Innovation Grants: Supporting Professional Learning and Collaborative Inquiry in the Library Learning Commons

By Rebeca Rubio

The Richmond School District's mission is to cultivate a safe, accepting and engaging community that inspires a passion for lifelong learning. The values that will guide our work together to achieve our vision and mission are: collaboration, creativity, curiosity, resilience, respect and equity, for all. (Richmond School District No. 38, 2017)

The Richmond School District 38 (SD 38) is a suburb of Vancouver, British Columbia, and is home to 37 elementary and 10 secondary high performing, multicultural schools, including 10 dual-track French Immersion schools. The Richmond School District highly values its School Library Learning Commons (SLLC) and is a strong supporter of professional learning and collaborative inquiry.

SD38 DISTRICT SLLC SUPPORT FRAMEWORK

Staffing	All secondary schools have full time, trained and qualified teacher-librarians and full time trained and qualified library technicians. Elementary schools are staffed according to enrollment ratios, with 401+ students resulting in a full time teacher-librarian position.
District Resource Center (DRC)	SD38 has a DRC that acts as a large lending library for the district. It has 5000+ resources, including periodicals, instruments, novels, educational technology, hands-on manipulatives, maker materials and tools as well as indigenous, science, French and professional resources. The DRC is staffed by two library technicians and a daily courier who delivers materials to and from schools.
Library Administration Center (LAC)	Adjacent to the DRC is the LAC, staffed by two library technicians. They provide cataloguing and classification services, software training, technical troubleshooting, inventory and weeding assistance and general operations guidance for all district SLLC.
Coordinator for Libraries and Information Services	The DRC and LAC are under the direction of the Coordinator for Libraries and Information Services. This full time teacher-librarian manages the department, leads professional learning and supports teacher-librarians in developing programs, redesigning flexible spaces and developing responsive SLLC. The Coordinator supports teachers and schools with resource acquisition, database navigation, digital literacy and other literacy initiatives.
Virtual Library	The LAC, under the direction of the Coordinator, acquires, configures and supports the implementation of district digital resources including (but not limited to) subscription databases, eBooks and audiobooks.

	This virtual library is accessible to all SD38 staff and students 24/7.
Teacher-Librarian Mentoring	All new teacher-librarians are invited to join the teacher-librarian mentoring cohort which provides support for the first 3 years. This support comes in many forms: monthly meetings, opportunities for release time to visit and collaborate with other teacher-librarians, personal visits and communication with the coordinator, support with programming, etc.
Teacher-Librarian Study Group	The teacher-librarian study group co-creates monthly agendas, rotates to different libraries, shares ideas/resources and examines guiding documents. This year the selected themes are: Collection Development, Building a Culture of Reading, Literacy and Maker Spaces, Flexible Learning Spaces, Digital Storytelling, Collaboration in the SLLC and Media Literacy.
District Conference	This full-day conference supports the professional learning of teacher-librarians. It sets the direction for library work throughout the year and is an opportunity to support shared practice and innovation.
3D Printer Pilot Project	Last year the district launched a 3D printer pilot project for all the secondary SLLC with the intent of infusing new technologies and innovative practices into SLLC, and empowering teacher-librarians to use these technologies to enhance student learning. This year, the pilot was extended to 14 of the district's elementary schools.

INNOVATION GRANT OVERVIEW

Innovation floats on a sea of inquiry, and curiosity is a driver for change.
(Halbert & Kaser, 2013)

SD38 encourages collaborative inquiry in schools. It aims to inspire, support and deepen student learning, innovative inquiry and pedagogical practice. Innovation Grants are intended to enable teacher voice and choice, support ongoing professional learning, and support educators as teacher-researchers. Innovation Grants integrate current research, new resources and digital and technological tools.

Innovation Grants fall under several categories: Assessment, Inclusive Learning, Learning Environments, Social-Emotional Learning and - most recently – School Library Learning Commons. Each SLLC Innovation Grant is in the amount of $2000, 50% of which is to be used for release time for collaboration and 50% of which is to be used for materials and resources.

The SLLC Innovation Grant process begins with school teams working with Spirals of

Inquiry (Halbert & Kaser, 2013), and meeting as school teams to develop their inquiry question(s). This is followed by the submission of a grant application, which is then reviewed by the Assessment & Innovation Committee made up of teachers, teacher consultants, administrators and senior district staff. Once approved, schools are invited to the Innovation Grant launch. With support from the Library Coordinator and other Learning Services staff, school teams then begin their yearly work, inquiring, implementing and reflecting upon innovative practices. All school teams come together for an Innovation Grant Celebration & Reflection at the end of the year. At this time, each team showcases their inquiry and engages in professional conversations with colleagues.

