

## Chapter 6

---

# SCHOOL LIBRARY TO LEARNING COMMONS LITERATURE AND RESEARCH

Today, many school libraries are being designed as “learning commons” in response to users’ involvement in “participatory culture,” which extends the users’ roles from consumers of information to creators of information. (Schultz-Jones and Oberg, 2015, p. 32)

The background to the emergence of school library to learning commons literature and research resides in an extensive literature and research base of more than fifty years, focused on school libraries and teacher-librarianship. As pointed out previously, however, this type of literature and research is not well known to many educators outside these fields. “Learning commons” literature and research is relatively new, and schools exploring the approach will often begin with familiarity or background knowledge relating to school library literature and research. This chapter highlights several key school library literature and research sources for background information, yet places greater emphasis on the developing resources focused on the learning commons approach.

School library literature and research describe best practice in school librarianship as also involving a whole school approach, a constructivist base, and a focus on collaborative planning, teaching, and assessment. Ensuing research on the impact of school libraries on student learning shows higher achievement test scores on both formative and summative assessment studies, no matter the socio-economic or community education level. These best-practice school libraries demonstrate active learning programs that contribute to making the school library a vital center of inquiry and collaboration in schools, and the results dependent upon best teacher-librarianship practice, in which a teacher-librarian actively collaborates in all aspects of instruction with each of the classes and teachers in the school.

Despite the extensive research on the impact on student achievement of school library programs led by dynamic teacher-librarians, when examining literature related to school libraries, it will be pointed out that many school districts eliminate professional teacher-librarians for a number of reasons. One reason is declining budgets, also seen in reductions in arts and athletic programs. Another reason is the belief that web technology replaces a “tired concept” (Loertscher, 2014, p. 8)—namely, school libraries and teacher-librarians. However, most schools in Canada and the United States, including new schools, have and continue to build a dedicated physical space for a school library (also referred to as a school library media center) and, increasingly, space for a “learning commons.” These dedicated spaces cost plenty to resource and maintain, operating with decreasing staffing of both certificated and technical or clerical personnel. The school library in some cases functions as a space with things in it such as books and other resources; rather than as an active, collaborative learning approach that brings the space to life within and beyond its walls throughout the school. As discussed in previous chapters, this active approach is interwoven within the overall school development plans, based on analysis of student learning needs aligned with curricular outcomes and mandates. Once student needs are collectively established, educators plan, teach, and assess collaboratively, ideally with a teacher-librarian, to impact the learning needs of their students. Planning is not *in*

*addition to* a school plan; it is an immersive blending of effective school and school library practice—student-centered, collaborative, and innovative; implemented through collective instructional design in rich physical and virtual learning environments. This rich environment, whether in real or archived time, physical or virtual, is “relentlessly focused on learning” (Oberg, 2014b) and not on artificial collections or unhelpful rules, with the physical and virtual spaces operating simultaneously to support each student’s learning, as determined through accountability for learning practices. Educators developing these rich learning environments continually revisit the question: How can the learning commons approach support our student learning goals and outcomes?

Metaphors for effective school library programs in the literature include the “heart or hub” of the school, a learning laboratory, a studio, or even the “great room” of the school, again often due to the talent and skill of an effective teacher-librarian along with the supporting technical and clerical personnel. Transitioning to a learning commons approach extends the metaphor to imagining the learning commons as perhaps a “fifth wall” in the classrooms, seamlessly breaking down isolation in instructional practice throughout the school. Another metaphor for school library to learning commons—and, by extension, classrooms—is the “kitchen,” the sense of a place to create or “make”:

We need to stop thinking of the library as a store—a place to “get stuff”—and start thinking of it as a kitchen—a place to “make stuff.” Libraries are becoming maker-spaces, giving all students access to workstations with fast processing speed, adequate memory, and software for video and photo editing, music production, voice recordings, computer programming, multimedia composition, and even 3-D printers. (Rixon, 2014)

Best practices in instructional design for learning and teaching create within this maker milieu a focal point for student engagement with information, ideas, critical and creative thinking, making meaning, and dialogue across the disciplines of curriculum.

