

**BRITISH COLUMBIA TEACHER-LIBRARIANS' ASSOCATION** *A PROVINCIAL SPECIALIST ASSOCIATION OF THE BC TEACHERS' FEDERATION* 

# The Points of Inquiry:

A Framework

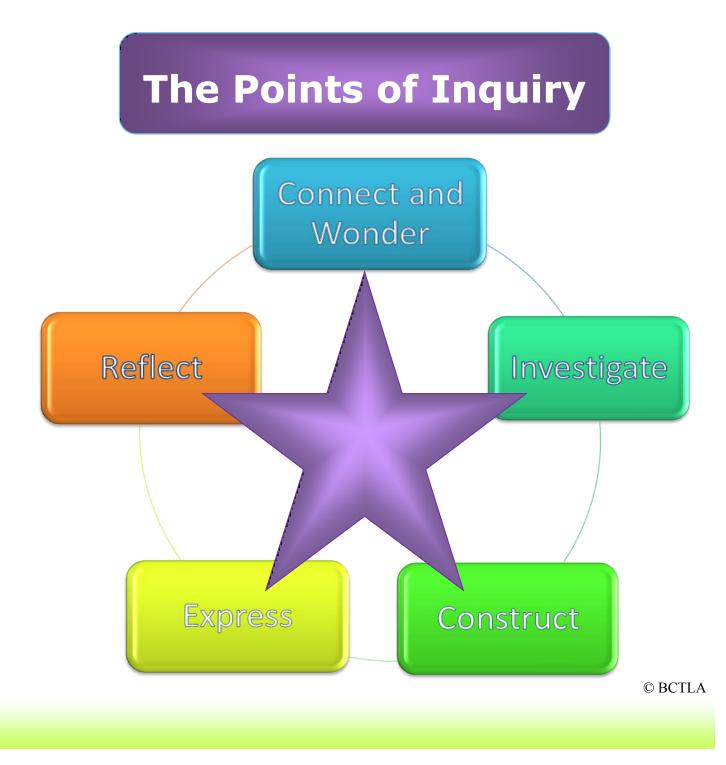
For Information Literacy and

The 21st Century Learner

BCTLA Info Lit Task Force January 2011

"Research shows that today's digital students learn more when engaged in meaningful, relevant, and intellectually stimulating schoolwork and that the use of technology can increase the frequency for this type of learning."

- NCREL and the Metiri Group, 2003, as cited in Berger



#### ACKNOWLEDGEMENTS

Barbara Stripling, Director, NYC School Libraries, has kindly granted permission for the InfoLit Task Force to adapt her Stripling Student Inquiry model. The Points of Inquiry graphic was designed by M. Ekdahl and is based on a reading of Stripling's "Using Inquiry to Explode Myths about Learning and Libraries." The 5-point Inquiry graphic is copyrighted for use with the BCTLA's Points of Inquiry student learning model.

Creating a framework for teaching information literacy in BC's 21<sup>st</sup> Century educational context did not start out to be such a comprehensive task: it was simply meant to be a guiding document for updating teacher-librarians on new ideas that underpin the teaching of literacy in the Information Age amidst the explosion of new resources, formats, and tools. That this project had to be much broader soon became obvious.

The role of the teacher-librarian as an educator who works collaboratively with other teachers to create and sustain powerful and relevant learning experiences for students made it essential to focus on literacy cognitive abilities and foundational skills for educating BC children today. **Teacher-librarians** support both teachers and students as they explore multiple sources of information to create new knowledge and learning. They have both the role description and the responsibility to advocate for a consistent approach within the school and to foster collaboration between teachers based on the systematic and systemic development of students' literacy abilities. All teachers, however, will need to understand and teach the fundamentals of information literacy if they are to empower BC's young people to succeed as adults in meeting the knowledge demands for living, working, and learning independently.

#### The Task

That learning is being transformed in the 21<sup>st</sup> Century for all citizens goes without question; students need to become more effective, ethical, and critical users of information. What students learn to do with information is more important than the specifics of the information itself. Educators are grappling with the profound implications this has for *what* and *how* they teach. The focus of the BCTLA Information Literacy Task Force has been the creation of the guiding document that renews understanding of what constitutes information literacy in today's world and that creates a practical framework to help teachers implement an inquiry approach in classrooms.

A narrow view of information literacy focuses on information skills, sometimes called library skills, such as how to locate resources, how to use the features of different types of resources to find information efficiently, or how to extract and organize information from resources. This perspective held up when information was relatively static and controlled, and when it was presented in a few stock formats which primarily featured print. It is this view that has spawned many guiding documents of the past, documents that emphasized sequential, linear, lock-step processes as the means of teaching students the skills of information literacy.

Today's students learn in a dynamic world where information changes and expands as fast as technological innovation. Information that grows exponentially and comes in multiple formats is presented without prior expert editing for truth or reliability, often without logical organization and frequently with a very short "shelf-life." Learning in the Information Age is very different from the kind of learning that took place prior to the advent of the computer.

