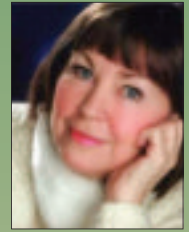


Bridging Two Worlds

Moving from Repository to Learning Spaces

KATHLEEN JOHNSON



“The closer the physical resources are to the users, the more they are used.”

SEATTLE ACADEMY

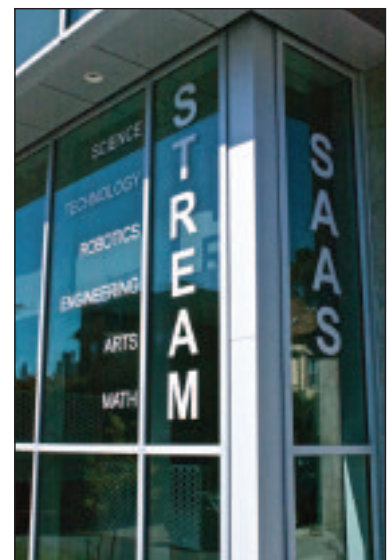
Founded in 1983, Seattle Academy is a private, urban school encompassing grades 6–12 that has steadily grown over the years and now occupies six buildings and one satellite space. In 1997 the high school became one of the first in the nation to adopt a one-to-one laptop program. The current middle school has a computer lab and permanent laptop collections in most classrooms. The school is steeped in a culture of performance and focuses on project-based learning, embracing risks, and creativity.

The most recent addition to the school’s campus has been the five-floor STREAM building, which opened in the fall of 2015. The STREAM building is purpose-built for curriculums in science, technology, robotics, engineering, arts, and math. Seattle Academy students in the sustainability classes challenged the architects to incorporate more environmental responsibility in this new facility (Roberts, 2015), resulting in a number of green features, including natural ventilation and lighting and an 11,900-gallon cistern that collects rainwater to provide toilet flushing and landscape irrigation. This building is expected to use 70% less energy than similar buildings of its type.

The STREAM facility includes a two-floor learning commons. The opening of the learning commons was a dream come true for me, as I had first proposed this new space during the school’s 2007–2008 master facilities planning process. Such facilities have blossomed in colleges and universities, where space design influences learning. These new spaces put a premium on comfort, flexibility, and technology-friendly designs. Seattle Academy’s learning commons functions as a multipurpose space for common library activities such as research, study, presentation rehearsal, team collaboration, and teaching, in addition to functioning as a space for student dining, meetings, community events, and student art display. I envisioned the learning commons representing the possibility of seamless service that emphasizes student needs. And after many years of planning and fundraising at Seattle Academy, the learning commons became a reality.

The overall mission of the Seattle Academy Library is to support our students to effectively use the information ecosystems of our modern era in order to become lifelong learners who create ongoing opportunity in their careers and lives.

Library motto: “The library will save you time.”



Seattle Academy’s STREAM building



JUNIOR FICTION

DO TRY THIS AT HOME

Pflugfelder, “Science Bob,” and Hockensmith, Steve. Garrett, Scott [ill.] **Nick and Tesla’s High-Voltage Danger Lab.** Quirk Books, 2014. 237 p. \$12.95. 978-1-594-74648-2. Grades 4-7. When eleven-year-old twins Nikola and Tesla Holt are sent to live with their eccentric uncle, Newt, while their scientist parents go to Uzbekistan to investigate a new method of soybean irrigation, they expect to have a boring summer. After all, they’re supposed to be going to Disneyland, not hanging out with an uncle they’ve never met.

However, after meeting their uncle, things start looking up. He’s a mad scientist inventor, with a super-duper lab in the basement, filled with all sorts of gadgets, tools, and chemicals, and he doesn’t mind at all if Nick and Tesla help themselves. The summer might be more fun than they thought! But that was before Tesla’s keepsake star necklace gets lost, a black SUV starts following them, and they get mixed up in a kidnapping.

Included are illustrated directions for actually making inventions used in the story: a bottle rocket launcher, a Robo-cat, an intruder alert system, and others.

