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Developing and Organizing Ideas: Exploring Topics

Research Process Grades 7–12 (Preparing for Research)

Research is a complex and dynamic process. When engaged in research, the interplay of reading, writing and thinking skills as well as information and communication technology (ICT) skills is essential for student success. Knowing the stages of research and understanding how to journey through these stages provides a learning map for this complex process.

Stage One, “Preparing for Research” sets the learning foundation for success. In this stage, students are given the parameters of the assignment: area of study, context for learning or performance task, intended audience, resource guidelines, timelines, and assessment. Choosing an appropriate and relevant topic related to the general area of study means that students are engaged in the research process right from the start.

Purpose

- Encourage student-generated topics.
- Build a wide variety of topics to explore.
- Help students select a topic that is meaningful and related to their interests.
- Encourage student ownership of the project.

Payoff

Students will:

- think in broad and specific terms about the area of study.
- see the vast possibilities of options for their research.
- select a topic of interest to them.
- be engaged and motivated in the project.

Tips and Resources

- Prepare students for the journey of research by highlighting the 4 stages of research and explain that this is a cyclical and recursive process. See Student/Teacher Resource, *The Process of Inquiry and Research* (adapted from OSLA, *Information Studies, K – 12, 1999*) and *Linking Stages of Research to Think Literacy*.
- Classroom teachers and teacher-librarians should work collaboratively to assist students in developing and choosing an appropriate and relevant topic.
- Give students the parameters of the assignment but not a list of topics.
- Students need time to explore topics using a variety of strategies:
 - Interest inventory to identify areas of general interest.
 - Rotation through stations or centres of different resources that will provide students with some of the background knowledge they need to make informed decision about the topic (e.g., encyclopedia searches, or encyclopedia indexes, videos, magazines/journals, collection of books on the area of study). See Student/Teacher Resource, *Stations for Topic Explorations*.
 - Guided brainstorming activities to explore broad and specific topics related to the area of study. See Student/Teacher Resource, *Think Topics Web*.
 - Students could create their own thinking web of topics using Ministry-licensed software SMART Ideas™.

Further Support

- Some students may need more support and direct guidance when choosing a topic. Focused questions are often helpful.



Developing and Organizing Ideas: Exploring Topics

Research Process Grades 7–12 (Preparing for Research)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Introduce the concept of the research process and the importance of understanding the stages of research. The stages become a learning map on the research journey. • Introduce the 4-stage process. See Student/Teacher Resources, <i>The Process of Inquiry and Research</i> and <i>Linking the Stages of Research to Think Literacy</i>. • Ask students to think about a prior project and brainstorm all the steps in a research project. Have students order the steps. • Chart the 4 stages: Preparing for Research, Accessing Resources, Processing Information and Transferring Learning. • Ask students to place their research steps within the 4 stages. • Provide students with the Teacher/Student Resource, <i>The Process of Inquiry and Research</i> and highlight the step of choosing a topic. 	<ul style="list-style-type: none"> • Think about a prior research project and record steps on Post-it notes. • With a partner, sequence these steps. • Students place their steps within the 4 stages of research introduced by the teacher.
<p>During</p> <ul style="list-style-type: none"> • Discuss the importance of choosing a topic related to the area of study that is: <ul style="list-style-type: none"> - relevant, (based on the area of study and within parameters of project). - appropriate (resources can be located on the topic). - based on student interest. • Hand out Student/Teacher Resource, <i>Stations for Topic Explorations</i>. • Invite students to rotate through the stations to explore their area of study. • When complete, distribute, explain and model Student/Teacher Resource, <i>Think Topics Web</i> as a synthesizing activity. 	<ul style="list-style-type: none"> • Rotate through stations exploring a variety of resources and record topics of interest related to the area of study. • Individually complete the Student/Teacher Resource, <i>Think Topics Web</i>.
<p>After</p> <ul style="list-style-type: none"> • Ask students to select 2 or 3 topics and be prepared to give reasons for their choice based on appropriateness, relevance and student interest. • Instruct students to develop a list of possible resources to support their topic based on the exploration activity. 	<ul style="list-style-type: none"> • Select two possible topics and gives reasons for their choice. • List possible resources for their topic based on exploration activity.

