portion of my research for these courses using on-line databases.) That does not make pre-service teachers information literature, however. Therein, lies the complexity. The ability to access information might not necessarily the most significant roadblock. What is lacking, to greater and lesser degrees, are the necessary skills to actually use the information effectively.

The research also indicates that there is a misunderstanding on the part of university instructors regarding information literacy. (Asselin & Dorion, 2003; Godwin, 2003; Henderson & Scheffler, 2003). From an anecdotal perspective, I would concur. In discussion with several faculty members, I have received some decidedly uncomfortable responses regarding the preparation of pre-service teachers about information literacy - or the library for that matter. Often, I am directed to other instructors who might use it more in their classes. In my opinion, the discomfort is because of a lack of understanding of the term, as well as a limited grasp of the actual skills.

While information is available at the click of a mouse, the higher levels of synthesis and application are missing when there is a 'cut and paste' mentality. Many

futurists predict that the higher order skills will be necessary for the 21st century worker. We must, therefore, prepare our students for a future that we don't necessarily comprehend.

Solutions - - Anyone?

There isn't a quick and easy fix for the problem. Pre-service education is not the exclusive purview of the university. Teacher preparation occurs on campus and in schools. Additionally, there are many stakeholders, from provincial certification bodies to professional associations that have a vested interest in the preparation of teachers. Ideally, all the stakeholders in pre-service education would collaborate to develop a workable plan. It is not possible, nor even beneficial to think that a single individual could effect change. But someone must start collaborative conversations with different groups to plant seeds of change.

"If we wait until we're ready we'll never get started." These words, attributed to Eleanor Roosevelt, are like a call to action. With this in mind I have identified some of the repeating themes in the research issues and proposed some suggestions to amend the situations. While some are simply a matter of developing collegial relationships, some require a change in perspective. The caveat is that these suggestions are based in a particular context – my experience with the University of Regina. It is possible to extrapolate to other situations. In fact, some of these proposals may already be happening elsewhere. Before considering these proposals, it is useful to discuss the context of the Faculty of Education at the University of Regina.

A discussion of context

At the University of Regina, there is a direct entry program into the Faculty, in which students are admitted after completion of grade 12. Others are admitted to the program after they have completed another degree. Although there are variations in the program, all pre-service teachers have several field placements throughout their studies.

They begin their field experience, as 'involvement students' visiting schools, in pairs, for a half day each week, often observing/participating in several different classrooms. As 'pre-interns', in the third year of the program, teams of two students spend one day a week in a specific classroom, teaching formal lessons toward the end of the fall term. The pair returns to the same classroom for an 8 day session at the beginning of the winter semester, returning for a seven day session at the end of the semester. During that time, they plan, prepare and teach a series of lessons on a theme or topic. In the final practicum placement, during the second last or last semester, 'interns' are assigned to a co-operating teacher. At the beginning of the term, they teach one subject and continue with that subject throughout the entire practicum. Gradually, they add more responsibility until they assume all teaching duties in the classroom for a 15-day period called the teaching 'block'.

The Proposals

I think that there are many possibilities during pre-service education, and particularly during the EPS classes (which is the field experience module) to educate in inform pre-service teachers about the important aspects of the teacher-librarian and the library program. What follows are some possible scenarios. They could be termed as options or recommendations. Some are very easily introduced while others, given the

right circumstances could be viable in the pre-service program. Instead of calling them options, I have chosen to use *What if* to indicate a question that evokes questions and further discussion.

Possibilities at the University

Asselin and Doiron (2003) found that there were few effective practices used at the university to educate pre-service teachers about the role of the teacher-librarian.

They found that instructors who wanted to introduce teacher librarians used guest speakers or class discussions most frequently. Few had students visit a school library or invited teacher-librarians to work with their class.

Pre-service Teachers, Information Literacy and the Role of the Teacher-Librarian

• What If a teacher librarian visited a university class?

As there is not a library program at the University of Regina, nor are there compulsory classes in the library, it is possible to integrate information about the school library program into the 'methods' classes - those classes which study subject-specific pedagogical strategies. Because information literacy goals are imbedded in most areas of the curriculum, the methods classes are a good way to introduce the role of the library program. A teacher-librarian could be invited to visit pre-service teachers in their methods classes at the first of the term, particularly during the first year and pre-internship years. These visits could lead to guided conversations or further visits for clarification of the role of the teacher-librarian and the library program.

• What If a university class visited a school library?

Another alternative is to have the university class visit a school library. Whether the pre-service students participated with a teacher-librarian working with a group of students or just had the opportunity to locate available resources, it would enable pre-service teachers to recognize the teacher-librarian as a teaching partner. While 'one-shot' training is not the most effective means of gaining an understanding, at least this brief foray might be a catalyst to future partnerships.