Engaging with information, ideas, critical and creative thinking, making meaning, and dialogue across the disciplines of curriculum requires quality resources in different formats. Resources for the learning commons are designed as “responsive print and digital collections” (Canadian Library Association, 2014b, p. 20) and cultivated to support identified student needs from the school plan. Whether print or digital, school library and learning commons literature notes that educators evaluate and select quality fiction and non-fiction resources in many formats for students of all ages and abilities—including print books—to meet learning needs and interests. It sometimes appears that books in print form disappear as school libraries transform into learning commons. Different cognitive processes are required for reading in print and digital forms, and both are necessary. As collection development based on student need and curricular change occurs, outdated or unsuitable resources in the learning commons are removed, based on authoritative resource evaluation criteria. In some cases it can seem as though many books are gone if the collection is newly assessed and being updated, as educators consider the quality, purpose, and best format for new resource purchases.

As educators engage in exploring and implementing a learning commons approach, familiarity with newly developing literature and research focused on learning commons provides information and guidance for discussion, reflection, and collectively moving forward with action plans. Historically, the term “commons” derives from the medieval gathering space or market: “The village green, or ‘common,’ was traditionally a place to graze livestock, stage a festival, or meet neighbors. This concept of social utility underlies the philosophy of the modern learning commons, which is a flexible environment built to accommodate multiple learning activities. Designing—or redesigning—a commons starts with an analysis of student needs and the kind of work they will be doing” (Lippincott and Greenwell, 2011). Academic libraries were one of the first modern institutions to start transforming libraries into user-faced information commons using the term “learning commons.” Public libraries followed, developing community-centered learning commons approaches. School, public, and academic libraries share common goals and aspirations such as literacy and lifelong learning, and also serve unique purposes and mandates. School libraries support kindergarten to grade twelve programs of study; post-graduate libraries support research and study

for their programs and students; and public libraries support the broad public focus, providing free access to collections, resources, and services to patrons of all ages, to obtain information relating to personal, educational, and professional needs. In Alberta, Canada, the combined library community worked together to develop a Collaborative Library Policy that “respects the diverse roles and services that local public, school, and post-secondary libraries occupy in Alberta’s diverse communities; while enabling stakeholders and government to work towards more efficient and effective library service delivery” (Alberta Municipal Affairs, 2013).

The American Association of School Librarians (AASL) and state or provincial school library associations provide access to a great and growing amount of information, literature, and research regarding resources, school libraries, teacher-librarianship, and increasingly, learning commons. The American Association of School Librarians (AASL) website is where to access the *Standards for the 21st-Century Learner* (discussed in chapter 4) as well as extensive research, or links to research, regarding the effectiveness of quality school library programs and student achievement. A comprehensive bibliography is developed to support *Leading Learning: Standards of Practice for School Library Learning Commons in Canada* (Canadian Library Association, 2014b), containing many key references related to school libraries and school library to learning commons, and links to the action examples from schools and teacher-librarians. School library associations within states or provinces and territories in most countries retain important directional documents and resources and links to national information. International information and literature about school libraries or learning commons can be accessed through the International Association of School Librarianship (IASL; 2016).

When examining the literature of school libraries and school library to learning commons, access the major research studies related to impacting student achievement. Knowing about these major studies, and sharing summaries of the results with the faculty and greater community, demonstrates the need to move forward and embrace a learning commons pedagogical approach that provides students with a distinct advantage for success. School library impact studies have been conducted and documented over at least twenty years in twenty-one American states, Ontario, and British Columbia (Library Research Service, 2013) and repeated in their original state of Colorado (Lance, 2015). These studies support a similar direct correlation between advanced student achievement and quality school libraries with teacher-librarian leadership, which a learning commons approach supports. The Library Research Service provides both summary and detailed information on school library student impact studies, including an infographic poster demonstrating the links to improved standardized reading test scores, a seven-part video series discussing the impact of school libraries on student achievement, “fast fact” reports from the various studies, and the full study reports.