Elementary and secondary teachers know that we are lagging behind in preparing our students for the kinds of information they will encounter. Postsecondary educators agree. Borrowing from notions of "backwards design" with "the end in mind" (Wiggins & McTighe), the BCTLA InfoLit Task Force began by asking academic librarians (Ball & Power) to survey colleagues for what were perceived to be the most common academic research problems faced by first-year students. *Are graduates of BC schools adequately prepared to demonstrate critical thinking skills and engage in independent* 

inquiry? What are the ten things first-year students need to know how to do better if they are to succeed with the demands of academic research?

BC students, according to the survey results, need to know more about how to find the right resources for their purposes, including books, journals, and databases; how to evaluate sources critically; how to write a good research question and a solid thesis statement; how to incorporate quotations and to cite

the sources, and why; how to paraphrase and how not to plagiarize; and how and whom to ask for help.

The Ontario Confederation of University Faculty Associations simultaneously released the results of their online survey of 2,000 of 15,000 faculty members including

academic librarians (Rushowy). First-year students' research and internet-seeking behaviours were found to be going downhill rapidly. What were these students doing to make that impression? They were:

- avoiding databases in favour of Google as the only search tool of value
- using Wikipedia as a citable academic source
- not knowing how to find a book or even how to ask for help

From this data it quickly became clear that not only did the Task Force need to consider how to frame its guiding document to support the developmental teaching of sophisticated cognitive processes that this current age demands, but also to attend to the teaching of the most basic information skills. Multiple abilities and skills, from basic to complex, must be at the core of any guiding document that intends to address the need for students to be more information "savvy." Three big questions governed the work of the InfoLit Task Force: What does it mean to be information literate in today's world? What implications does the goal of teaching for information literacy development have for the roles of learners and teachers? What framework will provide sufficient direction for BC teachers and teacher-librarians to enable them to

Information literacy is the ability to use information meaningfully in all aspects of our daily lives.

Barbara Stripling

create learning experiences that are relevant, developmentally appropriate, aligned with provincial goals, and capable of building increasing competency over the educational journey of the student?

#### What Does It Mean to be Information Literate in Today's World?

The closest answer to that question was found in the work of New York City's Director of School Libraries Barbara Stripling:

> Being literate in the information age involves the ability to find meaning in the vast barrage of diverse messages that form our learning environment. Information literacy involves being able not only to locate information, but also to interpret it within the context of our real-life experiences. Information literacy is the ability to use information meaningfully in all aspects of our daily lives. (Stripling 1999, p.6)

Further endorsement of this viewpoint is found in the work of the American Association of School Librarians (AASL) in its 2009 publication, *Standards for* 

*the 21st-Century Learner in Action*, which describes learning in terms of skills, dispositions, and responsibilities:

Learning in the twenty-first century has taken on new dimensions with the exponential expansion of information, everchanging tools, increasing digitization of text, and heightened demands for critical and creative thinking, communication, and collaborative problem solving .... All learners must be able to access highquality information from diverse perspectives, make sense of it to draw their own conclusions or create new knowledge, and share their knowledge with others.

## What Are the Implications for Teaching and Learning?

Just as information has become less controlled, so has the capacity of teachers to control the outcomes of the learning process. No longer can it be assumed that the teacher is the expert as students actively construct their own personal understandings of information. This kind of learning is best accomplished within a model of inquiry such as has been advocated by many leading educators and endorsed by the AASL in its Standards for the 21st-Century Learner. The AASL identified nine common beliefs that support learning. The second belief, that "Inquiry provides a framework for learning," focuses on students developing not only the skills, "but also the disposition to use the skills, along with an understanding of their own responsibilities and selfassessment strategies" (2009).

In this model, learners:

- are actively involved in the learning process
- use prior knowledge

- ask questions
- hypothesize and investigate
- construct new understandings
- communicate their understandings with others
- are reflective and critical thinkers who acquire the skills for independent learning

Committed 21<sup>st</sup> Century educators observe how their teaching, as well as student learning, has evolved as a result of our information-rich society. They:

- move to the side and work to guide or "scaffold" the learning
- provide feedback that empowers students to move more deeply into their learning
- encourage students to have more authority over their own knowledge and inquiry
- are actively engaged in learning, assessing, and teaching
- ensure new learning takes place in active, collaborative, and social contexts, real or virtual

#### What is an Effective Framework to Guide BC Educators?

The BCTLA InfoLit Task Force agreed with the foundation principles of the AASL *Standards* that had moved away from traditional notions of information literacy and concepts such as "scope-and-sequence"; included multi-literacies and technology; were benchmarked by age-groupings to enable flexibility; and were best taught:

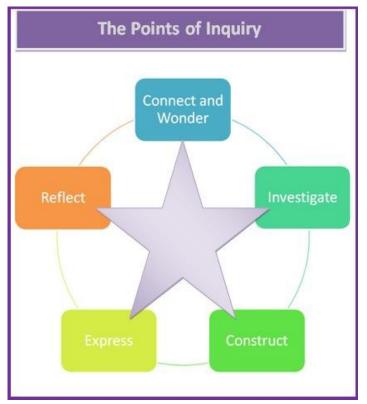
- as teachers work collaboratively with teacher-librarians
- in the context of curriculum

- within an inquiry model
- with multiple resources
- in a supportive environment that exemplifies equitable access
- with guidance, as required, in the form of direct instruction or scaffolding
- in conjunction with assessment rubrics that include process, content, and self- and peer-assessment.