The SLLC Innovation Grants are grounded in two primary guiding documents: *Leading Learning* (Canadian School Libraries, 2019), and *From School Library to Library Learning Commons: A Pro-Active Model for Educational Change* (Ekdahl & Zubke, 2017), as well as the work of *Future Ready Librarians* (Alliance for Excellent Education, 2020). The following graphic contains a working definition and grounds SLLC innovation work:
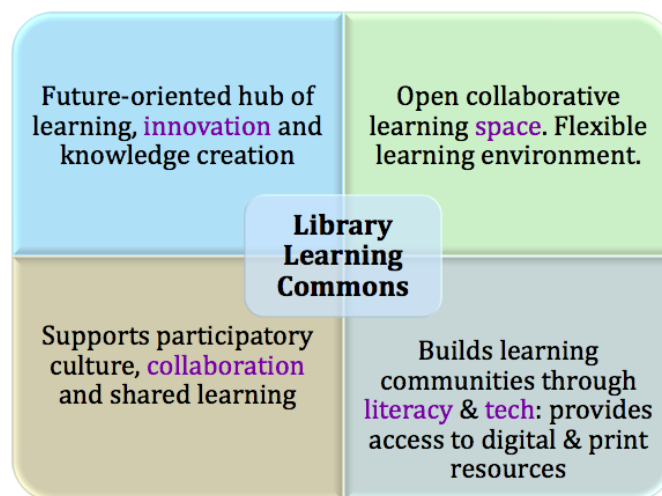
Below is an excerpt of the SLLC Innovation Grant application.

Inquiry: Scanning and Focus
What have you learned from listening to your students when scanning?
What is your inquiry question?
Inquiry: Learning, Actions and Checking
What actions will you take to enhance student learning and professional learning?
How will you know if you are making a difference for student learning?
Library Learning Commons
Describe which area of the *Leading Learning* standards this grant will address:

Standards of Practice for School Library Learning Commons in Canada

| Facilitating collaborative engagement to cultivate and empower a community of learners | Advancing the learning community to achieve school goals | Cultivating effective instructional design to co-plan, teach and assess learning | Fostering literacies to empower life-long learners | Designing learning environments to support participatory learning |

SPOTLIGHT ON PROJECTS

Case Study #1: McNeely Elementary School
Shannon Mills (Teacher-librarian) and Megan Wiltse (Teacher)

"When young people discover they can be agents of change, wonderful things happen."
- Alma Powell, America's Promise Alliance

Inquiry Question:
How can the SLLC create a space that engages self-motivated learners and supports the school goal of self-regulation through flexible learning environments?
Can changing a space change culture?

Leading Learning Standard of Practice:
Designing Learning Environments to Support Participatory Learning

Treasure Mountain Canada (TMC) 6 Sub-Theme:
- Culturally Relevant and Responsive SLLC
- School Culture

Details of project:
In their scanning, educators at the school noticed that students were exhibiting challenging behaviours, were lacking resilience, and were struggling to manage strong emotions. Self-regulation through creating flexible learning environments became the school goal for the year.

The teacher-librarian recognized that students needed choice about how and when to learn and how to take ownership of their learning. She had recently reclaimed an adjoining room to the SLLC and wondered if this could become a peaceful space - a refuge - where students with needs could calm down and practice mindful self-regulation. She also envisioned this as a collaborative space that could support all school goals and initiatives. It could be an inspiring space to make learning visible and share the collaborative work happening in the SLLC. She then theorized that if this space was meant for students, it should be designed, created and maintained by students.

The transformation began with intentional design choices that would create a calm learning space that allowed for choice. This included decisions about colour, flexible seating, lighting and materials. Students were invited to provide feedback and they led the setup. They created the art that lined the walls, led a competition to name the space and were tasked with maintaining it. Thus the "Learning Lounge" was born.

Currently, the "Learning Lounge" is the full responsibility of students, who set it up, clean it and maintain it. The walls exhibit the work that has resulted from school-wide book studies, and quotes selected by students from the school-wide "Global Read-Aloud". It is a multi-use space where students have refuge, are independent and can exercise both voice and agency.

Reflections
"The space is helping contribute to a collaborative learning and teaching culture. I see all of the amazing things teachers are doing and now I bring teachers and students together to share their thinking and self-regulate. Building community is about helping shift a mindset to more collaborative teaching and learning, and the SLLC "Learning Lounge" has become the avenue for doing that." S. Mills, Teacher-librarian

Case Study #2: Garden City Elementary School
Kelly Johnson (Teacher-librarian) and the entire school community

"If you have a garden and a library, you have everything you need."
- Marcus Tullis Cicero

Inquiry Question:
What actions can we take to create a welcoming inclusive space that children and teachers want to spend time in?
How can the SLLC create opportunities for students to positively impact their world?

