JUDI MOREILLON

Literacy not only saves lives—it enriches lives and supports people in reaching their potential. Like you, I believe that school librarians and library programs have a unique role in creating empowered literacy opportunities for children, teens, and families. This moral purpose and call to serve guides our work.

School librarians at the building, district, and state levels benefit from the leadership of a proactive national association that deeply understands and expands their potential to transform teaching and learning.

As your President-Elect, I will lead AASL in:

• harnessing your passion to serve others through school librarianship and through our professional association;
• fulfilling our purpose and honing our practice to elevate literacy teaching and learning to meet the needs of our stakeholders; and
• strengthening partnerships within ALA and AASL and with other educators, organizations, and literacy initiatives.

Passion, purpose, practice, and partnerships align with AASL’s Strategic Plan. These four Ps frame our on-going leadership development and can help AASL reach its capacity to build a cohesive collaborative association.

Working with the AASL membership, Affiliate Assembly, Executive Board, and staff, I believe we can raise an ever-stronger voice to ensure school librarians have an essential and enduring place at the education table.

MARY KEELING

Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has. — Margaret Mead

School librarians change the world daily for the young people and educators in their schools. We prioritize collaboration, equity, multiple forms of literacy, innovation, and advocacy. Our situations vary, but all of us want the best for the learning communities we serve.

Most of us are solo practitioners who draw strength from networks of colleagues. AASL offers community, a platform for learning together, and opportunities to develop expertise and relationships through collaboration on many kinds of projects. Through the National School Library Standards and its web portal, AASL has strengthened its ability to support us as we learn together.

I have learned so much through AASL and am grateful for the opportunities offered me. If elected president, I will build AASL membership by inviting school librarians to take small steps to get involved; champion implementation of the National School Library Standards; work to strengthen AASL’s coalitions with sister divisions in ALA and partner organizations; and lead members to work together to create excellence for the young people we serve in our school libraries.

2018 AASL ELECTION

PRESIDENT CANDIDATE STATEMENTS

For additional information on these and other candidates, visit <www.ala.org/aasl/elections>.
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We all have that friend. You know the one. The one who tries to be a living, breathing Miranda Priestly (the magazine editor-in-chief in Lauren Weisberger’s The Devil Wears Prada) by forecasting what’s going to be stylish in the coming seasons of fashion. Or maybe chasing styles reminds you of an administrator you used to know who was committed to trying the next big thing without allowing time for the last thing to become popular. I have to admit that forecasting style is not a strength of mine, so I have to look at this a different way when it comes to my professional outlook. I strive to remain relevant in my work, and thank goodness the AASL Standards and Guidelines Editorial Board knew just what I needed to frame our profession’s common beliefs in a way that resonates with me.

The common beliefs for AASL’s National School Library Standards are not wire-rimmed aviator sunglasses or the next high-fashion color. They are a homing beacon for me to orient whatever I do. I wake up every morning excited about the opportunity to help my students (librarians in training) learn more about the school library as a unique and essential part of a learning community. A school library provides a personalized space for all learners—students, faculty, staff, administrators, community members—to seek answers to the questions they face. For many learners this space is fully digital, but I see just as many who actively seek physical resources in their searches for answers. To find the answers learners seek, they need diverse sources collected and managed by skilled professionals.

That’s why qualified school librarians lead effective school libraries. This is the standard that AASL supports through our position statements, and your AASL leadership recognizes that not all communities require fully prepared school librarians right now, but we are committed to continue advocacy efforts on this point and appreciate your letting us know how we can be the voice our profession needs. Think of it this way: we all want our learners to be in style, so of course we want the most qualified leaders in school libraries to provide customized learning experiences. Learners deserve haute couture when it comes to access to the resources they seek, and we are here to provide those opportunities for learning when they need it.

Learners should be prepared for college, career, and life. Career aspirations are as unique as the learners we guide each day, but we must be sure our learners have access to and knowledge of the options they have before them. With the ever-increasing number of learning opportunities in making and coding, the paths to fulfilling careers have never been more varied than they are right now. How fortunate school librarians are to serve as chief access officers for their schools!

In my mind, this access is built on two ideas. First, that reading is the core of personal and academic competency. Literacy becomes more and more complex as the number of formats presenting information continues to grow. There is no literacy without reading, which makes our literacy leaders that much more important from Pre-K–12. Second, that intellectual freedom...
is every learner’s right. The commitment to access I have mentioned a few times already is what intellectual freedom is all about. This freedom makes us value access and question barriers in ways that our communities do not realize. Whether it is championing Internet filters that are not overly restrictive, offering required readings in graphic novel and audiobook formats, or making sure our students see characters like themselves throughout our collections, our efforts to promote access matter, and literacy is a skill to be nurtured by a trained professional, not a product to be purchased.

Speaking of products, information technologies must be appropriately integrated and equitably available. Depending on the community, technologies are being provided to learners, or learners’ personal devices have been invited to school. No matter what the local style is in device usage and technology adoption, school librarians, in their roles as chief access officers, make the “must” in the statements above happen. We are trained on how to use technology effectively in instruction, and we maintain a physical space that can offer equitable access to technology and connectivity in ways that cannot be guaranteed outside of school for every learner. There’s that chief access officer working again, making sure all learners have the access needed to quality resources to achieve their potential.

Thank you, AASL, for reminding me that my next big thing is the same great thing that continues to unite all librarians—providing access to resources for our communities. Guest editor Sara Duvall has done a fantastic job of elevating voices in this issue related to equity and social justice. Let’s keep this conversation going as we read and reflect on this issue of Knowledge Quest. How are you setting the style for your community? I know we have thousands of style influencers in our midst, and I challenge you to share your experiences by submitting an article to the KQ journal, by submitting an application to become a KQ blogger, or by presenting at the system, state, and national levels. AASL’s strength as the only national professional association for school librarians relies on our members to remain a style icon; it takes us all working together to transform teaching and learning.

I appreciate your efforts and am proud to serve alongside you this year and for decades to come.

Steven Yates is an assistant professor at the University of Alabama in Tuscaloosa. In 2017 he received the Lois Henderson Presidential Award from the Alabama School Library Association. He is a former president of the Alabama Library Association.
We live the future now. Students starting Kindergarten in September 2018 will graduate in June 2032. Not science fiction—rather, a school librarian’s call to action. Our students have no time for our prevarication or procrastination.

This issue invites us to consider the Future of School Libraries. None of us can know the future, but we can provide some insights based on our best deep thinking. One thing we do know is that future-focused education is clearly about so much more than technology integration. We also know that the future is a process of continual innovation and incremental improvement.

Brian Glazer, former principal of Thomas Jefferson High School for Science and Technology in Fairfax, Virginia, the often-ranked #1 high school in the nation, mused in a letter on the school’s website that we must “get comfortable with imperfection in pursuit of innovation.” The future arrives with unexpected demands to meet the ever-changing needs of our students’ realities. The future may be thought of as a series of alternatives from which we (and our students) choose.

I’ve observed over time that enlightened leadership is critical to significant positive impact on learning. Without widely shared leadership, innovation stagnates, the professional learning community fragments, and we lose sight of individual students in favor of top-down compliance and convenience. Teachers willing to leave their egos at the door and leap naked into the uncertain void of change depend on leaders willing to model that leap and value the hard work of teaching.

Finally, the vision that motivates us has significant influence on our ever-changing destination. All members of the school must be able to articulate what students need from their education today. All members must value the experience of every individual student and support change in that student’s world.

In my role as district chair for secondary library services, my steering committee and I have led a two-year process for our K–12 school librarians to envision the future of their libraries and their practice. The process has been eye-opening for us all as we adopted the Future Ready Librarians Framework (available at <http://futureready.org/program-overview/librarians>).

What is the future of school libraries in the midst of this accelerated educational change? Ideas for this issue of Knowledge Quest come from thinkers and doers whose work I follow and respect. I’ve attempted to keep the conversation practical and at ground level because it’s not always easy to determine the next step in your particular progression in your particular school library. Curl up in your favorite reading chair with a cup of coffee and an open mind as you read through this issue. Imagine the possible future...

We begin with Mark Ray, former school librarian and current director of innovation and library services in Vancouver (WA) Public Schools. He is an integral driver of the Future Ready Schools initiative. Mark’s article picks up on Simon Sinek’s TED Talk suggesting that “People don’t buy what you do...they buy why you do it” (2009). Mark talks about the why we do it for school...
librarians and positions our work in the Future Ready Librarians Framework as he proposes that we focus on meeting the needs of individual students.

The American School of Bombay (ASB) <www.asbindia.org> is a vanguard school in 21st-century future-focused education. Craig Johnson, its acclaimed superintendent (Special Feature 2016), and his team talk about how school libraries work at this Pre-K–12 international school. Decentralized out of the traditional library space to where they are most needed, collaboration spaces, makerspaces, and book pods have popped up all over the school. The iCommons concept supports the ASB 21st-century vision and provides us with a picture of a possible evolution of school libraries.

Sometimes big-picture thinking and watching for trends can be overwhelming. We can thank our comprehensive eyes and ears Miguel Figueroa, director of ALA’s Center for the Future of Libraries, for his constant scanning for reporting on issues that affect library services. He’s the force behind the Libraries of the Future—Read for Later blog <www.al.org/tools/future/blog> and an expert in the thinking-forward mindset. In his feature he shares his insights and practical advice.

For those who cannot wrap their heads around the thinking-forward idea, Lee Watanabe Crockett, coauthor of the book Literacy Is Not Enough and president of the Global Digital Citizen Foundation, has written a feature for you. He draws our focus back into our immediate practice, providing insights on teaching information fluency and global digital citizenship so that students can apply essential skills in the future. He brings a global perspective and urgency to our daily practice.

Kristal Jaaskelainen, ELA master teacher and instructional coach in an alternative education setting, and her colleague Musetta Deneen, an experienced Spanish teacher at the same school, recognize the school library’s expanded role and partnership with other educators. Their practical advice and examples of collaboration may stir something in your heart as an educator and move you to reach out in ways you may not have considered before. These authors challenge us to teach to what individual students need rather than to the test. Kristal and Musetta get out of their comfort zones and persist until they find just the right strategy for each student, often in collaboration with the school librarian.

Burgeoning urban schools have their own issues that scale up with the size of the student population and the number of faculty. Mary Keeling, supervisor of school library services in Newport News (VA) Public Schools and chair of AASL’s Standards Implementation Task Force, offers some perspective. Mary uses AASL’s new National School Library Standards to frame cultural competence and culturally relevant instruction in the urban setting. Her examination encourages us to internalize the new standards in ways that encourage student success across many cultural variables.

Consideration of the success-data inherent in our profession and how additional data can be generated seems a good way to round out the features in this issue. Marcia Mardis, professor and assistant dean at Florida State University School of Information, Sue Kimmel, associate professor and graduate program director at Old Dominion University, and Laura Pasquini, lecturer at the University of North Texas, provide an overview of AASL’s CLASS II project, which is aimed at establishing the foundation for comparison and groundwork for causal research about the effectiveness and impact of school libraries.

Yes, the future is now. School librarians live at the apex moment of choice. Do we maintain our well-trodden paths with comfortable static illustrations and tactile pages of text, or do we recognize what students need from their education for a successfully navigated future and make significant changes in our practices? This is a choice between irrelevancy and leadership. We, the thinkers and the doers represented here, challenge you to embrace leadership and invent the future.

Sara Duvall is chair of the 6–12 Library Program Department, Ann Arbor (MI) Public Schools, and is an enthusiastic supporter of ALA’s Center for the Future of Libraries. In 2011 she and two colleagues (Peter Pasque and Kristal Jaaskelainen) won the Gale/Cengage TEAMS Award for an ongoing collaborative project to integrate Google Tools into instruction and learning at Skyline High School in Ann Arbor. She blogs at <www.a2sarahduvall.com>.

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WHY DO WE NEED FUTURE READY LIBRARIANS?

That Kid.

Mark Ray
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In 1986 MTV featured a video by Timbuk 3 titled “The Future’s So Bright, I Gotta Wear Shades.” In 2017 I’m still wearing shades, but now they’re part of my bug-out survival bag to weather “The Big One. Between reading the news and seeing ash fall from the sky last summer in Portland, Oregon, the future does not seem as bright as it has before. Yet, despite my First World existential angst, I have never been more optimistic about the future of school libraries. It’s not because of the success of the Future Ready Librarians (FRL) initiative. It’s because of why we need Future Ready Librarians. Let me explain.

Over the last few years, I answered, presented, and wrote to the prompt “What is Future Ready Librarians?” Put simply, the FRL project and framework are intended to help school librarians strategically connect to an initiative that has the support of over 3,100 superintendents who have signed the Future Ready Pledge. The Future Ready Librarians Framework (available at http://futureready.org/program-overview/librarians) helps define how librarians might lead, teach, and support schools based on the core research-based components defined by Future Ready. The framework and initiative are intended to be ways to change the conversation about school libraries and librarians by connecting them to the strategic work of schools and districts. All of this speaks to how Future Ready Librarians define themselves and how the FRL Framework might be implemented within a school.

In Simon Sinek’s 2009 TED talk “How Great Leaders Inspire Action” he explains that identifying “what” and “how” is less powerful and less important than defining the “why.” If you’re not one of the 3.4 million people who’ve viewed his talk, it’s worth eighteen minutes of your time. His argument is that “people don’t buy what you do; people buy why you do it.” By defining the why, we can connect more effectively with others to lead, to inspire, and to motivate.

What does that mean for Future Ready Librarians? With the benefit of some time to process, listen, and reflect since the initiative was launched at the ISTE Conference in 2016, my thinking is evolving about Future Ready Librarians. Since that launch, the FRL initiative has become moderately viral both among school librarians and district leaders. That’s a great thing. But I think, to date, we’re focused on the what and how rather than the more essential why.

From my perspective, the Future Ready Librarians initiative is not really about school librarians. It’s not a Facebook page. It’s not a hashtag. It’s not about technology. It’s not about reading. It’s not a blueprint for changing the profession of school librarianship. Despite those Future Ready gears labeled Robust Infrastructure, Community Partnerships, and Curriculum, Instruction, and Assessment, it’s not really even about schools. At the center of all the Future Ready frameworks is the phrase “Personalized Student Learning.” [Cue anticipatory soundtrack!]

Have we arrived at our answer?
Not so much. [Cue “WAH wah” sound effect.]

At a recent Future Ready Institute, a school librarian asked me “How do you define personalized learning?” In that moment, I recalled the scene in the movie version of How the Grinch Stole Christmas when Cindy Lou Who (who was no more than two) asked the Grinch why he is taking her Christmas tree. The Grinch, taken aback for a moment, is at a loss for words. Both he (and I) came up with a response that moderately satisfied the interrogator, but I was never really satisfied with the answer I provided at the institute. I didn’t lie. But I definitely dodged.

