ibraries are places where curiosity is naturally fueled. As teacher-librarians, we are always on the lookout for ways to enrich the learning environment and use a variety of strategies to help guide our students' learning. The concept of Design Thinking is one such framework that has made its way into the Library Learning Commons. This creative problem-solving method encourages students to be critical thinkers by examining issues and problems from a variety of points of view, and to essentially present some type of solution. As described in *Together for Learning* (2010), "The Learning Commons liberates the exploration of ideas and concepts, encouraging inquiry, imagination, discovery and creativity through the connection of learners to information, to each other and to communities around the world" (page 6). Carefully crafting Design Thinking learning opportunities @ your library will most definitely engage your students.

Wondering Where or How to Start?

An excellent resource is the book, LAUNCH: Using Design Thinking to Boost Creativity and Bring Out the Maker in Every Student. John Spencer and A.J. Juliani outline six steps that will engage and mentor students through the process of design thinking:

- 1. Look, Listen & Learn
- 2. Ask Lots of Questions
- 3. Understand the Problem or Process
- 4. Navigate Ideas
- 5. Create
- 6. Highlight What's Working and Failing

Their website, thelaunchcycle.com, is full of excellent resources, including graphic organizers, links to blogs and videos about the different aspects of the cycle, and guiding questions for teachers. They also include links to free unit plans and posters so you can jump right in. Be sure to check out Chapter 4's resources to find a free unit plan for the 2030 Schools Project.

The Ontario School Library Association Student Inquiry Process

Upon analysis of the six phases of the Launch Cycle, you may note similarities to our own OSLA Student Inquiry Process. (accessola.com/studentinquiry). Our four steps include Exploring, Investigating, Processing and Creating, along with Reflection & Feedback as central components, embedded in each phase.

Both the Launch Cycle and The Student Inquiry Process focus on asking effective questions. One of my favourite resources to encourage students to ask meaningful questions is Carol Koechlin and Sandi Zwaan's Q Tasks (https://www. pembrokepublishers.com/book.cgi?isbn=9781551383019). When students establish impressive questions, these questions can guide their Design Thinking process. This allows them to not only select appropriate information and synthesize it, but to actually take action to create solutions.

Learning Culture

Values and priorities that support a growth mindset and allow us to build knowledge together as a community



Informative Assessment

Ongoing strategies and practices that continuously inform learning and teaching



Access to Technology

Reliable and equitable access to information, resources and other digital technologies



21st Century Competencies

Knowledge, skills and attitudes needed to learn and be successful in a modern world



Learning Environments

Dynamic physical, virtual and inclusive spaces designed to support learning and well-being



Models of Learning

Instructional approaches that empower modern learners



Together, these six innovative elements will help drive our work moving forward.

Graphic used with permission from Peel District School Board's EML.

Again, Together for Learning points out that "learners move beyond merely retrieving factual information to constructing personal meaning and building individual and collective knowledge. As learners read, research, experiment, discover, perform and create in the Learning Commons, they collaborate with others to test, confirm and enrich their learning" (page 14).

Other Resources

Experimentation, testing and reflecting are crucial aspects of the Design Thinking process. Collaboration to reconsider failed solutions adds to the collective knowledge of the group. The Learning Partnership's programs (http://www. thelearningpartnership.ca/what-we-do/student-programs), such as I3 – Investigate! Invent! Innovate!™, Dragon's Nest, and Coding Quest, use six core areas as anchors for guiding students to be actively involved in their learning. The categories include STEM (Science, Technology, Engineering and Mathematics), Innovative Thinking, Entrepreneurism, School to Work, Early Learning, and Social Responsibility. Within each of these areas, Design Thinking is inherently embedded. continued on page 28