Pflugfelder, “Science Bob,” and Hockensmith, Steve. Garrett, Scott [ill.]. **Nick and Tesla’s Secret Agent Gadget Battle.** Quirk Books, 2014. 254 p. \$12.95. 978-1-594-74676-5. Grades 4-7. Nick and Tesla, wannabe inventors, have decided that summer spent with their eccentric mad scientist uncle isn’t so bad, even if it does mean no Disneyland. After all, he lets them have full access to his lab and all the stuff in it, doesn’t ask questions, and seems content to let them roam around the neighborhood with their new friends Silas and DeMarco. Now, if only the neighbor lady would stop glaring at them.... What is her problem, anyway?

Then, things get a little too exciting. A long-awaited phone message from their mom telling them they’re in danger and not to trust -someone - is broken off just before she names someone, leaving the twins convinced that, whatever their scientist parents are doing, it isn’t researching soybean irrigation in Uzbekistan.

Included are illustrated directions for making a spy camera, a code wheel, and a booby-trap balloon drop.

Pflugfelder, “Science Bob,” and Hockensmith, Steve. Garrett, Scott [ill.]. **Nick and Tesla’s Special Effects Spectacular.** Quirk Books, 2015. 250 p. \$12.95. 978-1-594-74760-1. Grades 4-7. When Nick and Tesla’s new friends, Silas and DeMarco, become obsessed with filming an action movie full of special effects, the twins can’t help but get involved. Making gadgets for a movie? Awesome! And when DeMarco’s Aunt Zoe gets them all onto the set of a Cash Ashkinos movie, to see real special effects up close, they’re thrilled. Maybe they can get Cash interested in their movie!

But it doesn’t take long to discover something shady is going on. Why is someone sabotaging the making of *The Stupefying Metalman*? Who’s leaking embarrassing back stage videos? Is it the star of the movie, Damon Wilder? Or is Cash actually behind it all? Aunt Zoe may lose her job if they can’t figure out what’s going on!

Includes illustrated directions to make a super-steady video camera rig, a robo-arm, a stunt dummy, alien/zombie stage makeup, and a grappling hook wrist launcher.

Pflugfelder, “Science Bob,” and Hockensmith, Steve. Garrett, Scott [ill.]. **Nick and Tesla’s Super-Cyborg Gadget Glove.** Quirk Books, 2014. 270 p. \$12.95. 978-1-594-74729-8. Grades 4-7. When Nick and Tesla’s Uncle Newt and his sorta-kinda girlfriend Hiroko get a job at the Hall of Science, putting finishing touches on the animatronic figures in the Hall’s newest exhibit, the Hall of Genius, the twins tag along. They can’t help, but they can watch!

However, if suspicious glitches can’t be fixed in time, the grand opening may not happen, and Uncle Newt and Hiroko’s professional reputations will be ruined. Who’s behind the breakdowns? Is it the 6-foot-tall owl mascot they keep seeing wandering around? Is it the original designer of the exhibit, who was fired? Or is it the museum director, who used to be the director of the Hall’s biggest rival museum? And how does space-based solar power (their missing parents’ project) and the Solanow company fit into all this?

Included are illustrated instructions to make the title’s super-cyborg gadget glove, with four different finger functions.

FLEXIBLE—WORD OF THE DAY

The learning commons at Seattle Academy represents a highly flexible, comfortable space for a school that has long functioned with less than optimal space. (Space is scarce and expensive; the real estate boom incorporated 73,000 new Seattle residents in 2014 alone.) Our facility includes adequate Wi-Fi, a smart board, several large portable white boards, and a two-stories-high projection screen with a professional sound system. Comfortable furniture offers café-style tables and chairs with reconfigurable cubes. Couches, tables, and coffee tables designed as charging stations complete the mix. At the September 2015 *School Library Journal* Summit, Seattle Academy hosted 40 librarians during the pre-summit school library tours. It was a fabulous way to christen our new learning commons.