The main source of inspiration for this guiding document, however, came from reading Barbara Stripling's "Using Inquiry to Explode Myths About Learning and Libraries" in which she frames the learning of information technology processes in a cycle of inquiry called the Stripling Inquiry Model. There are six phases in this model: students, when engaged in inquiry learning, will be expected to connect, wonder, investigate, construct, express and reflect. Embedded in this model are many positive aspects understood to be part of the inquiry process. The model:

- uses active verbs that are clear, concrete, and simple, resonating as much with the language of reading as with research
- allows for messiness and recursivity in the inquiry process by enabling students, on reflection, to move to various points in the process
- is infused with literacy and critical thinking
- is cognitively manageable for all ages of students at six "points" (adapted to 5 "points" in the BCTLA model)
- includes technology at every stage
- calls for reflection at every point
- identifies reading for deep understanding as inquiry
- can be used from Kindergarten to Grade 12.

Stripling's textual framework inspired a graphic organizer and the conceptual re-design of *The Points of Inquiry* model, both adapted with permission from Barbara Stripling.



The new model is constructed on notions that both reading and research are enriched when an inquiry approach to learning is used: they are two pathways highly intertwined but stemming from different intrinsic motivations. When talking about reading for pleasure, educators do not view this as simply an activity which takes place without a result in mind or a question to answer. Such reading is deeply linked to inquiry as young readers go beyond fluency and decoding to develop understanding and create increasingly complex world views, or move from learning to read to reading to learn. Research, the other pathway, comes from wanting to know more about a topic or answer a question or expand on prior knowledge. The Points model intends to be inclusive, not exclusive, of current "process" models, such as Writing Process and Scientific Method, already in use in schools. Inquiry is deeply embedded in these.

Inquiry-based Learning for Classrooms and School Libraries

	Connect-and-Wonder		
	Inquiry-based Reading	Inquiry-based Learning	
K-3	By the end of grade 3, when engaged in inquiry-based read- ing, students will be able to:	By the end of grade 3, when engaged in inquiry-based learn- ing, students will be able to:	
	<ul> <li>use prior knowledge and personal experience to understand information</li> <li>use pictures to predict content and make connections between illustrations and written text</li> <li>use strategies to connect, infer, and visualize meaning from text</li> <li>ask questions that explore and expand text in order to understand it</li> </ul>	<ul> <li>activate prior knowledge specific to a topic</li> <li>ask questions related to a topic</li> <li>identify an issue worthy of investigation</li> <li>respond to new ideas using a variety of strategies and tools</li> </ul>	
4-7	<ul> <li>Students will continue to develop skills (K-3, above) and, by grade 7, be able to:</li> <li>make deep connections between text and self, other texts, and the world</li> <li>recognize that variations in stories may result from differences in cultures</li> <li>recognize that differences in interpretation of stories are important aspects for discussion and consideration</li> </ul>	<ul> <li>Students will continue to develop skills (K-3, above) and, by grade 7, be able to:</li> <li>predict and hypothesize</li> <li>ask focus questions related to aspects of the topic or issue</li> <li>ask a question that will generate meaningful inquiry and that is interesting and worth answering</li> </ul>	
8-12	Students will continue to develop a	ll skills (K-7, above) to mastery level	

#### Tools and Strategies to Use with *Connecting and Wondering*

**Instructional strategies:** brainstorming, mind-mapping, concept-mapping, webbing, KWL(KWHL) charts, logs, anticipation charts, visual organizers, guided imagery, prior knowledge, peer questioning, question stems, think-pair-share, booktalks, illustrating, small group discussions, whole-class discussions

Assessment strategies: learning logs or journals, rubrics, portfolios, charts

Technological tools: Kidspiration or Inspiration, blogs, wikis, skype, googledocs, youtube, bubbl.us, Moodle

#### Looking for Web 2.0 tools that work in classrooms?

Kathy Schrock's Educational Tools and Icing on the Cake webpages for ideas for online tools: *http://school.discoveryeducation.com/schrockguide/edtools.html* and *http://kathyschrock.net/cooking/* 