Asselin (2005) summarizes the information literacy projects at the University of British Columbia, University of Alberta, and University of Prince Edward Island. She says that a network of these initiatives is necessary in order for teacher librarians to have a significant leadership role in education.

Technology Enhanced Learning

• What If existing programs were expanded to make teacher librarians integral partners?

At the University of Regina a project, entitled *The iTeacherEd Project* was developed to integrate technology into the classroom. The project, with initial funding from Industry Canada, provided a very small group of pre-service teachers with laptops to use during their pre-internships and internships. These students, sometimes called the digital interns, were expected to integrate technology into their lessons during their field experiences. They were teamed with a select group of co-operating teachers to plan collaboratively. Although this was an introduction to collaborative planning and technology integration, could it be expanded?

If the program was extended, an extremely beneficial corollary is possible. Using the expertise of both academic and teacher-librarians, a more extensive exploration of information literacy and collaborative planning could be modeled. Based on information from the iTeacherEd web-site,

(http://education.uregina.ca/iteachered/index.html) there was some discussion of information literacy skills. Out of 10 modules, one (accessing and authenticating online resources) directly addressed information literacy issues. Unfortunately, in the recommendations from the evaluation of the project there was no mention of building collaborative relationships with librarians. However, this initiative, with the inclusion of teacher-librarians and academic librarians as partners, could have the earmarks of the initiatives for which Asselin advocates. As well, it would give pre-service teachers a whole new group of learning partners to access in their practicum experience.

Opportunities in the School

Teacher-librarians need to 'be there' in the school; to be one of the first people that a pre-service teacher meets; to be one of the go-to people for information; to be someone who touches base with the pre-service teacher throughout their in-school experience.

Collaboration

• What if the co-operating teacher encouraged the pre-service teacher to work with the teacher-librarian?

This first requires a culture of collaboration in the school. If the teacher-librarian uses collaborative methods and has the support of the in-school administrator as well

as the co-operating teacher, the teacher-librarian becomes more visible to pre-service teachers. There is a more natural propensity for the pre-service teacher to engage in collaborative teaching, when the teacher-librarian is an integral and important part of the school team. My colleagues have observed that their work with pre-service teachers is most effective when collaborative relationships already exist with inservice teachers.

Understanding the School Library and the Role of the Teacher Librarian

• What if the teacher-librarian prepared a professional development activity for involvement students, pre-interns or interns (and perhaps other teachers)?

Pre-service teachers are often overwhelmed, and, at the same time exceedingly enthusiastic and eager to learn. Extending an invitation to participate in some fun in the library, could both pique their curiosity and provide information about available support. David Loerstcher an advocate for school libraries over the past several decades authored an article entitled, *What flavor is your school library?* (2006). While he is, in fact, addressing teacher-librarians, his comparisons correlate directly with pre-service teacher's perception of the library. For some pre-service teachers, the impact on student achievement of the reading literacy aspects of the library is most recognizable (in Loertscher's analogy the strawberry flavour). The concept of information literacy (the chocolate flavour) is not as clear to pre-service teachers and requires further discussion. Technology-enhanced learning (mint chocolate flavour is a focus of the 21st century learner. The millennial generation pre-service teachers understand technology, but not necessarily how to use it with students (Branch, 2003). A discussion of the technology available in the school enables pre-service

teachers to consider these issues. Loertscher contends that spumoni ice cream, with its distinctive colours and textures, represents the fully integrated library program.

Pre-service teachers, having 'tasted' all the flavours, gain a solid understanding of the melding of all facets of the library program.

Forging new Partnerships

The final area of consideration involves all stakeholders in pre-service training.

The university and receiving schools figure prominently, but other advocates like the Saskatchewan School Library Association can support new ideas.

There is, unfortunately, sometimes a separation between what happens at the university and what happens in schools. While the university is preparing students to teach in many different situations, the in-school experience is specific to that time and place. Co-operating teachers in the school have the knowledge of their students and their environments, while the university has access to a wide range of theories. It is sometimes difficult for pre-service teachers to connect the two ideologies. It is possible that a teacher-librarian, with expertise and knowledge, can act as a link to collaborative and constructivist practices. Although these practices are not limited to the library program, they are certainly enlivened and enriched when a teacher-librarian is involved. Teacher-librarians know the curriculum, they know available resources, and they also have a good understanding of the student needs in their schools. This knowledge adds another dimension to the experience of the pre-service teachers.

By thinking, if not outside the box, certainly around it, there are some examples of shared approaches to pre-service education which include all partners.

Authentic and Constructivist Strategies

- What If professional learning release time was used differently?

 Teachers are allowed professional development release time. Could teacherlibrarians use this time to work collaboratively at the university with pre-service
 teaches. Pre-service teachers could prepare inquiry projects that could be used during
 the pre-internship or the internship sessions. Asselin (2005) describes similar
 projects. This professional learning would build collaborative skills for teacherlibrarians and keep them informed of current practices at the university. As well, it
 provides a model for future collaboration for pre-service teachers.
- What If University classes were invited to the Resource Centre at the School Board office?

