Information Literacy and the School Library

Information Literacy Program

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Information Literacy…

A complex multifaceted term …

- information seeking and use
- library instruction
- media education
- Inquiry-based learning
- procedural and process skills
- learning to learn competences
- ICT skills

My information literacy journey

… from library-based to inquiry-based

- Changing view of information literacy instruction
  - a source approach – 1960s – 1970s
  - a pathfinder approach – 1980s
  - a process approach – 1990s …
- Re-thinking information literacy – expanding into instruction that supports inquiry learning -- infused into K-12 curriculum

School Librarians – active agents

- Responsible for working to implement the curriculum in ways consistent with local and/or national curriculum
- E.g. Alberta's curriculum is inquiry-based
- E.g. Norway's Knowledge Promotion curriculum is based on the competences from the Lisbon Strategy (Quality Framework) – *learning to learn

What's new?
Information Literacy and Inquiry

- Complexity of the processes of information seeking and use
- Infusion of technology
- Availability of information
- Multiplicity of skills and strategies
- Instruction to address cognitive, affective, and action aspects of literacy (Kuhlthau)

Inquiry Approach

Personal, active, authentic learning in depth where students:

- develop questions to guide their learning
- research sources of information
- synthesize new ideas
- share evidence of their understanding
- while reflecting on their learning

Carol Kuhlthau

Louise Limberg

IL Researchers …

- Carol Kuhlthau
- Louise Limberg
- Ross Todd
- Barbara Stripling
- Julie Tallman
- Vi Harada
- Joy McGregor

A Constructivist View: We learn …

- by being actively engaged and reflecting on that experience.
- by building on what we already know.
- through guidance at critical points in the learning process (Vygotsky).
- in a sequence of stages (Piaget).
- In different ways.
- through social interaction with others.

Model of the Information Search Process

Tasks	Initiation	Selection	Exploration	Formulation	Collection	Presentation
Feelings (affective)	uncertainty	optimism	confusion frustration doubt	clarity	sense of direction/ confidence	satisfaction or disappointment
Thoughts (cognitive)	vague----------→focussed ----------→ increased interest					
Actions (physical)	seeking relevant information----------→seeking pertinent information exploring documenting					

Carol Collier Kuhlthau Information Search Process Rutgers University
http://www.scils.rutgers.edu/~kuhlthau/Information%20Search%20Process_files/frame.htm

Place OF Learning vs. Place FOR Learning

Limberg and Alexandersson (2003)

- Implement learning processes based on students' systematic research
- Stronger focus on organized student learning
- Increase in collective action vs. the prevalent pattern of individual communicative interaction
- Encourage students to explore topics in order to develop conceptual knowledge about the world
- Re-examine the layout of the library to encourage a variety of learning contexts

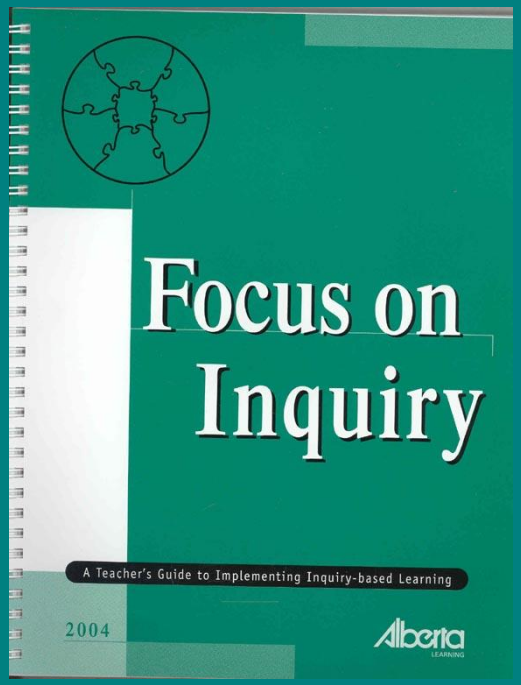
Why use a model?

- a scaffold for instruction
- a gauge for feelings
- a common language for teachers and students
- a guide for students
- a guide for monitoring

What is your model?

Focus on Inquiry:

A Teacher's Guide to Implementing Inquiry-Based Learning



Available free:
education.alberta.ca/media/313361/focusoninquiry.pdf

A systematic approach to inquiry-based instruction

Benefits to students:

- they become familiar with the inquiry process
- they internalize a variety of inquiry skills and strategies for independent and group use
- they are able to adapt procedures to various inquiry situations

What is inquiry-based learning?