“Personalized student learning” is like the bumper sticker that reads “Visualize Whirled Peas.” Are we talking about global comity? The 1990s surf-rock band? Or baby food? Within education, personalized student learning means something different to everyone. Outside of education circles, it often doesn’t mean anything at all. If I were to ask our district language interpreters to translate “personalized student learning” for our Russian, Spanish, and Chuukese families, I’m pretty sure I would get a note back seeking clarification of the phrase. As a result, it feels as though the phrase doesn’t really mean anything. Like Michael Pollan’s concept of “edible food-like substances” that make up much of our diet in the U.S. (2009), personalized student learning is ersatz, a stand-in for something real. In spite of this, personalized student learning is on the ingredient list of countless strategic plans and vision statements. However, if we lack a shared understanding of what personalized student learning means, then it is not actionable. We can’t do anything about it. While the Future Ready Librarians Framework gears or wedges may represent research-based elements to support personalized student learning, I think we need to peel away the label “personalized student learning” to reveal the hidden why.

In my view, the why behind Future Ready and Future Ready Librarians is very simple. It’s about that kid. I’m not talking about students in a vague third-person way or an anodyne student as a placeholder in the center of a graphic
organizer. I’m talking specific and granular. Pollan argues that we need to eat real food. We similarly need to focus on real kids, not aggregations, percentages, or populations on data dashboards. If we have a problem with English language learners not succeeding in our school, then we need to focus on that one kid who is an English language learner. That Kid has a name, a culture, hopes, dreams, fears, and a future that may or may not include sunglasses.

That Kid is one specific child in your school who depends upon you to prepare him or her for a future that is uncertain, dynamic, and challenging. We have a responsibility to ensure our students are ready for the future—and districts and educators, including school librarians, are rising to the challenge.

The future of Future Ready Librarians is That Kid. In my TEDx talk, I reference a tweet about school librarians sent in 2016 by Vancouver School District superintendent Dr. Steve Webb: “[School librarians] are indispensable to our strategic vision. #FutureReady graduates. Period.” As he always does, he focused on kids. He gets the why. Why do we need Future Ready Librarians? Because we have a responsibility to ensure our students are ready for the future—and districts and educators, including school librarians, are rising to the challenge.

If you agree with my superintendent and me on this why, then we have a different way of looking at the Future Ready Librarians initiative, defining the what and how by working backward from the why. Because every kid is different, your plan will necessarily be local, personalized, and specific. In effect, you are beginning to personalize student learning. One kid at a time.

What does this look like in practice? Start by identifying one kid in your school. That Kid might speak Spanish at home, didn’t eat breakfast...
this morning, or is wearing shoes she got at Goodwill last weekend. That Kid could be a boy who doesn’t do his math homework but spends lunchtime on computers writing code. That Kid is a student who was issued a Chromebook but doesn’t have wireless at home. That Kid is a bully who torments his classmates on Snapchat.

As a Future Ready Librarian, how can you change your philosophy, practice, program, or space to better meet the needs of That Kid? How can you as a Future Ready Librarian change that student’s future trajectory?

Maybe it’s having more Spanish-language books in your library, a bowl of granola bars on the counter, and taking down the harsh “No Food or Drink” sign on your door. It could be digging out an old laptop, installing Scratch coding software and making it available to your furtive coder. Maybe it’s purchasing some wireless hotspots instead of a new set of encyclopedias. Perhaps it’s setting aside the digital citizenship lesson and instead engaging with the bully about why he is harassing others.

Why?

If you don’t reach That Kid with a great book, a safe and fun place to learn, or tools to be an effective digital citizen, what does her future look like? To date, the Future Ready Librarians initiative has been affirmative and aspirational about the potential role of school libraries in 21st-century schools. It has focused largely on the what and how of Future Ready Librarians: What actions will you take to become a #futurereadylibs librarian and how can you change the conversation with your principal and district leaders about libraries?

If Simon Sinek is correct, these questions will get us only so far. They may not actually change the conversation because if the conversation is only about libraries and librarians, then we’ve got a problem. Sinek says, “People don’t buy what you do” (2009). And frankly, a lot of people don’t buy school libraries anymore.

But what if the future of school libraries is not about books, technology, or even librarians, but about the needs and hopes for That Kid? That Kid is a living, breathing why that every educator, every parent, and any decision-maker with a soul can get behind.

Taking it a step further, what if you as a Future Ready Librarian truly embrace the idea and take action to serve not only That Kid, but all students, including those who bully, those who lost their library books, and those who never come to the library? What if you, as a Future Ready Librarian, actually define personalized learning for That Kid and do something about it? School librarians are perfectly positioned to lead, teach, and support in ways that ensure the success of That Kid. Because they ostensibly serve all students and teachers in a school, librarians have the means, permission, and ability to respond to this essential why right now.

Why do we need Future Ready Librarians (and Libraries)?

Because That Kid needs to be future ready. And so does That Kid over there. And That Kid hiding out in the back corner. And if there aren’t librarians who intentionally serve EVERY kid in the school, then the future isn’t very bright at all, is it?

In less than two years, the concept of Future Ready Librarians has become a thing. Librarians across the U.S. are seeking to use the Future Ready Librarians Framework to change both conversations and practice. Education leaders can be heard using future and librarians in the same phrase.

Thanks to Dr. Kristen Mattson, the Future Ready Librarians Facebook group grows by another thousand participants every month or so. As Future Ready Librarians look to the future, let’s next define our whys. That Kid is in every school. Find every That Kid. Help all of them. Bring them into your library. Change their future. And we’ll all be reaching for our sunglasses.

Mark Ray, a former school librarian and current AASL member, is the director of innovation and library services in the Vancouver (WA) Public Schools and Future Ready Librarians Lead with the Alliance for Excellent Education. A long-time advocate for strong school libraries and innovation in education, in 2011 Mark was awarded the Washington State Individual Award for Influencing Instructional Leadership and Professional Growth of Educators, awarded by the Washington State ASCD affiliate. In 2012 the State of Washington Office of the Superintendent of Public Instruction named him Teacher of the Year. In the April 2012 issue of Teacher Librarian he was among those recognized as visionary leaders of the learning commons concept. In 2015 he was included in the National School Boards Association’s list of “20 to Watch” as emerging education technology leaders.

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STANDARDS
FUTURING
for
FUTURE READY LIBRARIANS

Miguel A. Figueroa
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At the FutureReady.org website, visions for a Future Ready Librarian and Future Ready Library are clearly expressed; the site explicitly identifies the areas in which school librarians can lead, teach, and support their school and district Future Ready Schools goals. But how can we find the inspiration and innovation to lead change in the key areas identified in the Future Ready Librarians Framework? And how can school librarians, AASL, and other organizations continue to find the relevant advocacy messages to keep the school library and school librarians at the center of a Future Ready Schools conversation?

Thinking Like a Futurist—Trends and Changes

Futurists and foresight professionals offer several guiding principles for thinking about the future. These principles can help all of us to think about the future and become more powerful players in shaping the preferred futures we want for ourselves and our communities. The principles also fit in well as strategies to support the Future Ready Librarians Framework.

For many futurists and foresight professionals, the first step in thinking about the future is to think about changes and trends (Bishop and Hines 2012; Cornish 2004; Rhea 2005). If we activate our minds to notice trends and changes in our world—especially sustained trends that are distinct from just fads or changing fashions—we can better anticipate the likely futures that those trends will advance. Working to observe trends broadly across sectors helps ensure that we are aware of the many possible futures that might become the present.

In their day-to-day work, school librarians have opportunities to witness trends at work: the ways that students learn and behave, the experiences of classroom teachers and administrators, the aspirations and concerns of parents and families. Changes and trends also happen outside of school librarians’ immediate professional and school environments, so it’s important to look broadly. Recognize the opportunities you have to learn outside of work, while on social media, enjoying hobbies, traveling or shopping, and even when talking with family members and friends. Try to take time every day to notice the things that are changing—technologies, spaces, services, behaviors, expectations—no matter where you see them. Once we activate our minds to look for trends, we will be surprised at how easily they appear.

Thinking Like a Futurist—Prioritize and Organize

In the same way that school librarians prioritize certain information sources for students’ reading and research, we also need to prioritize the trends and changes we observe in the world. An essential part of trend scanning is deciding which trends and changes are most important to you and to the community that you serve. Some of the trends found will be of interest but not of relevance. Some of them may be important for libraries but perhaps not of immediate importance to your library. Priorities can be based on the ambitions and aspirations of students, colleagues, families, and communities. What are the issues they are discussing or pursuing—and which of the trends speak to those aspirations and goals?

The eight focal components of the Future Ready Librarians Framework provide an excellent guide to help organize and prioritize trend scanning. As you identify trends and changes, consider how those might factor into each of the components of the framework:

- Curriculum, Instruction, and Assessment—Builds instructional partnerships, empowers students as creators, and curates digital resources and tools.
Those trends that might prove especially useful for advancing a component may be worthy of deeper consideration, especially if it is a component that is particularly important for your library’s mission and the library’s users.

For example, if in your trend scanning you begin to notice the growing popularity of 360-degree photo and video as a part of virtual reality’s expanding popularity, you might connect that trend to the Future Ready Librarians Framework’s emphasis on empowering students as creators. In another trend direction, you might begin to notice the growing popularity of pop-up spaces developed by retailers, government agencies, and community-based organizations. You could connect this trend to the framework’s focus on designing collaborative spaces.

Again, think of trends and changes that line up with your community’s priorities and with suggested priorities from the Future Ready Librarians program, or the AASL Standards, or another guide that helps you organize your work. If a trend doesn’t immediately fit with your priorities—or if its fit with local priorities is not yet obvious—the time may not be right for you to act on the trend. It is still worth noticing, even though you don’t yet act on it.

As you continue your trend scanning and prioritization, you will discover change comes at us from lots of areas: societal shifts, technological advances, and political, economic, and environmental changes. The majority of what we experience is inbound change. The signals for the future arrive as inbound change, but the future that we create is the result of outbound change—the change that we create for ourselves (Bishop and Hines 2012, 20).

Awareness of inbound change improves our chances for success creating outbound change. The trends and changes that you identified and prioritized as aligning with your goals for a Future Ready Library become starting material for innovations and improvements.

Trends and changes can be important factors to consider as you contemplate the actions and learning that you could implement in your life. Rather than thinking of the future as entirely new inventions,
think of future relevance as incremental alignment that reflects the larger world’s ongoing change. What elements of the trends you have identified can you bring to efforts to achieve goals that have a high priority for you?

To go back to the previous trend examples, having identified 360-degree video as a trend and aligning it with the goal of empowering student creators, you may decide to introduce the technology into future instruction sessions. Going further, as your comfort with the technology grows, you may recognize its importance in developing instructional partnerships and curating digital resources and tools, and so embark on a classroom partnership that has students record and use 360-degree video and curate digital portfolios to share with parents and the school community.

With the trend around pop-up spaces that complements your goals to design collaborative spaces, you may decide to introduce a mobile makerspace that pops up during students’ free periods or in teacher lounges to allow students and teachers to tinker, play, and explore. As you continue to explore the pop-up trend you may find ways that it supports goals to cultivate community partnerships. As you think more about this trend, you might see opportunities to introduce pop-up exhibits through a partnership with a local museum or other partner.

Trend-based incremental changes to existing programs or services allow you to maintain relevance and experiment with new models. Because you have aligned these trends to existing goals and priorities, there is less risk that your efforts will deviate from your mission and purpose. At the same time, because you have witnessed these trends in the larger world and your users are likely also familiar with them, there is a greater chance that the program or service will resonate with users’ emerging interests and expectations.

Some trends reveal our need to learn more about a topic before we can move to integrate it into library services. Trends are signals of change, and sometimes we need additional time and focus to understand the change and all its implications. If you encounter a trend that aligns with your priorities, but that you can’t immediately find a means of integrating and experimenting, maybe you need to learn more about it. Use those opportunities to seek out professional development, talk with expert colleagues, or partner with individuals or groups more experienced in those trend areas.

Thinking Like a Futurist—Communicate and Advocate

Trends-based and values-based innovations provide great opportunities for advocacy and communication.

Having collected relevant trend signals from the larger environment, you have built-in talking points to help explain the changes you are making in your school library. As you talk with students, administrators, or teachers, frame your new programs and services in terms of the trends you have observed. Library stakeholders have probably also, knowingly or unknowingly, observed and experienced those trends in their lives. By connecting library programs and services to real-world trends you help library users place a program or service in the context of a changing world.

At the same time, having aligned those trends to the principles promoted by the Future Ready Librarians Framework, you can also explain these programs and services as being consistent with the fundamental values and purposes of school libraries. This explicit alignment helps reinforce users’ understanding of what a school library and librarian do, even as it expands stakeholders’ vision for how the benefits of school libraries can be made available to learners. Using the language of trends keeps the vision fresh, while using the language of values keeps your mission and purpose consistent.
A Future for School Librarianship
Research and Practice

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Wouldn’t you like to see into the future, to know which of your many activities will actually make a difference in the lives of the learners you touch? This issue of Knowledge Quest centers on the future of librarianship, that is, what is ahead for our professional practice, the way we conduct it, the way we measure success, and how we communicate this value to others. While telling school librarians to be “data driven” is instructive and certainly forward-looking, this commandment lacks a key element that we reinforce to our learners and colleagues: to understand which changes work, we must contrast intended future outcomes with knowledge of documented past outcomes. The difference between the two tells us whether and how our efforts to affect our communities through a particular program, lesson, expenditure, or collection element has made the impact we needed.

The Colorado Study (Lance, Wellborn, and Hamilton-Pennell 1993) and its many replications in other states have demonstrated that when educators and learners had access to a qualified school librarian in the context of a thoughtfully built, adequately resourced, technology-rich, and widely accessible school library, learners tended to flourish on traditional measures of reading and science achievement, regardless of the district or community’s relative wealth and other external factors (Scholastic 2016). This correlational research has been vital for communicating the value of school librarians and school libraries to decision makers and other stakeholders. This entry point has also allowed the Causality: School Libraries and Student Success II (CLASS II) researchers to take the next step of framing an agenda to conduct research to show how school librarians “cause” improved learner outcomes.

The CLASS II project, funded by a research grant awarded to the American Association of School Librarians (AASL) by the Institute for Museum and Library Services (IMLS), is aimed at establishing the foundation for comparison and groundwork for causal research. In this article, we share the CLASS research agenda and progress to date and demonstrate how this effort to chart the future of school librarianship research has the potential to guide and strengthen professional growth and implementation. The resulting knowledge will help school librarians create meaningful, authentic learning experiences that impact and influence the next generation of learners.

