

ALERT



ADOLESCENT LITERACY: ENGAGING RESEARCH AND TEACHING

Make room for ENGAGING IN INQUIRY LEARNING

DID YOU KNOW?

There is a reciprocal relationship between literacy and inquiry; students use a number of literacy skills in order to engage in inquiry, and through inquiry, learners use and strengthen their literacy skills in purposeful and authentic ways. Inquiry is an extension of people's natural curiosity. Inquiry-based learning is an approach which involves investigating issues or events or phenomena, solving problems, drawing conclusions and creating new knowledge. Inquiry-based learning is not about arriving at one predetermined "correct answer". Rather it is an avenue to explore a wide variety of possible explanations, solutions, or the generation of further questions in relation to a problem or issue.

Adolescents develop and use a number of literacy skills during inquiry. They craft appropriate questions (e.g., open-ended, allowing for multiple answers) which drive investigations. They gather information from a variety of texts and observations (e.g., reading a variety of sources and keeping notes using an appropriate method), communicate their results and findings (e.g., in a variety of forms determined by purpose and audience), and reflect on the process (e.g., self-assessing their use of skills used during the process).

WHY IS IT IMPORTANT FOR ADOLESCENT LEARNERS?

One of the goals of inquiry is to engage students in deep learning and understanding. Inquiry supports adolescents' sense of contribution and autonomy because it allows for many paths of investigation, offers choices prompted by open-ended questions, and positions students as knowledge creators rather than knowledge retrievers.

Inquiry also supports adolescents' curiosity at a time in their lives when their knowledge of the world is expanding. Inquiry gives students an opportunity to see topics and issues as multidimensional (e.g., examining war from a variety of points of view), to make interpretations (e.g., posing possible explanations based on a set of data), and to explore implications on a broader scope (e.g., determining

"For students, the process often involves open-ended investigations into a question or a problem, requiring them to engage in evidence-based reasoning and creative problem-solving, as well as 'problem-finding'".

Student Achievement Division,
2013



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consequences related to social justice). Inquiry also broadens adolescents' understanding of perspective, invites them to ask critical questions about the multiple sources of information they use in their inquiries, and consider a wide range of audiences and purposes to guide how they assemble and communicate their conclusions.

IN THE CLASSROOM

GETTING STARTED

Inquiry is a way of both teaching and learning. Instead of unconnected projects, undertaken occasionally on an individual basis, an inquiry-based classroom is one that operates in an inquiry stance and encourages the growth of specific inquiry dispositions.

- Create a safe atmosphere that allows students to explore and take risks (Koechlin & Zwann, 2014).
- Begin with a problem or question that is interesting to students or generated by students, and encompasses a “big idea” related to the curriculum.
- Use opinionnaires, rankings, anticipation guides, as well as a variety of materials and demonstrations (e.g., primary source documents, video and audio clips, photographs, experiments) to frontload information prior to launching an inquiry (Wilhelm, Wilhelm & Boas, 2009).
- Explicitly teach vocabulary associated with inquiry (e.g., evaluate, synthesize). Consider additional vocabulary needs that some students, such as English Language Learners may have.
- Use inquiry as a way to foster growth mindset; that is, view all opportunities as contributing to learning. Also use words such as perseverance, self-confidence, and open-mindedness to describe attitudes that advance their learning (Watt & Colyer, 2014).
- Consider the lived experiences that students bring that contribute to the inquiry.

TRY IT OUT: USING SEE-THINK-WONDER TO STIMULATE QUESTIONS

One way to stimulate student questions is through a *See-Think-Wonder* graphic organizer. *See-Think-Wonder* allows students to gain a “foundation for greater insights, grounded interpretations, evidenced-based theory building, and broad-reaching curiosity” (Ritchhart, Church & Morrison, 2011).

See-Think-Wonder provides a framework that takes students through noting observations (*See*), to making interpretations (*Think*), to posing questions (*Wonder*) that can launch an inquiry.

See	Think	Wonder

The stimulus or material for the observations may include a photograph, media clip, article, data, or art work — anything that is connected to a learning goal and allows students to draw out details that they can use to “build up layers of tentative interpretation rather than naming the subject matter” (Ritchhart, Church & Morrison, 2011).

After generating *Wonder* questions, students may need help to shape questions into ones that are rich and deep enough to sustain an inquiry.

“[T]he inquiry process encourages students to frequently pause their work and think about what they are doing, how they are doing, and what they are learning. This metacognition and communication of the learning process allows them to self-correct, peer correct, or come to you with questions and wonderings.”

