

I've pretty much always known that I wanted to be a teacher, and my mother is a public librarian so maybe the library part of my destiny was just in the genes? Nevertheless, it took awhile to evolve in my career to the point where I am now - a teacher-librarian in the largest elementary school in my district and a student finishing the Master of Education in TL-DL program at the University of Alberta. Many different paths led me to this road - one which I see continuing to take me in new, exciting directions.

My husband and I graduated together with our B.Ed's and started teaching in the rural community of Clearwater, BC. I did not have a classroom position, but was kept incredibly busy as a teacher on call. Although I was itching to have my own group of students as an enrolling teacher, in hindsight the on-call work helped me prepare for my future calling as teacher-librarian. I worked in classrooms in every grade K-7, spent some time in long-term subbing positions in the grades I was least comfortable in (and found they weren't so bad), and was able to learn a tremendous amount from the teachers whose classrooms I spent time in. The walls DO talk in elementary school classrooms - through artwork, displays, student writing and more! This on-call work, along with a few term-certain positions at a variety of age/grade levels, gave me a solid base in both elementary curriculum and management strategies for working with students at all levels K-7.

After four years of on-call and temporary positions, I finally landed my first continuing teaching job at Parkcrest Elementary. I job-shared with a wonderful teaching partner, and for seven years we taught students at the grade 3-5 level. Our school had a fabulous library facility and collection, and a teacher-librarian who saw her position in more of a "traditional" light, focusing more on collection development and cataloguing than collaboration and teaching. As a staff member for seven years, I was keenly aware that my

colleagues were feeling more and more like they would like to see a different kind of support coming from the teacher-librarian's role in the school. When both my teaching partner and the teacher-librarian announced that they would be retiring the end of the 2003/04 school year, I saw an opportunity to explore another facet of the teaching profession. It also gave me a reason to challenge myself with some new learning, as my district requested that I begin either a diploma or Master of Education program in teacher-librarianship in order for me to take the new position. I did some research, found out about the program through the University of Alberta and submitted my application. I took one course in the diploma program and was admitted to the Master of Education program the following term.

The Teacher-Librarian through Distance Education (M.Ed.) program has been an amazing professional learning experience for me. My coursework has exposed me to research and literature on many different topics. As I progressed through my courses, two distinct areas of interest emerged for me. These areas were the use of instructional technologies in school library programs, and finding ways to engage reluctant, male readers in literacy activities. As I explored both these areas in greater detail for a variety of course assignments and projects, I found that the two topics were quite interrelated. Increasing the use of technology in lessons/units can be very motivating to many learners, especially boys.

When I began my coursework in the M.Ed. program, I was somewhat technologically savvy. I could navigate the Internet, do some neat stuff in word processing programs, and even create a pretty mean PowerPoint presentation. Nevertheless, I certainly had never heard the term "Web 2.0". Several of my U of A courses, as well as many hours of what I like to call "self-directed professional development", opened my eyes to the

exploration and use of these terrific, new technologies. I can now build a blog, edit a wiki, whip up a Voicethread, and contribute to a Ning with the best of them! Additionally, the fact that my school district has moved to a Linux (completely open source – no Windows programs) platform, made me motivated to take a serious look at free, web-based programs that can enhance teaching and learning. There are some great ones out there and many of them fit in exceptionally well with the school library program in terms of inquiry-based units, collaborative technologies, and presentation tools. Web 2.0 has become an area of passion for me (is it sad that I idolize Joyce Valenza over other societal/cultural icons?), but also of great frustration – there’s so much to learn and it is constantly changing. I knew that I wanted to incorporate this learning into my capping project in some way, so that I could continue my own learning in the area.

A second area of great interest that has come to the forefront throughout my coursework has been that of reaching reluctant male readers. Living with three y-chromosomed creatures (2 little, 1 big) obviously makes this a personally interesting topic for me. All three of my “boys” claim to not enjoy reading, despite my best efforts to bring home some pretty terrific material for them to peruse. Professionally, this has been an area of inquiry (and concern) for me also. Data collected at my own school shows that our boys are not achieving/progressing in reading/writing at the same rates as the girls; this is a district-wide trend as well. My school has chosen to focus on “bridging the gender gap” as one of our school growth plan goals. Our Superintendent has made this topic a priority for our district. At his behest, we recently hosted (October, 2007), a very large conference on the topic which included speakers from North America and Australia, and which drew attendees from across the country - even a couple from as far away as Trinidad. It was

absolutely fabulous! With both professional and personal interests converging in this one topic, it made sense for me to continue exploring it in my capping project as well.

Much of the reading that I have done suggests that the use of technology in the classroom can definitely motivate male students (and females as well!) to participate in literacy activities. As both topics are the ones which have emerged as high interest areas for me, it seemed logical to delve more deeply into the combination of the two as a culminating project for my degree. My specific focus will be looking at ways to use Information and Communications Technology, with an emphasis on Web 2.0 tools, to motivate and engage reluctant, male learners in literacy activities.

This capping project has several purposes. First, it will present ideas from research and professional literature which explain the benefits of integrating ICT into instruction and how this can impact student motivation and engagement in literacy activities, especially males. It will also provide background on the integral role that the teacher-librarian can play in helping this to occur. Second, it will provide a practical resource that can be shared with teaching professionals with suggestions for strategies to use in the school library and classroom to help facilitate the integration of these technological tools. Lastly, it will provide ongoing support and suggestions, for those interested, in the form of a blog and wiki. These resources will continue to be updated long after my capping project is completed. I am hopeful that the variety of formats used in this project will make the information easily accessible, practical, and user-friendly, as well as simple to share with colleagues - both in my district and others.

## A Review of the Research and Professional Literature

How to address the issue of dropping literacy achievement rates in males has recently become a “hot” topic in the education arena. Although much of the research does not, perhaps, support the “crisis” status that this topic has sometimes been given in the media and even in many professional articles, the statistics do warrant a definite cause for concern. Although it is not wise to generalize about literacy and gender, as there are many excellent students who are boys, there is a discernible trend toward boys trailing “girls on almost every literacy measure in every country and culture from which data are available” (Smith & Wilhelm, 2002, p. xix). Schools, school districts, and Education Ministries are starting to take notice, and are looking for ways to address this gender gap.

A second, separate issue that seems to be a current priority for many schools is examining how to best integrate technology into the curriculum as a tool for teaching and learning. Many districts have found it difficult to keep up with the rapid growth in popularity and accessibility of software, Internet resources and other programs being accessed via computer both at school and in students’ homes. Although some schools have found enough funding to be able to respond adequately with the hardware infrastructure and requirements this new technology necessitates, it is the ability to change perceptions and practices of education professionals that has become the larger issue. In order to keep up with the needs of 21<sup>st</sup> century learners, this matter needs to be addressed.

Although most districts are looking at the boys/literacy and technology issues parallel to one another, much of the research available demonstrates that the topics are quite interrelated. Effective use of Information and Communications Technology (ICT) in schools can often increase engagement and motivation levels related to participating in literacy

activities in boys, and indeed, in most students, regardless of gender. This review will explore some of the research and professional literature available that can assist educators in understanding and addressing both issues concurrently, in a more holistic fashion.

### *Expanding our Definition of “Literacy”*

A variety of surveys and reports have testified to what many of us already know – technology is becoming more and more prevalent in the lives of our youth (Australian Bureau of Statistics, 2003; Canadian Teachers' Federation, 2003; Kaiser Family Foundation, 2005; Media Awareness Network, 2005; Levin & Arafah, 2002). As media becomes more portable, it will continue to become even more ubiquitous in the lives of the “media generation” (Prensky, 2005). The skills needed to access and utilize these technologies are often much different than what is required of students in order to participate in more traditional methods of learning. As a result, today’s students have been required to develop a wide variety of literacies: digital literacy, visual literacy, media literacy, computer literacy, critical literacy and more (Asselin, 2004; Blair & Sanford, 2004; McPherson, 2004; Rowsell, 2006).

Unfortunately, the education system has not kept pace with this generation of learners. Many schools and educators still subscribe to a more traditional view of literacy, often becoming known now as “school literacy” (Coles & Hall, 2002; Knobel, 2001). This type of literacy is widely referred to as achievement in reading and writing (Blair & Sanford, 2004). “School literacy” is not often an area where male students typically excel, as reported by Smith and Wilhelm (2002). “They [boys] are particularly behind when it comes to reading novels and extended forms of narrative fiction – the kind of reading that counts most in language arts classes” (p. xix). When boys aren't reading the materials that teachers deem

“appropriate”, they are seen to be falling behind, creating a problem that continues to grow throughout their school careers (Newkirk, 2006). It is interesting to note, however, that many of them are very successfully engaged in other literacies outside of those traditionally accepted at school (Blair & Sanford, 2004; Levin & Arafah, 2002; Smith & Wilhelm, 2002; Taylor, 2004), and reading from a variety of non-traditional texts, both print and non-print, especially those involving popular culture, media, and new technologies (Alloway & Gilbert, 1997; Blair & Sanford, 2004; Marsh, 2006, Smith & Wilhelm, 2002).