As flexible as the physical spaces are, planning for the learning commons has likewise necessitated flexibility. And just as students participated in the building design, so too do they participate in defining its use. We are deliberately taking an ongoing design-thinking approach to this precious space in our school; we observe every day how students use the space. What do their activities tell us about their needs? How do they rearrange the furniture and for what uses? What support services are they asking for? Every day they answer these questions through their actions. As of this writing, our learning commons has only been open for 12 weeks, so we are in the very early stages of integrating this multipurpose space into our daily routines.

Flexibility also extends to spatial ownership—everyone is encouraged to contribute to the activities hosted

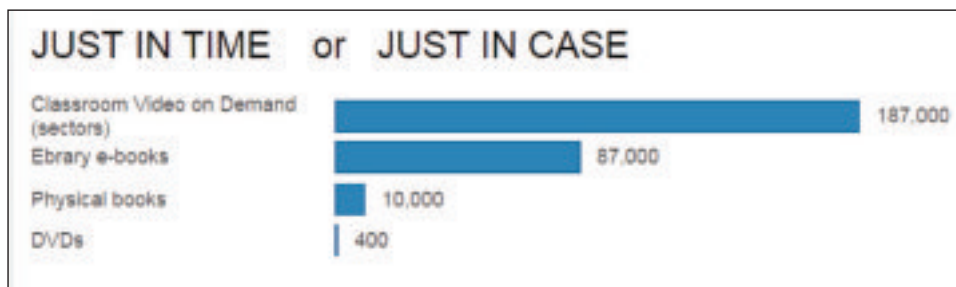


Figure 1. Just-in-Time, Just-in-Case Collections

in the learning commons. The space is available to all programs and departments. A new middle school, currently in the design phase and projected to open in 2018, will also include a learning commons. Director of academic technology, Meredith Hale, a certified librarian, runs the middle school lab.

Many learning commons activities occur throughout the campus. The basement of the STREAM building houses a dedicated robotics lab. Hale conducts a maker club in the middle school computer lab. A science teacher and visual arts teacher collaborated to create two mobile model-making supply carts to accommodate students creating models and prototypes.

CULTURES OF INNOVATION

“Beyond the core literacies of reading, writing, computation, and research, the world-wide culture of innovation, discovery, multi-polarity, interdisciplinary thinking, and rapid change depends on the explosive potential of the human mind, not entombed truths from the

past” (Markham, 2013). Librarians who adopt this pedagogical philosophy are well poised to contribute to knowledge-making inquiry beyond the classic research paper. Seattle Academy employs project-based learning that involves innovation, design thinking, systems thinking, and big data analysis, each complemented with knowledge of team dynamics. Traditional library collections are less relevant to some innovation projects because they document the past. Creative, diverse thinking teams that build something that has never existed need space for tinkering, prototyping, model-making, and physical experimentation. Virtual prototyping requires relevant software and hardware with adequate bandwidth. The learning commons model is a brilliant response to these students who are constantly challenged to innovate in preparation to thrive in highly competitive work environments.

As physical collections are slowly de-emphasized, the library offers flexible learning spaces, adaptable for one-to-one laptop programs and collaborative

innovation projects. In 2012 we added a new curriculum path of social and business innovation courses modeled after Stanford’s dSchool curriculums (Research as Design Team, 2011), furthering our move into active, entrepreneurial and creative curriculums.

So where is the rest of the library? A good portion of it is in “the cloud.” Seattle Academy’s 10,000+ physical book collection is augmented by an 83,000 e-book collection (ProQuest’s Ebrary). The 400+ title DVD collection is augmented by an 18,000 title streaming collection (Classroom Video on Demand).

The physical collections are nearly 100% comprised of resources requested by teachers and students, which results in collections with a very high calibration with the curriculums we offer. Thus the physical collections are considered “just-in-time” collections and the digital resources as “just-in-case collections,” since they are larger collections that cover broader arrays of topics (see Figure 1).