Leading Learning Standard of Practice:
Designing Learning Environments to Support Participatory Learning

TMC6 Sub-Theme:
- Collaborative Environments
- Accessibility
- School Culture

Details of project:

In her scanning, the teacher-librarian learned that the students felt the SLLC was "dusty and cold". She was inspired by the words of Allison Zmuda that learners need "space to read, process, analyze, reflect and create" (Zmuda, 2008). She began her inquiry by starting to create zones of learning in the SLLC but was frustrated at the lack of flexibility in the room. She looked outside and saw the neglected courtyard, littered with recyclables and garbage. She immediately knew that the SLLC could adopt that space. The inquiry was further sparked by a visit from a bee expert and an examination of the "Social Responsibility Core Competency" of British Columbia's new curriculum, that states "Contributing to community and caring for the environment" (British Columbia Ministry of Education, 2019). Soon a whole-school inquiry began to take shape.

The inquiry began by cleaning out the courtyard and preparing the space. Students removed old rock, put in new soil and created a watering system. In the SLLC, the teacher-librarian and students began to study bees, ecosystems and habitats; they learned about life cycles, bee body parts and insect hotels. They read fiction and non-fiction books about gardens, plants, bees and ecosystems. Later, they practiced the skills of note-taking and synthesizing information, made scientific drawings and honed observation skills. They explored local projects to create pollinator pathways and joined the "Million Garden Pollinator Project". Finally, they researched which flowers attracted bees and planted them in the garden. In short, the entire school participated in a deep garden and bee inquiry through the SLLC. Each group engaged in individual activities, skills or learning, catered to each particular grade needs.

The lasting legacy of the inquiry is threefold:
- The SLLC has expanded to include an accessible, inviting, mindful, outdoor library space in which students can read, play quiet games, draw and reflect.
- It forged a social contract about environmental stewardship within the school community. It linked literacy to environmental responsibility.
- It highlighted the SLLC as a place of deep, collaborative learning and inquiry.

Reflections and next steps
"*I've learned that teacher-librarians are in a unique position to touch every single student, to do things that matter, to bring equity and to develop a global conscience. Large school inquiries create school community and engage students. It was an excellent way to share with teachers what the inquiry process looks like and how the "Core Competencies" are embedded in inquiry learning. I can't wait to start next year's inquiry: understanding migratory and overwintering birds. How can we make our SLLC courtyard garden welcoming to them?*" – K. Johnson, Teacher-librarian

Case Study #3: McMath Secondary School
Lindsay Santos-Cox (Teacher-librarian) and Katie Awadalla (Teacher)

"Any sufficiently advanced form of learning is indistinguishable from play."
– Scott Snibbe

Inquiry Questions:
In what ways can the SLLC support the infusion of Applied Design, Skills and Technology (ADST), (British Columbia Ministry of Education, 2019), into the mathematics classroom to engage students and meet the diverse needs of the 21st-century learner? In what ways can the SLLC 3D printers meaningfully support inquiry and curricular/core competencies?

Leading Learning Standard of Practice:
Designing Learning Environments to Support Participatory Learning

TMC6 Sub-Theme:
- Collaborative Environment
- Creativity and Innovation

Details of project:
In their scanning, the teacher and teacher-librarian noticed that the maker space in the SLLC was well used for play in non-instructional time but was not being used to directly support curriculum.

The project began when the teacher-librarian introduced the students to 3D printing and CAD (computer-aided design) software by having them design graph art using the online graphing program Desmos (Desmos, 2019).

Concurrently, the teacher taught students about sinusoidal waves. Students were then tasked with 3D printing a tool that could create a sinusoidal wave that could be used to graph accurate sine and cosine functions. Students were given multiple entry points to the task: they could choose to work on a tool for the basic sinusoidal wave, or could select to create a more advanced tool that incorporated expansions and compressions of the functions. Both the teacher-librarian and the teacher guided students through the design thinking process to find a solution to the task problem. Throughout the task, students learned new trigonometry concepts to further enrich their understanding while ideating and prototyping their products. Students were asked to document their journey by including artifacts for each stage of the design process, explaining their thinking, and reflecting on the process. Students received formative assessments throughout the design process. They co-created a rubric to self-assess their collaborative and perseverance behaviors and they received formative and summative assessments on the Pre-Calculus 12 content related to trigonometric functions.