Schools need to explore ways to adapt current curricula and teaching practices to meet the needs of this new breed of learners. We also need to make sure that we have a varied collection of learning resources to effectively support learning through multiple literacies. Teacher-librarians are in an ideal position to assist with this. School library websites can provide access to resources that compliment the physical print collection, but also offer students alternative forms of information: visual, multi-media, and more. Access to a computerized/automated catalog system and quality subscription databases is also key. In addition, teacher-librarians can help instruct students in how to effectively and efficiently search, locate and evaluate all formats of both print and non-print materials. This is a critical form of literacy for today’s students, and underscores the need for a qualified, competent teacher-librarian to be available for this purpose (Asselin, 2004; McPherson, 2004 ). Lastly, teacher-librarians can provide training and examples for students in how to use a variety of software and/or online (Web 2.0) tools for presentation purposes. “One still needs librarians and proper training if users hope to benefit from the riches of the Internet and libraries” (Coish, 2005, p.8).

### *Engagement and Motivation*

The use of ICT at school seems to help increase engagement and motivation of boys in particular, but certainly in both genders, across a variety of different subject areas (Becker, 2000; House, 2007; Passey & Rogers, 2002; Pedretti, Mayer-Smith & Woodrow, 1998; Software and Information Industry Association, 2000). In general, students who used educational technology at school found the situation more stimulating than a traditional classroom, and felt that the incorporation of ICT into lessons made them more learner-centered (Kamil, Intrator & Kim, 1998; Pedretti et al., 1998). The use of ICT at school helped some students feel more successful, and assisted in increasing levels of self-confidence and self-esteem (Software and Information Industry Association, 2000). As noted in Smith and Wilhelm (2002), all of the above factors can contribute to higher rates of what they call “flow”, or engagement in literacy activities, in male students. A sense of competence and control, a challenge that requires an appropriate level of skill, clear goals and feedback, and a focus on the immediate experience were all key principles to achieving “flow”.

Passey and Rogers (2004) found that an important outcome of the use of ICT in school was that students focused more on learning and engaging in learning tasks rather than simply concentrating on finishing the task. The process of learning was positively emphasized. The level of motivation created by computer-based activities kept students from participating in off-task behavior (Becker, 2000; Van Daal & Reitsma, 2000). The sound, movement, and color inherent in multimedia is especially helpful for engaging boys, whose brains have been proven to participate in less cross-hemisphere activity than girls and often need the extra stimulation to keep them focused (Sax, 2005; Sullivan, 2004). Passey



and Rogers (2004) found that the use of ICT helped to positively impact the work habits of boys, moving them from “burst-like” patterns of activity to more consistent, persistent levels of activity that are more often associated with girls.

### *Reading, Writing, and ICT*

Increased motivation and engagement in the subject areas of reading and writing were also noted when ICT was used in learning activities (Alloway, Freebody, Gilbert & Musprat, 2002; Younger & Warrington, 2005). Teacher observations are noted, which state, “boys had a strong interest in electronic and graphic forms of literate practice... and boys were eager to engage with ‘real-life’ literacy contexts and ‘real-life’ literacy practices” (Alloway et al., 2002, p. 4). Instruction in how to effectively use electronic information is also essential for helping students internalize skills that will carry over into their post-secondary years and beyond, and help prepare them to become adults competent in many literacies in a rapidly changing technological age (Malloy & Gambrell, 2006; Tapscott, 1998). Teacher-librarians can support the recommendation of revisiting literacy by providing students with a wide variety of reading materials, both print and non-print in nature, and by planning learner-centered, active learning activities. Student inquiry projects, webquests, and other problem-based learning projects are perfect vehicles for teacher/teacher-librarian collaboration and promote authentic, 'real-life' learning opportunities.

It has been found that schools with qualified teacher-librarians as well as sufficient numbers of Internet-connected computers can raise achievement on tests in reading and writing (Curry Lance, Rodney, & Hamilton-Pennell, 2005). This could be, in part, due to the fact that teacher-librarians are usually trained in the use of technology for information

searching and retrieval (Coish, 2005), and often also in using computer programs for the presentation and communication of materials and ideas. They can assist students in learning how to use them as well. The use of ICT can often motivate students to improve the length and quality of their work, for example, by using a word processing program for writing assignments or by writing and recording scripts to use with images they have created or downloaded using a tool such as Voicethread ([www.voicethread.com](http://www.voicethread.com)). These tools can be effectively used for presenting research findings, story writing and more. The resources that students reported to be the most helpful in terms of writing, appearance and presentation were Internet resources, writing and publishing software, interactive whiteboards, and presentational software (Passey & Rogers, 2004).

Smith and Wilhelm (2002) emphasize the social aspects of learning as being those that can engage boys in literacy activities. The incorporation of ICT into learning projects can often contribute to a more social atmosphere. The creation of and/or participation in blogs, wikis and other online resources can be very social, as other students can comment, contribute and/or edit. Instant Messaging and email are extraordinarily social pursuits, and engage students in 'real-life' reading and writing activities (Babbage, 1999; Coiro, 2003; Leu & Kinzer, 2000; Smith & Wilhelm, 2006). Students can be given the option of forming online discussion groups for courses or even as book clubs, using course management programs such as Moodle or WebCT or by using online forums, social networking sites, or chat rooms (House, 2007; McKenna, Reinking, Labbo & Kieffer, 1999). All of these ICT programs, resources and strategies enhance learning by increasing "the levels of interaction, the visual quality of resources, the immediacy, [and] the ability to refresh work and redo it"

(Passey & Rogers, 2004, p. 6). They also provide absolutely authentic reasons for engaging in reading and writing activities.

### *Games and Learning*

When used appropriately, games can be a powerful tool for teaching, learning, modeling, demonstrating, and simulating (Egenfeldt-Nielsen, 2005; McFarlane, Sparrowhawk, & Heald, 2002; Pelletier, 2005; Sandford, Ulicsak, Facer, & Rudd, 2006). They seem an ideal way to engage students, especially boys, in active learning situations, especially since there are statistics that tell us that male students “are more likely to play games for leisure than girls” (Sandford, Ulicsak, Facer & Rudd, 2006, p. 2). In addition, it is believed that some video games can require players to become competent in skills that are found desirable by future employers – strategic and analytical thinking, problem solving, decision-making, and the ability to adapt to rapid change. Many skills fostered by game playing are also those valued in a school context. “Conversation, discussion and varied thinking skills” were identified as being positive outcomes of game playing (McFarlane, Sparrowhawk & Heald, 2002, p. 4). Some games, such as MMORPG's (Massively Multi-Player Online Role Playing Games) can additionally help students develop skills in areas such as cooperation, team-building, ethics, management, compassion, consequences and more (Prensky, 2006).

Smith and Wilhelm (2006) urge schools to make school more relevant and meaningful to students, especially males, by providing a more “learning-centered, problem-oriented, inquiry-driven approach to learning” (p. 156.). Many games assist with this type of learning, providing challenges and problems that require solving by the participants while encouraging the use of different literacies (Beavis, 2002). Teacher-librarians, with their

ability to provide pertinent print and online resources to assist with inquiries, can become indispensable to gamers (Squire & Steinkuehler, 2005; Whelan, 2005). “Games... could be one of the best untapped links to [resources] for librarians; they require serious thought and stimulate an interest in multiple topics including history, politics, economics, and geography. For many, they raise curiosity, spark passions, and inspire lifelong interests” (Squire & Steinkuehler, 2005, p. 41).

Surprisingly, the findings of the research on game playing in education were not as “glowing” as the reports given in the professional literature consulted on the subject for this review. Although most research commented positively on many aspects of games and surmised that games could one day be the future of education (Egenfeldt-Nielsen, 2005), most had caveats about their wide-spread use at the present time. Games selected for use in the classroom had to be appropriate to the educational context and curriculum content. Teachers had to develop a familiarity with and knowledge of the games they used in order to use them effectively with their students. There was also a concern that it was difficult to fit in time for students to play the games in an already overcrowded curriculum (Egenfeldt-Nielsen, 2005; McFarlane, Sparrowhawk, & Heald, 2002; Sandford, Ulicsak, Facer, & Rudd, 2006). A great deal of the success that could be achieved with games had to do with the underlying pedagogy and teaching strategies utilized by the classroom teacher. Pedagogy, indeed, is important to any teaching/learning situation involving ICT.