Our Heritage

Since the Colorado Study and its replications were conducted, the U.S. educational context has changed significantly. Technology has continued to transform education, and three decades of political and social change have made engaging learners with digital tools and technical competencies crucial for their future learning and future career plans. To ensure that this preparation is taking place and resulting in effective experiences, educational policymakers have increasingly embraced and required detailed levels of evidence and accountability measures.

In response to these changes, in April 2014 AASL convened a group of educational researchers at a national forum called Causality: School Libraries and Student Success (now known as CLASS I). At the CLASS I meeting, researchers from across the country discussed and debated the potential for causal research in school librarianship. The symposium participants explored

Figure 1. CLASS research agenda phases.

<table>
<thead>
<tr>
<th>CLASS II: BEST PRACTICES IDENTIFICATION</th>
<th>CLASS III: BEST PRACTICES TESTING</th>
<th>CLASS IV: IMPACT RESEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT RESEARCH PROJECT</td>
<td><strong>CLASS II.</strong> BUILD THEORY</td>
<td><strong>CLASS IV.</strong> DETERMINE CAUSAL RELATIONSHIPS</td>
</tr>
<tr>
<td>FOUNDATIONAL RESEARCH</td>
<td>• Meta-synthesis of causal</td>
<td>• Deploy larger studies</td>
</tr>
<tr>
<td></td>
<td>teacher/classroom best practice</td>
<td>• Refine study designs</td>
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<td>research</td>
<td>• Set priorities for</td>
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<td></td>
<td>• Determine potential school</td>
<td>ongoing research</td>
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<td></td>
<td>librarian best practices</td>
<td>• Make connections to</td>
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<td></td>
<td>• Generate theory to test</td>
<td>policy and practice</td>
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<tr>
<td></td>
<td>using causal research questions</td>
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<tr>
<td>EXPLORATORY RESEARCH</td>
<td><strong>CLASS II.</strong> BUILD THEORY</td>
<td></td>
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<tr>
<td></td>
<td>• Test theory in small field</td>
<td></td>
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<tr>
<td></td>
<td>study</td>
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</tr>
<tr>
<td>FUTURE RESEARCH PROJECT</td>
<td>• Refine best practice inventory</td>
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<tr>
<td></td>
<td>• Determine internal and external factors</td>
<td></td>
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<tr>
<td></td>
<td>• Determine priority sites for initial research</td>
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<td></td>
<td>• Refine theory</td>
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<td></td>
<td>• Prioritize research questions</td>
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<td></td>
<td>• Determine best practice</td>
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<td>combinations</td>
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<td></td>
<td>• Identify methods and priorities for scaling up and out</td>
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<td></td>
<td>• Determine appropriate methods</td>
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<td></td>
<td>• Design initial study</td>
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Design and Development Research

- PLAN INITIAL STUDY
  - Prioritize research questions
  - Refine research questions
  - Determine best practice combinations
  - Determine priority sites for initial research
  - Determine appropriate methods
  - Design initial study

- DEPLOY INITIAL STUDY
  - Review and iterate study
  - Determine limitations
  - Identify methods and priorities for scaling up and out
  - Make connections to policy and practice

Efficacy/Effectiveness/Scale Up Research

- DETERMINE CAUSAL RELATIONSHIPS
  - Deploy larger studies
  - Refine study designs
  - Set priorities for ongoing research
  - Make connections to policy and practice
the complexity of separating the influence of effective certified school librarians from the influence of the physical spaces and resources of school libraries. Participants raised questions about defining learner achievement when they asked whether measures besides standardized test scores—measures such as discipline referrals, attendance, or graduation rates—should be considered. Audience members passionately called for greater clarity about how we, as a profession, defined and measured information fluency and the indirect impacts of school librarians who work with other educational professionals to improve learner outcomes. Dr. Thomas Cook, an expert in causal research methods, led a panel of experienced researchers who explained the methodological challenges of these issues. From this rich discussion, the symposium leaders drafted a white paper (AASL 2014) that established an ambitious ten-year agenda for school library research directed toward building causal research. A key feature of the white paper was a graphic that illustrated how the agenda might unfold, as figure 1 shows.

As figure 1 depicts, the symposium leaders distilled the discussion and proposed a research agenda in line with the Common Guidelines for Education Research and Development (Institute of Education Sciences and National Science Foundation 2013), the prevailing guide to federal views of best practice in educational research. The CLASS forum research agenda (AASL 2014) builds a thorough and elaborate approach to causal research that will ultimately align school library research with federally recognized scientifically based empirical research. Unlike single case studies or small-scale action research implementations, each part of the study phase of the research agenda builds on the one before, all leading to the ultimate goal of research that clearly identifies the causal implications of school library practice.

Using the Past to Predict the Future

Work on the agenda has begun with the CLASS II research project. The CLASS II project began in late 2015 with teams of researchers from Florida State University (FSU), Old Dominion University (ODU), and the University of North Texas (UNT) who were tasked with implementing the first phase of the research shown in figure 1. As with most research, an important first step was uncovering what we already know about the problem. Guided by the research question “What causal relationships exist between school-based malleable factors [i.e., aspects within the school environment that can be controlled] and learner outcomes?” the three teams have been engaged in a major aggregation and synthesis of existing high-quality experimental and quasi-experimental causal research published since 1985. To enhance the breadth of the studies in the data set, each of the teams has taken a slightly different approach to data collection:

- FSU examined the studies included in the U.S. Department of Education’s Institute of Education Sciences (IES) What Works Clearinghouse (WWC) <https://ies.ed.gov/ncee/wwc>. To provide educators with the information to make evidence-based decisions, the WWC contains research on programs, products, practices, and policies in education.
- The ODU team focused on searching several leading periodical databases and “snowballing” the causal research they found by gathering and reviewing articles in the articles’ reference lists.
- The UNT team used the Scopus database to deeply examine library and information studies (LIS) literature for causal studies.

The resulting data set, composed of over four hundred studies, contains causal education research studies that document causal relationships between things educators do and significant positive learner outcomes.

The passage of the Every Student Succeeds Act (ESSA) and the subsequent release of guidelines regarding levels of evidence for educational interventions (U.S. Dept. of Ed. 2016) underscored the immediacy of the work undertaken by the research teams. Figure 2 illustrates ESSA’s levels of evidence and the types of study designs that must be used to produce a study meeting a particular evidence level.

Figure 2. ESSA levels of evidence (adapted from Herman et al. 2017).

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 STRONG</td>
<td>Experimental study: Random assignment of participants to intervention and control groups.</td>
</tr>
<tr>
<td>2 MODERATE</td>
<td>Quasi-experimental study: Nonrandom assignment of participants to intervention and comparison groups by 1. providing intervention to one group or 2. using existing data, identifying a comparison group of non-participants. Must demonstrate that the groups were equivalent before the intervention started.</td>
</tr>
<tr>
<td>3 PROMISING</td>
<td>Correlational study with controls: Using existing data, correlations between intervention status and outcomes must control for factors related to selection bias (e.g., participant demographics, prior associated outcomes).</td>
</tr>
<tr>
<td>4 RATIONALE</td>
<td>Well-specified logic model or theory of action that builds on high-quality prior research or a prior positive evaluation.</td>
</tr>
</tbody>
</table>
As we write this in December 2017, the three teams are working through their aggregated studies to verify and synthesize those that represent strong and moderate research; these two levels are considered the “gold standard” by federal educational policymakers. However, many excellent studies fit into the promising and rationale levels. These latter two levels of evidence are important foundations for understanding which interventions are candidates to be used in study designs likely to produce strong or moderate evidence. Studies at the promising and rationale levels also provide important depth and detail to understand why and how factors studied in experimental and quasi-experimental designs work for learners.

As we verify our data, we are following what IES and NSF (2013) have called “Foundational Research” by grouping the studies by topic and synthesizing the study findings to identify educators’ classroom best practices. These practices will allow the researchers to build theories that will be tested in subsequent studies of school librarians in school libraries. Figure 3 illustrates the components of foundational research and the following phase of theory testing.

As figure 2 shows, “strong” is the strongest level of evidence because all studies in this category include experimental designs with random assignment of participants to intervention and control groups. The next level of evidence, “moderate,” is closely related, as the short arrow suggests. A study that has been categorized as producing moderate evidence will include a quasi-experimental design, less rigorous because either participants are not randomly assigned to groups or participants are compared to others who did not participate in the study rather than compared to a control group. The next level of evidence, “promising,” has considerably less strength; as the arrow length indicates, the evidence is considerably further from the ideal. Studies in the promising category are correlational, not causal, with a sample that is controlled for selection bias. Finally, “rationale,” the lowest level of evidence, as indicated by the longest arrow, demonstrates the weakest evidence but is derived from a well-designed study based on a sound logic model or theory of action. The levels of strong and moderate correspond to the type of research CLASS II has been concerned with identifying.

As figure 3 suggests, we will take the findings from the foundational stage of the research to develop theories about which factors might be fruitful for causal studies about the impact of a school librarian on learner achievement. For example, we have synthesized the significant findings and conclusions from research in the strong and moderate categories illustrated in figure 2 that reported that when learners were taught systematic means for problem solving, they were able to use those skills to increase their mathematics achievement. (Examples of these studies include Cardelle-Elwar 1995; Hembree 1988; Jitendra, DiPipi, and Perron-Jones 2002.) Because school librarians also teach problem solving in many different types of schools, this predisposition for autonomous learning can be nurtured from an early age, and, with a foundation of evidence, school librarians can contribute to this learning ecosystem as the future needs of the workforce evolve.
this effective classroom practice is opportune for causal study in a school library context. In the coming months, we will be publishing similar syntheses with possible school library research directions in leading educational research journals.

As we continue to refine and finalize the syntheses, we will generate a series of theories, based in strong and moderate evidence, to be tested in the field by school librarians in authentic school library contexts. The results of these field studies (illustrated in the “Exploratory Research” phase of figure 3) will demonstrate which of the theories is ready to be examined in a larger causal study using one of the project designs shown in the “Future Research Projects” area of figure 1. In the coming months, the field studies will begin at selected sites throughout the U.S.

CLASS II research has the potential to affect more than school librarians who are already in service. To take our problem solving example further, if future causal research studies also conclude that school librarians’ problem-solving instruction makes a difference in learners’ mathematics achievement, then this finding not only suggests that school librarians might seek collaboration with mathematics educators in this area but also might engage in mathematics professional development to hone school librarians’ own problem-solving knowledge and instructional strategies. Because mathematics is a curriculum area rarely included in studies of collaboration between educators and librarians, the evidence that school librarians’ problem-solving approaches are effective may drive pre-service educators to more strongly focus on problem solving in the pre-service curriculum and include mathematics faculty in the design of those units. Because school librarians also teach visualization and data skills, close work with mathematics educators in the areas of problem solving and interpreting data and statistics may help learners gain the kinds of skills needed for college and career.

Causality and the Future of School Librarianship

To justify investments, educational policymakers require that state departments of education provide them with evidence that all educators are engaging in practices that definitively improve learner outcomes. For too long, school librarians have been expected to be as effective as classroom educators but have not had the tools to produce accepted evidence of their effectiveness. The ultimate goal of the CLASS II project is to provide those tools. Certainly the profession’s foundation of correlational studies has allowed the likelihood of school librarians’ effectiveness to remain a relevant topic. Now is the time to take this pursuit further, and the stakes have never been higher.

To evolve education systems and learning for the demands of a changing workplace, K–12 educators are expected to prepare learners to navigate not only to the next level of school but also to understand how to approach complicated problems that will challenge today’s learners when they are part of tomorrow’s workforce. In partnership with policymakers, school administrators, and classroom educators, school librarians have a strong role in improving core and technical curriculum knowledge with its new emphasis on creativity, critical systems thinking, lifelong learning, and growth (Manyika 2017). The future of job training in a technological age will require learners to cultivate relevant skills, capabilities, and attributes, such as...
emotional intelligence, curiosity, creativity, adaptability, and critical thinking (Rainie and Anderson 2017). Learning will often need to be self-directed and offered beyond traditional education systems or delivery formats.

This predisposition for autonomous learning can be nurtured from an early age, and, with a foundation of evidence, school librarians can contribute to this learning ecosystem as the future needs of the workforce evolve. Future librarians will scaffold digital literacy to support the learning personalization and create authentic learning practices (Adams Becker et al. 2017) that link education to real-world experiences. AASL’s National School Library Standards express this future based on six Shared Foundations: Inquire, Include, Collaborate, Curate, Explore, and Engage (AASL 2017). As learning increasingly transcends and blends the classroom with other physical and digital environments (Beck 2015), school librarians will model and mentor these key commitments to not only impact how K–12 education supports technology and information literacy development but also to cultivate learners’ lifelong contribution to a knowledge-based society.

The CLASS II researchers’ in-depth look at educational research suggests that positive learning outcomes have the potential to be causally linked to school librarians’ work in exposing learners to the foundations of digital literacy, digital citizenship, responsible and creative technology use (Adams Becker et al. 2017), inquiry-driven investigation (Diekema, Holliday, and Leary 2011), and knowledge construction in makerspaces (Moorefield-Lang 2014). School librarians’ role in a school’s readiness to infuse information literacy in curriculum is also a fertile area of exploration (Tan, Kiran, and Singh 2015). Causal research can help identify critical roles for school librarians in ensuring that social justice is present in library and pedagogical decisions around information technology (Dadlani and Todd 2015). The future of education, as reflected in these trends and our new National School Library Standards, offers bountiful opportunities to collect evidence to uncover causal relationships between school librarians’ activities and positive learner outcomes; ESSA has given us the language to use and the milestones to meet for this evidence to matter.

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Sue C. Kimmel is an associate professor at Old Dominion University (ODU) in Norfolk, Virginia, where she is graduate program director of the library program. She is a member of the ODU CLASS II research team and author of the book Developing Collections to Empower Learners (AASL 2014). Among her other recent publications is “ ‘It Was...the Word ‘Scrotum’ on the First Page’: Educators’ Perspectives of Controversial Literature” (coauthored by Danielle Hartsfield) to be published this year in Journal of Teacher Education.

Laura Pasquini is a lecturer at the University of North Texas in Denton. She recently coauthored the New Media Consortium’s 2017 Digital Literacy Impact Study; the May 2017 article “Selective Openness, Branding, Broadcasting, and Promotion: Twitter Use in Canada’s Public Universities,” published in Educational Media International; and the paper “Sociotechnical Stewardship in Higher Education: A Field Study of Social Media Policy Documents,” published in the August 2017 issue of Journal of Computing in Higher Education.
Many of us are familiar with the very important warrant to investigate the causal relationship between what school librarians do and how learners thrive and academically achieve. K–12 educators are increasingly expected to deliver learner-centered learning approaches, technology-based support, and effective assessment (Freeman et al. 2017). As the role of classroom educators evolves and broadens, school librarians are inevitably included in and affected by this paradigm shift. As school librarians, we know that we, in and beyond the school library, are well positioned to meet the needs of these pedagogical activities that require planning and access to new digital tools. However, as learners are challenged to demonstrate new skills and competencies beyond rote memorization and drill practices, we have a responsibility to determine how and why we are essential elements on this transformation. Causal research may forge a path for our profession by documenting the ways in which our efforts contribute to the most important future of all—that of our learners.