## Investigate

	Inquiry-based Reading	Inquiry-based Learning
K-3	<i>By the end of grade 3, when engaged in inquiry-based reading, students will be able to:</i>	By the end of grade 3, when engaged in inquiry-based learn- ing, students will be able to:
	<ul> <li>locate and select resources appropriate to their own reading interests, ability, and purpose</li> <li>preview and select relevant texts</li> <li>differentiate amongst genres of literature and kinds of non-fiction materials</li> <li>distinguish fiction from non-fiction</li> <li>locate and read award-winning and quality books</li> <li>read to explore and expand reading interests</li> <li>recognize that styles of writing and illustration influence meaning</li> <li>interpret meaning from images</li> <li>recognize and use the features of non-fiction text</li> </ul>	<ul> <li>select information for a purpose</li> <li>use effective search strategies</li> <li>gather and record information using a variety of resources and tools</li> <li>use experts and institutions in the community or online as resources</li> <li>use text features of books or website to locate information efficiently</li> <li>differentiate main ideas from supporting details</li> <li>record information in note format</li> <li>use the internet safely and responsibly</li> </ul>
4-7	<ul> <li>Students will continue to develop skills (K-3, above) and, by grade 7, be able to:</li> <li>independently locate books for personal reading or informational tasks</li> <li>identify the parts of a book and use these to aid comprehension</li> <li>recognize and use text features such as boldface, italics, headings, subheadings, graphics, and captions to aid comprehension</li> <li>choose reading materials that are both personally interesting and intellectually accessible</li> <li>choose books and other formats of text of increasing variety and complexity</li> <li>ask questions about the reading</li> <li>suggest answers to questions about the reading</li> <li>read to investigate new ideas, genres, and types of materials for reading</li> <li>scan to locate key topics</li> <li>skim to identify key words and phrases</li> </ul>	<ul> <li>Students will continue to develop skills (K-3, above) and, by grade 7, be able to:</li> <li>identify the types of information required</li> <li>develop appropriate, efficient, and effective search strategies</li> <li>choose the best resources for the task</li> <li>use the school library and the electronic catalogue to find information</li> <li>use other libraries to search for information</li> <li>understand what primary and secondary sources are and when to use each one</li> <li>evaluate resources for usefulness</li> <li>use reference sources appropriately</li> <li>use graphic organizers to record and organize information</li> <li>take notes using key words and phrases</li> <li>determine when more information is needed</li> <li>verify findings using additional sources</li> <li>develop a structure to organize and store information</li> <li>sort information by topic and sub-topics and by criteria such as time, importance, cause and effect</li> <li>keep a record of resources used</li> </ul>

	The Points of Inquiry		
	Investigate		
	Inquiry-based Reading	Inquiry-based Learning	
8-10	<ul> <li>Students will continue to develop all skills (K-7, above) to mastery level and be able to:</li> <li>understand the relationship between information and the medium in which it is presented</li> <li>recognize the differences between implicit and explicit messages</li> <li>understand the difference between fact and opinion</li> </ul>	<ul> <li>Students will continue to develop all skills (K-7, above) to mastery level and be able to:</li> <li>evaluate resources and information critically for perspective, purpose, currency, authority, relevance, coverage, and quality</li> <li>check for reliability and credibility of a source</li> <li>understand the differences between various tools and resources for searching, and use each appropriately</li> <li>prioritize resources by usefulness</li> <li>use different kinds of resources to expand and verify information</li> <li>interpret information from graphic representations, statistics, and media sources</li> <li>develop graphic organizers to record and organize information</li> <li>use information responsibly</li> <li>report sources in a Works Cited format</li> </ul>	
11-12	<ul> <li>Students will continue to develop all skills (K-10, above) to mastery level and, by graduation, be able to:</li> <li>evaluate strengths and weaknesses of various forms of media</li> <li>understand the difference in purpose and style of a variety of newspapers, journals, and magazines</li> </ul>	<ul> <li>Students will continue to develop all skills (K-10, above) to mastery level and , by graduation, be able to:</li> <li>access government documents as sources of information</li> <li>understand the differences between search engines, search directories, and metasearch engines, and use each appropriately</li> <li>use Works Cited and bibliographies as resources to find additional information</li> </ul>	

#### Tools and Strategies to Use with *Investigating*

**Instructional Strategies:** Note-taking (point-form, two-column, keyword, visual or graphic organizers); Re-Quest (Reciprocal Questioning); group work; evaluation of resources; vocabulary development; school library orientation; effective keyword and other search strategies; journalling

Assessment Strategies: visual organizers, observations, interviews, conferences, portfolios, checklists, charts, rubrics

Technological Tools: Google, googledocs, wikis, Survey Monkey, Pageflakes, Diigo, Del.icio.us, Voicethread, Jing

#### Construct

	Inquiry-based Reading	Inquiry-based Learning	
K-3	<i>By the end of grade 3, when engaged in inquiry-based read- ing, students will be able to:</i>	<i>By the end of grade 3, when engaged in inquiry-based learning, students will be able to:</i>	
	<ul> <li>demonstrate understanding of text and images through a variety of media</li> <li>listen, view and read to identify and illustrate main ideas and themes</li> <li>understand the elements of a story</li> <li>respond to stories, text, and poetry</li> <li>create stories and other texts</li> </ul>	<ul> <li>organize information into a variety of appropriate formats and products</li> <li>work with others in gathering and recording information</li> <li>sequence information alphabetically, numerically, chronologically; by category</li> </ul>	
4-7	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:	
	<ul> <li>listen, view and read to analyze ideas and information</li> <li>compare, contrast, infer and synthesize to create meaning from text(s)</li> <li>interpret and respond to literary elements</li> <li>interpret and respond to new ideas in non-fiction text</li> <li>synthesize prior and acquired information</li> <li>create meaning from new and prior knowledge</li> </ul>	<ul> <li>use supporting details to expand key ideas</li> <li>merge information from a variety of sources</li> <li>use point-form notes to develop sentences in own words</li> <li>demonstrate responsible use of information</li> <li>integrate the work of all group members</li> <li>sequence information by cause-and-effect, importance, priority</li> </ul>	
8-12	Students will continue to develop all skills (K-7, above) to mastery level and be able, by graduation, to:	Students will continue to develop all skills (K-7, above) to mastery level and be able, by graduation, to:	
	<ul> <li>identify supporting details and understand how they are used to support a point of view or thesis</li> <li>write a précis; write a clear thesis statement</li> <li>develop a working plan or outline that supports the main idea and organizes the subtopics or supporting details logically</li> </ul>	<ul> <li>adapt an inquiry plan to own learning style</li> <li>find and use newly available online tools</li> <li>use a variety of note-taking strategies to develop para- graphs in own words</li> <li>consider and select an appropriate product for presenta- tion</li> </ul>	