### *Pedagogy and ICT*

The literature consulted for this review supports the opinion that ICT can have a positive effect on students, teachers and the learning that goes on in classrooms when it is used. Much of it also found that ICT could certainly be used as a tool to engage and

motivate male students in learning and literacy tasks. “Electronic technologies and online communities promote the DIY (do it yourself/display competence) ethic the boys admired, and the DIN (do it now) and GIN (get it now) immediacy they [desire]” (Smith and Wilhelm, 2006, p. 168). Several of the authors do have, however, a few cautions to note. Simply providing computers for student use will not necessarily create the potential improvements indicated in these studies. There has to be a focus on the use of good pedagogy in planning lessons that focus on both the teaching and the learning that happen with their use (Alloway et al., 2002; Becker, 2000; Kramarski & Feldman, 2000; Moseley et al., 1999; Passey & Rogers, 2004; Pedretti et al., 1998; Way & Webb, 2006; Younger & Warrington, 2004). “The structure and purpose of lessons and educational activities then becomes all the more important” (Passey & Rogers, 2004, p. 72). Learning activities should be, as much as possible, learner-centered and inquiry-based to stimulate the most interest from students, both male and female. It is important to note that computers should be identified as “one of a set of tools rather than a central learning modality.... a vehicle for accomplishing substantive curricular objectives” (Becker, 2000, p. 3).

Other elements and conditions need to be in place to achieve positive learning experiences with ICT as well. Teachers need to learn how to use the specific hardware or software programs that they intend to utilize with their students, and possibly change their approaches to teaching to better accommodate the use of ICT (Alloway et al., 2002; Kramarski & Feldman, 2000; Leu & Kinzer, 2000; McNabb et al., 2002; Pedretti et al., 1998; Way & Webb, 2006). The vision of Internet use at school is not always the reality, and “its potential as an innovative learning tool for students and for teachers” (Gibson & Oberg, 2004, p. 569) often goes unrealized due to lack of training for staff.

A trained, qualified teacher-librarian can be a godsend to a staff with teachers less confident in the use of ICT. “Given that teacher-librarians are trained in the use of technology for information retrieval and search and part of their duties is the training of staff and students, it is possible that schools with a qualified teacher-librarian are more likely to incorporate technology applications into teaching practices” (Coish, 2005, p. 27). If a school’s teacher-librarian is willing to model best practice teaching strategies in collaborative units that involve the use of ICT, and if they provide opportunities to support their colleagues with professional development activities to increase their confidence and competence in its use, the entire school can benefit.

#### *Implications for Future Practice and Research*

Many studies and surveys have demonstrated the pervasiveness of ICT in the lives of today’s youth. The desire of most students to use electronic tools to create and communicate meaning and engage in real-world literacy activities cannot be ignored. We need to find ways to incorporate this technology into our teaching and learning activities by using good pedagogy and the appropriate strategies and tools. Boys, in particular, seem to find the use of ICT motivating and engaging in learning activities, however, girls are not immune to its obvious benefits. Best practice teaching using sound pedagogical design for lessons incorporating ICT can help motivate all students and increase their achievement in literacy as a result.

Though only some of the research provided in this review targeted all topics as a whole (the link between boys, literacy, technology, and the teacher-librarian), examining the information provided in the broad scope of articles easily makes the relationship clear. Improving literacy achievement levels in boys and integrating technology as a tool for

teaching and learning into existing curriculum do not have to happen independently of one another. By providing more opportunities for boys to engage in learning activities and projects that require the use of appropriate technologies, both issues can be addressed simultaneously, with a good prognosis for success.

### Summary and Synthesis

#### *The Future is Web 2.0*

The research and professional literature supports the fact that the use of technology in schools can help motivate learners; however, simply just understanding this reality and nodding our heads in agreement is no longer enough. We need to take action. If we are truly going to make a difference in addressing the gender gap that is occurring in our schools, teachers and teacher-librarians need to begin looking for practical ways to engage male (and indeed, most) students by using the tools that they are comfortable with and excited about – most of them being electronic and/or digital.

Based on what I have learned through my research, courses, reading, and experimenting with ICT, the best way to start infusing technology into our teaching and learning activities is to look carefully at the use of Web 2.0 tools. “Web 2.0 refers to the current Web, an environment filled with opportunities to not only create content in new ways but also to share information, communicate differently, collaborate easily with the rest of the world, and self-publish” (Hauser, 2007, p. 7). Different schools and districts use a variety of platforms/operating systems (Microsoft, Apple/Mac, Linux, etc.). As a result, there is great variance in the types and/or quality of software available to staff and students. We can create a more level playing field by advocating the use of free, web-based tools. Use of Web 2.0 programs can also assist in easing the transition between use of different

platforms/programs at school and home. Unlimited, anytime/anywhere accessibility of programs, projects, and information is created, so long as a computer with an Internet connection and a web browser is available. The number of tools available is constantly growing, and many of them hold a great deal of potential educational value. Educational technology consultant Steve Hargadon anticipates that, “the read/write Web, or what we are calling Web 2.0, will culturally, socially, intellectually, and politically have a greater impact than the advent of the printing press” (Hargadon, 2008). If his prediction is even close to being accurate, teachers and teacher-librarians would be remiss in waiting to embrace these rapidly emerging technologies and starting to use them with their students.

I feel very strongly that teacher-librarians need to quickly upgrade themselves and their school library programs to “2.0” if they are to make any significant difference in helping our male students to willingly and enthusiastically participate in literacy activities. What this means is that we need to embrace the new “read/write web” and learn to use and incorporate ICT into our lesson planning, collaborative units, and professional development offerings. It means that we need to learn about these new technologies and become proficient at using them so that we can share our knowledge and newfound talents with our students and colleagues. To be successful, we may need to invest some of our own, out-of-school time to develop these skills. In addition to being of significant benefit to our students, it is my opinion that this investment will pay great dividends in the form of job security. By establishing ourselves as true information experts in the school and demonstrating that we have the skills to navigate, teach (and sometimes even create!) a multitude of formats of information, both print and online, teacher-librarians will prove what a value-added position they hold and make themselves indispensable to their school



communities. Providing students with alternative formats in which to access information and present their knowledge or content about any given topic will also improve learning environments for students and, quite possibly, contribute to higher achievement levels in literacy activities in not only male students, but females as well.

Little to no knowledge of computer hardware, programming, html coding or anything of the like are required for people to start using most of these web-based tools. In fact, often all that is required to start experimenting is a valid email address. Most programs that I have used are comprised of three easy steps: sign up for a free account, create your content, and publish your content. In workshops that I have presented to colleagues, I have joked that most of these tools can be considered the “Rice Krispie Squares” of educational technology. They’re just 3 easy steps to make, and once others experience them they are incredibly impressed by what you’ve done. In the memorable commercial for these tasty treats, the mother has to throw flour on her face to make it look as if she’s been slaving away in the kitchen while making the squares, when really the task has been quite easy. The same goes for most web 2.0 tools. People will “ooh” and “aahh” and marvel at the skill and talents of the content creator – it’s up to the creator whether they will let their audience know that using these tools is something pretty much anyone can do with little difficulty and a relatively small learning curve.

#### *Where I’ve Been, Where I Am*

As a teacher-librarian in a school with a growth plan goal of increasing literacy skills with an emphasis on male students, and as a mother to two reluctant reader boys, I have been both professionally and personally motivated (and curious!) to learn and test out some of these emerging technologies to see if they really do make a difference with young men.

What started as “dabbling” has become a passion – and quite possibly a bit of an addiction – as I try to find more free sites and tools to recommend to my colleagues and students. I continue to be amazed at what is made freely available for educational purposes, and marvel at the myriad of ways that using these sites can positively impact the learning that goes on in our schools. Although my journey into educational technology integration has been relatively quick by most standards, I don’t see an end to my learning in the foreseeable future.

A little more than two years ago, I began the creation of my own school library website. It was an excellent medium for sharing resources with my staff and other colleagues and for making recommendations of safe, valuable sites to students (and parents) in my school community. It served as a gentle way to introduce many of my colleagues to the “wonders of the web”, as access to quality information was only one click away and they didn’t have to search for it themselves. Some of my staff were even brave enough to suggest (or ask me to find) great websites to add to their own, personal “classroom links” section of the website so they could use them with their class. A few of them stepped even further out of their comfort zone and began asking me to add links to webquests they wanted to use, some of them through collaboratively planned units with myself, and more. It changed the dynamics of computer lab use for many teachers in my school, helping them move away from activities such as typing skills, games and random Internet surfing, to using web resources in a useful, relevant way that was integrated with the curriculum and helped meet prescribed learning outcomes while engaging and motivating all students, but especially the males. In addition, the “virtual library” was an excellent complement to the

school library's print collection, providing 24/7/365 access to quality resources, even when our physical facility was not available.