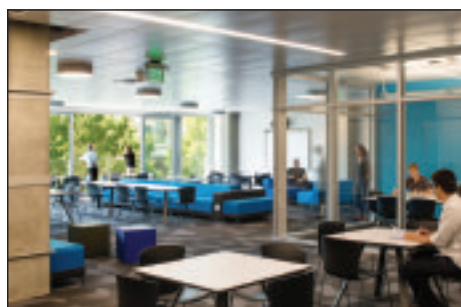
As a laptop school, students opt for the convenience of online resources, which has led to de-emphasizing the physical collection and ramping up the database collection. A side benefit has been a decrease in competition for library space on campus, as classroom space has been a priority in a school that has tripled in size over the past 15 years. Nevertheless, many students still recognize the quality and convenience of physical books, especially in the middle school, where reading for pleasure and the appeal of physical books are still very strong.

PHYSICAL COLLECTIONS— PROXIMITY IS KEY

The closer the physical resources are to the users, the more they are used.



Students exploring the Learning Commons for the first time



Second Floor Learning Commons



JUNIOR NONFICTION

NATIVE AMERICANS

Bodden, Valerie. **Sioux** (Peoples of North America). Creative Education, 2016. 48p. LB \$38.50. 978-1-60818-555-9. Grades 4-8. Combining color photos, artwork and fact boxes the reader learns about the old and the new ways of the Sioux lifestyle. Other titles in the series are about the Apache, Cherokee, Iroquois, Navajo, and Nez Perce. Each concludes with a traditional tale, glossary, bibliography, and an index.

Bowman, Donna Janell. **The Navajo: the Past and Present of the Dine** (American Indian Life). Capstone, 2016. 32p. LB \$19.99. 978-1-4914-4992-9. Grades 3-6. This brief title provides an introduction to the Navajo history and culture, including the accomplishments of the Navajo Code Talkers and the beautiful handcrafts of the Navajo. A timeline, glossary, additional reading, index, and critical thinking questions round out the title.

Krasner, Barbara. **Native Nations of the Southwest** (Native Nations of North America) Child's World, 2016. 40p. LB \$32.79. 978-1-6340-7036-2. Grades 3-6. Eight native nations of the Southwest United States are presented in this volume of the series, each with an introduction and information about each tribe's unique traditions, history, and a few examples of the language.

Maron, Terra Rose. **Cheyenne** (Spotlight on Native Americans). Rosen: PowerKids Press, 2016. 32p. LB \$19.70. 978-1-4994-1678-7. Grades 3-8. This narrative of the Cheyenne people succinctly portrays their history from the time before America was explored by Europeans to their life today. Current issues are discussed in the final chapter, including the wind farms that help them to be financially independent. The book concludes with a glossary, websites, and an index.



Visual Arts Book Collection

Books that were not used in a centralized repository regained use when proximity was increased. Proximity plus patron-driven acquisitions became a recipe for success in Seattle Academy's technology-fueled environment. Realizing this, I began to create classroom collections for teachers who requested them. In the middle school, the fantasy book club and sixth-grade English have fantastic collections, voraciously devoured by the students. The large visual arts collection is now located in the Arts Center building. That collection is used on a daily basis. By contrast, when it was with the main collection in another building, there was very little use. Upper school courses often set up a reserve collection of books for specific units of study, and sometimes these reserve collections reside in the classroom. This year I created a science reading room on the third floor of the new STREAM building, which holds our Dewey 500s and eight current science magazine titles. There is, however, a trade-off when resources leave the main collection where there is no functional circulation system. Loss of control over physical items occurs when resources are distributed to users. Nevertheless, I have consciously opted for *resource use* over resource control. Happy, satisfied users continually justify this decision.



Kathleen Johnson, Seattle Academy Librarian

Another way that I move resources closer to the user is through the use of the LibGuides I create for classroom units. I ordered LibGuides in 2009 because I recognized its utility for library promotion. LibGuides is a good way to highlight library resources, prioritize database use, and point out quality websites customized to a particular unit. When students see a book cover in a LibGuide, it connects them to the book collection, because they see a tangible image of something they need or want. LibGuide resource scaffolding helps students in their discovery process.

