

From Teacher to School Librarian Leader and Instructional Partner: A Proposed Transformation Framework for Educators of Preservice School Librarians

By Sheila Baker

As early as the 5th Century BC, the Greek philosopher, Heraclitus, is quoted as saying, "The only thing constant is change". This change still occurs in schools today, so it is urgent that we embrace the challenge of preparing future librarians in today's technological world and innovative society. To keep pace with today's digital world takes a dramatic change in the structure, culture and direction of the school. School librarian preparation programs must equip our students with skills to become transformational school leaders and instructional partners. The proposed model, the Six Ts of Transformation, can inform educators in preparation programs. Through the use of this framework by educators, preservice school librarians can be transformed into leaders and change agents that impact the entire school community.

Transformational Leadership

Transformational leadership can be defined as an ongoing mutual process where leaders and followers inspire each other and raise each other to higher ethical and motivational levels (Burns, 1978; 1998). According to Burns, transformational leaders connect and work collaboratively toward higher goals. Bass' Transformational Leadership Theory (1985) expands Burns' definition to argue that better work is produced when a transformational leader builds trust and focuses attention on reaching goals through coaching and mentoring.

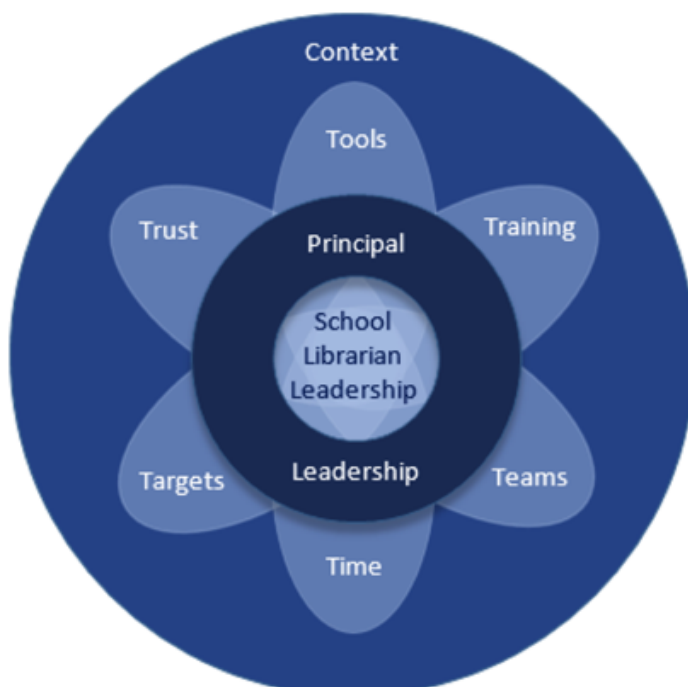
Transformational leadership has been widely accepted in many professions as a way to keep pace with innovation and increase creativity in the workplace. The many 'T' models of transformation contain unique constructs specific to their purpose, but several constructs are consistent across many models, such as tools, teamwork, training, and trust (Arora, 2014; Denham, 2006; Persico et al., 2013; Roberts & Atkins, 2015). Though there are many transformation models, there appears to be no model that helps to prepare future school librarians in their transformation as leaders and instructional partners in their schools. Building upon these transformational leadership theories, the Six Ts model provides constructs in which educators can inform preservice school librarians of the importance of the fluidity of school librarian leadership. Ultimately, this interplay in transformational leadership inspires and motivates innovation in teaching.

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Introduction to the Six Ts of Transformation Model

The Six Ts of Transformation model shown in Figure 1 is potentially a necessary framework for use by educators to guide preservice school librarians in their successful transformation from teacher to school librarian leader.

Figure 1. The Six Ts of Transformation model.



By using the constructs of this model in their preparation programs, educators will help preservice school librarians understand their place within the school and will provide them with the tools and strategies needed to overcome barriers, such as insufficiencies in time, funding, and staffing, to enact their role as leaders.

School librarians take on roles they may not have experienced as a classroom teacher, such as leading professional development, evaluating technologies and resources, and integrating innovative technologies. While some teachers do take on these roles, for those who do not, transitioning from the classroom to the school library can be challenging. Based on prior knowledge and participatory experiences many teachers may have an understanding of the constructs of the Six Ts model; however, some teachers may not. In their education for school librarianship, new students coming from the classroom are not often trained to map their classroom behaviors onto the responsibilities and leadership roles of the school librarian. This model can help students move from the teacher mindset to that of the school librarian, and can assist educators in helping preservice school librarians assimilate their roles within the context of their practice.