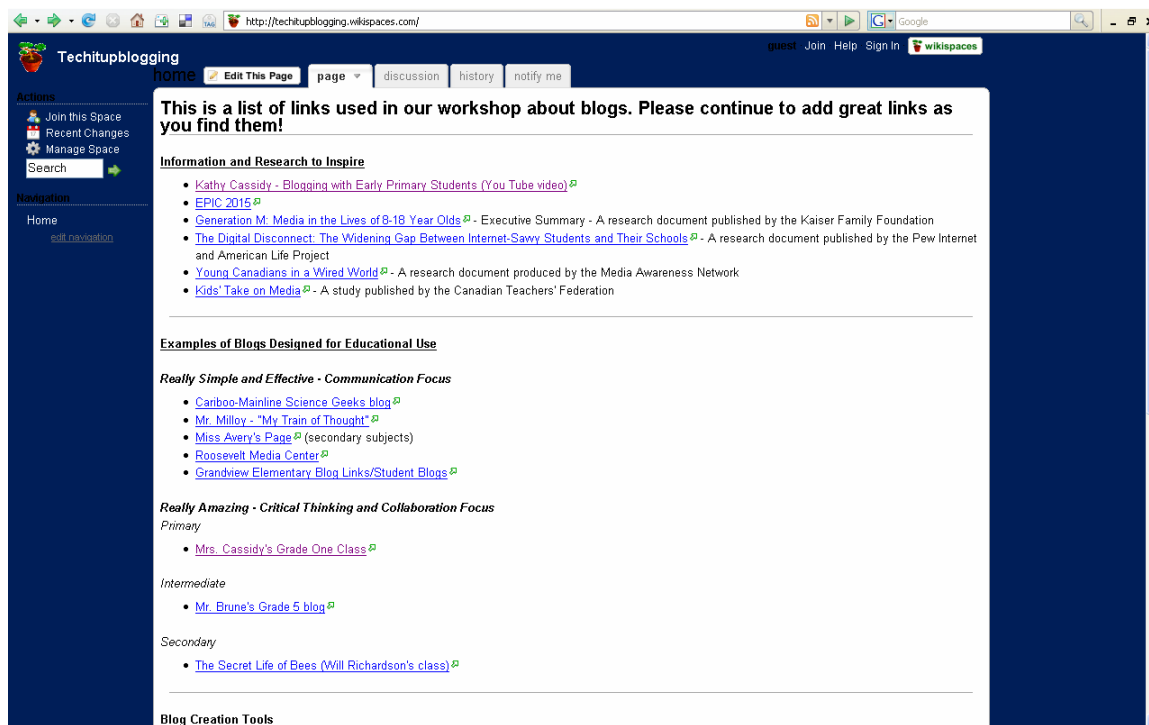
The screenshot shows a web browser window displaying the Parkcrest Library Media Center website. The URL in the address bar is <http://library.parkcrest.sd73.bc.ca/>. The page has a yellow and blue color scheme with a pattern of speech bubbles in the background. On the left side, there is a vertical navigation menu with buttons for: Home, Library Catalog, Newsletters, Our Library, Students, Teachers, Parents, Growth Plan Links, Seasonal Links, Classroom Links, and Book Talk. The main content area features a blue box with a 'NEW!!' announcement: 'The Spiderwick Chronicles is a new movie in theatres now. It is based on the terrific series of books by the same name. Check one out from the library today! Many movies are based on fantastic books (and the book is usually better than the movie!). Ask the library staff for some examples.' Below this is another blue box with text: 'Interested in building animated pictures, stories and movies online? Try out a great site called "Kerpoof!" Find it in the Students -- Neat Sites to Try area of the website.' The main heading reads 'Welcome to the Parkcrest Elementary School Library Site!'. The text below explains the site's purpose: 'The goal of this site is to provide useful, current information to students, parents, and teachers in the Parkcrest school community, accessible from any computer with an internet connection! We hope you find it valuable for use from both school and home.' It also states: 'The information contained on this site is just one way that the Parkcrest Library Media Center can support you in finding the information you seek. Our school facility houses an excellent selection of fiction, non-fiction, reference, professional, and audio visual materials, most of which are available for sign out to teachers, parents, and students of Parkcrest Elementary.' A note asks users to click on the left-side links for navigation. A contact section mentions Mrs. Poelzer, Teacher-Librarian, and provides an email link. A 'Disclaimer' section states that links to external websites are provided for convenience but may lead to inappropriate content. The page footer includes the date 'This page was last updated on 02/20/08.' and a small logo for 'CREATED & MANAGED BY'.

Students were very excited about the new site, and it quickly became their preferred method of information location and retrieval – even when it was pointed out to them that searching print materials was likely a more time-effective option. I have often observed, with male students in particular, a remarkable increase in interest in using the library computers during lunch and after school to access information via the library website. Most of them don't feel like they are “reading” when using the computer, when in truth they are simply accessing their reading material in an alternative format. Although many of the websites I have seen them visit are written at a fairly challenging reading level, these students work hard to decode and make sense of the text because they are motivated by the format and content.

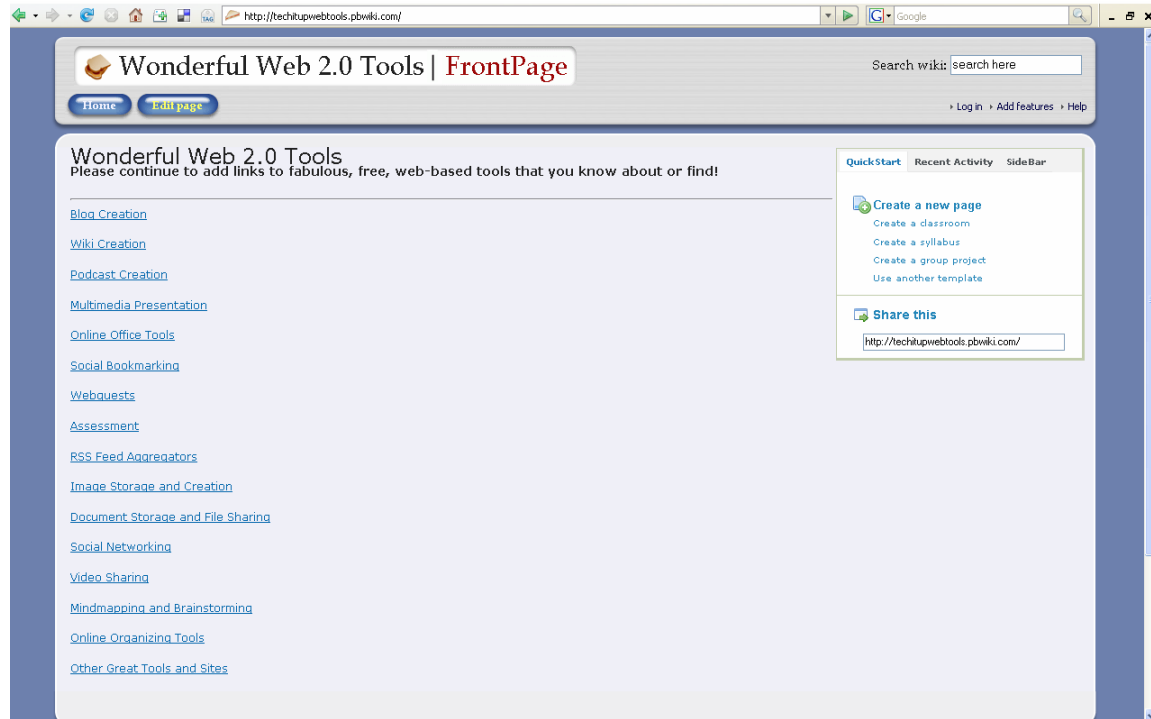
Creating my library website was just the beginning of my own learning about the power of using technology effectively in our schools. Some of the research I conducted in an inquiry about the value of school library websites led me to several articles by Joyce Valenza. I was so impressed by Joyce's amazing ideas and strategies for integrating technology and teaching that I felt compelled to explore other resources that she created: her library website, several books, pathfinders, wikis, and her blog, the "Neverending Search". Through Joyce's blog, I found links to other blogs. I started reading blogs of additional professionals in the educational technology and school library fields. I found out how to create an iGoogle page. I became addicted to checking my RSS feeds for new postings and news. I read, learned, experimented and learned some more.

It is through following many of these blogs and via subscriptions to several educational technology-focused e-newsletters that I have found links to most of the amazing web 2.0 tools that I have begun using with students in my school. The past two years have seen a real explosion in these types of programs – the ones where students are not only searching for and using information found on the Internet, but also becoming content creators who share their work for a sometimes global audience. Last spring I created my first blog, which was basically a communication piece between science fair students I was chaperoning at the national fair in Nova Scotia and their parents. It was extremely well-received and it was easy to see the power in sharing information through this medium. I was motivated to do more blogging and test-drive additional Web 2.0 tools such as wikis. I also felt compelled to start trying to share my knowledge about these tools with other educators and convince them of the value to all of our students, especially the boys, of including them in our teaching and learning activities.

Over the summer I was asked to present some workshops on blogging and web 2.0 tools at a summer institute at our local University. I built wikis for each workshop in order to supply links to the information I spoke about. Session participants were able to record or remember one link to the wiki which contained all the workshop information, rather than try to take notes about every tool or site that I discussed or type lengthy url's into a web browser from a list in a photocopied handout. They could also add their own great links and suggestions to the wiki with the click of a button. They were very well received, and both wikis continue to be accessed often.



The wiki of Web 2.0 tools (see next page) is one that I intend, in particular, to continue updating, using, and promoting. The purpose of the wiki is to attempt to compile a list of free, web-based tools that I have found which I feel would be good to



use in an educational setting, and to have other educators contribute to the list as well. My goal is to make this wiki a “one-stop-shopping” site for teachers who want to explore web-based tools and find a few that they would consider trying in their classrooms. I hope that by saving them the work of searching for the tools that are available, they will commit to spending some time playing with a few which interest them and become comfortable enough to use them with students. The benefit of using these tools with students is undeniable; I want to make it as easy as possible to help teachers with their learning and implementation process.