- …a process where students are involved in their learning, formulate questions, investigate widely and then build new understandings, meanings and knowledge. That knowledge is new to the students and may be used to answer a question, to develop a solution, or to support a position or point of view. The knowledge is usually presented to others and may result in some sort of action. (*Focus on Inquiry*, p. 1)

Inquiry-based instruction? What might it look like?

- Developing emotional literacy
- Investing time in exploration
- Supporting students during their work
- The importance of the teaching role
- Understanding the process approach to inquiry

Inquiry Model

Reproduced with permission from Alberta Learning, *Focus on Inquiry: A Teacher's Guide to Implementing Inquiry-based Learning* (Edmonton, AB: Alberta Learning, 2004), p. 10.

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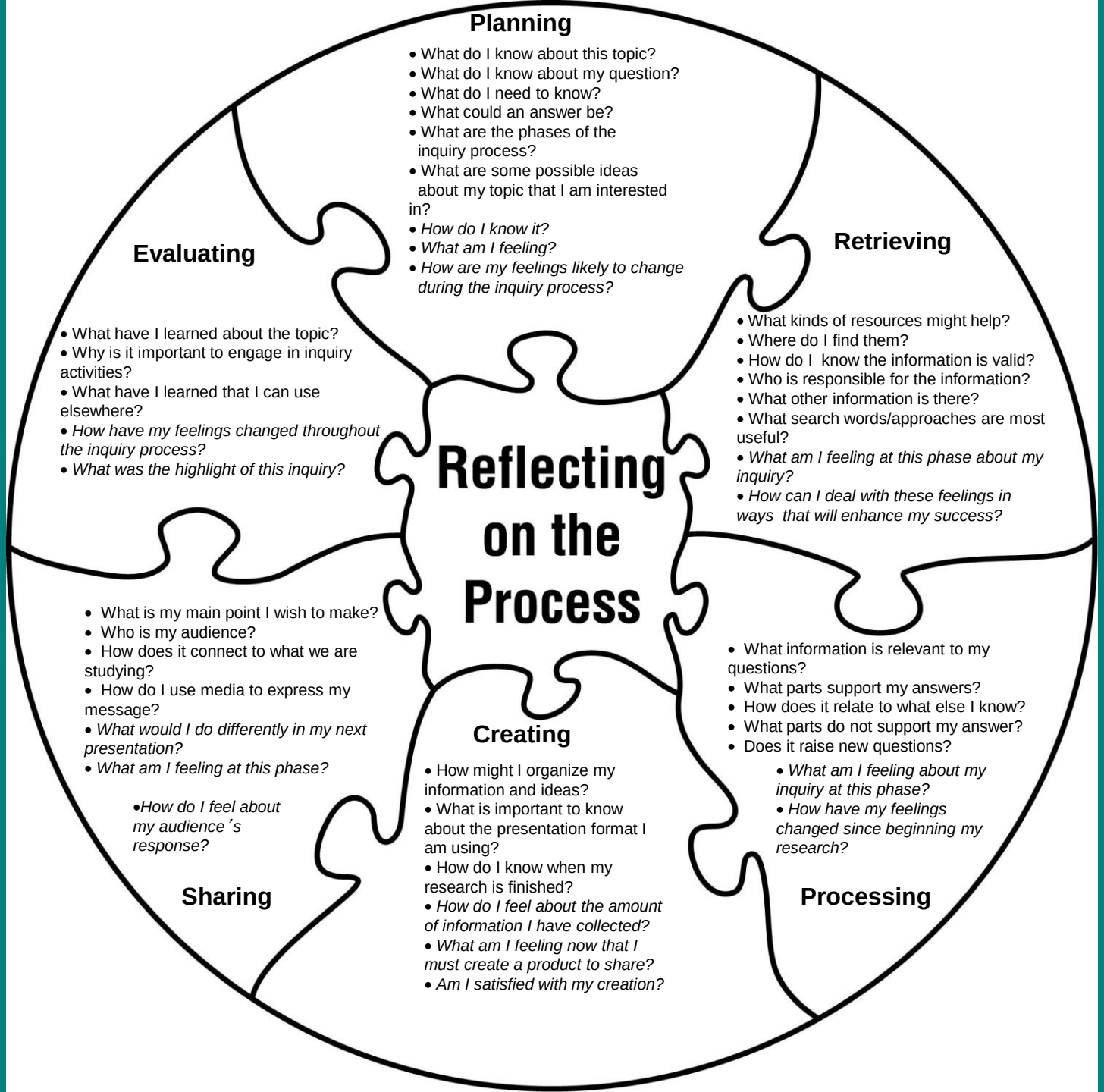
The Alberta Teachers' Association