**Acknowledgments:** The CLASS II research team members include Lenese Colson (FSU), Faye R. Jones (FSU), Sue C. Kimmel (ODU), Marcia A. Mardis (FSU), Laura A. Pasquin (UNT), Shana Pribesh (ODU), and Barbara Schulz-Jones (UNT).

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**Works Cited:**


LIBRARIANS LEAD THE GROWTH of Information Literacy and Global Digital Citizens

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Librarians are leaders in growing global digital citizens. Consider the question of what libraries actually mean to our society now and in the future. In the face of exponential change, what is the new role of the librarian in this modern information age?

The libraries of the future are more than just housing centers for books and media. They are invigorating meeting places and communities where truly meaningful learning and discovery take place. Within the comfort of their environments we learn useful and often surprising things about the world, our citizenry, and ourselves.

What’s sad about this truth is the notion that runs parallel to it, that the love of books and the adventures they take us on are disappearing in the wake of the digitalization of knowledge. As technology has transformed reading and learning, it has also transformed our vision of the library in both structure and function.

The fact is we have always needed librarians as guides and providers to assist us in learning and discovery. Furthermore, we must realize that librarians in the information age play a critical role in our access to and application of knowledge.

Then and Now

An image of librarians as gatekeepers of knowledge is a highly stereotypical profile that’s existed for hundreds if not thousands of years. As such, it’s quite outdated and doesn’t fit with the realities of today and tomorrow. If we look at the issue with our hearts as well as our heads, we realize librarians are actually our most trustworthy guides and facilitators in our quest to acquire knowledge and skills. They were all those years ago, and they remain so today. The difference now is that with the advent of the Internet and its transformation of how we read, learn, and consume knowledge, librarians have had to work tirelessly to adapt to this transformation by acquiring new sets of skills that coincide with the marriage of the traditional and the digital. Librarians, especially school librarians, create opportunities for learning like never before in history.

To fulfill their modern duties and adapt to new technologies, librarians have processes by which they guide research endeavors and other forms of individual exploration. In a 24/7 Wikipedia-on-demand world, the relatively limited and ailing research skills of people—and this is people in general, not just students—have made us—21st-century researchers—somewhat complacent. An example of this is how we use Google. Most of us type in a question to produce literally millions of search results for our query, and then we never bother to look past the second page. More often than not we’re willing to take the top link at face value, regardless of whether or not it is the best source for the information we seek.

Leverage Marketing author Madeline Jacobson cited a study done in 2014 by Advanced Web Rankings, a company specializing in marketing SEO (search engine optimization), and revealed some alarming statistics about our most common search habits:

• over 67 percent of clicks on search engine results pages are on the top five listings, and
• websites that are on the first search results page receive over 90 percent of Web traffic.

What we learn from this—and from the number of times Google has come under fire for the questionable integrity of what often appears as their highest-ranked search results—is that it pays to have solid and methodical research skills. Not just any skills either, but the kinds of chops that librarians can boast. This skill set is called information fluency.

Information Fluency: A Researcher’s Best Friend

From my perspective, information fluency is the ability to unconsciously and intuitively interpret information in all forms and formats to extract essential knowledge, authenticate it, and perceive its meaning and significance. In addition, information fluency includes knowledge how to apply that knowledge to complete real-world tasks and solve real-world problems effectively.

As with all the other essential fluencies of modern learning, knowing how to formulate and structure important, meaningful, and relevant questions, long before researchers even begin to access the most appropriate knowledge sources, is one of the most important skills school librarians teach.
Information fluency is a structured process that is both highly teachable and easily learnable. It is defined by the 5As:

**Ask**: This stage involves compiling a list of critical questions about what knowledge or data is being sought. The key here is to ask good questions because that’s how we get good answers.

**Acquire**: Accessing information is easier than ever because now we are dealing with exponential surges in quantity. However, these large amounts of information must be filtered. This stage involves accessing and collecting informational materials from the most appropriate digital and non-digital sources.

**Analyze**: With all the raw data collected we must now authenticate, organize, and arrange it all. This stage also involves ascertaining the authority of the source and distinguishing the good from the bad.

**Apply**: Once data is collected and verified, and a solution is finally created, the knowledge must then be practically applied within the context of the original purpose for the information quest.

**Assess**: This stage involves open and lively discussions about how the problem-solving journey could have been made more efficient and how the solution created could be applied to challenges of a similar nature.

Ultimately, the best person for our students (and us) to seek out to develop these skills is our librarian. It makes sense that information fluency is the kind of information gathering and vetting process librarians will teach to learners, preparing them to successfully navigate seas of information that are both traditional and digital.

Whether the 5As happen in conversation, in online research, or with paper books, the process is still the same. As with all processes, however, there is a starting point. Knowing how to formulate and structure important, meaningful, and relevant questions, long before researchers even begin to access the most appropriate knowledge sources, is one of the most important skills school librarians teach.

**Five Steps to Ask Effective Questions**

The practice of formulating a powerful question in research isn’t about typing spontaneously into a search bar; it’s about exploring the topic to determine first what types of questions need to be asked, and then to determine the best primary and secondary information sources to

![Figure 1. Question-creation process applicable to many disciplines.](image)
A five-step process designed to work with information fluency can be used to formulate the most effective and useful research questions possible in our quest for knowledge (see figure 1).

1. **Focus**: What specifically do I want to know? What kinds of information am I missing? Is this more than a simple YES or NO question? Am I going for much deeper knowledge? What sources do I have to help me form my initial question?

2. **Purpose**: Why am I asking this? Do I want to gather facts or opinions? Do I need simple clarification? Do I want to offer a different perspective? Am I looking for general or for more-specific information? What am I going to do with this information?

3. **Intent**: How do I want people to respond? Do I want the answer to be of help to others? Am I starting an argument or opening up a discussion? Is the question superficial and not really useful or important? Am I asking out of frustration or curiosity? Do I really care about the answer? Am I willing to show respect/dereference to the person I’m asking?

4. **Framing**: Am I using easily understandable terms and wording? Is my question neutral or does it contain bias or opinion? Is it too long or too short? Does it focus on what I want to know? Does the question focus on only one thing?

5. **Follow-up**: Do I have any more-specific questions to add? Will the person I’m asking be available for other questions if need be? If I still don’t have the answer I need, what are my next steps? What can I do if I still don’t understand?

Once learners understand and internalize this process for creating questions, other critical research skills can be developed. These skills include understanding the problem to be solved, identifying keywords, forming questions around keywords, brainstorming, thinking laterally, understanding ethical issues, listening deeply, viewing wisely, speaking critically, filtering out information white noise, and sharing personal knowledge and experience.

**Reach Even Higher**

So far we’ve thought about why librarians deserve respect as facilitators and guides to seek and gain knowledge, and about the processes they teach learners while stressing the importance of being real-life information detectives. We’ve also talked about how to ask the most powerful questions in the most profitable knowledge pathways. This, however, is not the extent of a school librarian’s positive influence on learners. There’s a much larger connection to the future here we haven’t yet considered.

More than many other educators, school librarians are exceptional candidates to cultivate global digital citizenship in learners. The question is how and, more importantly, why global digital citizenship is so critical to current and future learners.

First, we need to define what a global digital citizen is; this can be accomplished by defining each of its characteristics separately: digital citizenship and global citizenship.

**Digital citizenship** describes how a person should behave in the online world. Digital citizens:

- **adhere to guidelines that govern the ethical and responsible use of technology, and**
- **act responsibly in all relationships and interactions in the digital world.**

Global citizenship is a well-understood concept relating to how one participates in and contributes to the world as a whole. Global citizens:

- **see the world as a community in which all people live and prosper together,**
- **understand their actions contribute to the values of the entire planet,** and
- **endeavor to participate in and contribute to the entire world.**

When these two sets of characteristics are mixed, it’s the perfect recipe for the global digital citizen. United they address how we participate and contribute in the blended physical and digital worlds, and how we can leverage the digital world to grow citizens in this new reality. School librarians lead their staff members and students to develop into responsible global digital citizens.

Another important point to make here is what we at the Global Digital Citizen Foundation put forth as the tenets of digital citizenship: respect and responsibility for yourself, for others, and for property. In terms of school librarians and their role to empower learners in the ways of global digital citizenship, it’s the last point we’re concerned with here.

To respect and be responsible for property refers to not only the physical but also the intellectual—in other words, knowledge. How we give credit to creators of intellectual properties by citing sources and authorship properly says much about our respect for those who devote their time to creativity in the service
More than many other educators, school librarians are exceptional candidates to cultivate global digital citizenship in learners.

of others. Exploring the rules of “fair use” and copyright laws, and how they apply to sourcing and using online information is a crucial part of modeling and teaching this respect. Likewise, treating our own property and others’ with care and respect, including intellectual properties, is vital to preserving a sense of digital and global community.

All in all, very few professionals on the planet revere both the power of knowledge and the importance of respecting its origins more than school librarians do. It’s a code of honor that’s practically built into the vocation. Imagine all the ways students benefit from having such an individual in reach, especially one who harbors both a fundamental passion for learning and discovery, and a keen familiarity with the new ways technology enhances it.

Passion, integrity, responsibility, and citizenship. That pretty well sums up the essence of the modern school librarian in today’s information world, and why we can’t do without them.

Looking Deeper into Global Digital Citizenship

Educators everywhere, including school librarians, have so much to think about when it comes to teaching guidelines for safety and proper etiquette for digital students in their tech-oriented lives. An important way to guide students towards global digital citizenship practices is to ensure the knowledge and teaching practices educators, including librarians, employ are both current and relevant.

School librarians, the champions of information-age knowledge systems, international agencies, and corporations to help people and organizations connect to their highest purpose and realize their wishes for the future. A resident of Japan, he believes in creating balance in the reality of a digital present and future. Therefore, he studies Aikido, Buddhism, and the shakuhachi, a traditional Japanese bamboo flute. Joyful curiosity is the foundation of his approach to creating vital learning environments for groups around the world. His several best-selling books, including Literacy Is Not Enough (Hawker Brownlow Education 2012), Growing Global Digital Citizens (Solution Tree 2018), and Mindful Assessment (Hawker Brownlow Education 2017), have garnered many awards and are used in schools and universities around the world.

Lee Watanabe Crockett, president of the Global Digital Citizen Foundation, works with governments, education systems, international agencies, and corporations to help people and organizations connect to their highest purpose and realize their wishes for the future. A resident of Japan, he believes in creating balance in the reality of a digital present and future. Therefore, he studies Aikido, Buddhism, and the shakuhachi, a traditional Japanese bamboo flute. Joyful curiosity is the foundation of his approach to creating vital learning environments for groups around the world. His several best-selling books, including Literacy Is Not Enough (Hawker Brownlow Education 2012), Growing Global Digital Citizens (Solution Tree 2018), and Mindful Assessment (Hawker Brownlow Education 2017), have garnered many awards and are used in schools and universities around the world.

Work Cited:


Recommended Reading:


FEATURE

Framing an Urban School Library

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an Urban
WITH THE
National School Library Standards

Mary Keeling
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What is the future of urban school libraries? AASL’s National School Library Standards offer a framework for school librarians to reflect on how they can tailor their professional practice to serve their specific school communities. Through the lens of the standards, school librarians can refine their focus, identify how interrelated Shared Foundations point to possible strategies, and identify shifts in practice to better serve the particular needs of the learners and educators in their buildings.

A working definition of “urban” is in order. Generally, urban schools and school libraries are located in comparatively densely populated areas and serve families with relatively higher rates of poverty, cultural diversity, and limited English proficiency (Russo 2004; NCES 1996; Small et al. 2008). Urban youth are also more likely to experience health and safety risk factors, live in a single-parent home, change schools frequently, and have an out-of-work parent or family member (NCES 1996). Urban schools have been described as bureaucratic, underfunded, and under-resourced, with decision makers removed from teachers (Small et al. 2008). Although some perceive that urban youth lack family support, one study found that “urban students were equally or more likely than other students to have families… that support desirable education outcomes” (NCES 1996).

Urban centers offer a rich array of lifestyle services and opportunities: multiple broadcasting stations, museums and world-class libraries, public transportation, concentrated healthcare services, retail and design centers, ethnic restaurants and community organizations, nightlife, and more. How can urban school libraries connect with such resources? How can the urban school library become a relevant and vibrant...
part of the lives of urban youth? What guidance can we find in the AASL Standards?

Inquire and Explore

Learners and school librarians **Inquire** to “build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems” (AASL 2018, 68).

Learners and school librarians **Explore** to “discover and innovate in a growth mindset developed through experience and reflection” (AASL 2018, 103).

When school librarians teach an authentic inquiry process, they scaffold difficult procedures for the purpose of guiding students to internalize methods involved in a complex learning sequence. Authentic inquiry is an open-ended pursuit of a question or potential solutions to a problem; it teaches students that knowledge creation is an uncertain, recursive process (Donham 2014).

Inquiry is important for urban children because it provides a mental model for authentic learning and a structure for developing voice and agency. “The bottom line is to give students choice and as much control as is feasible and age-appropriate in their information-seeking project, then keep feedback on the functional rather than on the controlling level…emphasizing better ways to accomplish learning goals rather than…grades, competition, and rewards” (Crow 2011, 30).

As they develop Competencies in the School Librarian Framework, urban school librarians help learners develop voice and agency by:

- **I.A.1.** Encouraging learners to formulate questions about a personal interest or a curricular topic. (AASL 2018, 68)

- **I.D.3.** Enabling learners to seek knowledge, create new knowledge, and make real-world connections for lifelong learning. (AASL 2018, 68)

A focus on the student’s personal interest will empower her to develop a sense of competence and intrinsic motivation (Crow 2011). In addition, inquiry allows for collaborative, social learning. For example, Guided Inquiry Design provides for students to develop background knowledge, identify topics of personal interest, and refine their focus through conversation with their Inquiry Circles (Kuhlthau, Maniotes, and Caspari 2012). When curricular topics allow choice of subtopics, the student’s freedom to choose increases autonomy, also intrinsically motivating. Delia Neuman and colleagues reported that kindergarten students experienced deeper learning and developed a more expansive understanding of information sources when allowed to choose their focal topics (2015). Kafi Kumasi has recommended that school librarians “guide youth in inquiry projects that help them answer questions about some of the larger social issues that directly affect their community” (2012, 35).