This current school year has seen me take an even larger role in modeling the use of these tools with my staff and other colleagues. I have provided workshops to my own staff and one other school staff on the benefits of having and how to start a classroom blog. I feel very proud when I see some of these teachers adding to their blogs and continuing to use

them as terrific communication tools with students and teachers. I have had one teacher brave enough to let me help her students start their own blogs as part of

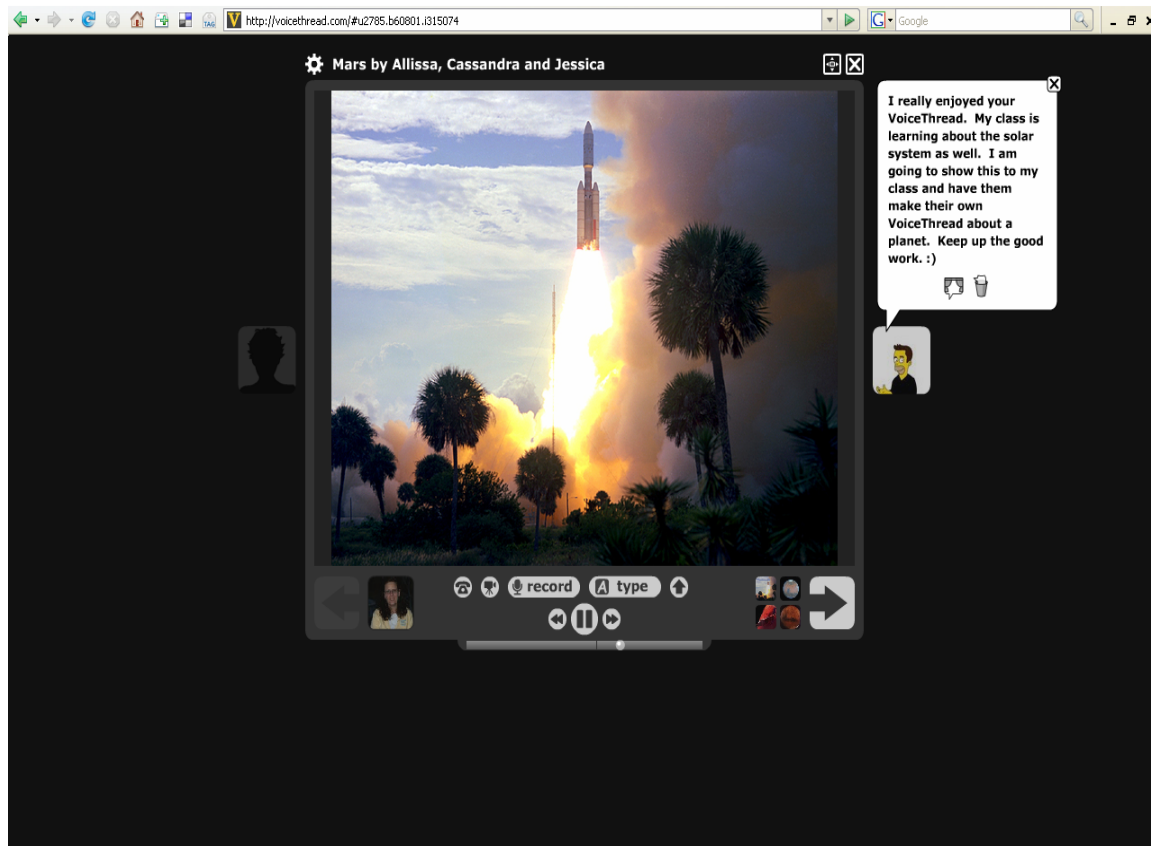
The screenshot shows a Blogger blog page with the following content:

- Header:** Media Center Musings, Parkcrest Elementary Library Media Center. Students come here to enjoy literature, and to learn skills to help them search, locate, evaluate, and utilize information in a variety of formats. by Tracy Poelzer.
- Left Sidebar:**
  - Related Links: Parkcrest Library Website, Gr. 5 Classroom Links - Natural Resources
  - Teacher Assignments: 10/28 What is your big question?
  - Teacher Entries: 11/19 The First Two Steps (List 5, 10, all)
  - Student Entries: 11/19 my big question (N), 11/19 my project (N), 11/19 It was the best of times, it was the worst of times (B), 11/19 November 19 2007 (B), 11/19 November 19 2007 (B), 11/19 my monday misery (M), 11/19 November 19th (A), 11/19 About My Project (M), 11/19 me (LM), 11/19 Rylee's second article (R), 11/19 Rylee's second article (R), 11/19 I HAVE HAD IT!!! (h), 11/19 how my project has been going (K), 11/19 Bad mining (MB), 11/19 Helpful Resources (M), 11/19 no luk (C), 11/19 step 1 (P), 11/19 step 1 (MQ), 11/19 My Project (M), 11/19 November 19th (B)
- Main Content:**
  - Today is March 18, 2008**
  - The First Two Steps**: On Friday we started learning some pretty cool searching strategies for using online resources such as Encyclopedias (WorldBook Online and The Encyclopedia of BC) and our Parkcrest Library catalogue. Encyclopedias and Books are the first two steps in our research searching plan. Always start with these two steps for the most reliable information. Searching on the free Internet can be useful too, but you can't always be sure that what you're finding is the most accurate, up-to-date information. Anyone can publish anything to the web. Encyclopedias and books are edited, published, and reviewed by educators. You know that you will always find the "good stuff" in these resources! Don't forget to always use the "Advance Search" or "Power Search" to find the best results. Remember the "Boolean Aerobics" that we learned as well, using the search terms "and", "or", and "not". They will help you find the most specific results when you are searching! Article posted # November 19, 2007 at 10:49 AM • comment • Reads 355
  - Good job!**: Students had an interesting time today learning how to get their research blogs started. We'll work on them again tomorrow. Good job! We will be diving into our research tomorrow as well. If you want to do some work from home and are exploring a forestry or mining topic, check out the pre-selected links in your classroom links - Science - Natural Resources section of the library website (see the link on the left side of this blog). Article posted # November 8, 2007 at 04:35 PM • comment • Reads 92
  - Natural Resources Blogging**: Some of our grade 5 students will be using blogs as a means of documenting their research projects on Natural Resource topics. Stay tuned! Article posted # October 25, 2007 at 02:18 PM • comment • Reads 233
- Right Sidebar:**
  - My Classes & Students
  - Natural Resource Researchers
  - About the Blogger: Mrs. Poelzer is an experienced classroom teacher in all grades K-7. She will be finished her M.Ed. in Teacher-Librarianship through the University of Alberta this April. Mrs. Poelzer is very interested in the use of Web 2.0 applications as tools for teaching and learning. Blogs are just one of these fabulous new tools!
  - RSS and BlogLines icons.
- Footer:** View (5) 10 20 all Entries

an inquiry unit we planned together. Students did not get as far along with the blogs as I had hoped due to lack of time available in the computer lab, but the idea of using them had all of the students very excited and it was an excellent first attempt at exposing students to this terrific communication medium.

Other projects I have worked on with students this year include the use of podcasts and Voicethreads. I have never seen students so eager to participate in project work. Boys who normally don't get very excited about research are working hard to finish their scripts and begging to be the next ones to record their Voicethreads. Students are so elated when they view their finished product and share it with others that some have literally been jumping up and down with enthusiasm. They are nearly bursting with pride when virtual

strangers make positive comments about their research, as “Mr. K” did on this group’s Voicethread:



Completed Voicethreads can be shared instantly with classmates, teachers, administrators and parents by quickly sending an email with the Voicethread’s url link. The project is no longer being produced as something only the student and their teacher will see, but is now “out there” for the viewing and learning enjoyment of a potentially global audience. Reading and writing are being done for truly authentic purposes, speaking and listening skills are being developed in a meaningful way, and the students are demonstrating a very high level of engagement and motivation as a result of sharing information in this format. Male readers seem particularly grateful for the fact that this presentation option puts the focus more on their knowledge of the project topic rather than on aesthetics such as pretty printing or a colorful backboard – things that boys often find challenging. They also



appreciate that they can record and re-record their content until they are satisfied with the end product. Many boys find it daunting to be “put on the spot” to speak in front of their peers and/or teacher. Creating a Voicethread greatly helps eliminate presentation anxiety because the audience’s focus shifts from the person to the product.