#### Tools and Strategies to Use with *Constructing*

**Instructional Strategies:** idea diagrams, storyboards, and other visual and design skills to arrange, display, and organize information; writing strategies to clarify ideas, like quick writes, paraphrasing, précis, journalling; plagiarism; group strategies to edit, prepare, and practice product for presentation; various "product" formats; planning and outlining; multimedia and/or traditional formats for presentation; Works Cited; essay-writing; criteria for "publishing" (making public) presentations; task assignment and timeline development

Assessment Strategies: anecdotal observations, conferences, checklists, exemplars, rating scales, rubrics

**Technological Tools:** digital tools to capture, enter, save, retrieve, revise, display, and present information, like googledocs; Edmodo; word processing; spreadsheets; wikis; blogs; email; Skype; Twitter; BibMe; Noodlebib; chat; instant messaging

		The Points of Inquiry	
	Express		
	Inquiry-based Reading	Inquiry-based Learning	
IZ A			
K-3	By the end of grade 3, when engaged in inquiry-based read- ing, students will be able, to:	<i>By the end of grade 3, when engaged in inquiry-based learn- ing, students will be able to:</i>	
	<ul> <li>share ideas and responses to literature through discussion</li> <li>share learning with small and large audiences</li> <li>collaborate with others to exchange ideas and develop new understandings</li> <li>retell stories</li> <li>use the writing process</li> </ul>	<ul> <li>choose an effective medium for sharing</li> <li>use a variety of formats for sharing</li> <li>understand a simple concept of ownership of ideas and information</li> <li>communicate using a variety of expressive formats (software and technology tools, music, art and drama, writing)</li> </ul>	
4-7	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:	
	<ul> <li>participate in the social exchange of ideas based on listening, reading, writing, speaking, and viewing</li> <li>use an understanding of audience in presentation</li> </ul>	<ul> <li>apply models, rubrics, and/or criteria for exemplary presentation</li> <li>present information in a variety of media and formats</li> <li>demonstrate respect for intellectual property by understanding copyright and plagiarism</li> </ul>	
8-12	<ul> <li>Students will continue to develop all skills (K-7, above) to mastery level and be able, by graduation, to:</li> <li>articulate different points of view</li> <li>use techniques of summarizing, paraphrasing, and quoting</li> <li>show evidence of original thought</li> <li>understand the difference between personal opinion and thesis statement</li> </ul>	<ul> <li>Students will continue to develop all skills (K-7, above) to mastery level and be able, by graduation, to:</li> <li>integrate various formats of communication</li> <li>act as an expert and teacher in presenting information</li> <li>know the consequences of plagiarism</li> <li>understand the impact of design on visual presentations</li> </ul>	

#### Tools and Strategies to Use with *Expressing*

**Instructional Strategies:** guidelines for presentation, peer- and self-assessment, audience response; group discussion and/or consensus for rubric development; plagiarism; principles of design; media formats

Assessment Strategies: group-developed rubric; exemplars; portfolios; checklists, rating scales; charts; peer- and self-assessment

Technological Tools: wikis, blogs, Glogster, Prezi, Powerpoint, Animoto, Voicethread, podcasts, digital storytelling

Need more Learning Tools? Try Jane Hart's Top 100 Tools for Learning 2010 at the Centre for Learning & Performance Technologies (C4LPT): *http://www.c4lpt.co.uk/recommended/top100-2010.html* 

#### Reflect

	Inquiry-based Reading	Inquiry-based Learning
K-3	<i>By the end of grade 3, when engaged in inquiry-based reading, students will be able to</i> :	<i>By the end of grade 3, when engaged in inquiry-based learning, students will be able to:</i>
	<ul> <li>monitor listening, viewing and reading to ensure comprehension</li> <li>participate in constructing literacy goals</li> <li>understand own preferences for reading</li> <li>expand reading selections to include different genres and styles</li> </ul>	<ul> <li>reflect on what worked or did not work during the in- quiry process</li> <li>articulate new learning</li> <li>apply what worked to future inquiry</li> </ul>
4-7	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:	Students will continue to develop skills (K-3, above) and, by grade 7, be able to:
	• make peer recommendations for reading	<ul> <li>understand how new knowledge influences prior knowledge and hypotheses</li> </ul>
		• use self-, peer-, and teacher-generated criteria to assess the representation of learning
		<ul> <li>consider constructive criticism from peers and teachers in reflection</li> </ul>
		• assess the inquiry process and adjust for future inquiry
8-12	Students will continue to develop all skills (K-7, above) to mastery level.	Students will continue to develop all skills (K-7, above) to mastery level and be able, by graduation, to:
		• reflect upon personal change of ideas and perspectives
		• apply constructive criticism and comments from peers and instructors to future inquiry
		<ul> <li>assess how new skills, strategies, tools, and resources influence learning</li> </ul>

#### Tools and Strategies to Use When *Reflecting*

Instructional Strategies: journalling, learning log

Assessment Strategies: age-appropriate rubrics; small-group and whole-class feedback; interviews (formative and summative); exit slip

Technological Tools: blogs, wikis, email, Survey Monkey

Looking for great websites for teaching and learning? Try the AASL's Top 25 Websites for Teaching and Learning: http://ala.org/ala/mrtps/divs/aasl/guidelinesandstandards/bestlist/bestwebsitestop25.cfm



"Research shows that today's digital students learn more when engaged in meaningful, relevant, and intellectually stimulating schoolwork and that the use of technology can increase the frequency for this type of learning."