The basis of this framework is the understanding that transformation of teachers to school librarians draws on several components: Tools, Training, Teams, Time, Targets, and Trust. The Six Ts model places the school librarian in a central leadership position and provides a clear framework for scoping which areas and behaviors to target. Consideration is also given to principal leadership and the context in which school librarians lead. The constructs of this model are aligned to the American Association of School Librarians' (AASL) *Empowering Learners* (2009), the American Library Association's *ALA/AASL Standards for Initial Preparation of School Librarians* (2010), and *Empowering Leadership* (Martin, 2013). All the constructs are interrelated and preservice school librarians must have a working understanding of all the components to transform and successfully enact their leadership and partnership roles in practice.

School Librarian Leadership

Leadership is considered an essential characteristic for school librarians and today's highly technological environment presents an opportunity for school librarians to assume their meaningful leadership role as directed by state and national guidelines. Researchers have argued that school librarians are well positioned to assume a meaningful leadership role in technology integration (Everhart, Mardis, & Johnston, 2011; Hughes-Hassell & Hanson-Baldauf, 2008; Kuhlthau, 2010).

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School librarians continually evolve as leaders, parallel to the advancement and meaningful integration of new technologies, and can proactively support the transformation of teaching and learning through instructional partnerships and technology integration when empowered and supported by their principals.

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Accomplished school librarians are leaders in their profession, leaders in the administration of their libraries, and instructional leaders who provide learning opportunities for teachers and students (NPBTS, 2012). School librarians are "instructional leaders who forge greater opportunities for learning" (p. 55). School librarians "strengthen library media programs by assuming responsibilities of instruction, administration, and professional

leadership" and "provide consistent and visionary instructional leadership" (p. 42). Instructional leadership can be accomplished through instructional partnerships, which should be viewed as greater opportunities for learning.

AASL's guidelines emphasise the importance of the leadership role of the school librarian in meeting the needs of changing technologies and learners who need to be skilled in multiple literacies, and in ensuring that learners are provided with the skills and knowledge necessary to succeed in our ever-evolving technological society. The guidelines state that the school library program is "built by professionals who model leadership and best practices for the community to ensure that learners are equipped with the skills and knowledge they need to succeed in the technological society of the 21st century" (2009, p. 45).

Professionally trained school librarians are proactive in implementing best practices and leading teachers in the transformation to becoming digital educators. They can support the principal's vision and assist in developing that vision to move teachers forward in the transformation process, and share their knowledge and passion to empower teachers to become leaders in technology use and its effective integration into teaching and learning. School librarians meet the needs of teachers at their comfort level, providing tools and resources specific to grade-level curriculum, collaborating with teachers to co-develop, co-teach, and co-assess lessons, providing professional development opportunities, informing them of the latest best practices and methods for teaching and learning with technology, and ensuring a risk-free and supportive environment throughout the transformation continuum.

The *Empowering Learners* guidelines (AASL, 2009) provide direction in how school librarians can design their library programs to best influence student learning. School librarians who exhibit leadership in the school have the greatest potential to impact student achievement levels and provide learning opportunities that are meaningful and invaluable in promoting student motivation and achievement (Weimer & Hall, 2006).

Studies have demonstrated that students in schools with effective school library programs learn more, get better grades, and score higher on standardised tests than their peers in schools without effective school librarian leadership. A compilation of

research findings from nearly two decades of empirical studies on the impact school libraries and librarians have on student achievement (Scholastic, 2008) identifies the school librarian's expertise in leadership and technology as two areas where they impact student achievement. The findings of the report state that school libraries are "leading the way for technology use in schools" (p. 4).

Several components of the school library program have a positive association with student achievement. These components include professional development training for teachers by librarians (Lance, Rodney, & Russell, 2007; Lance, Rodney, & Schwarz, 2010); providing teachers with technology support (Lance, Rodney, & Schwarz, 2010; Smith, 2006; Todd, 2005; Todd & Kuhlthau, 2003); and collaboration between librarians and teachers (Farmer, 2006; Haycock, 2007; Lance, Rodney, & Hamilton-Pennell, 2000; Lance, Rodney, & Schwarz, 2010; Rodney, Lance, & Hamilton-Pennell, 2002). Today's school librarian "acts as an innovator, transformation agent, and a technology integration leader" (Smith, 2006, p.16) when leading with best practices for library programs. Educating preservice school librarians with the knowledge of innovative technologies, school-wide curricular content, strategies for effective collaboration, and pedagogical strategies for integrating instructional technologies into teaching and learning will make them invaluable instructional partners and leaders in their schools.