An additional project that I successfully implemented both last and this year is building a Moodle site for use as an online book club for grade seven students in my school using the Red Cedar Award nominees as book club reading selections. The Red Cedar is British Columbia’s young reader’s choice award, and students who read a minimum of five books from either the fiction list or non-fiction list (or 5 from each list if they want) are eligible to vote for their favorite titles. Students are encouraged to engage in thoughtful discussions to evaluate the titles they have read, and use reading strategies

The screenshot displays a Moodle course interface for 'Red Cedar Non-Fiction 2008'. The main content area is titled 'Topic outline' and lists nine discussion topics, each with a title, author, and a count of unread posts. The topics are:

Topic Number	Title	Author	Unread Posts
1	Backyard Birds	Robert Bateman	6
2	Funny Business	Helaine Becker	10
3	Are You Psychic?	Helaine Becker	2
4	Lowdown on Earthworms	Norma Dixon	7
5	Coming to Canada	Susan Hughes	3
6	Animals Hibernating	Pamela Hickman	5
7	Turtle Rescue	Pamela Hickman	9
8	Strange New Species	Elin Kelsey	6
9	The Blue Jean Book	Tanya Lloyd Kyri	4

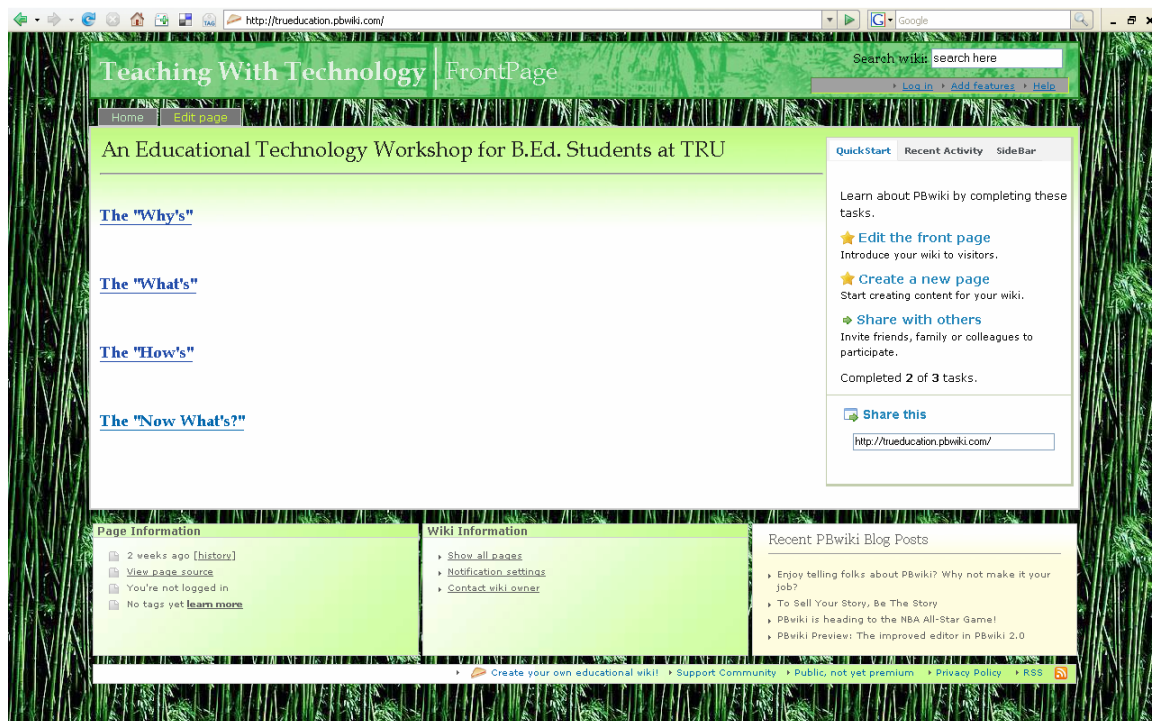
The interface includes a left sidebar with navigation options like 'People', 'Activities', 'Search Forums', 'Administration', and 'Courses'. The right sidebar contains 'Latest News', 'Upcoming Events', 'Online Users', and 'Recent Activity'. The user is logged in as Tracy Poelzer.

such as making connections, asking questions, making inferences, visualizing, and transforming their thinking in their deliberations about which book is the best. Both male

and female students are excited to share their views in the online forum. Some are eager to read the titles simply because the discussions are incredibly social in nature and they don't want to miss out on contributing or appear to have nothing to say. Many boys are reading fiction titles that I doubt they would be reading otherwise, based on the recommendations of their peers. Many of the more reluctant male readers had originally stated that their goal was simply to read the minimum, but have now read many more books – some from both lists – because they find the discussion format so motivating. I am always excited when I see students in the library at lunch adding to their online discussion threads, or see postings being published later in the evenings from home. Reluctant readers are often engaged by activities which are social and immediate, and an online book club such as this meets both those pieces of criteria and gets the students involved in a terrific and valuable literacy activity.

I recently assisted our district library coordinator in presenting a workshop to teachers and teacher-librarians about podcasting and Voicethreads. The interest was strong enough that we are planning an evening event for teacher-librarians in the near future where I've been asked to present on how to create a school library blog where podcasts and Voicethreads, or the links to the sites that host them, can be posted. I'm optimistic that many of our district's teacher-librarians who attend will see the value in using these tools with students and will be motivated to make a concerted effort to start and keep a blog to actively communicate with others about the wonderful things that are happening in their libraries. This type of communication is one of the most powerful forms of advocacy that I know of for school libraries, and the ability to share tips and information with parents and students will only improve learning outcomes at their schools.

Pre-service teachers in B.Ed. programs also need information about these tools and the benefits of using them with students if they are to be truly prepared for their future careers in the classroom. I recently volunteered to teach a 2 ½ hour session on educational technology to each of two groups of B.Ed. students at Thompson Rivers University (TRU). We had some excellent discussions around the reasons behind using more instructional technology in our classrooms, and how the integration of these tools into our lesson planning can impact student motivation and engagement in learning activities, and with male students in particular. Again, I built a wiki specifically for these sessions and used it to organize our session and share links, research and information. The students were interested and appreciative, and many were curious as to why an entire



course or elective was not being devoted to this topic as part of their B.Ed. program due to its apparent importance. Several students began building wikis to share information for an

assignment in another class before our session was over, and I received phone calls a week later from two students who were building their first Voicethreads and needed some help troubleshooting. I was impressed by their willingness to experiment immediately with these new tools. I feel optimistic that they will attempt to integrate them into units which they teach in their student teaching practicum placements as well as in their prospective classrooms, to the very large benefit of the students, both male and female, with whom they work in the future.

### *Plans for the Future*

I see no end in sight to the potential learning opportunities and personal professional development that I will be engaging in to find out more about these new technologies and how to use them to motivate and engage students, especially males. It is amazing what is available to participate in from the comfort of your own home computer. There are many webinars (both live and archived) available, blogs to read, recommended tools to explore, online discussions to participate in, wikis to contribute to, and more and more research about how students need us to use technology in our teaching to uncover. I belong to the Classroom 2.0 and School Library 2.0 Ning social networking groups, and lurk there to read tips, tricks and recommendations from other education professionals. I download educational technology podcasts and listen to them in my car and while I walk my dog. I find it amazing that we have access to such an incredible wealth of information and that we can learn, often in real time, from other teachers and professionals from around the globe. We live in pretty remarkable times.

Steve Hargadon (2008) states that, “the answer to information overload is to produce more information”. I believe he is correct and have started my own professional blog (<http://geekygirl.edublogs.org>) to sort out and discuss my own thoughts about educational technology and to provide a learning resource for interested readers. My intent is to use the blog to introduce some of the fabulous Web 2.0 tools which I have come across, and explain some of the ways I envision them being used effectively in classrooms. I will provide information from my research about how these tools can be particularly helpful in engaging and motivating male students. Many potential readers in both my own district as well as other schools and districts in Canada and several other countries are concerned about the gender gap in literacy and are looking for ways to address the problem. I have sent the link to my blog to district administrators, my principal, all district teacher-librarians, and my own staff as well. I am hopeful that others will take the opportunity to learn with me, and that the blog will serve as a successful vehicle for me to provide leadership in this area to my colleagues.

Another way of providing continued leadership is to make myself available to present at district and school professional development workshops and sessions. Several schools have expressed an interest in having me work with their staff members in the future, and I would enjoy having the opportunity to do so. Additionally, individual teachers have approached me to work with them one-on-one through our district’s mentorship program in order to learn more about instructional technology – a request that I will be happy to oblige. I will also pursue further opportunities to work with B.Ed. students at Thompson Rivers University. I think it is of the utmost importance for teachers entering the profession to come into our schools with a greater understanding of the importance of technology in the

everyday lives of our students, and to be actively searching for ways to use this to their advantage as classroom teachers.

My own staff will continue to focus on our school growth plan goal of improving students' reading skills, with an emphasis on our male population. I will continue to model and promote the use of ICT in lessons and units and provide leadership and professional development opportunities for my staff to help us achieve our goal. The fact that this goal is so connected to the services that the school library and teacher-librarian provide make this a prime opportunity to advocate for the school library program. It will hopefully help my own staff, as well as school and district administration, recognize the importance of the role of the teacher-librarian in schools and how it will continue to become even greater as we grapple with an ever-increasing amount of information.