Focus on Inquiry Model

Tasks	Planning	Retrieving	Processing	Creating	Sharing	Evaluating
Feelings (Affective)	optimistic uncertain worried	confident confused upset	confident overwhelmed	excited pressured	nervous excited	relief satisfied/ unsatisfied
Thoughts (Cognitive)	holistic	generative	focused	organizing conflicting	audience creative	transference understanding

Metacognition



“Lens” for each phase

- Key outcomes
- Building student skills for …
- Teaching … incl. Tips for Teachers
- Assessing …
- Thinking about …
- Sample activity for …

Sample: Key Outcomes for Reflecting on the Process – Students will:

- understand inquiry is a personal learning process
- understand the inquiry process is transferable to other learning situations
- develop their metacognitive and reflecting skills – thinking about their thinking and thinking about their feelings
- develop strategies for monitoring and enhancing their thinking and feelings.

Sample: Building Student Skills for Planning

In the Planning phase, and/or in the context of classroom activities, the teacher provides students with opportunities to:

- Brainstorm possible questions, ideas and issues
- Use concept mapping software (such as Inspiration), mind maps, or topic webs to record ideas
- Use a KWL chart to develop questions about the topic of inquiry

Sample: Teaching Retrieving

During and in the context of an inquiry-based learning activity, the teacher provides students with opportunities to:

- Understand that Retrieving is problem-solving that requires both critical thinking and imaginative thinking.
- Create a search strategy
- Communicate with experts both locally and beyond
- Record bibliographic information

Sample: Tips for Teachers

- Teach the difference between relevant and pertinent information
- Teach students to self-check –“Is this information even remotely related to my question?”
- Beware of ‘hyperleaping’ – databases and the Internet need different searching strategies

Sample: Assessing Processing

The teacher provides opportunities for st to:

- Complete graphic organizers (compare / contrast, cause / effect, etc.)
- Write/talk about which graphic organizer(s) was/were most appropriate for their inquiry
- Write/talk about which resources are most useful for a deeper understanding of their topic and why
- Write/talk about how their understanding of the topic has changed/developed

Sample: **Thinking about Creating**

- In this phase of the inquiry process, students organize and synthesize their information and ideas in a unique and personal way. They develop or revise a thesis and formulate alternative answers, solutions and conclusions. Facilitating student discussions before writing can help them express their ideas in their own words. Students categorize information according to various frameworks, developed by themselves or provided for them, such as time/order or cause and effect. Students look for inconsistencies or deficiencies in their information and locate information to rectify such problems. ...

Sample: Sample Activity for Evaluating

- Teach students the basics of a flow chart and how it assists in evaluating process and product. The chart can be designed on 11 x 17 paper or on a computer program.
- Provide time for students to compare and contrast their flow charts.

Inquiry Challenges

- Inquiry takes time. It often is messy.
- Worries that inquiry takes time away from curricula and test success.
- Inquiry-based learning moves from teacher-centred, past student-centred, to a learning-centred model.
- The critical role of emotions in learning is acknowledged.

Reducing the challenges

- Dealing with time demands
- Building procedural knowledge
- Reducing cognitive overload
- Reducing affective overload

Dealing with time demands

Plan for more time early in the project:

- exploration of the topic, using multiple media
- building content knowledge
- developing a personal focus
- connecting the project to a purpose, to other school work

Building procedural knowledge

- Prior to beginning an inquiry, teach skills such as database searching and note-making in the context of classroom activities
- During an inquiry, teach specific procedural skills to small groups on an “as-needed” basis

Reducing cognitive overload

- Ensure students have a broad general knowledge of the topic area
- Minimize the number of new process skills to be taught
- Reduce the range of choices for creating and sharing project results

Reducing affective overload

- Help students to expect waves of positive and negative feelings during complex learning
- Help them see that feelings are a normal part of learning
- Discuss feelings as a part of regular “reflection” times, build coping strategies

Some Benefits, or "So What?"

- Prepares students for lifelong learning, as well as for the next grade and the next test
- Prepares students for 21st century workplace – e.g., to research possible causes of problems, to solve problems with others, to write clearly to convey complex information
- Increase in student engagement

- Commments?
- Questions?

- Followup contact information

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