Most educators appreciate summaries of research studies, especially when first being introduced to them or when being introduced to an unfamiliar field. A succinct summary of the school library impact studies research is compiled in “Research Foundation Paper: School Libraries Work!” (3rd ed.), which summarizes these research results to 2008, noting, “A substantial body of research since 1990 shows a positive relationship between school libraries and student achievement. The research studies show that school libraries can have a positive impact on student achievement—whether such achievement is measured in terms of reading scores, literacy, or learning more generally. A school library program that is adequately staffed, resourced, and funded can lead to higher student achievement regardless of the socio-economic or educational levels of the community” (Scholastic Library Publishing, 2008, p. 10).

Another summary of school library impact studies is published by students in the School Library and Information Technologies Graduate Program, Mansfield University, Mansfield, PA, as part of their course work since 2011. Included in the 2013 publication compiled by the instructor (Kachel, 2013) is a chart depicting “school library program components and

the states/province in which they were found to have a positive association with student achievement,” as well as concise summaries of the major findings of the past ten years in the areas of “school library staffing, collaboration, instruction, scheduling, access, technology, collections, budget, professional development, and achievement gap.” Kachel affirms,

Clearly, the studies confirm that quality school library programs with full-time, certified librarians and library support staff are indicative of and critical to student achievement. In fact, quality school library programs may play an even greater role in providing academic support to those students who come from economically disadvantaged backgrounds. In closing the achievement gap and assuring that all students are prepared with the 21st century skills they need to succeed, school leaders and librarians need to embrace this body of research and foster school library programs that can make a difference in student learning. Schools that support their library programs give their students a better chance to succeed. (Kachel, 2013, p. 5)

Although major research studies, international research studies, and literature on school libraries are extensive, as noted, many educators outside of the school library field do not know about them, nor realize the potential of the school library learning commons approach in impacting school reform and student success advantage. A contributing factor is that such research and its results find publication and sharing in school library journals and other school library media forums, and rarely in teacher, administrator, or even technology journals and forums, other educational association forums, or education university degree programs. In order to advance the learning commons approach development and build shared vision and understanding of its impact on student learning success, it is enlightening and beneficial to collectively share the major research summaries, and follow any new developments. Library Research Services founder, director, and key researcher Keith Curry Lance poses three critical questions for educators to consider when conducting educational research: “How can we ensure that students leave school having learned how to learn? Having learned how to know when they need information? Where to find it and how to know if it’s any good or not?” (Achterman, 2007).

Literature directly focused on school library learning commons has come into view principally within the last decade, with the publication of the first and second editions of *The New Learning Commons: Where Learners Win! Reinventing School Libraries and Computer Labs* (Loertscher, Koechlin, and Zwaan, 2008, 2011b). Emerging from literature, research, and best practice in school libraries and teacher-librarianship, the fundamental vision, as well as burgeoning literature and research reflecting the learning commons approach, arose and continues to build notably through the progressive leadership, inspiration, and publications of Dr. David Loertscher. Loertscher is a professor at the School of Library and Information Science at San Jose State University, former co-editor of *Teacher Librarian* journal, and former president of the American Association of School Librarians (AASL), among his many other accomplishments. Loertscher often collaborates with outstanding educator Carol Koechlin, an independent educational consultant from Toronto, Canada, who was the writing coordinator and contributing author for *Leading Learning: Standards of Practice for School Library Learning Commons in Canada* (Canadian Library Association, 2014b). These learning commons pioneers and leaders first define learning commons as

a learning “space” that is both physical and virtual. As you might guess, a Learning Commons is about common physical and virtual places to experiment, practice, celebrate, learn, work, and play. But a Learning Commons is more than a room. Much more than that, it calls for the creation of new environments that improve learning. It is about changing school culture and about transforming the way learning and teaching occurs. (Koechlin, Rosenfeld, and Loertscher, 2010, p. 9)

Publications by Loertscher and Koechlin—together and with various collaborators, listed in this book’s bibliography—provide learning commons pedagogical background and implementation resources, ideas, and practical tools for schools to forge forward in the learning commons approach. Loertscher and Koechlin design and continually update a companion virtual learning commons website to support the learning commons books (Loertscher and Koechlin, 2016a), with new and emerging resources, literature, research, innovation, exemplars, and news.