Service learning is a curricular approach that engages students in identifying and addressing community needs (National Youth Leadership Council n.d.). It leverages community service against the curriculum, and the urban school librarian can be guided by School Librarian Competency V.C.3 and “prepare learners to engage with the learning community by structuring activities for learners to collaboratively identify innovative solutions to a challenge or problem” (AASL 2018, 104).

As students deepen their interests and develop competence as self-directed, independent learners, school librarians engage learners in “projects and activities that allow them to take personal, social, and civic actions related to [their own] educational outcomes” (Hughes-Hassell and Rawson 2011, 17).

In Newport News, Claudine guided fifth-graders’ inquiry as they developed a service learning project to support the Food Bank of the Virginia Peninsula.
Include and Collaborate

Learners and school librarians Include to “demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community” (AASL 2018, 76), and Collaborate to “work effectively with others to broaden perspectives and work toward common goals” (AASL 2018, 85).

Guided by the AASL Standards Framework for School Librarians, the urban school librarian can:

II. B. Establish opportunities for learners to adjust their awareness of the global learning community by:

1. Providing opportunities for learners to interact with others who reflect a range of perspectives.

2. Devising learning activities that require learners to evaluate a variety of perspectives. (AASL 2018, 76)

—and—

III.A. Facilitate collaborative opportunities by:

1. Challenging learners to work with others to broaden and deepen understandings.

2. Scaffolding enactment of learning-group roles to enable the development of new understandings within a group.

3. Organizing learner groups for decision making and problem-solving. (AASL 2018, 83)

School librarians have traditionally supported and provided access to a wide range of perspectives. The commitment to respect diversity now extends to a respect for and celebration of students’ home cultures. To fully understand and appreciate the cultures of others, school librarians need to develop their own cultural competence and to approach students and families from an assets-based model, recognizing that “through mutual respect, shared power, and collaboration, professionals become partners with the communities they serve” (Montiel-Overall, Nuñez, and Reyes-Escudero 2015, 29). Specific actions to address the needs of Latino youth include maintaining social interaction between English-speaking and Spanish-speaking students, developing bi- or multilingual signage, involving parents in social and informational programs, and using library instructional time to build background knowledge in content areas (Montiel-Overall, Nuñez, and Reyes-Escudero 2015).

Culturally responsive instruction uses strategies that create inclusive learning environments to nurture all students—but it is difficult to implement fully because of its complexity (Powell et al. 2016). One cultural feature represented in urban schools is a preference for social interaction and spontaneous, lively expression (LAUSD n.d.; Hughes-Hassell and Hitson 2013). School librarians can embrace this preference and take steps to create more-inclusive learning environments by using response and discourse protocols to ensure all students have access to instructional conversations and opportunities to learn in social settings (Hughes-Hassell 2017). Such protocols emphasize that all students are responsible members of the group (LAUSD n.d.).

Accountable Talk practices help students learn how to have academic conversations; in so doing they become accountable to the learning environment, knowledge, and evidence (University of Pittsburgh 2015). Through using practices such as these, “school librarians explicitly lead learners to demonstrate empathy and equity in knowledge building within the global learning community by creating an atmosphere in which learners feel empowered and interactions are learner-initiated” (School Librarian II.D.1, AASL 2018, 76) and “foster active participation in learning situations by creating a learning environment in which learners understand that learning is a social responsibility” (School Librarian III.D.2, AASL 2018, 84).

CULTURAL COMPETENCE IS THE CAPACITY TO:

- **RECOGNIZE** the significance of culture in one’s own life and in the lives of others;

- **ACQUIRE** and respectfully use knowledge of diverse ethnic and cultural groups’ beliefs, values, attitudes, practices, communication patterns, and assets to strengthen LIS programs and services through increased community participation;

- **BRIDGE GAPS** in services to communities by connecting them with outside resources;

- **RECOGNIZE** socioeconomic and political factors that adversely affect diverse populations; and

- **EFFECTIVELY IMPLEMENT** institutional policies that benefit diverse populations and communities. (Montiel-Overall, Nuñez, and Reyes-Escudero 2015, 21)
Curate

Learners and school librarians curate to “make meaning for [themselves] and others by collecting, organizing, and sharing resources of personal relevance” (AASL 2018, 94).

Inspired by the School Librarian Framework, the urban school librarian can:

IV.A. Challenge learners to act on an information need by:

1. Designing opportunities for learners to explore possible information sources.
2. Guiding learners to make critical choices about information sources to use. (AASL 2018, 94)

This Shared Foundation extends traditional collection development practices into the arena of curation and includes learners as well as librarians in this act of meaning-making. Marcia Mardis defines curation as “an ongoing process of skillfully selecting resources that meet the school community’s needs and creating an experience with those resources through organization, description, promotion, reflection, and engagement” (2017, 15). Urban school librarians can curate resources by focusing efforts on providing access to enabling texts and materials that reflect and celebrate the cultural heritage of their learners. Patricia Montiel-Overall and her colleagues have recommended that school librarians develop Spanish-language and bilingual collections and highlight language and culture in resources, displays, and performances (2015). Alfred Tatum advocated using enabling texts to give voice to black adolescent males; inspire healthy identity development, resilience, and engagement; and build capacity (Hughes-Hassell and Rawson 2011). School librarians should also engage learners in book clubs or discussion groups using these materials (Hughes-Hassell and Rawson 2011) and design experiences to engage young people in curating resources that have meaning for them (Boone, Rawson, and Vance 2010; Hughes-Hassell and Kumasi 2017).

In addition to curating informational resources, school librarians can use curation strategies to discover, organize, and describe the assets of newcomer immigrant groups as well as the resources of the larger urban community, conducting surveys to identify individuals with specific capabilities as well as institutions, landmarks, and other cultural features. This essential first step to map community assets can help the school librarian develop partnerships with local and regional organizations, businesses, and other institutions (Hughes–Hassell et al. 2012; Montiel-Overall, Nuñez, and Reyes-Escudero 2015). It can also help the school librarian connect young people with sources to help them with information needs in their everyday lives and help “teens understand the world and their positions in it…and to contemplate who they aspire to be in the future” (Agosto and Hughes–Hassell 2006, 1399).

Engage

Learners and school librarians engage “in a community of practice and an interconnected world” (AASL 2018, 113).

Urban school libraries can be the most interconnected of all school libraries, and school librarians should make every effort to help learners understand how they can participate in larger scholarly and social communities. As school librarians explore community resources, map community assets, and develop community partnerships, they can help learners connect with resources beyond the school and engage in social action projects to improve their communities. Such community engagement is supported by the alignments in the AASL Standards Framework for School Libraries:

V.C. The school library prepares learners to engage with a larger learning community by:

2. Encouraging families and other members of the community to participate in school library activities.

—and—

3. Building and advocating for strong relationships with stakeholders who recognize and support an effective school library. (AASL 2018, 105)

Recent projects demonstrate the impact that community partners can have on learning through partnerships with the school library. In 2011 the Weinberg Foundation initiated a project with Baltimore City Public Schools to renovate school libraries (appropriately staffed with professional librarians and support staff) to foster 21st-century skills, use emerging technologies, and provide access to information in multiple formats and from multiple platforms (Falkenberg et al. 2017). MyLibraryNYC, a partnership between the New York City Department of Education and New York City’s three public library systems, provides educators and learners with fine-free access and delivery of materials (Wilson and Ellis 2014). Limitless Libraries (LL) provides students with borrowing privileges at the Nashville Public Library through their student identification numbers. Positive test outcomes correlated with use of LL services, and three out of five learners associated LL use with academic success (Lance and Barney 2016).

These partnerships emerged because community leaders saw the school library as a viable locus for positive change. Encouraged by these developments, urban school librarians can reach beyond our walls as we cultivate our own cultural competence, learn about the assets and strengths of our learners’ home cultures, and improve our services through partnering with our communities.
Mary Keeling is supervisor of Newport News (VA) Public School Libraries and a Lilead Fellow. She serves as chair of the AASL Standards and Guidelines Implementation Task Force. She has blogged for Knowledge Quest and published articles in Knowledge Quest, School Libraries Monthly, and School Library Connection.

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The volume of information we have available at our fingertips has grown exponentially in the last several decades. Social, professional, and learning networks have altered the way humans deal with the volume of information that bombards them daily. Traditionally, the library has served as a center of information in our schools. Because the availability and access to information has changed, many institutions, in both business and education, have chosen to rethink the role of the library and its place in our schools, our communities, and in our world.

Meeting the Challenge

At the American School of Bombay (ASB), we understand that libraries are essential to student learning. Our school library’s mission is to inspire and support our users towards creative and intellectual achievement while responsibly and ethically learning the value of information, its acquisition, and its use. Committed to student learning, we chose to reinvent our library to best reflect the spirit and the mission of our school. In the process, we discovered a way to both make school libraries relevant in today’s technology-driven world and deliver the highest level of teaching and support the highest level of learning for our students.

The iCommons (Information Commons) at ASB was created to replace the traditional concept of a school library. Our existing traditional library was transformed by being decentralized and divided into many interactive learning spaces. The iCommons model follows the elements of the International Literacy Association’s Standard 5, which recommends developing a suitable milieu to enhance student reading and writing (ILA 2010). Meeting this standard requires a respectful attitude and designing a physical space that would optimize students’ learning. To do that teachers must teach reading and writing using traditional print, digital, and online resources in their reading and writing instruction. Students must, therefore, have easy access to books, online resources, and instructional materials for both small-group and whole-class engagements (ILA 2010).

Knowing the importance of this easy access, we decided to take the courageous step of decentralizing our entire library collection.

Elementary School Grade-Level iCommons Spaces

Now, instead of a centralized library space, each elementary school grade has its own unique iCommons housing a variety of resources: e-books, audiobooks, printed books, and resources supporting opportunities to create digital products. This collaborative space is right outside the grade’s classrooms and engages students in their learning journey (see figure 1).

In the past, checking out books was the responsibility of a librarian. Now, in establishing an environment of trust and independence, this responsibility was given to the students. Self-checkout stations throughout the schools help the children quickly and easily check out the books on their own. In addition to demonstrating trust, this approach to check out also frees up the school librarians to play the bigger role of information curator and coach. The 100 percent self-checkout policy happens from grade 1 through 12; only the kindergarten students need some adult support to do the checkouts. A huge variety of books across genres and reading levels are now being used much more in the decentralized iCommons than were ever used in the centralized library. As Heeru Bhojwani, the information curator and coach at the American School of Bombay put it, “After we decentralized the libraries into iCommons, we found that the number of book checkouts shot straight up! Today, the students in our school are checking out books almost four to five times more than what they used to do earlier under the centralized library system.”

Figure 1. An iCommons area near elementary school classrooms.
Secondary School iCommons

In the secondary school, the ASB iCommons is an educational sharing space for collaboration, content creation, readings, and study. It replaces the concept of a traditional library by expanding its uses in form and function. The physical space is flexible and is blended with the virtual world, adapting to meet the needs of individuals and group study (see figure 2). Books students could read digitally were removed from the iCommons collection and redistributed into the spaces within the school in a way that would enhance student learning. Therefore, books on different languages were moved to the Modern Languages space; young adult fiction was placed in the Language Arts classrooms; science and social studies books were also shifted to their respective areas (see figure 2).

The original name of the iCommons in the secondary school was the Da Vinci Studio. It was a place to come, think, share ideas, and create. Initially, it was envisioned as a space for a “renaissance” within the school. Our iCommons emerged from this renaissance. It houses the makerspace, an idea that came out of school libraries in the U.S. and best highlights the evolving nature of libraries. The makerspace is equipped with materials that provide an opportunity for students, faculty, and other members of the school community to explore and tinker (see figure 3). Making and tinkering matters because this hands-on learning is a proven approach that equips minds with the tools to create something new. It also helps students make decisions in open and connected learning environments. Making and tinkering are being driven by the quest for authenticity as well as global social and economic trends. The iCommons is now a place for our community to gather; it also provides creative and informative resources that would not be accessible elsewhere.

Fiona Reynolds, the deputy head of school at the American School of Bombay, explained, “Thanks to the iCommons, the responsibility of checking in and checking out the books is no more the responsibility for the librarian; it is now the responsibility of the children. This, in turn, creates a new sense of trust and independence for the children; it also empowers the librarian to evolve into an information coach and curator. We will be focusing on continuing and expanding upon such enhancement for the future.”

Linton Weeks, a national correspondent for NPR Digital News said, “In the nonstop tsunami of global information, librarians provide us with floaties and teach us to swim” (2001). With the transformation of the physical space, the role of the school librarian has evolved from being a media specialist to an information curator and coach who focuses on coaching the community of learners. School librarians are available to personalize teaching and learning and to support users in understanding the importance of evaluating all kinds of media for communication and education. They are experts in assessing and curating credible and reliable resources—both print and electronic media—for teachers and learners. They are collaborators and classroom teachers’ partners in teaching. Handling all these responsibilities, along with meeting the need to analyze, collate, and deliver information in a variety of formats, is the role of our librarians.

Writers Club

The transformation of the school library also pushed the library staff to think about what more we in the school community could be doing, such as creating our own pieces of writing and publishing them into books that we could have in our new iCommons space.

As a result, recently Heeru Bhojwani, ASB’s information curator and coach, collaborated with a parent to create the Writers Club at ASB, giving all the members of our community—parents, students, and staff—
members—the opportunity to express themselves through a creative process. Through writing and imagery, members of the ASB community explored the idea of what it means to be international. This exploration culminated in a series of writing workshops for parents and students, resulting in two printed anthologies: *Memories from the Road* (available in Kindle format from Amazon) and *Letters from the Road*. *Memories from the Road* was born out of two ideas. The first was that writers need an authentic audience. If we wanted our students to care about punctuation and grammar, we had to give them a public space to share their hearts and souls. The second idea was to uncover the world of “third culture kids,” particularly at ASB. (Third culture kids are those who do much of their growing up while living in a country other than the one that issued them a passport.) Once we chose the theme of sharing our experiences as global nomads, the writing community quickly grew to include parents and teachers who also wanted to share their memories and learnings from their lives “on the road.” *Memories from the Road* became a canvas to share the authors’ joys, sorrows, questions, and epiphanies through poetry, memoirs, essays, and more.

*Letters from the Road* brings together stories of journeys, memories, and reflections that people carry as they transit to different places throughout the world. Language frames one’s experiences; therefore, all the writers had an opportunity to express themselves in the language in which each was most comfortable. This unique book contains eighty-five articles in seven different languages: Dutch, Korean, Japanese, Hebrew, Hindi, Bahasa, and English. Members of the ASB community believe this book will resonate, not only with expatriates and third culture families, but also with all global citizens.

After receiving an overwhelming response, the Writers Club wishes to take their publications a step forward to include not only the school community but also the greater Mumbai community. R. David Lankes, a passionate advocate for libraries, says, “Bad libraries build collections, good libraries build services, great libraries build communities” (2012). This is exactly what we strive to accomplish with our publications.