Tools

The Tools construct includes the technologies, resources, skills, and knowledge needed that support a school's diverse population in teaching and learning. Emerging technologies have generated the potential for new teaching and learning possibilities as traditional and new literacy skills are integrated in meaningful ways that are relevant to digital learners. School libraries are at the forefront of technology integration, pedagogical practices, and curricular content, and their librarians can provide leadership in integrating technology in the classroom and throughout the curriculum (Scholastic, 2008).

Despite the advances in technologies, many teachers struggle to effectively integrate them into their curriculum. The literature shows effective technology use and integration into teaching practice to be deficient in classrooms (Angeli & Valanides, 2009; Ertmer, 2005; Ertmer, & Ottenbreit-Leftwich, 2010; Hew & Brush, 2007; Koksal, Yaman, & Saka, 2016; O'Hara, Pritchard, Huang, & Pella, 2012). Quality of and accessibility to computers, tablets, and digital resources is a factor in the development of teachers' knowledge for integrating technology into teaching (Hosseini & Tee, 2012). Miller (2010) suggests that "individuals need to do their best with the resources provided, but it's equally important for organisations to give people the tools they need to succeed" (p. 27). Having the right tools, as well as the knowledge and skills to integrate those tools effectively, gives people the confidence to get their job done.

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The ALA/AASL Standards for Initial Preparation of School Librarians (2010) charges preservice school librarians to "Integrate emerging technologies into a variety of instructional strategies to support the diverse learning styles, interests, and ability of all students to inquire, think critically, and gain and create new knowledge" (p. 3). Mishra and Koehler (2006; 2008) argue that teachers require knowledge and understanding of the relationships between technology, pedagogy, and content to integrate technology effectively. Preservice school librarians need to be able to share their expertise in these areas to help teachers understand their relationships "broadly enough to apply it productively at work and in their everyday lives, to recognise when information technology can assist or impede the achievement of a goal, and to continually adapt to changes in information technology" (p. 15). They will help teachers gain a deeper understanding and mastery of specific technologies for efficient and effective use in teaching and learning.

Preservice school librarians must gain expertise in analysing technologies for their advantages and drawbacks and in modeling the best approaches to using those technologies effectively. They can provide teachers with a variety of opportunities for learning and growth by helping them to locate effective resources, providing support, and conducting professional development programs (Staples, Pugach, & Himes, 2005). These skills and opportunities will help preservice school librarians learn how to guide teachers in selecting the tools and platforms most appropriate for supporting instructional goals and the teaching and learning of specific subject matter. Competent teachers promote meaningful learning when they choose a tool based on what the technology can do and how it can be used efficiently and effectively in their teaching. Preservice school librarians should learn how to help teachers apply pedagogical strategies for using various technologies and help them understand how using a particular technology impacts changes in teaching and transformation. The preservice school librarian should learn how to effectively match technology tools with subject matter content to achieve lesson goals and learning outcomes. According to Angeli and Valanides (2009), before a technology can be pedagogically integrated, "teachers must first perceive and understand the affordances of the specific technology and then relate them to their classroom goals during lesson planning" (p. 4665).

The school librarian preparation standards charge educators to "Enhance access to information for P-12 students and other members of their schools and communities through the use of current and emerging technologies that support the access, interpretation and communication of information (ALA/AASL, 2010, p. 11). Preservice school librarians should learn how to facilitate access to information in various formats and demonstrate their knowledge of information sources and services that support the needs of a diverse learning community. They should demonstrate the effective use of digital technologies to access and provide authoritative information resources to support teaching and learning in a digital society. Additionally, they must be proficient in using technologies and resources to stay abreast of the current trends and emerging technologies in the field, as well as for professional networking and growth, to engage in professional responsibilities, and to advocate for the profession.