I will additionally continue to learn from and provide learning opportunities at home for my two sons. My 11 year old does not love to read novels, but he does read everyday from the sports feeds he subscribes to on his iGoogle page, and the emails that he writes to and reads from family members. My 8 year old visits many favorite sites which require him to interact with text and to compose and create content. Both my boys maintained blogs on our recent trip to Disneyworld, and have contributed to Voicethreads about family photos and events. Often they will be my "guinea pigs" for testing out new tools and sites, and I suspect that they will usually be willing participants. I would (selfishly) love to be asked to provide some professional development for the staff at the school that my sons attend around how to engage and motivate male learners by using ICT in their teaching. It would be a great leadership opportunity, and would improve the learning opportunities at school for my sons as well!

My ultimate goal is to eventually be considered for the position of Technology Coordinator in my school district. It is difficult to do the job of a teacher-librarian in 0.6 F.T.E. while trying to support others in their professional development in this area in my “spare time”. I would love the opportunity to be in a position where providing this leadership was my full-time responsibility, and where I had the necessary time, resources, and budget to do an excellent job of it. It would also be a terrific position from which to make district personnel aware of the interconnectedness of the teacher-librarian, school library program and technology integration, and advocate for an awareness of the importance of this role in schools.

#### Conclusion

*“If we teach as we taught yesterday, we rob our children of tomorrow.” - John Dewey*

For many busy educators, finding the time to learn new skills in order to help facilitate change can be challenging. In addition, human nature sometimes keeps us from making it an absolute concern. “Most of us prefer to walk backward into the future... a posture which may be uncomfortable, but which at least allows us to keep on looking at familiar things as long as we can” (Charles Handy in Prensky, 2008, p. 44). Nevertheless, if we are to evolve and develop professionally, as well as continue to meet the needs of today’s learners, we need to make it a priority to learn about new technologies which engage our students and help provide the best learning opportunities possible. “Literacy has always been about using the most powerful cultural tools to create and communicate meanings. In our era, these tools are electronic. And if we want to relate to our students and address their needs, we must consider the influence of new literacies and our students’ use of them” (Smith and Wilhelm, 2006, p. 167). Certainly this holds true for all children in our schools,

but especially the boys, if we want to engage them in their literacy learning and improve achievement levels in this area.

The desire of most students to use electronic tools to create and communicate meaning and engage in real-world literacy activities cannot be ignored. Teacher-librarians, with their unique positions and ability to work with many teachers and students over the course of a school year, are in a perfect position to facilitate this. If we embrace Web 2.0, provide instruction to students on how to incorporate these tools into their learning, model the use of them for our colleagues through collaborative units, and provide inservice opportunities around them for interested educators we can demonstrate yet another reason that the role of the teacher-librarian in our schools is value-added and indispensable.

The ultimate goal of any teacher-librarian is to help create information literate citizens who are able to take the skills they have learned in school and continue to apply them to their real-life inquiries well into adulthood. We need to make a concerted effort to find ways to engage and motivate boys in literacy activities so that they leave our schools with a solid foundation of literacy skills. Teacher-librarians can help make this happen by integrating more technology, especially Web 2.0 tools, into the lessons and units being taught in our libraries and classrooms. It may take a little extra work to learn these tools well enough to teach them, but the end results will be well worth the effort. Seizing this opportunity will benefit our schools and students, especially the boys, and will raise the profile and importance of teacher-librarians within our school communities at the same time. It truly is a win-win opportunity that we can't afford to put off any longer.



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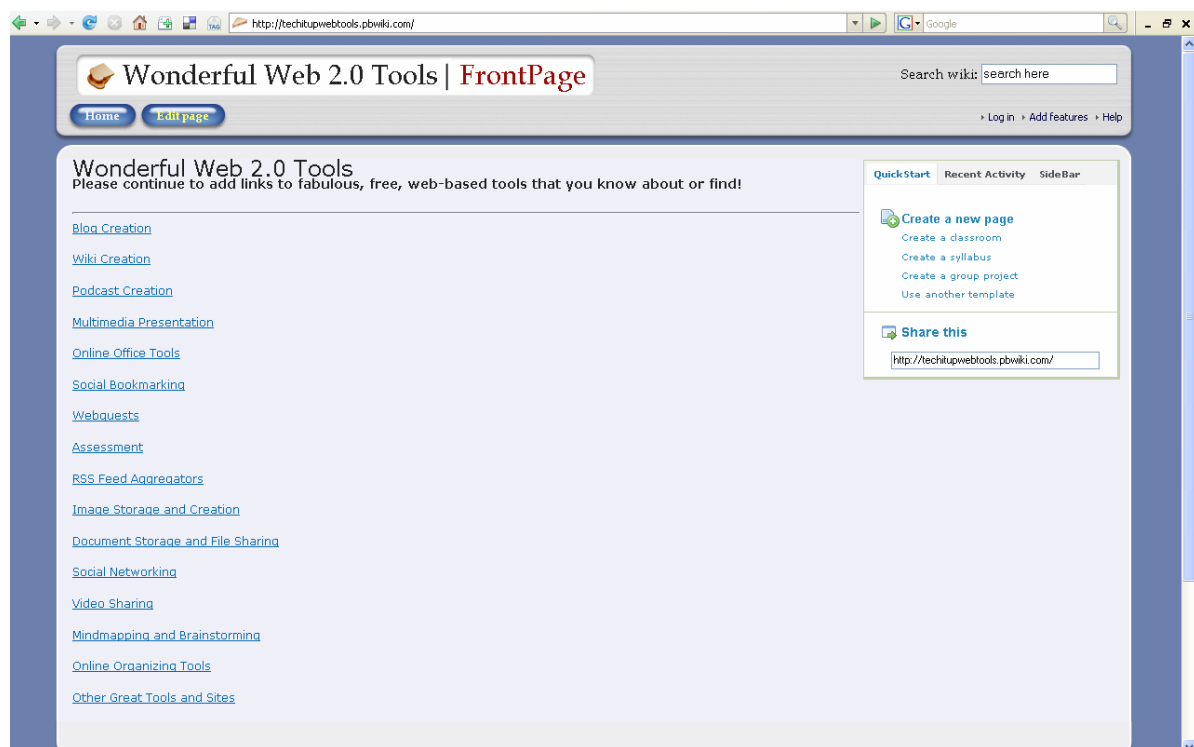
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## Appendices

### *Web 2.0 Wiki*

I will be continuing to add more great Web 2.0 tools to the wiki that I have started. Wikis are a collaborative effort, so contributions from teacher-librarians or other educators would be welcome as well. I am trying to keep the tools on my wiki restricted to those that are free, web-based (ie: you don't have to download anything onto your computer), and have useful applications in an educational setting.

To contribute to the wiki please go to: <http://techtupwebtools.pbwiki.com> The password to edit the wiki is: techitup



## Geeky Girl Blog

I have started, and will be adding to, a blog entitled, “Geeky Girl’s Teaching and Technology Tips” in which I introduce readers to fabulous web 2.0 tools that I have come across. Please feel free to add my blog to your RSS feeds, or ask questions and make comments around any of the postings that I write. You can access my blog at:  
<http://geekygirl.edublogs.org>

The screenshot shows a web browser window displaying the homepage of the blog "Geeky Girl's Teaching and Technology Tips". The browser's address bar shows the URL "http://geekygirl.edublogs.org/". The page features a dark blue header with the blog title and a navigation menu with links for "Home", "About Me", and "Great New Sites I've Found Lately".

The main content area displays a post titled "Blogging Basics" dated March 13, 2008, posted by "geekygirl" in the "Uncategorized, blogs" category. The post text discusses the challenges of starting a blog and the importance of time management. It references a post by Steve Hargadon and includes a definition of blogs from Wikipedia. The post concludes with a note about the author's motivation for starting the blog.

On the right side of the page, there is a calendar for March 2008, a "Blogroll" section listing several related blogs, a "Links" section, and a "Recent Posts" section listing the current post.

**Geeky Girl's Teaching and Technology Tips**  
 Way-Cool Ways to Use Web 2.0 Tools in the Classroom and Beyond

Home About Me Great New Sites I've Found Lately

**Blogging Basics**  
 Posted by [geekygirl](#) in [Uncategorized, blogs](#)

I guess the biggest challenge in starting a blog is that you have to make time to keep posting to it. Finding that time is not easy. In fact, sometimes it's downright impossible. That being said, I read a [really fantastic post by Steve Hargadon](#) this morning about why Web 2.0 is the future of education. I was inspired (and if you read his posting I hope that you are too – even if you're not a "techie person" and feel like he's speaking another language). So here I am... posting to my blog, eager and enthusiastic to help with the Web 2.0 learning process.

Many of the people reading this blog are probably here at my invitation. I truly appreciate you humoring me by clicking on the link to get here. Now that you're here, I'm hoping that you will stay awhile (and come back often) to learn with me. I'm guessing that a few of you probably aren't even really sure what the heck a blog is, despite the fact you're here reading one. As a result, I thought that talking about blogs might be a really good place to start our virtual exploration of Web 2.0 tools.