**Jarul Book Award**

Creation of the Jarul Book Award was the result of another collaborative effort, this one involving our information curator and coach, and staff members from two other international schools in Mumbai. The goal: to celebrate and honor Indian
Looking Ahead

At the American School of Bombay our libraries have long since evolved from the traditional “books for lending” model into idea incubators and learning hubs. Our libraries have transformed from being places for research to spaces for inquiry, from places for books to spaces for ideas, from places for isolation to spaces for collaboration, and from places for information to spaces for innovation. We are now fully prepared to embrace the future of school libraries. We are actively working towards becoming early adopters of futuristic library technologies like augmented reality, print books with digital interface, RFID application concepts, real-to-digital highlighters, and more.

Matthew Ruffle, the director of institutional advancement at ASB, perfectly summed it up when he said, “With its bold new vision, our school intends to play the role of a major contributor in shaping the libraries of the future. Building upon the successful iCommons model, we are constantly innovating—transforming libraries into collaborative, open, and productive spaces—to equip students and our community in effective sourcing, selection, and utilization of relevant information.”

Craig Johnson is currently serving as the Head of School at the American School of Bombay (ASB) in Mumbai, India. Prior to assuming this role in 2010, Craig, his wife, and his three sons were in Brazil where Craig served as the principal and then the headmaster of two different international schools. In his capacity as the Head of the School at ASB, Craig endeavors to stay engaged with his students and faculty by teaching classes, coaching sports’ teams, and leading professional learning communities. A regular presenter and workshop facilitator around the world on a variety of leadership and educational topics, Craig is a passionate advocate for innovation and relevancy in education as well as the author of numerous articles on a variety of subjects, a screenplay set in Mumbai soon to be made into a movie, and has published a novel titled, Wave Watcher.

Arun Subbian has three decades of experience across advertising, journalism, and corporate relations. He interacts with national and international media across print, television, radio, and digital platforms and also directs the creation of audiovisual content.

Heeru Bhojwani, information curator and coach (K–12 librarian), serves the ASB community as a collaborator and a co-learner to manage, curate, organize, share, and create information and media while supporting a maker mindset.

Rachel Bishop, head of communications and marketing, has spent the last five years of her professional career telling the story of ASB and its students. She uses words, images, and social media to further the stories of achievement and success that occur at ASB daily.

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School Librarian, Teacher Collaborator, and Independent Learner

A Symbiosis for Equitable Education in an Alternative High School

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As the future arrives faster and faster we must ask continually, what do kids actually need from their formal education today and tomorrow? Continuous innovation of method and strategy must be integral to the practice of all teaching professionals. Equitable educators must take a look at the learners in front of them, when and where they stand, and address the needs of each individual. It has never been clearer that we cannot know what tomorrow holds for our students—yet we must be the wizards of the future. While we have no magic wand, the two critical opportunities made visible in this article are the processes to 1) build powerfully honest relationships and 2) teach students to be independent learners. Teacher collaboration with a future-thinking school librarian makes these processes possible and responsive in an alternative school setting.

We work in an alternative education school where the population is majority minority; 80 percent of our students are black or brown, and 90 percent of our student body are eligible for free or reduced-price lunch. Almost 60 percent of our students have IEPs (Individualized Education Plans), and most have attended larger comprehensive middle and/or high schools but were unsuccessful there. These are the disruptors, the kids who challenge the flow of traditional schooling, the kids who come with highly charged life experience. These are the kids whose only meal of the day may be at school, or for whom the only hours of warmth in winter may be at school. School may be the safest, most secure place they ever go. The school library may be the only place they ever curl up in a comfortable chair with a good story about alternative realities or have access to the Internet other than using their phones.

The idea of teaching students to be independent learners in this alternative atmosphere is in reality often contrary to current “best practices.” Classrooms or programs are often expected to use a prescribed curriculum intended to address gaps in learning instead of teaching these students how to learn. Classroom design and instruction often fosters dependency by placing the teacher, book, or task at the center, instead of the student. For example, many English classrooms still require The Great Gatsby to be read by every student instead of using literature circles or choice reading with this classic as an option. Every educator strives for student independence, but we must examine whether the instructional design choices we make actually encourage such. When working with this population of struggling learners, future-thinking school librarians and teachers must come together to provide a consistent experience of success with strategies for how to learn despite setbacks that surround learners.

Learning leadership program research indicates that 93 percent of students in school can tell you what they are “doing” in class. However, when asked what they are “learning” the ability to respond drops to 33 percent (Antonetti and Garver 2015)! We must re-envision our schools and libraries as learning spaces, and for our most-struggling populations we must be intentional and explicit in doing so. The role of school libraries and forward-thinking school librarians in this shift is to be in critical partnership with teachers, parents, and administrators. After years of working with our colleagues as equitable educators of our most-challenged learners, we offer this advice to school librarians and teachers alike as they look to the future.

Engage Minds: Teach How to Learn Independently

Educators assume that by high school students know how to engage their brains independently in many traditional school tasks. That is simply not true for all students. The library, especially, is known as a space that is designed for students to explore and develop a body of knowledge independently. As a reading recovery teacher (Kristal) and Spanish teacher (Musetta), we have learned that neither age nor number of years in school accurately predicts a student’s ability to learn independently. Students need to experience what independent learning feels like. Our job, to truly be equitable educators, is to scaffold and teach students the skills embedded within independent learning tasks.

We envision educators in 21st-century classrooms and school libraries collaborating intentionally to design methods to model the experience of independence. As educators, we must be considerate of and deliberate about each individual learner as we revise how to teach young people how to learn.

Independent Reading: A Couple of Good Ideas

A struggling reader or literacy-averse high school student rarely walks into a library and browses for a book of choice that will then be read front to back independently. So what are the ways we can get high-interest, level-appropriate books into the hands of the students most in need of literacy skill development?

Create and Maintain Book Pods—A Book Pod is simply a collection of appropriate books and other reading materials. School librarians can work with classroom teachers to design themed, multi-level Book Pod collections for student use, collections that can live inside of the classroom space. Once the Book Pods have been built and delivered to the classroom, the school librarian can work with the teacher to design lessons or routines that embed the
use of the books within the classroom space. For example, during a biology unit regarding energy, students can be asked to choose a related text for daily independent reading. To connect the reading, students can be asked each day to reveal connections to the unit’s essential question(s) following the independent reading time. Our future-thinking school librarian has disbursed more than one-third of the school library collection out to classrooms. The response from learners and teachers has been enthusiastic.

Teach Students to Choose Level-Appropriate Texts—Many schools require a reading assessment such as the Reading Inventory to obtain an “objective” analysis of a student’s reading level. However, this number means little to readers or is underutilized by the students when selecting texts. Many classrooms and libraries have leveled texts available. For some tasks, it may be expedient for the classroom teacher or librarian to choose level-appropriate texts. Instead of simply providing the leveled text, however, the more effective method would be to teach students how to find and select materials appropriate to their own levels. A future-thinking school librarian could:

- Teach students how to search independently by Lexile score or reading level on Google, in Newsela, or in the school library catalog. Our school librarian calls this “standing up for your right to read...what you want...in a format that amplifies your knowledge.”
- Have students conduct one-minute reads to evaluate a text and decide if it is too easy or too difficult for them personally. Our school librarian calls this “Speed Dating.”
- Encourage students to identify and discard texts that are too difficult, and then to search for resources that are more accessible. The librarian can use these to build a library of accessible resources for next year’s students and to think forward to provide accessible reading materials quickly for current students. Our school librarian regularly selects and brings books from our public library with certain students in mind.

Collaborate to Teach Research Skills

The collaboration between school librarian and classroom teacher can have a profoundly positive effect on students’ practice of skills for independent learning.

Teach Skills for Independent Research—Even our highest-achieving students struggle with research. They often lack the skills needed to conduct an effective search for appropriate sources, comprehend the text in the sources, and then synthesize information and ideas from these valid sources into new knowledge. Too often, research is assigned as a task that we assume children know how to do independently because everyone can Google, right? Wrong. We must explicitly teach our students how to move into meaningful, purposeful, reliable research by teaching all students specific skills.

Teach Best Practices for Keyword Searches—We can’t assume that students know how to do a keyword search in Google. Learners need lessons that demonstrate how search results are impacted by various keyword choices. Students need to learn how Google results are generated and the influences involved in a webpage or document showing up in the first page of such a search. Students benefit from lessons around using precise, concise language and limiters when conducting a search, and they can use their new skills throughout their lives.

Teach about Databases and Academic Journals—Few high school students we’ve encountered in our years of experience have been explicitly taught about online academic journals and databases. As educators, we must explain to students what these resources are, how to access them, and why they are authoritative.

As a reading recovery teacher (Kristal) and Spanish teacher (Musetta), we have learned that neither age nor number of years in school accurately predicts a student’s ability to learn independently. Students need to experience what independent learning feels like. Our job, to truly be equitable educators, is to scaffold and teach students the skills embedded within independent learning tasks.
Projects that allow for personalized, meaningful research centered around self-identified problems or current issues provide excellent opportunities for students to explore academic journals and databases containing authoritative resources. Our school librarian plans these lessons jointly with teachers, teaches how to organize research in the digital world, demonstrates the time-saving utility of using valid databases, and follows up with students individually to model the academic research process. Our school librarian displays a large poster from ALA that says “…because employers want candidates who know the difference between Google search and research.”

Help Students Make the Most of Makerspaces—Many innovative school librarians are already reinventing the library space to include a makerspace. However, once again, simply providing opportunities for students is not enough. We must also provide teaching and learning opportunities for students to learn how to use and create in such spaces while engaging with other learners. Is it crazy that we have to teach kids how to do free play? If given the opportunity to choose an activity to engage with independently, many students will look at their phones, skim social media, text or message, or listen to music. How can we teach individual students to engage differently or leverage that interest in technology to create and play? Providing space, support, and resources in a makerspace inspires these skills. Embed learning in the Design Thinking or Solution Fluency models inspire students’ independent, meaningful innovation.

Reset Expectations—What are the behavior expectations when students enter a classroom or the school library? Are these expectations clear and explicit? Do they match what students want and need to do in the space? How do we know students know our expectations?

If a school library has spaces for collaboration, creation, or games, conversation will be necessary. How can shared, understood, reasonable expectations for these activities best be set and communicated? Educators, including school librarians, should not assume that students are intentionally misbehaving, but instead must find out what learners are doing, and then work with students and other educators to establish—or reestablish—behaviors appropriate for both the activity and the space.

Engage with Students—Both school librarians and students benefit when librarians think about the students that most often frequent the library space. What are the activities students most often engage in while in the space? Reaching out and talking with students who appear throughout the day give librarians opportunities to foster a welcoming atmosphere while discovering what matters most to students. Conducting action research about why students frequent the space and then building resources around the needs of the students is an effective way to improve instruction and learning. Our advice: Student by student, engage, engage, engage.

Address Students’ Needs as Lifelong Learners

The future is now. What kids actually need from their formal education is continuous innovation of method and strategy by all teaching professionals. Equitable educators must take a look at the learners in front of them, when and where they stand, and address the needs of each individual. It has never been clearer that we cannot know what tomorrow holds for our students. Yet we must be the wizards of the future. Engagement, relationship building, and collaboration between classroom teachers and school librarians in and out of the library setting are essential to student success.

Kristal Jaaskelainen is an English teacher and instructional coach at the Pathways to Success High School in Ann Arbor, Michigan. In 2016 the Ann Arbor Public School District (AAPSD) identified her as one of its exceptional teachers. In 2014 Kristal participated in the Toyota Education Initiatives in STEAM Innovation Program and was also an AAPSD STEAM mentor teacher. The Meemic Foundation awarded her a professional development conference grant in 2013, and in 2011 she was part of the team that won the high school Gale/Library Media Connection TEAMS Award.

Musetta Deneen is a Spanish teacher at the Pathways to Success High School in Ann Arbor, Michigan. In 2016 she was the recipient of a grant from the African American Endowment Fund, enabling her to introduce her students to Latino culture in Chicago. In 2015 the Ann Arbor Educational Foundation awarded Musetta and her colleague William Copeland a Great Idea Grant, enabling them to take Pathways students to visit community colleges. She coauthored (with Lauren Rovin) “Seeing with Spanish Eyes: Spanish Audiovisual Recommendations,” published by Language Magazine and available at <www.languagemagazine.com/seeing-with-spanish-eyes-spanish-audiovisual-recommendations>.

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School Librarian as Inquisitor of Practice

Reimagine, Reflect, and React with the New Standards

Elizabeth Burns
The modern school library is a complex social setting “grounded in standards and best practice” (AASL 2018). The new National School Library Standards have refreshed the student learning standards and aligned new Shared Foundations to the school library. Additionally, the competencies for learners are now complemented by competencies of effective school librarians. To be effective, school librarians must be aware of classroom pedagogy and possess a thoughtful disposition about their practice. Professional competence challenges school librarians to continuously monitor and self-assess while being receptive to professional growth. Ideally, school librarians are self-reflective. This reflective stance toward our own practice allows us to model the self-reflection process for learners and impact practice for greater student improvement.

**Engaging as a Reflective Practitioner**

Anne R. Freese (2006) has described reflection as a form of inquiry, similar to the process school librarians strive to instill within their learners. Like inquiry, reflective practice begins with a curious disposition regarding one’s own practice and the success of learners. School librarians act as professional inquirers, hoping to make sense of their own practices and how they impact student learning. School librarians reflecting on their practices are eager to identify how theory and practice inform each other.

Educators who are reflective practitioners observe how learning occurs in the school library and consider ways to improve instruction and learning (Todd 2015). With student success as their goal, reflective practitioners systematically consult research to identify best practice, collaborate with other educators, and pursue innovations in their practices. They then reflect on the impact of their work and determine how they may better meet the needs of their students. In addition to improving practice, this reflection may lead to data collection that provides evidence of an impact on student learning that can be shared with others across the school community (Loertscher and Woolls 2002; Todd 2015). The new school library standards provide several entry points for school librarians wanting to implement reflection as a regular practice.

