

Librarians and Learning: The Impact of Collaboration

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Squeaking soles of new sneakers and backpacks filled to the brim with school supplies were among the many signs that announced the first day of school. As the students entered the middle school gymnasium to find their teachers, I stood watching with my back pressed against the wall. Unlike the previous ten, when I had been waiting for my own students to arrive, this year I did not have a class waiting for me. I had made the decision to take on a new role and a new challenge: moving from being a classroom teacher to becoming the school's teacher-librarian. As the students followed their teachers out of the gym, I felt a great sense of loss. My administrator, always astute and perceptive, sidled up to me. "Don't worry, they are all yours now," he whispered as he scanned the room with his eyes. And I knew, with his comment, that he didn't just mean the students; I would now have the privilege to directly collaborate with all the teachers and support staff.

As I navigated my way through the many facets of my new position, I quickly noticed one specific area of literacy that needed urgent attention. Although our students and staff integrated technology into daily learning, and despite the fact that most of our students had open access to technology at school and at home, our students lacked the skills they needed to successfully navigate online sources. In fact, very few of our students reported having ever been taught Internet search skills.

Online Literacy Requires Instruction

It is possible that prior teachers had assumed that because we are located in an area with a high median

income, our students were already skilled in Internet searching and source differentiation. The students believed they were, too—more than half of them reported being skilled at Internet searching, even without instruction. But their confidence did not bear out in their performance when we measured their skills. Given simulated Internet search results, they could not identify which results best aligned to their search topic, nor could they recognize unreliable sources.

Our students have never known a world where information is not quickly and easily accessed from the Internet. They wear portable devices from which they can find an answer to any question they might have (Ontario Library Association [OLA], 2010). Given that this age group are early adopters of new technologies (Asselin & Doiron, 2008), their teachers may feel that additional instruction in using digital tools is superfluous or even beyond their own skills. However, simply being able to use the technology does not mean that these students are acquiring the skills they need to be literate citizens (Asselin & Doiron, 2008; Brown,

Murphy, & Nanny, 2003; Leu, Kinzer, Coiro, & Cammack, 2004).

Online searching involves complex literacy skills: knowing how a search engine works, reading the results, locating and reading the information from the web page, and making inferences about where additional information may be located within the links (Leu et al., 2007). Early in the year, I assessed our students' online search abilities and found that they needed help developing these literacy skills. As Braasch and colleagues (2009) have previously found, our students often select web pages based on titles, summaries, and keywords. Or, they simply trust their intuition. Many cannot provide a rationale for their choices.

I know that for online readers, understanding how to read the results provided by a search engine is key (Leu et al., 2007). However, research shows that many students are lacking this essential information literacy skill. While searching for information online, students have been found to use natural language and search terms that are either too broad or too specific, dedicate very little time to scrolling through web pages, and rarely read the context of the sites they visit (Bilal, 2000). Additional studies conclude that students tend to use terms solely from the original question and have a hard time selecting topics from the retrieved list (Branch, 2003). Kuhlthau, Heinström, and Todd (2008) found that students also tend to believe that information is easily available. They note that students feel frustrated when the process is not as easy and immediate as they anticipate. This was true in our case; students reported a very high level of frustration associated with

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interpreting the results from search engines.

In order to address this issue, I designed four mini-lessons on Internet searching and source evaluation. These lessons were taught in our library/learning commons and were integrated into various inquiry projects that students were assigned by their classroom teachers. The goal was to engage students in authentic tasks, allow them to work collaboratively with their peers, and use their existing technological skills in order to increase their online search and source evaluation skills in a way that was meaningful and transferable.