Training

The Training construct includes formal and informal training, coaching, and mentoring, depending on the needs of each individual teacher. Teachers should be able to rely on their school librarian to provide them with effective professional development to increase their knowledge of technology tools and platforms, as well as pedagogical strategies for integrating technologies and resources within the curricular content areas. Preparation programs that include a focus on content knowledge in the subject areas, plus training and follow-up in pedagogical content knowledge show significant effects in effective technology integration (Blank, de las Alas, & Smith, 2008). Practicing school librarians are expected to plan and implement staff development that is of high quality and that targets teachers' needs. Preservice school librarians should not only learn to provide professional development to introduce new technologies, they should also learn strategies to provide ongoing support in the form of training, mentoring, and coaching. "Training . . . creates team members who are sharp, able, and ready to solve problems while building trust, loyalty, and confidence – not to mention competence" (Miller, 2010, p. 140). "Coaching is essential to both the individual's and the organisation's success" (p. 157), "with the best coaching happening day to day and moment to moment" (p. 160).

Preservice school librarians are charged with collaborating in and leading professional development opportunities while in their preparation programs (ALA/AASL, 2010). Preservice school librarians should gain the expertise to develop and sustain a teaching force knowledgeable in using technologies and resources effectively in support of student learning. They should be knowledgeable in various teaching and technology integration models that assist teachers in developing their skills so they can give teachers practical tools and strategies they can quickly implement into classroom instruction. They should be able to provide the appropriate amount of professional development, direction, and support to meet teachers' individual needs through modeling, mentoring, and collaboration as teachers gain the technological skills and pedagogical strategies needed to effectively integrate innovative technologies into the curriculum. This is critical, as teachers who receive substantial professional development can have a positive and significant effect on student achievement (Biancarosa, Bryk, & Dexter, 2010; Wallace, 2009; Yoon, Duncan, Lee, Scarloss, & Shipley, 2007).

Professional development should include training in the development of authentic and relevant learning experiences, engaging instructional strategies, reading instruction in support of lifelong learning and student achievement, efficient and ethical information seeking behaviors, school improvement, and digital citizenship regarding intellectual freedom, intellectual property, and the right to privacy. Particular attention should be given to professional development pertaining to the meaningful integration of innovative technologies. Effective professional development can lead to empowering teachers to become technology leaders themselves. Given the tools, knowledge, and support needed to be effective digital educators, teachers can become confident in their ability to apply their skills and knowledge to emerging and advancing technologies, and technologies that enable them to locate, evaluate, and ethically use information for specific purposes for relevant teaching and learning.

Teams

The Teams construct encompasses many forms of collaborations, partnerships, and community involvement. Teams can include collaborative grade level or content area teams, one-on-one partnerships, and teams that unite members of the community. The formation of teams generates a network of communication and support that unites colleagues and aims them toward common goals.

The school library program urges collaboration among members of the learning community (AASL, 2009). Collaboration is essential for some teachers to gain an understanding of innovative technologies and the technological skills and pedagogical strategies needed to effectively integrate technology within the curriculum. Though teacher/librarian collaboration has been promoted throughout the library science literature, in national guidelines, and in preparation programs, it continues to be a practice that is challenged to gain widespread acceptance. This may be due to the specific barriers to collaboration, a lack of communication between educators and librarians, inadequate preservice preparation for teacher/librarian collaboration, working in a school setting that does not possess a collaborative culture, or a lack of principal support. Moreillon (2013) found that dispositions, communication skills, collaborative practices, and the technologies used for collaboration, influenced participants' understandings of instructional partnerships. A greater understanding may lead teachers to appreciate collaborative experiences. Kimmel (2012) found that teachers in a sustained collaboration with the school librarian recognised the librarian's contributions to their teaching, and that the participating teachers wanted to plan with a librarian.

Harvey (2011) suggests that school librarian leaders model new technologies, initiate conversations about potential projects, and coach small groups on technologies appropriate to their grade-level and content area. Successful small group coaching can lead to partnerships where one-on-one help immediate and specific to individual teacher needs is provided. Working in partnerships and gaining an understanding of teacher needs will enable the librarian to identify techniques and strategies to help guide teachers through barriers and challenges.

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An advisory team is needed "to ensure open and equitable access to information and develop solutions to physical, social, and intellectual barriers to resources and services in school libraries"(ALA/AASL, 2010, p. 11). An advisory team consisting of students, parents, teachers and others in the community can bring experiences, knowledge, and expertise from varying perspectives to the collaboration as it pertains to various media and literacies.

Preservice school librarians should understand the importance of being active contributing members of larger communities including district, state and national professional organisations. They can take advantage of professional resources, webinars, networking, and internship opportunities to stay abreast of the latest trends and best practices in school libraries. They can share their knowledge and experiences and gain new knowledge about emerging technologies and research in the field. Networking with members of professional organisations is essential to strengthen and advocate for the profession.