LibGuides is also my go-to tool for collaborating with teachers. The most effective LibGuides are those requested by teachers. They share their lesson plans and we discuss the best way to proceed. I turned the LibGuides platform over to ninth-grade science teachers who had students curate items of renewable energy. Students learned LibGuides quickly and had a great time creating their pages. The project was chosen as an exemplary example of LibGuides pedagogical design by the editors of the book *Using LibGuides to Enhance Library Service: A LITA Guide* (Dobbs, Sittler, & Cook, 2013). This is another example of how we encourage students to lead the way. Two science teachers designed another LibGuide that consisted of several narrow-topic



YA NONFICTION

PEOPLE OF INTEREST

Ellis, Catherine. **Adolf Hitler** (The Holocaust). Rosen, 2016. 112p. LB \$35.60. 978-1-4994-6248-7. Grades 7-12. This series is a collection of the people behind the Nazi crimes and those who fought to survive the cruelty. Chapters in this title include Hitler's young years to his final days. Photographs and fact boxes support the text, and back matter includes a timeline, glossary, additional information, and an index.

Medina, Mariana. **Frida Kahlo: Self-Portrait Artist** (Influential Latinos). Enslow, 2016. 128p. LB \$37.27. 978-0-7660-6997-8. Grades 7-12. One of Mexico's most famous painters is described with examples and discussions of her self-portraits. Her life was closely woven with that of her husband, artist Diego Rivera, with both a loving and stormy relationship. The book concludes with a chronology, detailed chapter notes, and index.

Pettinella, Amy. **Sheryl Sandberg: COO of Facebook and Founder of the Lean in Movement** (Leading Women). Cavendish Square, 2015. 112p. LB \$39.93. 978-1-62712-987-9. Grades 6-12. With the opening chapter, "Boys Are Leaders, Girls Are Bossy" the reader learns that at an early age Sheryl was already an organizer of neighborhood children. Those skills led her to helping women with her "Lean In" movement. Extensive material at the end enriches the book for research and encouragement for women with a timeline, source notes, glossary, bibliography, and index.

Senker, Cath. **Stephen Hawking** (Against the Odds). Heinemann-Raintree, 2016. 48p. LB \$32.65. 978-1-4846-2466-1. Grades 4-8. This small and easy to understand volume contains a great deal of information about Hawking's science studies as well as his personal life.

dynamic textbooks. Here, the line between textbook and web articles blurs. They use them year after year, continually editing and updating content.

Last summer I migrated my LibGuides to the version-two platform (<http://library.seattleacademy.org>). I was able to build a new library website to replace the longstanding Moodle page. This website is mobile responsive (i.e., accessible on all types of screens, including cell phones and tablets), built with modern code (HTML5, CSS3, and Bootstrap 3.2), and hosted on Amazon servers. New features in LibGuides v.2 allow for a website design that looks distinctly different from the class assignment guides. Our graphic designer created the header, which determined the color scheme and overall look of the guides. It is a very bright website designed for kids.

For this website redesign, with the help of our IT director, I employed a single sign-on for the databases using OCLC's EZProxy. This single sign-on saves time for everyone, leaving behind forever a spaghetti list of user names and passwords. Overall, this virtual library presence vastly improves our community's knowledge of library programs and services.

In such a fast-paced, early-adopting school, by necessity I find ways to leverage my time and efforts. One time-effective strategy has been to join those select committees in the school where new directions and new ideas are incubated. These committees include the Department Heads Committee, the Innovations Committee, and the Computer Science Curriculum Review Committee. I also respond to requests for research and documents to support administration's research. Joining select committees has helped me keep abreast of developing initiatives in the school. In this way I can

tailor library contributions and involvement in the developing programs at Seattle Academy.

These last sixteen years have certainly been a wild ride. I can't think of anything more fulfilling, challenging, and exciting than to be a librarian in the radically shifting information landscapes. It has felt like working at a start-up.

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Kathleen Johnson has been a teacher librarian at Seattle Academy of the Arts and Sciences in Seattle, WA, since 1999. She has served as library director for the Kelso Public Library. She can be reached at kjohnson@seattleacademy.org.