During the research stage of their projects, students received mini-lessons about online inquiry skills as follows:

Lesson 1. Search Engines: key vocabulary, how a search engine works, and search (AND, OR, -word, control F)

Lesson 2. Boolean Search Tips (quotation marks, truncation, Google search tools)

Lesson 3. Evaluating Search Results (URLs and their meanings)

Lesson 4. Reliable Sources (currency, author, reliability)

These mini-lessons took about 20 minutes each. After the mini-lessons, students had approximately 40 minutes to conduct research on their topics. The intent was that students use the tips taught during the mini-lessons in a practical and relevant way. Information literacy, when taught in a manner that engages students in authentic tasks, can tap into students' intrinsic motivation so they adopt a deeper approach and use information as building blocks for comprehension. In contrast, when students are extrinsically motivated to complete the information-seeking task, they tend to adopt a surface approach, such as fact-gathering and basing information relevance on easy access (Heinström, 2006).

The mini-lessons were also designed to promote collaboration and allow students to use their prior knowledge. Information literacy skills are acquired best through social exchanges rather than from direct teaching (Leu et al., 2007) so teachers should ensure that information literacy is taught within a collaborative and social context (Ekdahl, Farquharson, Robinson, & Turner, 2010) where students can collaborate with others in order to test, confirm, and enrich their learning (OLA, 2010). Additionally, Leu and colleagues (2007) note that information literacy instruction should be designed to take advantage of the skills that the students already possess, skills that students may have and teachers may not.

Nine classes completed these lessons. After they completed their inquiry projects, I gave all the students an assessment to gauge their skill development. They showed significant improvement in their Internet search skills and source differentiation. This was exciting, as I am convinced that information literacy skills are essential for learning. However, being new to my role as a teacher-librarian, I was curious about the impact of collaborating with classroom teachers: as my principal had noted, I was in a role that could be of service to them. I also wondered about the best way to help students learn these important skills. So I compared two approaches.

Collaboration with the Teacher-Librarian Results in Deeper Learning

For half of the classes, the lessons were taught by both the classroom teacher and by me, the teacher-librarian. We met before each lesson to review content and met again after to debrief and evaluate each lesson. During the lessons, we shared the direct instruction, circulated to reinforce and support the research, and conducted verbal protocol check-ins in which we asked students to

verbalize and justify the choices they were making during the search process. I taught the other half of the classes alone; the classroom teacher did not collaborate or teach during the mini-lessons or the following research blocks.

The impact of the collaboration between the teacher and the librarian was significant in terms of these valuable literacy skills. Although the students in each group had performed similarly on a pre-assessment, the students whose teacher worked within the collaboration model had greater gains from their initial to final assessment scores, on average, than the other students did. In fact, their results indicated that collaboration between the classroom teacher and the teacher-librarian leads to a statistically significant higher level of student skill development.

Why did collaboration have this impact on student learning? The classroom teachers involved noted that working with any other professional strengthened the quality of instruction, but that collaborating with the teacher-librarian provided even more benefits: access to resources, expertise, and connections to the broader school community. The teachers all agreed that collaboration with the teacher-librarian positively impacted student learning. One teacher responded:

As with most things that students learn, repetition is often needed to solidify new concepts and skills. Because of our collaboration, I am now able to continually reinforce the messages presented in this mini-unit throughout the year. The overall retention and use of these concepts/skills will likely be increased with this repetition than if students had just done this mini-unit and not had this reinforcement from me. The collaboration has also given us a common language to use when discussing Internet search skills.

In a similar response, another teacher stated:

I think it's going to result in more transferability of these skills. Because we taught this unit together, I think my students will be more likely to use the Internet skills when working with me on other Internet activities. If it was just done with the librarian, I think they might associate the skills with library only.

Classroom teachers who did not collaborate with the teacher-librarian were asked how collaboration might have impacted their students' understanding of Internet search and source evaluation skills. One teacher commented: "I think that the students would have had more support in their understanding of Internet search skills. I would have been able to learn from the teacher-librarian and perhaps implemented techniques used or skills acquired in the future." Another teacher stated: "I think that being able to work together to support the student learning would have improved some students' achievement. It is difficult to reinforce what is happening when the teacher is not involved."