**Reflection in the National School Library Standards**

The National School Library Standards focus on competency-based assessment and evaluation; this focus encourages school librarians to reflect on their own practices. These standards also encourage school library practitioners to pose questions about their practices and develop ideas about how teaching impacts daily activities and students’ achievement. This shift aligns with more-thoughtful attention to personalized learning and allows for monitoring effectiveness and growth in meeting the needs of all learners.
The new AASL Standards were developed with the intent that school librarians at all stages of their careers will be guided by best practice and a strong research base. Through an inquisitive stance, the school librarian will ask questions about the teaching and learning process. In Part II of the standards, the end of each chapter highlighting one of the six Shared Foundations contains a compiled list of best practices. These suggested activities align with the tenets of the Key Commitment expressed by the Shared Foundation on which the chapter focuses and assist school librarians in identifying those practices they may choose to implement in their own practice and setting. Through this endeavor, school librarians may use the suggested best practices, and then plan and reflect on their actions. Additionally, throughout the standards are questions to guide the reflective practitioner. These questions are written to prompt reflective thought when implementing the new standards and engage others in the use of the Shared Foundations for greater impact on students’ learning and achievement. Finally, several assessment and evaluation guides are included. The evaluation suggestions for school librarians (AASL 2018, 153), the school librarian growth plan (AASL 2018, 164), and the Evidence of Accomplishment list in Appendix H all serve as resources to aid in the reflection process.

Once reflections are complete, school librarians may choose to use the results of their reflection to improve or modify practice—or they may choose to share their results through discussions with colleagues or decision makers in their school communities. Any reports or documentation that are created are evidence and a means of supporting assertions of the value of library practices; this evidence may also be used to enhance collaboration. Reflection and resulting documentation provide evidence of continuous improvement in practice. Formalized reflection is designed to assist school librarians improve practice. In short, when acting as reflective practitioners, school librarians gain a sense of what is successful in their school libraries and build sharable evidence to support what does and does not work.

Using the format of the reflective practitioner, as a school librarian you can implement the new standards and reflect on the impact of your activities. What? Reimagine Student Learning

The new AASL Standards challenge school librarians to refresh their practice. Using the Shared Foundations and the language of the Key Commitments, you can refresh low-level assignments with robust, authentic tasks that ask students to think critically. Reflection begins with an inventory or recall of what is or has recently occurred. After developing and teaching new lessons, the reflective practitioner thinks objectively about what happened.

Consider:

• What did you observe about your learners?
• Were learners engaged in the learning process?
• Were the strategies and assessments aligned to the objectives?
• Did the lesson allow learners to connect information in a new way?

As a reflective practitioner you can embrace the opportunity to pause and explore the impact of your practice.
So What? Reflect on Your Experience

Reflection involves not only thinking about a teaching and learning experience, but also questioning parts of the experience. Reflection is thinking about the learning experience and then considering what you might do differently the next time. Deep reflection on a teaching experience can be challenging. Many reflections tend to be descriptive and fall short of focusing on changes in attitude or practice that lead to professional growth. Questioning your practice to identify areas of strength and areas of weakness allows you to determine what is important. This assessment identifies where student needs lie and helps you to prioritize areas of focus in your practice.

The questions in the standards help form initial reflective thoughts on your implementation of the standards. This reflective component challenges you to explore best practice in action. Reflections are commonly viewed as self-assessments, and when conducting a good reflection you will discuss personal feelings and ideas while analyzing your teaching. Reflection includes open self-disclosure and a connection to experiences in an effort to demonstrate personal growth.

Questions that can guide your reflection as you begin this practice include:

- What do you think went well? Explain.
- Do you think the task made an impact on student learning? How are you measuring this impact?
- How was the experience different from what you expected—for you and your students?
- What would you do differently next time?
- What surprised you during the learning experience?

Now What? React to Your Findings

Once a deeper understanding of what has occurred in the lesson has been reached and you have reflected to discover the strengths and challenges you face in your practice, it is time to think about your own growth and development. In the reaction stage a plan for next steps can begin. It is here that you will think about the impact you are having on students and begin to consider sharing this information with others.

Again, here are some ideas to assist you as you begin your process:

- How will you think or act in the future as a result of this experience?
- What were your thoughts during the experience? And why did you think that way?
- How or what can you learn from this experience?
- What areas will you focus on for improvement in future lessons?
- What do you regard as your most important personal learning experience during the lesson? How will you apply it in the future?
- What did you learn about yourself as a learner and/or school librarian as a result of this reflection?
- About what would you like to learn more, related to this reflection?

Using the Shared Foundations and the language of the Key Commitments, you can refresh low-level assignments with robust, authentic tasks that ask students to think critically.
When we become reflective practitioners, we can learn from our experiences. Self-assessment measures where we are and where we want to go next in our practice.

Reflection for Lifelong Learning

Reflection is the process that helps school librarians think about what happened, why it happened, and what else could have been done given the same situation. The inquiry process of lifelong and continuous improvement is present in every aspect of an effective school library. By employing the opportunities for reflection through the implementation of the new standards, school librarians engage more deeply and explore new opportunities in their practice. Using the evidence collected in the reflection process, school librarians have the potential to interrogate their practice and set the plan for continued professional and pedagogical growth. The evidence of impact on students’ learning gained through reflective inquisition can be shared to benefit the practice of other school librarians and to demonstrate the value of school libraries.

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SCHOOL LIBRARIES ADDRESSING THE NEEDS OF ELL STUDENTS

Enhancing Language Acquisition, Confidence, and Cultural Fluency in ELL Students by Developing a Targeted Collection and Enriching Your Makerspace
In 2009 the American Library Association included in their annual survey questions that focused on English Language Learners. The survey found that although 14 percent of the schools responding had student populations that included at least 25 percent English Language Learners, school library collections had few materials to support those students. Although many librarians agreed that encouraging free-reading choices was the most effective initiative for supporting English Language Learners, 58 percent of those responding indicated that less than 1 percent of the materials in their collection is in a language other than English. Respondents indicated that 97 percent of the collections contained less than 10 percent non-English materials (AASL 2009).

Why Are So Few ELL Resources in the Library?

In a survey conducted by School Library Journal and Rourke Educational Media in 2015, librarians stated two basic reasons for the lack of materials. The first, predictably, is funding. Only 40 percent of schools surveyed have a dedicated ELL budget (Barack 2015). This circumstance requires librarians to use already stretched library funds to purchase ELL materials, and foreign language books tend to be more expensive than English versions. As Donna McAndrews, a school librarian from New York said, “I find that ELL materials are more expensive. Sometimes it is hard to justify the expense” (Barack 2015, 36). The second cited reason for having few ELL resources is that the materials are hard to find. While many English Language Learners want to read in their L1 (first) language as well as their new language, materials such as popular new books that their peers are reading are often either impossible to find in languages other than English or prohibitively expensive.

When new students come to my school, one of the first places they visit during their tour is the library. I watch students and parents as they are shown our small foreign language section. I see the students light up. I know it makes them feel that they are not quite so alone. They realize that Wyandot must have other students who read in their language, and as a school we must care enough about them to make sure they have reading materials in their language. My students particularly love reading the Diary of a Wimpy Kid series and Harry Potter books because, although they are reading in Korean or Japanese, they are reading the same books as their peers. This sentiment has been
According to the National Center for Education Statistics, in 2011 the achievement gap between non-ELL students and ELL students was 36 points in the fourth grade and 44 points in the eighth grade (2012). One way to address the achievement gap is by cultivating students' interest in reading. Several studies have indicated that for young people reading is a social process (Krashen 2004; Gramstorff and Hayden 2000). Yet, as students get older we progressively require that they read independently. Educational research is now suggesting that this forced independence is a major contributor to the reading decline that begins in the upper elementary grades (Knoester 2009). This is one of the reasons it is important to continue to expand a school library’s collection of foreign language books that are of interest to ELL students. Ideally, this collection includes the same titles that ELL students’ peers are reading. However, ELL students also need English language texts that will help cultivate English language proficiency and interest in reading in English as well as in their first language. One type of text that researchers and librarians suggest are graphic novels. Stephen Krashen has pointed out that the visual narrative accompanying the text in comic books “can provide clues that shed light on the meaning of an unfamiliar word or grammatical structure” (as cited in Chun 2009, 146). The pictures help give context and meaning when a reader comes across unfamiliar words, and provide the multimodal experience that many young people find engaging. Graphic novels also allow ELL students the opportunity to engage in critical literacy. Often we focus only on an ELL student’s ability to comprehend, but to be successful in school a student must be able to analyze, synthesize, and evaluate text. Graphic novels often address social, cultural, and historical content, but make it accessible to readers with limited language proficiency.

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Collection Development for ELL Students

Graphic novels also allow ELL students the opportunity to engage in critical literacy. Often we focus only on an ELL student’s ability to comprehend, but to be successful in school a student must be able to analyze, synthesize, and evaluate text. Graphic novels often address social, cultural, and historical content, but make it accessible to readers with limited language proficiency.

While building a collection or looking for a supplement to your print collection, try using the International Children’s Library site <www.childrenslibrary.org> where students can read books in fifty different languages. Also, just as older students like to read books in their native language that other students are reading in English, so do our youngest emergent readers. Books from authors such as Mo Willems, Eric Carle, and James Dean are available in languages other than English and could be added to the collection. As emergent readers, these young ELL students do not read well in any language, but we should encourage students to learn to read in both
languages. As Lily Wong Fillmore said, "Parents and teachers should be working together to find ways to support children's development and retention of their primary language" (2000, 208). The word "development" is key. As a young person's reading skills and language skills develop, we do not want them to leave one of their languages behind.

Makerspace Benefits for ELL Students

Useful for All Students Regardless of English Proficiency

Another library trend that can be used to benefit all students, including ELL students, is the creation of makerspaces. A makerspace is a place containing tools and materials for the creation of innovative, practical, or artistic objects. They can be physical objects or created in a digital space. Makerspaces are also places to pursue ideas, hypothesizes, and passions. In schools, makerspaces have generally been used to encourage the study of STEM and to teach students critical-thinking and problem-solving skills. STEM-based makerspaces have materials such as computers, audiovisual equipment, 3-D printers, and electronic components. They also tend to include lots of building materials or electronics that are made specifically to encourage the use of STEM skills. However, a makerspace does not have to be geared toward science and technology.

Some makerspaces have sewing machines, arts and crafts materials, painting supplies, and other low-tech materials that still encourage making, critical thinking, and problem solving, but are not STEM focused. As Shirin Vossoughi et al. (n.d.) have pointed out, makerspaces can also "promote social interaction through shared activity and play." Although the maker movement has been embraced—and in some instances usurped—by STEM, the idea of making has been around since time began as has its social aspect. As makerspaces proliferate throughout schools and in libraries, teachers of ELL students are starting to see how these spaces can be used to support their students who have limited proficiency in English.

Queen Victoria School

A group of teachers in Ontario formed a personal learning community to explore how makerspaces enhance student learning. In blog posts, the teachers describe how surprised they were to find that the making experience was impactful on their ELL students. One of the teachers wrote, "Our goals for this project are to enhance our learning about makerspace and design process, but there are so many opportunities for learning that are unplanned and unintended. It's these opportunities that excite me the most, because I don't see them coming!" (Astanfie 2017). What they did not see coming was that their ELL students would excel in making. The teachers mention that they went on several trips to learn how to use the hand tools in their makerspace, but that many of their ELL students were already familiar with and had experience with these tools. This experience allowed ELL students to shine and even help teach their peers. This circumstance gave the ELL students a great deal of confidence, and they were able to engage with their peers on an equal level. All students were able to use videos on the YouTube Instructables channel to learn skills they needed to complete their projects, minimizing the language barrier. Because what they were doing was very visual, all students were able to communicate with their team members. The concept is very similar to project-based learning. Students are able to continue to learn content and skills while they are learning the new language. These are often forms of learning, "such as design, multimodal practices, creativity" that are not necessarily taught in a regular class setting, and that failure can be an opportunity in the school library (Barton, Tan, and Greenberg 2017).

Evergreen School

The Evergreen School requires that all of their students begin learning a second language in first grade. Although this is an example of English-speaking students learning another language, the principles used there apply in the context of working with ELL students. In Lindsey Own's 2016 article she describes how the school administrators began encouraging teachers outside of the STEM subjects to use their makerspace. They believed that "the tinkering, iteration and physical connection to content afforded by a makerspace can be brought to every subject area." This kinesthetic aspect to learning can certainly be applied to language acquisition, and what better place to connect physically to learning than a makerspace? The students at Evergreen School used green screen software applications to create postcards, telephone conversation videos, commercials, weather reports, and interviews. With Makey Makey products, learners created rainforest dioramas with audio, so
not only did students put their language skills to work but they also learned about the rainforest. They used Scratch free programming language to create games using the second language they were learning, and then the other students played the game. An arts and crafts project had the students making jewelry and then setting up a market to sell their creations. The market was a Spanish market so no English was allowed! Interestingly, Own’s article points out that most of these projects focus on using the second language as a way to learn about the culture and way of life of the people who are native speakers of that language. The focus is on cultural fluency because the educators at the school believe that people who speak a second language even with perfect grammar cannot effectively communicate with people who think in another language without understanding those people’s culture. This is an important point and one worth more study.

My Experience with Makespace

Although I do not have a designated space in my school library for making, I have collected many items to encourage my students to make. Some of the items are high-tech, and some are geared towards arts and crafts making. Each Friday, my students and I participate in Challenge Friday. These challenges vary greatly, from engineering challenges that require them to create an electrical circuit to crafty challenges where they figure out what to make out of a toilet paper roll. While working on these challenges one thing I have learned is that different cultural groups are attracted to different materials. This is something to which I did not give a great deal of thought until I read an article by Angela Barton, Edna Tan, and Day Greenberg about equity in the maker movement. In the article the researchers “wonder if individuals who do not see their cultural repertoires of practice reflected in makerspaces—in the people, practices, tools and artifacts produced—will be attracted to makerspaces” (2016). Last year a friend gave me a bag of materials. I had no idea what we were going to do with them, but I have learned over the years the wisdom of the saying that “one person’s trash is another’s treasure” so I put the stuff in the library cabinet. For weeks the kids just ignored it. Then one afternoon a group of Japanese girls were in the library making, and they used these materials to make beautiful lanterns. Originally, it just did not dawn on me that certain materials could be more interesting or attractive to some cultures than others.

Our makerspace gives students an opportunity to learn many skills while minimizing the language barrier, but it can also be used as a conduit for strengthening cultural literacy. Parents and
students introduce us to games and crafts that are traditional to their culture and challenge us to learn them. For example, as part of the maker culture in my school I started a Knit and Crochet Club. I crochet because most of my family is Appalachian, and needlecrafts, including quilting and embroidery, are still a large part of the traditional culture. Dozens of girls from at least four different countries stay after school every Monday to knit and crochet. For some it is a social experience; for others it is a connection to a grandparent; and for many of my ELL students it is an opportunity to interact with English speakers and to participate in something they consider to be an American activity. All makerspace administrators should be asking themselves these questions: What materials should I include in my makerspace to engage all of my students in the making process? Am I taking advantage of and honoring the cultural and social aspects of makerspace?

Priceless Smiles

Although ELL students are sometimes a small constituency, many resources already in the library can be used to enhance their language acquisition, confidence, and cultural fluency—resources such as graphic novels, hi-lo books, and makerspace materials. Buying popular books written in foreign languages may be expensive, but just a few books can make a difference. The smiles are well worth the expense.