Preservice school librarians should also be actively engaged in all forms of instructional partnership experiences with preservice teachers in their preparation programs. In a review of studies on collaborative experiences, Rawson, Anderson, and Hughes-Hassell (2015) found that school library programs offer little interdisciplinary coursework that partners preservice school library students with preservice education students for collaborative work. Though, Hunt and Luetkehans (2013) found successful collaboration between practicing school librarians and teacher interns. Placing teachers and school librarians in collaboration partnerships during their preparation programs is the perfect opportunity for pre-service teachers to gain first-hand experiences and knowledge of the value of the school librarian. The goal is two-sided, one for preservice school librarians to be actively engaged in instructional partnerships to hone their skills for use in practice, and one for preservice teachers to take the knowledge gained from these experiences into practice where they will continue to utilise the expertise of teacher/librarian collaborations and value the support of the school librarian in teaching and learning.

Time

The construct of Time greatly impacts the success of transformation and instructional partnerships. Insufficient time has been found as a major barrier to the school librarian's role as a leader, as well as exclusion from the leadership role and responsibilities, insufficient funding, inadequate staffing (Johnston, 2012), and a lack of teacher knowledge of strategies for effectively integrating technology (Hew & Brush, 2007; Mishra & Koehler, 2006). Similarly, a study from the Pew Research Center found time constraints as the primary obstacle for teachers, followed by the pressure to teach to assessments and a lack of resources (Purcell, Heaps, Buchanan, & Friedrich, 2013). Time is considered a luxury in education and preservice school librarians must be aware of strategies that help them use their time effectively to support teachers and students.

Time must be invested in teacher/librarian instructional partnerships.

Preservice school librarians need to understand their role in saving teachers time in their busy schedules. They can share with teachers their knowledge of emerging technologies and, through their instructional partnerships, they can direct teachers toward those tools and platforms that can be most effectively integrated into their lessons. Time is needed to work collaboratively with teachers to plan lessons that are aligned to state and national teaching standards and guidelines, implement lessons using appropriate pedagogical strategies, and analyse lesson outcomes which includes reflecting on the lesson to identify improvements for future use.

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Time must also be scheduled to provide effective professional development to teachers. Preservice school librarians need time to research and model innovative technologies and develop pedagogical strategies for integrating them into teaching and learning. They need time to locate and evaluate authoritative resources that can be used in teaching and learning. Further, time must be devoted to coaching and mentoring to meet immediate needs of teachers before, during, and after instruction.

Teachers bring different beliefs and varying levels of comfort and fear to an instructional partnership, so it is essential that time is devoted to developing trusting relationships with teachers. According to Martin, ". . . investing time in developing people relationships and focusing attention on stakeholders' concerns is vital" (2013, p. 19). Preservice school librarians need to understand how to itemise and prioritise their time strategically and effectively to meet the needs of those in the school community.

Targets

The Target construct encompasses the many other items that can fall under the leadership of the school librarian and the school library program, i.e., teaching for learning, literacy and reading, information and knowledge, advocacy and leadership, and program management and administration. Preservice school librarians should be knowledgeable in these specific areas which they will need to target in their practice.

Preservice school librarians should be able to demonstrate a knowledge of teaching and learning through their knowledge of learners and learning pertaining to growth and development, diverse learning styles, cultural backgrounds, student and teacher abilities, needs, and interests, and best practices for teaching and learning. They should also be able to communicate their impact on student achievement.

Literacy and reading are fundamental to the school library program and to children learning to read. Preservice school librarians should demonstrate their knowledge of a wide range of diverse literature to meet the information and personal reading needs and interests of teachers and students at all grade levels. They must be knowledgeable in how to implement effective programs, activities, and instructional strategies for promoting reading. They should be able to develop a collection of print and digital resources that meet the needs specific to the students and teachers in their community, and collaborate with teachers on instructional strategies to ensure students can comprehend and create new meaning from the information they've accessed and read.

Preservice school librarians should be able to demonstrate ways to ensure students, teachers, and administrators have equitable access to information and can assist them in locating, evaluating, and using a variety of resources and services that support their needs. They should be able to design and engage students in relevant learning experiences that support consumers and producers of information. They should also be able to conduct research in which they collect, analyse, and use the data to disseminate new knowledge to improve school library programs and inform practice.