Some teachers also noted that collaboration benefits both classroom teachers and the librarian. As Yukawa and Harada (2009) report, classroom teachers provide expertise on the curriculum content as well as in-depth knowledge of their students; teacher-librarians provide expertise in information literacy, print and nonprint resources, technology, and strategies to guide students through the research process. Collaboration also has to be seen as beneficial for both the classroom teacher and the students (Peterson, 1999). However, collaboration is not always seamless; there are often barriers.

Barriers Must Be Overcome

Limited access to resources such as the library, the library resources, the teacher-librarian, and the time to collaborate have been seen as barriers to effective information literacy instruction (Asselin, 2005). The teachers I worked with agreed.

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They indicated that time was the largest limitation and barrier to collaboration. Time is required to collaboratively plan and build common goals, and time is something that is precious within the hectic school day. One of the teachers captured this concern by saying, "Collaboration is much stronger when the parties have time to meet, plan, discuss, and assess together. Finding this time is always a challenge." Another said, "There is never enough time to meet and plan. Both of us have very busy schedules, and no time is built into either of our schedules for collaboration, so we end up having to collaborate on the fly or via emails and texting, which is not ideal." Teachers also listed structural barriers such as the availability of the library/learning commons and limitations within the school timetable or schedule. One teacher noted that "The lack of teacher-librarian point-time is probably the greatest barrier to collaboration. If my school had an actual full-time teacher-librarian, we would be able to collaborate a lot more."

The benefits and limitations indicated by teachers validate the need for full-time teacher-librarians in schools. Teacher-librarians are often part-time and have to work in additional capacities within the school or between schools. Furthermore, they indicate that the teacher-librarian must be provided a schedule with enough flexibility to allow for effective collaboration with all teachers in the school.

Considerations for Others

School leaders who want to promote

information literacy using this collaborative model must advocate for the importance of the teacher-librarian position, especially as school boards are faced with having to make cuts due to shrinking budgets. Positions not specifically attached to a class of students—like librarians—will often be the first to be cut. There are other considerations, as well, for those who want to support this model in their school.

Build relationships. Peterson (1999) notes that classroom teachers often work in isolation and may be reluctant to collaborate or ask for support, as that suggests weakness or failure in some school cultures; the teacher-librarian must therefore work to build trust and create bonds, which takes time. Collaboration requires letting go and making compromises. In order for collaboration to be effective, it is essential that there is a foundation of trust as well as a balance of complementary skills. Successful collaboration is characterized as an equal partnership between the classroom teacher and the teacher-librarian. This collaboration requires that both the classroom teacher and the teacher-librarian are committed to working together and that they have a common mission. This in turn requires a foundation of trust and respect, comprehensive planning, and shared power and risk (Peterson, 1999). We were fortunate to have this strong foundation.

Share common goals. Given that collaboration requires a great deal of commitment from both the classroom teacher and the teacher-librarian, it is essential that both parties work together to determine the goals for instruction. Agreements about the model of instruction and a common understanding in terms of lesson delivery, student expectations, and assessment must be in place prior to beginning instruction.

Establish technological infrastructure. Access to technology is also important. Our school had excellent access to technology. The

library learning commons had enough computers for a full class of students as well as a teaching area with an interactive whiteboard to deliver lessons. In addition, the staff had a high level of technological literacy. In order for students to increase their ability to effectively search and evaluate sources online, they require hands-on time to experiment and access to the technology to do so.

Foster stakeholders' capacity with technologies. Asselin (2005) also noted that the lack of available technology and technical support within a school can also limit the ability to instruct effective information literacy. Furthermore, teacher experience and skill with technology combined with the pressure of a very full curriculum can lead to other instructional areas being prioritized. Finally, Asselin notes that the availability of technology at home and parental experience and skill level with technology also impact effective information literacy instruction. Model effective strategies for staff and demonstrate how these can be woven into the content areas to complement instruction. Invite parents to become part of the conversation as well, by demonstrating that online source evaluation skills are tools for school and for life.