Loertscher and Koechlin are primary experts and “names to know” in the school library to learning commons approach, for educators to familiarize themselves with as they embark on learning commons journeys. Loertscher and Koechlin ground school library to learning commons pedagogy in knowledge building and collaboration:

Knowledge building is a central focus of the learning commons program. The program of the learning commons is to use the power of information and technology, the physical space of the learning commons as an extension of the classroom, and the curriculum of the various classrooms, to push excellence in the school through effective collaboration. The emergence of collaborative technologies, the opening of quality information and multimedia resources, and quality instructional designs, allow classroom teachers new opportunities to develop super learning experiences jointly with the specialists of the school. Teacher librarians, teacher technologists, reading specialists, teachers of the gifted, and special education teachers stand ready to combine forces to demonstrate that co-teaching and integrated instruction are far superior to isolated one-person teaching strategies. Knowledge building can happen as a face-to-face experience, a totally online experience, or a combination of both. (Loertscher and Koechlin, 2016a)

According to Loertscher, Koechlin, and fellow contributor Zwaan, the learning commons approach accommodates two major functions. First,

Open Commons—the place, both physical and virtual where classes, individuals, small groups, events are scheduled to benefit from the support and expertise of specialists, resources, and the comfortable learning environment. The Open Commons is not regularly scheduled by any group but is available using its own calendaring system. It is the place where one can observe the highest quality of teaching and learning throughout the school. (Loertscher, Koechlin, and Zwaan, 2008, p. 125)

And second,

Experimental Learning Center—the place both physical and virtual where professional development, action research, and experimental programs are being tested, exhibited, and analyzed before going out for widespread adoption in the school. (Loertscher, Koechlin, and Zwaan, 2008, p. 122)

Loertscher and Koechlin’s most recent publication to date is two learning commons approach “manuals,” with specific companion applications in each manual pertaining to elementary and secondary school focus. These manuals identify “12 important characteristics of the learning commons,” with activities, resources, and short videos “designed to be used by librarians, other specialists in the school, administrators, and teachers who are trying to implement the LC concept.” Activities have a companion in each other volume, with resources and ideas that differ for age and grade levels (Loertscher and Koechlin, 2015b and c).

In 2013 Professor Loertscher was granted the American Library Association Baber Research Award (American Library Association, 2016), to conduct a study on the impact of co-teaching, planning, and assessment in the school library learning commons on student learning. In an article published about this research, its results, and its implications, two major conclusions show that in the learning commons, “co-teaching makes a major impact on learning” and “allows for experimentation” (Loertscher, 2014). Loertscher declared April 2015 to May 2016 “The Year of the Learning Commons,” through designing a project that involves many schools in the United States, Canada, and around the world, as they transition their school libraries to the learning commons approach. With many schools participating, a significant amount of data is being collected relating to ideas, challenges, and successes of learning commons journeys. The schools involved report their progression on an ever-expanding spreadsheet, accessible on the Learning Commons website. The “Year of the Learning Commons” page on the website includes posters, logos, models, and resources that any school is welcome to use in their own websites, presentations, or reports (Loertscher and Koechlin, 2016b). When studying the spreadsheet, readers can see a wide variety of schools at different stages in their journey, which can be used for comparative purposes or as a basis for joining the project.

Teacher-librarians in many schools lead learning commons initiation and development, and many who lead the process document their challenges and successes in school library journals or other forums, such as conference presentations and web spaces. This form of documentation is largely creating a growing body of literature and research on school library learning

commons through journal articles, wikis, blog posts, websites, interviews, and papers. Some of this documentation is found in sources such as *Teacher Librarian: The Journal for School Library Professionals* (Levitov and Kaaland, 2016) or *School Libraries in Canada* (Grose, 2016). The publisher of *Teacher Librarian: The Journal for School Library Professionals* developed a website containing a number of articles originally published in the journal from 2010 to 2014, on the topic of the school library to learning commons approach. These articles provide educators with information relating to a wide variety of differing school contexts and range “from philosophical and foundational explorations of the learning commons concept to first-hand accounts of teacher librarians transforming their traditional libraries into learning commons for the 21st century. Many of the articles are highly illustrated; many provide practical advice, guidance, and instruction at both the micro and macro level” (*Teacher Librarian: The Journal of School Library Professionals*, 2014).