- NCREL and the Metiri Group, 2003, as cited in Berger

## So how does this work?

Teachers who use the inquiry-based approach view every learning opportunity as a place for student engagement in inquiry. From the consideration of a simple haiku to the reading and discussion of one or more novels in Lit Circles, from reviewing online articles about 33 Chilean miners' survival underground for a current events discussion in class to undertaking more significant amounts of work to explore various geographical, scientific, or spiritual accounts that "explain" the phenomenon of the Black Death, educators recognize that there is pedagogical importance in hooking students into searching for ideas and explanations that create both meaning and deeper knowledge. Some inquiries are simply more complex than others. But always, the initial connections and wonderings about the content or topic, upon *reflecting*, serve to generate both interesting and authentic questions and the enthusiasm for *investigating* the questions and *constructing* the account or answer. The shape of the lesson or the findings, again upon *reflecting*, is matched to a product, then readied for expressing, that is, for being shared or published or presented or handed in. Always students must consider:

• the question, perhaps re-framing it if there is insufficient information or evidence, for example

- the sources, going back to find more if, in constructing a product, there are found to be gaps or shallow content, eliminating those in which there is shallow content or obvious limits to the credibility
- the tools and their usefulness and applicability for collaborating, capturing, managing, presenting, and otherwise sharing the interesting new knowledge
- the findings or information, checking again if these are not consistent or not complete, and shaping them into new meaning, contemplating how to demonstrate the new-found knowledge
- the group, as not all members have the same scope of task or skills and abilities
- the product, where design, organization, proofreading, practice, and commitment are needed to manage and tie together the many pieces

Points for *reflecting* permeate these considerations. Teacher reflection is also important, especially as students' social and emotional responses to inquiry include anxiety, intense focus, "flow," and pride. Yes, inquiry-based learning is a complex process, even in its simplest classroom format.

## And why should you do it?

*"Inquiry places students at the heart of learning by empowering them to follow their sense of wonder into new discoveries and insights about the way the world works."* 

— Barbara Stripling, 2003

## So what does inquiry look like?

#### Grade 2s are studying animals and creating an original information book

The students are familiar with the difference between fiction and information books and have some idea about the features of nonfiction texts. For this project, they are going to create an information book with a Table of Contents, a labelled diagram, and a Glossary, and include three more features, like a map, a fact box, a picture, and headings. Starting with print sources, they sort through to find an interesting animal in books they can read and understand. Animals selected, they complete a KWL chart to identify what they already know and what more they want to find out. Using Kidspiration and a search engine such as Quintura for Kids, they begin to investigate, capturing their information as notes from print as well as electronic sources, like World Book for Kids. They assess the information: Do they have enough? Do they understand their own notes? Are they still wondering about aspects of their animal? Before beginning to create their books that will be "housed" in the school library, they consider: Will the book be interesting and relevant to the reader? What good visuals work with the information? Construction begins. When their books are finished, the teacher helps them think about how they will present them: they need to introduce the topic, show two pages from the book, and tell what was the most interesting fact about the animal they have chosen. The teacher assesses the presentation and guides them to reflect with a self-assessment rubric: What have they learned? What was the greatest challenge? What would they do differently next time? They complete the KWL chart.

#### Grade 6s are studying ancient civilizations and creating a list of the "new" Seven Wonders of the World

In earlier classes, students learned about the Seven Wonders of the World. What, asks the teacher in a brainstorming activity, were the criteria that made these "wonder-full"? Should there be a new list of wonders? With a list of monuments and grand constructions, the students consider the question. Using books and online sources, they explore to find ones that they might like to investigate and "sell" to the class as a possibility for the new list. The teacher accepts their choices on the class blog. They create a list of questions to guide their inquiry, questions that are designed to generate interesting, relevant, and persuasive information. Information is gathered on a graphic organizer — their choice: Inspiration, Mindmeister, journal — from a variety of print and electronic resources. They use BibMe to keep a record of their sources and later create a Works Cited page for their "sales pitch." They reflect before construction of the argument begins: Do they have enough appropriate information for each category? Do they understand their own notes? They file a progress report on the class blog to provide the teacher and classmates an opportunity for feedback. Constructing the argument for their "wonder" involves considering different presentation formats, from traditional and technological booklets, to posterboards and powerpoint, video, podcast or Animoto formats. They are required to construct a model and a presentation of information. They will need to consider the audience, especially how to "grab" and keep their attention. Which graphics will they use? How much text? What technology would work best? They know that the teacher will assess their models and information as products, the oral component, including their persuasiveness, and the Works Cited page. To finish the inquiry, they complete a self-assessment rubric via the class blog; by now, they know to expect the questions, What was the hardest part? What did you learn that surprised you? What would you do differently next time?