Build schedules to accommodate collaboration. Perhaps most importantly, the teacher-librarian must have an open schedule that allows for flexibility. As Asselin (2005) notes, if a library program is structured so that the teacher-librarian and the library are used to cover classroom teacher-prep times, the classroom teacher and the teacher-librarian will have little time to collaborate, so library or information skills will almost certainly be taught in isolation from classroom learning. This is not an effective model for deep transferable learning.

Structure the library around learning. Our school had adopted a learning commons model aimed to

situate the library as the heart and hub of the school, with learning at its center. A learning commons is a place where the emphasis is switched from teaching to learning. It is a place that fosters curiosity, a place where everyone models how to learn. It is a space for everyone within the school community: teachers, parents, administration, technical staff, support staff, and students—a place where everyone collaborates in learning partnerships.

I took my principal's words from that first day of school to heart. As I embraced my new role within the school, I aimed to create collaborative partnerships that would translate into a strong foundation for student learning. As a result of this collaboration, our students have become better equipped with the literacy skills they need for both school and for life. ●

References

- Asselin, M. (2005). Teaching information skills in the information age: An examination of trends in the middle grades. *School Libraries Worldwide*, 11(1), 17–36.
- Asselin, M., & Doiron, R. (2008). Towards a transformative pedagogy for school libraries 2.0. *School Libraries Worldwide*, 14(2), 1–18.
- Bilal, D. (2000). Children's use of the Yahoo!igans! Web search engine: I. Cognitive, physical, and affective behaviors on fact-based search tasks. *Journal of the American Society for Information Science*, 51(7), 646–665.
- Braasch, J., Lawless, K., Goldman, S., Manning, F., Gomez, K., & Macleod, S. (2009). Evaluating search results: An empirical analysis of middle school students' use of source attributes to select useful sources. *Journal of Educational Computing Research*, 41(1), 63–82.
- Branch, J. L. (2003). Instructional intervention is the key: Supporting adolescent information seeking. *School Libraries Worldwide*, 9(2), pp. 47–61.
- Brown, C., Murphy, T., & Nanny, M. (2003). Turning techno-savvy into info-savvy: Authentically integrating information literacy into the college curriculum. *The Journal of Academic Librarianship*, 29(6), 386–398.
- Ekdahl, M., Farquharson, M., Robinson J., & Turner, L. (2010). *The points of inquiry: A framework for information literacy and the 21st century learner*. Vancouver, BC: British Columbia Teacher-Librarians' Association.
- Heinström, J. (2006). Fast surfing for availability or deep diving into quality: Motivation and information seeking among middle and high school students. *Information Research*, 11(4), paper 265.
- Kuhlthau, C. C., Heinström, J., & Todd, R. J. (2008). The "information search process" revisited: Is the model still useful? *Information Research*, 13(4), paper 355.
- Leu, D. J., Jr., Kinzer, C. K., Coiro, J., & Cammack, D. W. (2004). Toward a theory of new literacies emerging from the internet and other information and communication technologies. In R. B. Ruddell, & N. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp.1570–1613). Newark, DE: International Reading Association.
- Leu, D. J., Jr., Zawilinski, L., Castek, J., Banerjee, M., Housand, B. C., Liu, Y., & O'Neil, M. (2007). What is new about the new literacies of online reading comprehension? In L. S. Rush, A. J. Eakle, & Berger, A. (Eds.), *Secondary school literacy: What research reveals for classroom practice* (pp. 37–68). Urbana, IL: National Council of Teachers of English.
- Ontario Library Association (OLA). (2010). *Together for learning: School libraries and the emergence of the learning commons*. Toronto: Ontario Library Association.
- Peterson, D. L. (1999). Collaboration in teaching and learning. In B. Strippling (Ed.), *Learning and libraries in an information age* (pp. 133–162). Englewood, CO: Libraries Unlimited/Teacher Ideas Press.
- Yukawa, J., & Harada, V. (2009). Librarian-teacher partnerships for inquiry learning: Measures of effectiveness for a practice-based model of professional development. *Evidence Based Library And Information Practice*, 4(2), 97–119.