Wikipedia offers a pretty comprehensive [definition of blogs](#), if you care to read it. If you're like me, you might want to keep it a bit more simplistic. Basically it goes like this: The creator of the blog writes an entry or post to discuss their thoughts, feelings, etc. This post is published on the Internet using an easy-to-use, web-based program (often free of charge). Other people read the post. Sometimes people respond to the post by clicking on the "Comment" or "Reply" link at the bottom of the post. The author of the original post can respond to the replies. And so it continues... I really like the way Jeremiah Owyang [describes the blogger](#) as being the "keynote speaker" of the blog. It's a simple definition that makes a lot of sense and might help you understand the differences between blogs and some of the other tools out there.

March 2008

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**Blogroll**

- [Billions of Bytes](#)
- [Blue Skunk Blog \(Doug Johnson\)](#)
- [Digital Reshift \(Chris Harris\)](#)
- [Edublogs Main](#)
- [Joyce Valenza's Neverending Search](#)
- [Steve Hargadon](#)
- [TL-DL Blog \(Jennifer Branch\)](#)

**Links**

- [Parkcrest Library Media Center](#)

**Parkcrest Bloggers! (Yay!)**

- [Blacquiere's Blog](#)
- [Ms. Lane e Us](#)

**Recent Posts**

- [Blogging Basics](#)

*ASCD Express Article*

I submitted an article on my capping topic to Educational Leadership journal, and it was selected to be included in the March 20<sup>th</sup> edition of their electronic publication, ASCD Express. Please feel free to share the article with colleagues and anyone else potentially interested in this topic. I am including a copy of the article below as it appears in ASCD Express. It can be also accessed online at the following url:

<http://www.ascd.org/portal/site/ascd/menuitem.d6eaddbe742e2120db44aa33e3108a0c/template.ascdexpressarticle?articleMgmtId=d7b98f917faf7110VgnVCM1000003d01a8c0RCRD>



Looking Beyond the Books

Using ICT to Engage Reluctant Male Learners in Literacy Activities

Tracy Poelzer

Many educators are in schools or districts that are grappling with how to best address the issue of the gender gap in literacy achievement. Since males make up the largest percentage of the students considered to be reluctant literacy learners, educators have tried to find creative new ways to get them reading and writing.

Teacher-librarians are on the front lines of this reconnaissance effort, with specialized training and vested interest in all things literacy related. We've been trying to find ways to improve our own collections and programs and work collaboratively with our classroom-teacher colleagues to motivate reluctant male learners. While the purchase and promotion of more nonfiction library materials, graphic novels, and other "boy-friendly" books is one important step in addressing the problem, we should start looking beyond the books for even

more effective solutions.

By integrating information and communications technology (ICT) into learning opportunities at school, educators can engage even the most reluctant students in literacy activities—sometimes without their even knowing it. Teacher-librarians, trained in the use of technology for information searching and retrieval, are the perfect people to provide support, modeling, and training to their colleagues in the use of these resources. They can help make the connection between ICT and literacy and get those reluctant males happily participating in literacy activities.

### New Forms of Literacy for 21st Century Learners

MP3 players, PDAs, cell phones, digital cameras, recording devices, home computers—you'd be hard-pressed to find a student who didn't have easy access to some form of technology. The Kaiser Family Foundation study *Generation M: Media in the Lives of 8–18 Year-Olds* (2005) gives an overview of the prevalence of technology in children's lives: "Without question, this generation truly is the media generation, devoting more than a quarter of each day to media. As media devices become increasingly portable, and as they spread even further through young people's environments—from their schools to their cars—media messages will become an even more ubiquitous presence in an already media-saturated world. Anything that takes up this much space in young people's lives deserves our full attention" (p. 39). Also, the Pew Internet & American Life Project (Levin & Arafeh, 2002) reports on the growing disconnect between these media-generation students and their schools. Students *like* to use technology, and they *want* to use technology; as their educators, we need to listen.

As users of media and technology, students have had to acquire new forms of literacy to adapt to these modern ways of accessing, retrieving, consuming, and creating information, communications, and entertainment. Educators need to move from traditional definitions of literacy to an expanded understanding of what it means to be literate. Examples of these new aptitudes include "visual literacy, critical literacy, hypertext, media literacy, multi-media, drama, music, and other less 'traditional' forms of print and nonprint texts ... Literacy is not just about mastering reading and writing, but it also involves the ability to convey and recover meaning from a variety of different symbol systems" (McPherson, 2004, p. 60). When the definition of literacy is broadened, educators can develop new strategies for engaging students in information acquisition.

### What Are Boys *Really* Reading?

In keeping with the idea of embracing new literacies, we also need to expand our definition of what constitutes "appropriate" reading material. When we state that many boys are

reluctant to read, we are often referring to traditionally accepted materials such as novels and textbooks. What we haven't usually considered is that many boys are still making meaning with a wide variety of texts in other formats: information books, text messages, instant messaging, e-mails, manuals, magazines, Web sites, and more.

My own 10-year-old son has dodged all my efforts to provide him with great books (including nonfiction and graphic novels) but will happily spend plenty of time on the Internet reading hockey statistics and player bios or reading and composing e-mail messages to friends and relatives. I don't think he is unique in this, based on my observations of many boys in my own school. We need to encourage boys to explore a variety of texts, media, and technologies that they find interesting and relevant. Reading is reading. The more time they spend doing it, regardless of the type of text they are exploring, the better they will become at it.

There are several features of text that contribute to flow or "a total immersion in the immediate experience of reading" for boys, which include short length, visual descriptions or graphics, challenging information filled with weird and wonderful facts, edginess, real content (nonfiction or connected to real life), current information, and humor (Wilhelm, 2002, pp. 16–17). These features can be found in many forms of online reading material, as well as in various computer programs and games.

Michael Sullivan (2004) contends, "boys' brains engage in less cross-hemisphere activity than girls'. In other words, boys use only half of their brain at any given time. That means that when boys read, they need an extra jolt of sound, color, motion, or some physical stimulation to get their brains up to speed" (p. 36). Therefore, using multimedia and other interactive materials to engage male students in literary activities seems very desirable.

Schools need to explore ways to adapt current curricula and teaching practices to meet the needs of this new breed of learners and ensure a varied collection of learning resources to effectively support learning through multiple literacies. Developing student inquiry projects, WebQuests, and other problem-based learning projects provides the perfect way for teachers and teacher-librarians to collaborate. Through school library Web sites, teachers and students can also access resources that complement the school's print collection and offer alternative forms of information.

### Blogs, Wikis, Moodle, and More

Reluctant learners, especially males, are often motivated by activities that are social and immediate. The use of tools such as blogs, wikis, and online learning management systems (LMSs) like Moodle or WebCT can provide occasions for students to conduct research, communicate with one another, and formulate and express their own opinions (Smith & Wilhelm, 2006, p. 166). Technological literacy projects also provide authentic reading,

writing, and responding opportunities that are fun for students.

I created an online book discussion club using Moodle for a 7th grade class based on our provincial Young Reader's Choice Award nominees. Students read the books, and in the Moodle course they discussed, compared, and contrasted texts; made personal connections with the stories; and shared opinions. A mother of one of the boys recently thanked me for motivating her son to read, saying her son "would usually rather cut off his right arm than sit down with a book." However, because he didn't want to miss out on the discussion opportunities, he felt motivated to read the assignments.

It is also interesting to note that the minimum number of books students must read to be eligible to vote for their selection for the Young Reader's Choice Award is five—from a list of either 15 fiction or 15 nonfiction titles. Many of the reluctant learners in this group originally stated that their goal was to simply read the minimum from one list, but a good number of them have now read more than the minimum, with some choosing from both lists.

### Achieving Literacy Through Games

When used appropriately, games can be a powerful tool for teaching, learning, modeling, demonstrating, and simulating. They seem an ideal way to engage students, especially boys, in active learning situations. In addition, some believe that some video games can require players to develop skills that future employers desire, such as strategic and analytical thinking, problem solving, decision making, and adapting to rapid change.

How do teacher-librarians fit in with this new type of game-based learning? There are several ways that these specialists can assist teachers in using learning games that incorporate technology. "Since these online games are [often] inquiry-based, researchers say media specialists are crucial to providing relevant print and online resources and making sure they apply to ongoing lessons in the classroom" (Whelan, 2005, p. 42). Also, research shows that games can "promote various types of information literacy, develop information seeking habits and production practices (like writing), and require good, old-fashioned research skills, albeit using a wide spectrum of content" (Squire & Steinkuehler, 2005, p. 38). Also of note are the connections that games can have to other content areas, such as history, politics, economics, and geography (Squire & Steinkuehler, 2005).

### What's Next?

As educators, we have to use the most powerful cultural tools available to reach students (Smith & Wilhelm, 2006). At this time, technology is the key to accessing information that matters to young males. We must find ways to look beyond books and incorporate technology into teaching and learning activities; hopefully, in the process, we will reach even

our most reluctant learners. Teachers, don't think you have to go it alone—your friendly teacher-librarian is only a couple of doors away, ready and willing to help.

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