Teacher librarians attend meetings where issues of practice are discussed. Could a portion of this time be used to invite groups of pre-service teachers from University Field Placement classes to the model Resource Centre at the School Board Office? As there is not a model library at the university, this would allow them to explore the resources available in schools – the professional collection, professional journals, fiction and non-fiction collections as well as databases. At the same time teacher librarians could brainstorm with small groups to introduce the library program and the role of teacher librarians.

- What If internship seminars were organized in a slightly different manner?

 Pre-service teachers and their co-operating teachers participate in internship seminars to develop a working relationship. As a facilitator of these seminars, I have noted that a few, small changes could be used to advantage. Introduction of constructivist, collaborative practice could easily be integrated into the seminar during contract planning sessions and mock teaching modules. As a facilitator, I take time to introduced pre-service teachers to the role of the teacher-librarian in their internship semester. If other teacher-librarians were introduced into the mix, relationships could be developed to continue throughout the practicum. Doiron (1999) notes that when all partners share the learning experience, there is growth in understanding. He found that pre-service teachers were more conversant with the collaborative, constructivist approaches than many co-operating teachers. In this neutral environment there might be greater acceptance of the collaborative, constructivist strategies when a successful model is demonstrated.
- What If assignments at the university were changed to incorporate more aspects of information literacy?

Pre-service teachers are asked to develop self-contained units in many subject areas.

My teacher-librarian colleagues have expressed a willingness to act as resource people in development of these units or other projects. If university instructors asked for evidence of collaboration with teacher librarians who are information specialists, pre-service teachers would gain information literacy strategies. Not only could they improve their search for on-line and print resources, they would learn to use

information effectively and ethically. This would allow them hands-on experience in designing authentic assignments for their own students.

• What If different practicum arrangements were instituted?

Many new teachers are placed in classrooms which are other than the norm. What better way to introduce these alternative situations than to allow the pre-service teachers to experience them during a module of their field experience? Besides the teacher librarian, placements could be made with the Learning Resources Teacher, Itinerant subject specialists, ESL, Behaviour, or Adapted Learning classrooms. Ideally, pre-service teachers would be placed with co-operating teachers who have embraced the best practices for student learning and achievement, who are open to change and the possibilities of the 21st century.

These proposals are a few suggestions to enrich the pre-service experience with the possibilities that abound when partnerships are nurtured with the teacher-librarian.

Perhaps they will be catalysts for discussion so that we can provide pre-service teachers with a holistic perspective of their future profession.

Some further thoughts

In this paper, I have not discussed two major areas defined by Wolcott et al. (1999) and Rosenfeld and Loertscher (2007) – the organization and administration of the library and instilling the love of books. There are several reasons. According to the research (Wolcott et al. 1999; Asselin, 2000) the administrative role is the most clearly understood by pre-service teachers. At the same time the administration of the library is not directly applicable to teacher education. While the organization of the library provides a

framework for resource based learning, the basic skills necessary to find resources in the library can be taught through on-site in-services. Collection development is a very specific role of the teacher-librarian. Although input into resource needs is solicited from teachers, the actual maintenance of the collection falls to the teacher-librarian, and on the occasion when there is one, the library assistant.

Instilling the love of reading is, in my estimation, a shared goal among all staff in a school. As a teacher-librarian, I might bring new approaches to story telling (when I entered this program, oral history and story-telling were the areas I intended to study indepth). I might discuss books with students from a different perspective – searching for what they enjoy reading and their understanding of what they read. But, like a classroom teacher, I have the same sense of excitement when a child reads their first book whether it is at age seven or in grade seven. I assume that throughout their classes at the university and their experiences in the schools, pre-service teachers are made aware of the importance of reading.

Conclusion

A summary of the findings in the research and practical application in schools would show us that there is much to be done. It is necessary to develop programs of study at the university which prepare pre-service teachers to teach the 21st century learner. The single classroom, single teacher perception must give way to a collaborative approach to improving student achievement. Pre-service teachers must understand the importance of active student-centered learning. These emerging teachers must have a solid understanding of the implications of technology in student learning. As well, they must be prepared to help their students unravel the intricacies of a world of information.

These are no small tasks. Built on a clear understanding of the role the teacher-librarian can play to advance student learning, the pre-service teacher is not alone. With the development of educational partnerships, through co-operation of all the stakeholders, pre-service teachers can help prepare their students for the challenges of their future.

I've heard the sudden realization when Ms D uttered the words "so that's how you find something in the library'. I'm waiting, with anticipation, to hear a pre-service teacher exclaiming to the students "Today, we get to learn with the teacher-librarian in the library!"

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