This growing amount of educator research, articles, websites, blogs, online videos, and other media documenting school library learning commons developments provides models for schools to examine, compare to, and learn from—as well as a wealth of on-site practitioner research to replicate. Buffy Hamilton blogs as “The Unquiet Librarian” (Hamilton, 2015) with a wide variety of pedagogical interests and blog entries on “critical literacy, participatory learning and culture, ethnographic studies, critical pedagogy, and writing literacies.” The blog “By the Brooks”—Libraries and Learning: Leadership for the School Library Learning Commons, by school library consultant Anita Brooks Kirkland (Brooks Kirkland, 2016) contains current and archived blog posts on school library to learning commons resources and developments. School District Superintendent Chris Kennedy blogs about school library to learning commons, including a blog post on his visits to schools throughout his Vancouver, British Columbia, school division, eager to share their learning commons developments with him (Kennedy, 2015). Students in the University of British Columbia Master of Educational Technology program designed an informative learning commons wiki, highlighting school learning commons history, defining features, educational theories, and remarks on the changing role of the teacher-librarian. On their wiki they include educational theories or strategies that support the learning commons approach, such as “constructivism, collaboration, multimedia learning, connectivism, sociocultural constructivism, distributed cognition, situated cognition/learning, Marzano’s instructional strategies, backwards design, differentiated learning, professional learning communities” (McVittie and Duggan, 2014).

Papers, articles, and presentations from Treasure Mountain United States (Loertscher, 2015c) and Treasure Mountain Canada (TMC; 2016) research retreats also depict the context of many diverse schools and how they approach the learning commons transition. Treasure Mountain United States began in 1989 as a research retreat founded and developed by Loertscher and colleagues, to focus on school library research as a “valuable catalyst for school improvement based on contributions and analysis of research in the field and the emergence of the learning commons.” Papers from the 2015 retreat, held in Columbus, Ohio (Loertscher, 2015a), include a look at school library to learning commons from the perspective of many school library field experts. Paper topics include co-teaching, statewide initiatives, maker education, shifting to the learning commons perspective, and student learning commons ownership. Treasure Mountain Canada, held every two years since 2010, is an extension of Treasure Mountain United States, and provided impetus to create *Leading Learning: Standards of Practice for School Library Learning Commons in Canada* (Canadian Library Association, 2014b). TMC4, held in Ottawa, Ontario, in 2016, continues to follow the “growing impact” of *Leading Learning*. Papers posted to the TMC site concentrate on implementation efforts of the school library learning commons standards, focusing on co-teaching for deeper learning, innovation for learning, and building a learning community. Both Treasure Mountain United States and Canada research retreat blogs, live streaming, video conference, and archived websites, with papers focused on the learning commons approach, inviting schools to access, learn, and participate even if not attending.

School library associations within countries, states, provinces, and territories, as well as school districts, increasingly produce studies or documents reflecting the shift from school library to the learning commons approach. *Together for*

*Learning: School Libraries and the Emergence of the Learning Commons* (Ontario School Library Association, 2010) is a collaboration between government, the Ontario School Library Association, and school library leaders in response to the forces of change affecting society and schools, “all while ensuring students emerge with the skills they need not only to survive, but to thrive—development of a Learning Commons addresses this challenge” (p. 2). *Together for Learning* defines the learning commons as

a flexible and responsive approach to helping schools focus on learning collaboratively. It expands the learning experience, taking students and educators into virtual spaces beyond the walls of a school. A Learning Commons is a vibrant, whole-school approach, presenting exciting opportunities for collaboration among teachers, teacher-librarians and students. Within a Learning Commons, new relationships are formed between learners, new technologies are realized and utilized, and both students and educators prepare for the future as they learn new ways to learn. And best of all, as a space traditionally and naturally designed to facilitate people working together, a school’s library provides the natural dynamics for developing a Learning Commons. (Ontario School Library Association, 2010, p. 3)