#### Grade 11s are studying Macbeth and writing an essay about Shakespeare's use of the supernatural

Senior students reading Macbeth and viewing the Polanski version of the film, have some experience writing essays, creating a thesis statement, organizing ideas to support an argument, and understanding plagiarism, paraphrasing, incorporating quotations, and using in-text citations matched to a Works Cited page. But they are not at "mastery" level and need practice writing. They are given a paper found in an "essay mill" and apply appropriate Writing Performance Standards to assess the quality. The assignment asks them to compare and contrast the use of the supernatural in Shakespeare, as it reflects Elizabethan worldviews, with the use today, in a current film or book of their own choice. The teacher introduces the essay by facilitating a discussion, using booktalks, about the supernatural in Latin American magic realism, the spirit world of aboriginal literature, the horror film genre, ghost stories, and so on; they review the conventions of writing to compare. They are directed to books and databases to find reliable sources on the Elizabethan and Shakespearean views of the supernatural. They need two credible sources of information for information and quotes. In addition, they read or view their current "supernatural" resource. They take notes, keep a learning log, organize information into a plan, record source information, and compose a draft for review by a classmate; when the draft is refined, it is submitted for teacher feedback, refined again and submitted, with the Works Cited page in MLA Style, for final assessment. Learning logs are completed: What were their writing and inquiry processes? Challenges? Surprises? Things that, done differently, would help their essay-writing?

#### **IN SUMMARY**

The BCTLA K-12 Information Literacy Task Force moved, over a period of more than three years, to deeper understanding of the importance of learners being able to think critically about information, about sources of information, and about constructing and answering their own questions. The goal posts had shifted well beyond the search for a right model for research for the BC curriculum to the capacity for drawing new knowledge from an inquiry-based approach to information, reading, and 21<sup>st</sup> Century learning.

The BCTLA inquiry-based approach, termed *The Points of Inquiry*, is:

- framed by well-established as well as new understandings about learning, including traditional literacy and multi-literacies
- constructed as a model that works for reading as well as research
- framed by the notion of learners as those who seek to explain or find answers to their own questions
- grounded in new and emerging technologies as tools for accessing, using, working with, and presenting information
- built developmentally with benchmarks for use in classrooms and school libraries from Kindergarten to Grade 12
- constructed through the lens of the BC IRPs, for BC students and teachers.

The model no longer puts a focus on information literacy skills. Rather it embeds these skills under broader inquiry-based cognitive abilities and within curriculum to empower and position young British Columbians to become strategic and independent lifelong learners.

#### References

- Alberta Learning. 2004. *Focus on inquiry: A teacher's guide to implementing inquiry-based learning*. Edmonton: Alberta Learning and Teaching Resources Branch.
- American Association of School Librarians. 2009. *Empowering learners: Guidelines for school library media programs*. Chicago: AASL.
- American Association of School Librarians. 2009. *Standards for the* 21<sup>st</sup>-Century learner. Chicago: AASL.
- American Association of School Librarians. 2009. *Standards for the* 21<sup>st</sup>-Century learner in action. Chicago: AASL.
- American Association of School Librarians. 2009. *Standards for the* 21<sup>st</sup>-Century learner in action. Chicago: AASL.
- Asselin, M., J. Branch, and D. Oberg. 2003. Achieving information literacy: Standards for school libraries in Canada. Ottawa: CSLA/ATLC.
- Asselin, M., and R. Doiron. 2005. Redefining the school library's role in literacy teaching and learning. In *Literacy, libraries, and learning: Using books and online resources to promote reading, writing, and research*, ed. Marlene Asselin and Ray Doiron, 9-18. Markham, ON: Pembroke.
- Ball, C., and H. Power. 2009. *Top ten research skills for first year university students*. Unpublished paper prepared for the Vancouver Board of Education.
- Berger, P. 2010. Student Inquiry and Web 2.0. School Library Monthly. XXVI, 5: 14-17.
- British Columbia. Ministry of Education. *Curriculum*. Victoria, BC: Ministry of Education. Available [18 October 2010] from <http://www.bced.gov.bc.ca/irp/welcome.php>.
- British Columbia. Ministry of Education. Learning Resources Branch. 1991. Developing independent learners: The role of the school library resource centre. Victoria: Ministry of Education.
- Chambers, Aidan. 1996. *The reading environment: How adults help children enjoy books*. Markham, ON: Pembroke.
- Clark, C., and K. Rumbold. 2006. Reading for pleasure: A research overview. In *National Literacy Trust*. Available [23 October 2009] from <a href="http://www.literacytrust.org.uk/assets/0000/0562/">http://www.literacytrust.org.uk/assets/0000/0562/</a> Reading\_pleasure\_2006.pdf>.
- Cooper, D. 2006. *Talk about assessment: Strategies and tools to improve learning*. Toronto: Nelson Education.
- Fulghum, R. 1989. *All I really need to know I learned in Kindergarten.* Oxford, UK: Ivy.
- Henri, J. 2008. The changing landscape for school libraries. Presented at summer conference (August 25-6, 2008), Byng Secondary School, Vancouver.