Advocacy and leadership are a critical focus of school library professionals. Preservice school librarians should be able to demonstrate leadership and the effectiveness of their school library programs once in practice. They should connect and network with those at all levels in the library community for support in leading and advocating for school library programs, resources, and services. They should also stay abreast of the literature and digital resources that support their learning, and take advantage of and contribute to professional development opportunities through library associations and professional conferences.

Preservice school librarians should be able to demonstrate their ability to be an effective manager and administrator of their school library program. It is important that they are able to align the school library program and all that it encompasses with the school's mission, ethical principles, and current professional standards. They should be able to evaluate and select resources to build a quality collection that enhances the curriculum and meets the needs of the school community. They should also be able to evaluate the facilities, budgets, and personnel in the school library.

Trust

The construct of Trust is critical to transformation in the school setting. Wink (2014) asserts that trust is essential to the process of moving forward and must be maintained throughout the school. All stakeholders must trust that continued instructional partnerships will strengthen teacher and student successes, attitudes toward partnerships, and the seamless integration of technology and information resources throughout daily classroom activities.

Instructional partnerships can create a risk when teachers attempt to integrate new technologies and strategies into their teaching. Teachers are likely to be on varying levels of comfort and knowledge in instructional partnerships. Many teachers may be fearful of their failure to integrate technologies successfully, which could ultimately impact student achievement measured on standardised tests. Teachers must be able to trust that the school librarian will meet their individual needs within a risk-free partnership. Building this risk-free environment will help to strengthen teachers' trust levels and attitudes toward instructional partnerships.

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Teachers must be able to trust that the school librarian is knowledgeable of school-wide curriculum standards and guidelines, and skilled in providing them with tools and authoritative resources that will impact student learning. They must be able to trust that the librarian will model best practices and collaborate with them to co-develop, co-teach, and co-assess lessons that integrate technology. Finally, they must trust that the school librarian is in close communication with the principal, provides guidance in activities that are aligned to the school mission, and will continue to provide the help and support needed as they navigate their partnership experiences.

The degree of direction and support the librarian provides to each teacher depends on each teacher's initial readiness, confidence, skill, and knowledge levels. Preservice school librarians should be prepared to communicate with teachers in terms of their differential readiness for participating in effective partnerships. Meeting the needs specific to each teacher empowers that teacher to see that (s)he can build a trusting relationship with the librarian.

The school librarian's approach to leadership can constantly change due to situations and issues relating to individual personalities and abilities of those being led, as well as those created by the introduction of new programs and advanced technologies. Preservice school librarians must learn strategies for building trust and they must learn how to lead teachers based on each teacher's individual needs. They must learn how to identify teachers' skill and knowledge levels, as well as their willingness and confidence levels. They will be able to build trusting relationships by providing teachers with the tools, skills, and knowledge to meet their specific and individual needs when facing new challenges during technology use and integration. Equipping preservice school librarians with the ability to gain a teacher's trust will help to build the teachers' confidence and beliefs in themselves to use innovative technologies. 'Belief in oneself builds self-confidence and, consequently, team confidence. A winning team succeeds or fails based on the level of trust and respect team members give themselves and each other' (Martin, 2013, p. 45).

Principal Leadership

Principal leadership plays a pivotal role in the leadership and instructional partnership roles of the school librarian. Principals who are transformational leaders create an environment with a clear and focused vision, self-confidence, and clearly calculated decisions that are in the best interest of the organisation (Bass, 1985). They develop a school culture that embraces collaborative partnerships and encourages innovative technologies and strategies for teaching and learning. Their mission is focused on the academic success and well-being of students (NPBEA, 2015). Preservice school librarians must understand the relevance of the

principal's leadership role and the value in having the principal's support. They also need to learn strategies for gaining the support of a principal who may not be as effective or forward-thinking.

According to the national standards for what principals should know and do (NAESP, 2008), "Every member of the school community must be continuously learning, including students, educators, families and community partners and citizens" (p. 7). Preservice school librarians need to understand their position in helping all members of the school community learn and should be taught strategies for providing effective professional development to those within the school and in the community at large. The report also states that "Children need numerous opportunities to learn and develop - at home, in school and in the community" (p. 12). Preservice school librarians should be knowledgeable of activities, strategies, and technologies that extend teaching and learning beyond the school day. Also stated in the report is a call to action for ways universities can share leadership and accountability with principals, specifically, "Redesign principal and teacher preparation programs. Programs should be guided by the Leading Learning Communities standards: Principals and teachers need programs that focus on preparing children to succeed in the 21st century" (p. 7). This underscores the crucial need for preparing preservice school librarians in the selection, analysis, and effective use and integration of technology tools and applications.