*Together for Learning* and its subsequent website (Ontario Library Association, 2016) provide educators with a comprehensible blending of learning commons theory and practical implementation tools, making them significant sources to use as a book and web study for educators exploring or implementing the approach. The document discusses the emergence of the learning commons approach, its key components, how it empowers learners, its implementation through a culture of inquiry, personalization of learning, inherent pedagogical shifts, and tactics for evidence-based practice. It details each phase of the inquiry process with cross-curricular learner outcomes, sample activities for either elementary or secondary schools, and a variety of assessment tools for each phase.

The British Columbia Teacher-Librarians Association (BCTLA) document *From School Library to Library Learning Commons: A Pro-Active Model for Educational Change* (Ekdahl and Zubke, 2014) reflects a transformation model based on three years of practitioner research K–12. It focuses on the inquiry question “When and how does a school library become a learning commons?” (p. 5). The document presents a unique chart, illustrating school library to learning commons performance standards metaphorically from “wagon cart” to “sports car” (p. 8). As the authors observe,

The transformation of a School Library Resource Centre (SLRC) into a Library Learning Commons is an example of one component of how a school or system actively addresses goals of change in response to new kinds of teaching and learning. The goals for change are aligned with evidence from current research and with school, district, and provincial goals. (Ekdahl and Zubke, 2014, p. 5)

The model in this study is established on five components: project, process, program, professional capital (culture of collaboration, practice, and best practices), and product (student success). The document includes checklists for using the model, detailing the components, learning commons student outcomes, and “Points of Inquiry: A Foundational Inquiry Model For Library Learning Commons Programs” (Ekdahl and Zubke, 2014, p. 18). Teacher-librarians in a variety of situations involved in the inquiry share detailed narratives of learning commons implementation, and a list of extensive references is provided.

School districts transitioning to the learning commons approach document and share processes, challenges, and successes. Lexington School District One in Lexington, South Carolina, has been implementing the learning commons philosophy in all of its school libraries since 2011, inspired by David Loertscher. Their experience is described in the chapter “The Learning Commons: From Planning to Practice in a School System in South Carolina, USA,” by Kohout and Gavigan, collected in *Global Action on School Library Guidelines* (Schultz-Jones and Oberg, 2015a, pp. 86–92). Lexington School District One defines learning commons as

both a physical and virtual space staffed by the media specialist, technology integration specialist, instructional coaches, support staff, and trained students. It is a flexible and responsive approach to helping students and educators collaboratively focus on learning. It expands the learning experience, taking students and educators into virtual spaces beyond the walls of the school. The Learning Commons is a vibrant, whole-school approach, presenting

exciting opportunities for collaboration among teachers, Media Specialist, Technology Integration Specialist, Instructional Coach, and students. (Lexington School District One, 2015)

The change process in this district has involved using significant collaborative efforts to develop shared vision and understanding of school library to learning commons among all of its schools, and developing rubrics that all of its schools agree on to identify needs in the “physical, virtual, and experimental commons,” along with the design and use of rubrics to set professional goals. Kohout and Gavigan reflect that “a successful learning commons is more about creating an active, engaging learner-centered environment than it is about creating the facility itself. The strength of a quality learning commons lies in collaborative learning that occurs between and among the library media specialists, technology integration specialists, classroom teachers, and students” (in Schultz-Jones and Oberg, 2015a, p. 91). No matter the level of support or resources educators access in their learning commons journeys, the authors go on to recommend that educators consider the following advice that they received from David Loertscher:

Establishing a learning commons in a school can be done with a limited or plentiful amount of resources. Start the programme first, meaning that co-teaching is happening, simultaneous use of physical facilities, the construction of a virtual learning commons and making both students and teachers start to feel like they have ownership of the idea. For those lacking resources, become the world’s great scrounge. Ask everyone for help, time, and money to spruce things up. This includes students, teachers, janitors, parents, community organizations and businesses. Lots of folks will pitch in when they feel that the results will make a real difference in teaching and learning. (Quoted in Schultz-Jones and Oberg, 2015, p. 91)

Schools conducting site-based action research examine the literature and research of others, while gathering evidence of their own learning commons approach progression and challenges, to ensure that this forward-thinking pedagogy impacts the student learning goals and outcomes that their school is monitoring. Site-based action research is now widely recognized as a professional development tool “at the center of school improvement” (Reeves, 2008), and guides teacher professional growth throughout the career with its “snowball effect”: once an action research cycle is completed, it leads the teacher researcher into further exploration of or connection to the topic—in this case, learning commons. As the development keeps growing, so does the inquiry-based cyclic process of action research. The action research process, in summary, calls for

- refining a topic or issue of current focus within the context of where the school presently is with the approach,
- posing critical questions focused on student learning,
- brainstorming possible information and answers to questions,
- hypothesizing the outcome,
- reviewing pertinent literature in the field and the research of others,
- developing a plan, with goals and outcomes for gathering on-site evidence,
- putting the plan into action,
- analyzing results for patterns and themes to create actions and strategies, and
- reflecting on the results.

Reflecting on the results of research leads to new questions, issues, or directions, re-starting the action research cycle. “Teachers have the support of the teacher-librarian and other specialists in the Learning Commons to help them determine what evidence to gather, how analyze the data, and then how to apply the findings to improve teaching and learning. Becoming a reflective practitioner is a process of discovery” (Loertscher, Koechlin, and Zwaan, 2008, p. 84).

Learning commons action research models and examples are available from the research retreats, journals, books, and websites mentioned above. Reviewing the action research of others is a vital part of getting to know and understand the growing literature and research base of school library to learning commons, and creating a community of learning commons research and researchers. As a school district initiative, the Greater Essex County District School Board in Windsor, Ontario, in partnership with the University of Windsor, has supported teams of educators in collaborative inquiry action research since



2007. The district outlines the collaborative inquiry process in four stages: “framing the problem, collecting evidence, analyzing evidence, celebrating and sharing.” The district selects “15 proposals from within-school and between-school teams,” and provides teacher release time, a school board consultant and/or university researcher on each team to provide ongoing support, the ability for teams to meet at least four times “to identify inquiry questions related to their teaching practice, to collect and analyze evidence, plan for next steps, and report results,” and the the opportunity for sharing of results during a “Learning Fair” where “teams presented their inquiries and findings through posters, display boards, photos and video presentations.” Detailed action research reports reflecting most curricular areas and grade levels from this district initiative are available on the district website; many of the projects involve teacher-librarians co-teaching with teacher teams (Greater Essex County District School Board, 2016). Some topics chosen by the district are site-based and contextual; however, the topics are broad enough to inform and inspire other educators in seeking learning commons literature and research to review, or to provide ideas for replicating or conducting their own research on similar topics of interest or concern. For instance, projects from the district’s 2014–15 reports include the following:

- Eliciting collaboration between the teacher librarian and classroom teacher to create an inviting, accessible learning commons space and improve student information literacy skills
- Investigating the impact of Teacher Librarian/Teacher collaboration on student achievement
- Changing the ways in which students engage in the research process
- Impacting teaching practice through collaboration between homeroom teachers and teacher librarians

The district’s 2010–2011 report focuses exclusively on teacher-librarian action research, with topics such as

- How can the teacher librarian who is also the vice-principal support classroom teachers?
- Will the integration of technology into projects developed and implemented in collaboration with the teacher librarian increase teacher confidence and willingness to integrate technology into future lessons and will this use of technology increase student engagement?

(Greater Essex County District School Board, 2016)

The developing literature and teacher research on the learning commons approach serves as impetus for conversation and building shared understanding, ideas, and ongoing action planning; enlightens action research; and provides a base for schools to explore, implement, or take the WSLLC to the next level.