- Koechlin, C., and S. Zwaan. 2008. *Building info smarts: How to work with all kinds of information and make it your own*. Markham, ON: Pembroke.
- Krashen, S. 2006. Free reading. *School Library Journal* 52, 9: 42-45.. Available [23 October 2009] from <a href="http://www.schoollibraryjournal.com/article/ca6367048.html">http://www.schoollibraryjournal.com/article/ca6367048.html</a>
- Krashen, S. 2004. *The power of reading*. Westport, CT: Libraries Unlimited.
- Kuhlthau, C., L. Maniotes, and A. Caspari. 2007. *Guided inquiry: Learning in the 21<sup>st</sup> century school.* Westport, CT: Libraries Unlimited.
- Locke, M., and H. Daly. 2008. School libraries as classrooms. *The Bookmark* 48, 2: 7-12. Available [8 May 2010] <a href="http://psas.bctf.ca/bctla/Bookmark/2008WinterBookmark.pdf">http://psas.bctf.ca/bctla/Bookmark/2008WinterBookmark.pdf</a>>
- Ontario Confederation of University Faculty Associations. 2009. Students less prepared for university education. In *qualitymatters.ca*. Available [10 May 2010] from <a href="http://www.qualitymatters.ca/QualityMatters/docs/">http://www.qualitymatters.ca/QualityMatters/docs/</a> Students less prepared April 6 2009.pdf>.
- Ontario School Library Association. 2010. *Together for Learning: School Libraries and the Emergence of the Learning Commons. A Vision for the 21st Century.* Toronto, ON: OSLA. Available [4 October 2010] from: <a href="http://www.accessola.com/data/6/">http://www.accessola.com/data/6/</a> rec docs/677 OLATogetherforLearning.pdf>
- Rushowy, K. 2009. Profs blast lazy first-year students: Wikipedia generation is lazy and unprepared for university's rigours, survey of faculty says. *The Toronto Star*, April 6, A12.
- Saskatchewan Education. 1998. Reading. English Language Arts 20: A Curriculum Guide for the Secondary Level. Regina, SK:

Saskatchewan Education. Available [15 October 2010] from <http://www.sasked.gov.sk.ca/docs/ela20/teach5.html>

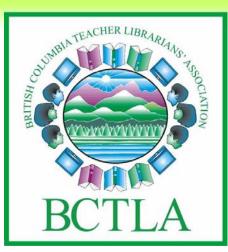
- Saskatoon Public Schools. 2009. What is Inquiry? *Instrutional Strategies Online*. [15 October 2010] from <http://olc.spsd.sk.ca/DE/ pd/instr/credits.html>
- Schnellert, L., M. Datoo, K. Ediger, and J. Panas. 2009. *Pulling together: Integrating inquiry, assessment, and instruction in today's English classroom.* Markham, ON: Pembroke.
- School District #43 (Coquitlam). 2002. Learning outcomes for information literacy. In *Teacher-Librarian & SD43 Library System*. Available [14 October 2008] from <a href="http://public.sd43.bc.ca/district/library/default.aspx">http://public.sd43.bc.ca/district/library/default.aspx</a>
- Shore, R. 2008. The power of pow! wham!: Children, digital media & our nation's future: Three challenges for the coming decade: Executive summary. In *The Joan Ganz Cooney Center at Sesame Workshop*. Available [10 May 2010] from <a href="http://www.joanganz-cooneycenter.org/pdf/Challenge">http://www.joanganz-cooneycenter.org/pdf/Challenge</a> Paper ExecSummary.pdf>
- Stripling, B., Ed. 1999. Learning and Libraries in an Information Age: Principles and Practice. Englewood, CO: Libraries Unlimited
- Stripling, B., and S. Hughes-Hassell. 2003. Curriculum connections through the library. Principles and Practice Series. Englewood, CO: Libraries Unlimited.
- Stripling, B. 2004. Using inquiry to explode myths about learning and libraries. *SLA Journal* 28, 1:15-17.
- Wiggins, G., and J. McTighe. 2005. Understanding by design. Alexandria, VA: ASCD.
- Wortel, K., et al. 2001. 9-12 Information and technology benchmarks for Mankato Area Public Schools. Available [10 May 2010]

#### K-12 INFORMATION LITERACY TASK FORCE British Columbia Teacher-Librarians' Association

POINTS OF INQUIRY: Inquiry-based Learning for Classrooms and School Libraries

Task Force members included Moira Ekdahl, Teacher-Librarian Consultant (Vancouver) and teacher-librarians Michele Farquharson (Vancouver), Julie Robinson (West Vancouver), and Lynn Turner (Terrace), with advice from BCTLA President Heather Daly, Library and Information Coordinator (Coquitlam); development of this model took place over a period of three years. K-12 learning outcomes were developed from BC and other curriculum documents, including BC Integrated Resource Packages.

Revised October 2010. Presented at Kelowna BCTLA and Delta Encompass Student Engagement conferences.



**BCTLA** hereby grants permission for this work to be reproduced in part, or in its entirety, for nonprofit educational purposes within British Columbia. All other rights are reserved.

Available for reprint, BCTLA website: http://bctf.ca/bctla/

When citing this source, please use the following attribution:

Ekdahl, M., M. Farquharson, J. Robinson, L. Turner.
2010. The Points of Inquiry: A Framework for Information Literacy and the 21<sup>st</sup> Century Learner.
Vancouver, BC: British Columbia Teacher-Librarians' Association.