As an effective leader, the principal can ensure the provision of tools and training, and the removal of barriers to school librarian leadership and instructional partnerships. Preservice school librarians must understand that the principal is in the position to encourage and empower school librarians and teachers, and can provide what is required to enable school librarian leadership and instructional partnerships to be implemented and sustained.

Context

Graduates of school librarian preparation programs will potentially be placed in schools of varying circumstances pertaining to access to technologies, student demographics, and neighborhood settings. Preservice school librarians must understand that consideration must be given to the context within which they are teaching when leading and participating in instructional partnerships. Areas for consideration include student and teacher backgrounds and learning needs; the technological, pedagogical, and instructional needs of teachers and students; and the available technologies that are accessible to the school community.

Understanding how they can use demographic information will help preservice school librarians make decisions regarding educational technologies, the needs of teachers, and the learning needs of students once they are in practice. The projected total percentage of minority students is now larger than the percentage of whites in public elementary and secondary schools (NCES, 2013). Knowing the makeup of the student population can inform programming, budget allocations, the development of the collection specific to the student population, and pedagogical strategies and activities for engaging students when teaching.

Preservice school librarians should learn tools and strategies for helping teachers teach grade-level content most effectively while integrating innovative technologies. Familiarity with the skills, gaps, and preconceptions teachers and students may bring to a subject will help the teacher/librarian partnership implement teaching strategies to help students better understand subject area content. Kelly (2010) suggested that teaching with technology occurs in a teaching-learning context where various physical, social, psychological and cultural characteristics can interact with content, pedagogy, and technology in ways that will affect learning outcomes. Preservice school librarians must learn how to identify the levels at which teachers are ready to participate in instructional partnerships. Some teachers are more receptive than others and preservice school librarians must be able to adjust their leadership style to meet the individual needs of each teacher.

According to a Pew Research Center survey of nearly 2,500 teachers on how the use technology, there is a difference in the role of technology between affluent school districts and disadvantaged school districts, with schools in poorer urban and rural areas falling behind (Purcell et al, 2013). Preservice school librarians must understand the need to know the types and numbers of technologies accessible to the school community to inform their teaching strategies and guidance during instructional partnerships.

Future Research

Future research calls for pre-service school librarian educators to explore the Six Ts model to examine their own programs and be reflective about how they are acculturating teachers to school librarianship. The strength of the Six Ts model is that, though the constructs are interwoven, they can be implemented one construct at a time, thus differentiating needs and increasing the likelihood of transformation. Studies examining individual components and their interplay with other components for their effectiveness within the preparation program are needed. Qualitative research could be done during students' practicum experiences to gain an understanding of how the constructs of the model helped to prepare them for practice. Following graduates into practice to examine what skills and strategies are being implemented would be of interest. Further studies could also focus on the model's use in teacher transformation in the preK-12 school setting, as well as the model's application to fields outside of education.

Conclusion

The Six Ts framework places the school librarian with the principal in a central leadership position. Within this framework are six elements needed for successful transformation from teacher to school librarian leader and instructional partner. Addressing the individual constructs in their coursework will help to provide preservice school librarians with the tools and strategies needed to overcome barriers to leadership and collaboration once in practice. This serves as a call for action to examine the way educators prepare school librarians to meet the ever-changing needs in our schools. Educators of preservice school librarians can answer this call by uniformly introducing the constructs of the Six Ts model.

This model may influence change in school librarian preparation programs. Although instruction in preparation programs may vary, the Six Ts model can be used in all school librarian preparation programs to provide a framework for implementing standards and guidelines. This model can also help preservice students to make sense of current and upcoming revised standards and guidelines as they become transformational leaders of innovation, and change agents that impact the entire school community. The implementation of this model has the potential to help preservice school librarians overcome barriers to leadership and develop dynamic partnerships once they are in practice. Through these partnerships teachers can become more skilled in providing learning opportunities that integrate technology effectively, which would ultimately benefit PreK-12 students. Ideally, when our graduates enter their first library equipped with the strategies aligned to the Six Ts model, transformational leadership may emanate throughout the school through a fluid synergy, enabling others to keep pace with innovation and be agents for change.

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