Curricular Connections

Core Competencies	• Critical Thinking • Creative Thinking • Communication https://curriculum.gov.bc.ca/competencies
Curricular Competencies for Pre-Calculus 12	• Explore, analyze and apply mathematical ideas using reason, technology and other tools • Think creatively and with curiosity and wonder when exploring problems • Develop, demonstrate and apply conceptual understandings of mathematical ideas through play, story, inquiry and problem solving • Solve problems with persistence and with positive disposition • Use mistake as opportunities to advance learnings https://curriculum.gov.bc.ca/curriculum/mathematics/12/pre-calculus
ADST	• The design cycle https://curriculum.gov.bc.ca/curriculum/adst
Content for Pre-Calculus 12	• Trigonometry: graphing primary trigonometric functions, including transformations and characteristics • Trigonometry: solving problems in situational contexts

Reflections

The biggest challenge was shifting student mindsets. These very academic, university-

bound students struggled with being creative, learning to ideate, embracing ambiguity and learning to fail forward. The biggest success was in relationships, both as colleagues and with students. It was amazing to see the lights turn on with some of the groups. The engagement was extremely high. They were learning to succeed after struggling. I believe that participatory learning in the library is how you really solidify what you know. It's so important to bring that creative, buzzing energy to this space. I would absolutely work with teachers this way again – it is hard work but it is endlessly rewarding. – L. Santos-Cox, Teacher-Librarian

Case Study #4: Burnett Secondary School
Dita Verma (Teacher-librarian), Cailee Zindler (Teacher), John Lim (Teacher), Wes Bevan (Teacher)

"If a child can't learn the way we teach, maybe we should teach the way they learn."
- Ignacio Estrada

Inquiry Questions:
In what ways can the SLLC support differentiated learning?
How can the SLLC help create more inclusive learning environments?

Leading Learning Standard of Practice:
Designing Learning Environments to Support Participatory Learning

TMC6 Sub-Theme:
- Accessibility for All
- Collaborative Environment
- Creativity and Innovation

Details of project:
In their scanning, teachers noticed that students in the Learning Assistance classes repeatedly asked for lessons to be re-taught or concepts to be repeated. It seemed that the single delivery of material was not sufficient for a multitude of reasons. The teachers acknowledged the need to differentiate instruction for all students, and wondered how they could make the lessons more easily accessible to meet individual student learning rates. They wondered aloud if they could just create videos of the lessons. They then partnered with the teacher-librarian in the SLLC. This was a natural partnership because the teacher-librarian had already been collaboratively making great shifts in the integration of new technologies to support all learners (greens screen, podcasting room, 360 cameras, VR goggles, etc.).

The teacher-librarian and teachers visited the UBC Lightboard Studio (University of British Columbia, 2019), and were inspired to design their own lightboard for the SLLC. They theorized that perhaps the lightboard could provide a solution to their questions: it would allow teachers to film their lessons in small segments (in essence *flip* the classroom) and then allow students to view and review as needed. They argued that

this new technology would support all learners: those with slower processing speeds could pause the lesson and think; those with reading comprehension problems could rely on auditory delivery; those with self–regulation challenges could stop and move; English Language Learners could listen multiple times and strengthen listening comprehension; those on the autism spectrum could reinforce the learning of facial cues; gifted students could accelerate and learn at their own rate. In short, the team wondered if the creation of a lightboard would enact the UDL (universal design for learning) model of inclusion.

The lightboard was ideated, prototyped and created by staff and students. It followed the design cycle with a real-world challenge, it developed student agency and resulted in a tangible product that would immediately meet the needs of the school community. A few teachers then began, in the SLLC, to experiment with the lightboard. They began to film portions of their lessons to trial a new way of teaching and, thus, a new way of learning.

Click HERE to see the lightboard unveiling, and HERE and HERE to see how the lightboard was used in its trial stages.

Next steps
The lightboard is now housed in the SLLC and is accessible to all teachers and the hope is that soon students, too, will be empowered to use it as another tool for showing their learning.

The teacher-librarian envisions making library skills lesson plans which can be differentiated as well such as the inquiry process, digital literacy and citizenship tools, effective research skills and so on. The long-term goal is for the school to use this lightboard in the SLLC to guide professional learning. The hope is to amass a collection of videos, embedded in the SLLC digital library platform, for use throughout the school and throughout the district.

The lightboard is intended to create capacity for all students and all teachers. The deep collaboration between staff and the teacher-librarian highlights the power of innovation and technology integration in the SLLC to directly support the needs of all learners.

CONCLUSION

> *"Innovation is the ability to see change as an opportunity, not a threat."*
> -   Steve Jobs

It is difficult to quantifiably measure the impact of the SLLC Innovation Grants. Changes to the SLLC do not directly result in improved achievement but result in social-emotional benefits, improved student engagement and sense of belonging, increased collaboration between teachers, increased technological fluency in students and staff, and shifts in school culture. These are deeply felt impacts that directly change student

and staff experiences at school.

The Innovation Grants have opened up new opportunities for schools to rethink and reshape their SLLCs. They have increased educator involvement, collaboration and professional dialogue; they have empowered teacher-librarians to initiate change and take risks; they have redefined the dialogue about libraries and learning in our schools. This momentum is energizing and transformative.

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