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Problem Scoping

Design Thinking & Close Reading

Makerspaces in the School Library

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Makerspaces, collaborative workspaces stocked with materials and tools for creating, building, designing, and learning, are becoming more and more common in schools and, in particular, in school libraries. These educational makerspaces “harness the same intellectual playground concept for the purpose of inspiring deeper learning through deep questioning” (Kurti, Kurti, and Fleming 2014, 8). By letting students ask questions, dig for answers, and work through solutions, making deepens learning and understanding (Kurti, Kurti, and Fleming 2014).

Makerspaces in the school library allow for connections between making and literacy. Indeed, such connections are authentic and natural as real-world engineers practice multiple forms of literacy (Wilson-Lopez and Minichiello 2017, 7). In the makerspace, before building students might write proposals. Students can also write reflections on the process or write their own instructional pieces. Angela Stockman has even encouraged teachers to turn the writing process into a making process, linking the two together (2016). To design and build new creations, students might do research or read how-to guides. However, perhaps the greatest advantage to hosting the makerspace in the school library is the collection of high-quality children’s literature. As the researchers at the Tufts University Center for Engineering have shown, children’s literature can inspire making. Their Novel Engineering project has studied the way that young student engineers work through the design process when making is tied to literacy. In particular, students use children’s literature as part of the design process, particularly in the problem-scoping stage. (For more about the project at Tufts, go to www.novelengineering.org.)

Problem Scoping: The Research

Problem scoping is part of the problem-definition phase of the design process. The design process starts with problem definition, followed by brainstorming, designing, building, testing (repeated as necessary), and is finalized by showcasing or sharing work. As described by Amy Wilson-Lopez and Angela Minichiello, the processes of defining problems, generating and evaluating solutions, testing and optimizing solutions, and communicating solutions do not happen linearly, but rather simultaneously (2017). However, for the purposes of understanding and teaching these processes, it makes sense to look at them as discrete.

Researchers in the Novel Engineering program posit that real-world engineers and designers start with complex and poorly designed problems. The first step of design is thus to scope the problem (Watkins, Spencer, and Hammer 2014). Engineers work within a system of limitations and constraints. It is easy to confuse these two terms. Limitations are the requirements that solutions must meet, while constraints are restrictions on possible solutions, such as time or access to materials (Wilson-Lopez and Minichiello 2017, 8).

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Problem scoping is the process by which student designers “figure out” the problem that they need to solve (Watkins, Spencer, and Hammer 2014). It is the process by which the problem is defined. Students identify the key elements or factors to which they need to attend, and also consider the context of the problem (Watkins, Spencer, and Hammer 2014). Engineers work within a system of limitations and constraints. It is easy to confuse these two terms. Limitations are the requirements that solutions must meet, while constraints are restrictions on possible solutions, such as time or access to materials (Wilson-Lopez and Minichiello 2017, 8).

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Problem Scoping in Practice

Children’s Literature as a Scaffold

In my work with students I have found the problem-definition step to be a challenging one. Students can readily identify a group they might want to help (e.g., animals) or something they want to make (e.g., a fidget spinner), but have more trouble clearly identifying a problem that needs a solution. While making can take the form of recreating or tinkering, if we want students to more deeply practice their critical-thinking and problem-solving skills, they need to master the skill of problem scouting. Using children’s literature is a way to scaffold this process.

Connecting making and literacy has the potential for inviting students to engage with the text in new and deeper ways. Effective problem scouting from a literary work asks students to dig more deeply into the text to find relevant details. I support this work through whole-class brainstorming and guided practice with problem-scoping worksheets.

Whole-Class Brainstorming as an Introduction

Whole-class brainstorming is a good way to introduce the idea of problem scouting to students. In one lesson, fourth-graders who were reading The Young Man and the Sea by Rodman Philbrick were challenged to make boats for the main character, Skiff. The kids explained Skiff’s problem: to raise money and help his family, he needs to catch a tuna. As each student spoke, I added the student’s comments to a piece of chart paper. To get more details, I asked a clarifying question: “Will he need to pull the tuna up into the boat, or will he drag it behind?” They told me he’d be dragging it. Therefore, we knew that any boat they would design would need to be able to go out into the water, and then pick up the tuna and drag it back. This would be considered a limitation. The tuna, in our case, would be a blue clothespin with a rock glued to it.

I also ask kids to think about constraints. Constraints might come from the story, or they might come from the context in which the making is taking place. In this case, I told learners that they would have one class to design and build, and the following class we would do finishing details, and then motor our boats in a kiddie pool. I also gave them the requirement that the boat had to be powered by a Sphero, a robotic sphere. For materials, I put out some scrap wood and told students they had to use the wood as is (no cutting). I also gave them cardboard, craft sticks, mini dowels, straws, corks, and empty water bottles. They could use LEGO bricks as well. Together we had effectively identified the parameters of the problem, and the students were ready to design and build.

Small-Group Projects as Further Practice in Problem Scoping

Problem scouting can be more independent as students have more practice. Fifth-grade teachers used the novel Out of My Mind by Sharon M. Draper as an all-class read aloud. This novel lends itself very well to a maker project and to problem scouting in particular. In this book, the main character Melody loves music, fast food, and trivia. She is smart and is working hard to make the school’s quiz bowl team. She also has cerebral palsy and is severely limited in motion and communication. The students were given the task of designing a product for Melody. The challenge was purposefully left open so students could think of it as something she wanted, something she needed, or something to help her with her day-to-day life. I wanted students to realize that Melody was more than her disability and that their products could be unrelated to her cerebral palsy but would need to be devised with her physical challenges in mind.

The process started with students being put into groups. They were asked to complete a worksheet that asked students to record Melody’s likes, wants, and limitations. Some of the worksheets were filled out on a fairly simple level, but others had quite lengthy lists. For example, under “What does Melody like?” groups included Melody’s favorite subjects (math and history), her friend Rose, and even her love of McDonald’s fast food. Similarly, while many groups made assumptions about Melody’s wants (“a voice,” “legs that work,” “to walk”), some groups more deeply mined the text and included joining the Whiz Kids team (the quiz bowl team Melody wants to join) and a computer. While all students were exhibiting some degree of textual analysis to problem scope, they did so at varying levels. In this way, the problem-scoping worksheet serves as a formative assessment. Feedback helps students see that in both reading and problem scouting, understanding a character is not about assumptions but requires close attention to the text.
This attention to the text continued as students worked on their designs. I overhead one student ask, “You know how it’s hard for her to get out of her chair?” referencing moments in the book that focused on the difficulty Melody and her family faced in getting her from her wheelchair to her bed. In another class, a group focused on her troubles eating, and discussed the idea of making a chewing machine. In these instances, students took details from the book—Melody’s needs and limitations—to define a problem that their design would solve.

**Hybrid Approach to Problem Scoping**

Another instruction model is a hybrid of whole-class and small-group problem scoping. Third-grade students study theme, which makes fables a nice literary genre to incorporate into making. For two years I have used the “Engineering Solutions to Aesop’s Fables” lesson from littleBits (available at <http://littlebits.cc/lessons/engineering-solutions-to-aesop-s-fables>). After I’ve read three fables to the students, we make a chart on the whiteboard, identifying clients and their problems (see table 1). In the story of the fox and the grapes, the students readily identify the fox as a potential client, but take some prodding to find the other character: the grapes (or, perhaps, the farmer). For each character, we identify the general problem. In “The Belling of the Cat” the mice don’t want to be eaten by the cat. The cat, in turn, would like to catch the mice. The peacock can’t fly, according to the fable, because his tail is too heavy. From there, students work in groups to choose a client and do further problem scoping. These fables work well for the younger students because the details they need to mine are clearly stated.

**Literature as an Authentic Framework**

Problem scoping is an essential skill not only because it defines the parameters of the problem, but also because a clearly defined problem leads to new design ideas. Rather than simply recreating something they have seen, when students complete the full design process they come up with novel ideas. Moreover, they can articulate how their invention solves the problem, thus demonstrating their problem-solving skills. Using the children’s literature that is readily available in the school library offers an authentic framework in which design thinking can occur.

<table>
<thead>
<tr>
<th>FABLE</th>
<th>CLIENT: CHARACTER</th>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Fox and the Grapes</td>
<td>The Fox</td>
<td>Wants the grapes but can’t reach them.</td>
</tr>
<tr>
<td>The Fox and the Grapes</td>
<td>The Grapes (or The Farmer)</td>
<td>Do not want to be eaten.</td>
</tr>
<tr>
<td>The Belling of the Cat</td>
<td>The Mice</td>
<td>Can’t get to food without being chased by cat.</td>
</tr>
<tr>
<td>The Belling of the Cat</td>
<td>The Cat</td>
<td>Wants to catch the mice.</td>
</tr>
<tr>
<td>The Peacock</td>
<td>The Peacock</td>
<td>Now that his feathers are so beautiful, he can no longer fly.</td>
</tr>
<tr>
<td>The Peacock</td>
<td>The Eagle</td>
<td>Plain looking.</td>
</tr>
</tbody>
</table>

Table 1. Fables, characters, and problems.

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**Megan Blakemore**

is a teacher librarian at South Portland Schools in Maine. She is a member of AASL and a board member at large for the Maine Association of School Librarians. Megan is currently pursuing a doctorate at the Simmons College School of Library and Information Science. You can read her blog at <www.meganfrazerblakemore.com>.

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**Works Cited:**


That's the power of this program. It engages kids in a new way. Even if just for an hour, all the fear, all the self-consciousness, all the resistance just fade away.

CBC COLUMN

This is not your mother’s library.

Who came up with that image anyway—drab, stale shelves with librarians shushing customers. Nonsense!

Today, not only do you find colorful rooms, and innovative librarians, if you’re lucky, you might also find dogs.

I know because that’s what happened to me! When I first discovered the Read-to-Dogs program at my local library, I was immediately hooked. First of all, dogs don’t often wander into the library. Second, thank goodness someone decided they should. On that day, I saw fourteen dogs. Big dogs, small dogs, purebreds, and lovable mutts. All were calm, gentle, and ready to be read to.

But reading to dogs is not just a novelty or a fad for animal lovers. These dogs are working, and they make a difference where it’s needed most—in children’s lives.

Reading out loud was not my favorite thing when I was young. I disliked anything that brought attention my way, so reading aloud was definitely not enjoyable. Because of that nervousness, I would get hung up on some of the words. I remember feeling that I wanted to just disappear.

Given the choice, of course, I would have stayed and read to a dog.

I have always known the calm reassurance of animals, especially as a child. I have counted them some of my best friends. When I saw this program and watched kids sidling up to their canine companions, I knew I wanted to share this story. I wanted to try to capture the magic of what I was witnessing, both visually and in words.

On that first visit, I listened closely. It went like this:

Girl: “Can I read to your dog?”

Handler: “Sure. This is Boots. She was left outside at a shelter.”

Girl looks into Boots’s eyes, strokes her ears, and says, “They didn’t want to keep her?”

“"I don’t really know,” the handler explains. “It was raining, so the shelter named her Sprinkles. But when I adopted her, we thought Boots was a better fit.”

Reading to Dogs—How a Loyal Listener Can Help

Lisa Papp
Lisa@LisaPapp.com
Girl: "Boots—because of your feet." (Girl pats Boots's little white paws.)

Handler smiles: "She loves to hear you read. What story do you have?"

Girl proudly shows Boots her book, sits close, and begins to read.

That’s a typical introduction. It never gets old. I know all the stories of the therapy dogs at my library. It never gets old because each child has a little different reaction. Maybe a little history they share with the dog. But each of the kids has just made a friend. One they care about. One they can count on. The stage is set. Now it’s just friends spending time together.

No pressure. No scores. No have-to’s.

At this point, the handlers settle back. They tell me they are not to assist with the reading of words unless specifically asked by the child. In other words, the handlers just let the kids go. At their own pace. At their own level. It’s their time with the dogs. And it’s a magical time...of being loved...of being accepted...of being okay exactly as you are.

Exactly as you are.

That is rare in the world of learning and achieving. It’s a very generous space. A wide open space. There’s room for everyone, and no room for judgment of any kind. It’s a vibrant learning ground, and the kids take right to it. They swim in it. They soak it up. They leave filled to the brim with the wonderfulness of themselves. What a very special gift.

One afternoon, I watched a nine-year-old girl spend the entire hour and a half reading a single Golden Book to a dog named Chloe. Her dad said she would not pick up a book
at home, but she would come to the library for this.

That’s the power of this program. It engages kids in a new way. Even if just for an hour, all the fear, all the self-consciousness, all the resistance just fade away.

The experience is wonderfully beneficial, not only for struggling readers, but also for children who are shy or feel different in some way.

My goal in creating Madeline Finn and the Library Dog (Peachtree 2016) was to capture some of that magic. I wanted to show Madeline’s vulnerability, her frustrations, her embarrassment. And I wanted to show how her emotions shifted when she met Bonnie, the library dog. It was fun to both write and illustrate the book because I had a chance to tell this story in two different mediums. Some things were better told in words, such as when Madeline Finn discovers, “It’s fun to read when you’re not afraid of making mistakes.” That’s a big truth. And the illustration of Bonnie and Madeline Finn gazing into each other’s eyes—the moment Madeline Finn decides to trust Bonnie—couldn’t really be expressed as well in words. I hope the combination of pictures and words reaches out to kids in a powerful way.

I have yet to meet a librarian with a therapy dog program who hasn’t witnessed breakthroughs. At a recent event, a school librarian told me of a mother in tears as her son read a Dr. Seuss book cover to cover to a therapy dog named Mr. Chips. I give so much credit to the teachers and librarians who are willing to give these programs a try. Thank you! And my heart is filled with gratitude for the wonderful handlers who give their time so generously, and share their therapy dogs with the children. You truly make a difference in young readers’ lives.

You can’t put a price on self-confidence. On self-acceptance. On understanding that you have a voice in the world. It goes beyond reading. These are gifts children will share with the world one day.

And the dogs are perfect messengers.

These dogs create that safe and beautiful space of “I’m okay no matter what.” And when you feel it, you believe it!

And when you believe it—anything’s possible!

Lisa Papp grew up telling stories. With a notebook full of sketches, her early tales featured her cat, stuffed animals, and other nature-y things. Today, Lisa is still making up stories and painting pictures, but now they fill the pages of children’s books. She has received awards for both her writing and illustration, including a 2011 National Parenting Publication Awards Honor book, a 2012 Storytelling World Resource Award, and the 2017 Children’s Choice Book Award winner in the K–2nd-grade Book of the Year category. Lisa lives in Pennsylvania with her husband, Robert, also an artist, and three wildly creative cats—to whom she does read. You can visit her website at <www.lisapapp.com>.

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