Watt & Colyer, 2014

See	Think	Wonder
<p>The town now owns a large vacant lot downtown, and the mayor and council would like to see the land redeveloped.</p> <p>Town council says it wants to hear from people on what they want for the land redevelopment.</p> <p>Besides a few people on town council, the newspaper article includes quotations from two business people who talk about what they would like for the property.</p>	<p>When looking at the news article, it looks like only politicians and business people are talking about the land redevelopment.</p> <p>There are lots of things the town needs that would make it better.</p> <p>There isn't enough for young people to do.</p> <p>Something could be developed on the land that young people would like.</p>	<p>What are the possible uses for the land so that it benefits the community?</p> <p>How can politicians gather input on the land redevelopment from everybody so that it is fair?</p> <p>Do, or should, the voices of youth have the same power/influence as the voices of adults when it comes to land development?</p> <p>What ways do local governments make decisions so that it has the greatest benefit? How do they weigh the options?</p>

See-Think-Wonder

See-Think-Wonder could be adapted to See/Hear-Think-Wonder depending on the text students are using to prompt their inquiries.

This example of *See-Think-Wonder* is based on students reading an article in a local newspaper and the process of documenting what they see and think leads them to generating a number of questions that could be pursued through inquiry.

MAKING A PROCESS FOR INQUIRY EXPLICIT

Inquiry not only allows adolescents to develop understanding of a concept, issue or idea, it helps students develop a process for investigating and drawing conclusions. Inquiry-based learning involves a number of stages which move learners from initiating lines of curiosity to communicating conclusions based on findings.

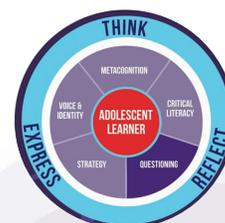
Although inquiry is not limited to particular subject areas, some of the Ontario curriculum documents organize stages of inquiry processes into broad categories which support learning in the discipline.

One way to make students more aware of an inquiry process they are using is to post the stages of the process in the classroom (e.g., on an anchor chart). During the inquiry, point out the particular stage the students may be in, and help them set or refine their goals as they progress. Stress that the stages are not intended to be linear, and explore with students how and when they may need to revisit stages.

A number of sentence stems can be provided during the process to prompt students to think about their use of skills at each stage of the process, for example

- The criteria are helping me evaluate if I have enough evidence because...
- The method I am using to organize my evidence (data, observations, information) is helping me to...
- If I were to change one thing about how I organize my evidence, I would...
- Putting this information in a chart helps me to see...
- Making predictions about my data was helpful/unhelpful because...

Canadian and World Studies	Science	Social Sciences and Humanities
<ul style="list-style-type: none"> – Formulating questions – Gathering and organizing information, evidence and/or data – Interpreting and analyzing information, evidence and/or data – Evaluating information, evidence, and/or data and drawing conclusions – Communicating findings and/or plans of action 	<ul style="list-style-type: none"> – Initiating and Planning – Performing and Recording – Analysing and Interpreting – Communicating 	<ul style="list-style-type: none"> – Exploring skills – Investigating skills – Processing – Communicating and reflecting skills



The *Adolescent Literacy Guide* outlines components which support students' abilities to think, express and reflect. Questioning is one of the components to which this ALERT connects.

USING INQUIRY TO BUILD COMMUNICATION SKILLS

Inquiry-based learning allows students to practice and develop their communication skills. Although most inquiry processes include a stage for students to communicate their conclusions and findings at the end of the process, there are a number of opportunities for students to share their initial curiosities, tentative interpretations, and discoveries along the way. These opportunities can be used to assess and support student communication skills.

Inside-Outside Circle is one way for students to share with a number of peers in a relatively short amount of time. *Inside-Outside Circles* structures a series of low-risk conversations between pairs of students. This instructional strategy can also be especially supportive of English Language Learners and students who may experience literacy challenges.

To set up, half of the students form a circle facing outward, while the other half forms an outside circle facing inward. Students engage in discussion with the student directly facing them. On a signal, the inside circle moves clockwise (e.g., three spots) while the outside circle moves counterclockwise so that each student faces a new partner.

The chart below (Wilhelm, 2007), provides a way for students and/or teachers to quickly assess (e.g., with a check) the presence of elements of the discussion along with effective communication skills.

Student Names	Shared a new insight	Built on another's comment	Made specific reference to a text being discussed	Used attentive listening behaviours
1.				
2.				

Adapted from Wilhelm (2007).

IN BRIEF

Inquiry-based learning opens up possibilities for students to explore and engage in topics and ideas. It also provides a platform for students to use literacy skills, and to develop those skills through learning.

REFERENCES

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- Ritchhart, R., Church, M., & Morrison, K. (2011). *Making Think Visible: How to Promote Engagement, Understanding and Independence for All Learners.* San Francisco: Jossey-Bass
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- Wilhelm, J., Wilhelm, P. & Boas, E. (2009). *Inquiring Minds Learn to Read and Write.* Markham, ON: Rubicon Publishing Inc.

FOR MORE ON...

Adolescent Literacy

Literacy GAINS. (2012)
[Adolescent Literacy Guide: A Professional Learning Resource for Literacy, Grades 7-12](#)

Questioning

Literacy GAINS. (Winter 2013)
[ALERT: Make Room for Students to Pose and Pursue Questions](#)

Student Collaboration

Literacy GAINS (Winter 2015)
[ALERT: Make Room for Supporting Student Collaboration](#)