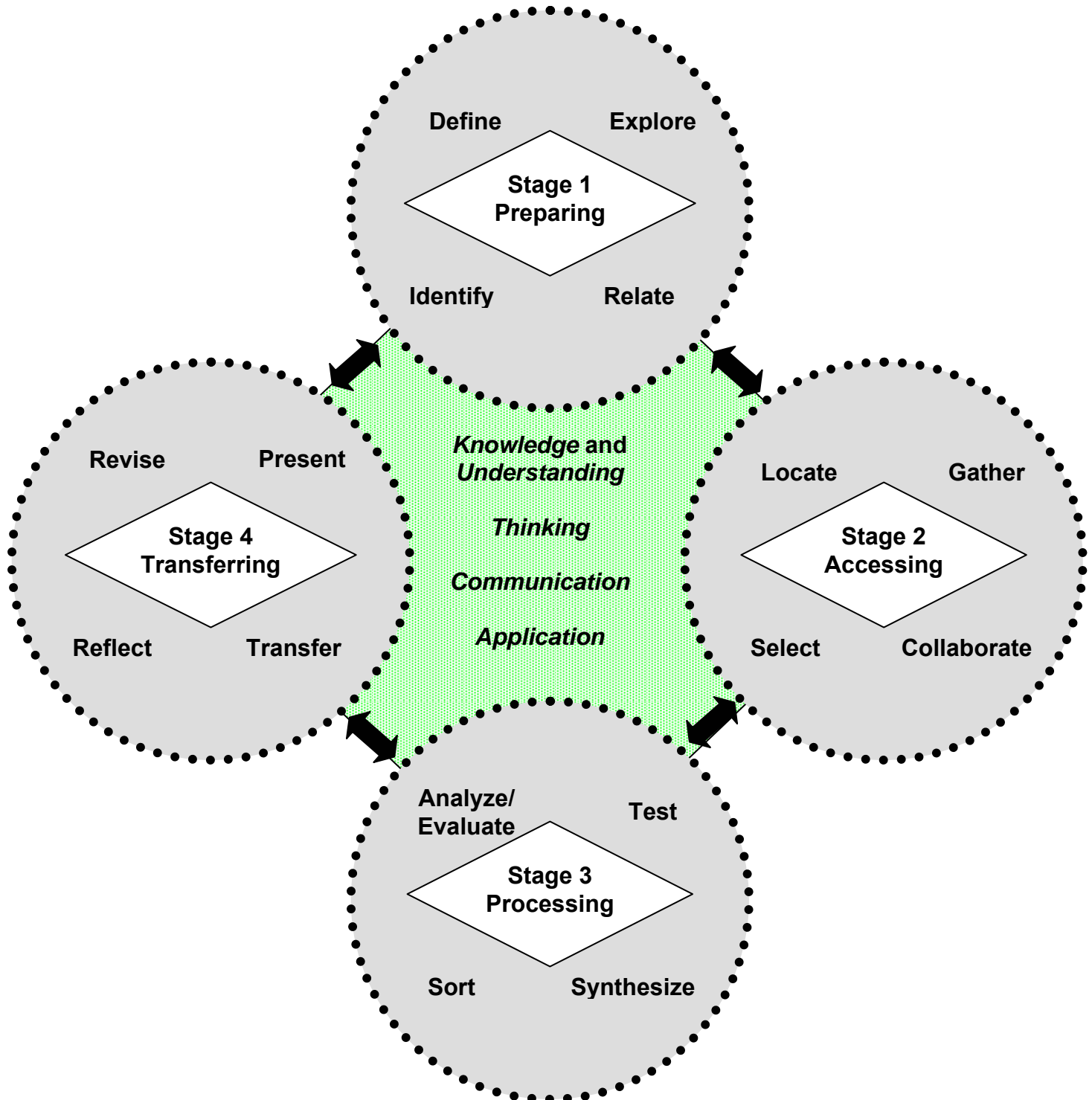
Notes



Developing and Organizing Ideas: **Exploring Topics**

Research Process Grades 7–12 (Preparing for Research)

The Process of Inquiry and Research





Developing and Organizing Ideas: Exploring Topics

Research Process Grades 7–12 (Preparing for Research)

Linking the Stages of Research to Think Literacy Cross-Curricular Approaches

Information Studies	Think Literacy	
Stages of Research	Strategies	Page
STAGE ONE: Preparing for Research		
Define <ul style="list-style-type: none"> requirements of the assignment information needs using a variety of strategies Explore <ul style="list-style-type: none"> topics using a variety of resources, print, electronic and human Identify <ul style="list-style-type: none"> key questions that need to be answered varied ways of organizing information and the research process Relate <ul style="list-style-type: none"> prior knowledge to information tasks 	<i>Previewing a text</i> <i>Analyzing features of a text</i> <i>Finding organizational patterns</i> <i>Anticipation guide</i> <i>Finding signal words</i> <i>Extending vocabulary</i> <i>Following instructions</i> <i>Setting the context</i>	 8 – 10 12 – 14 16 – 19 20 – 23 24 – 28 30 – 33 92 – 95 102 – 103
STAGE TWO: Accessing Information		
Locate <ul style="list-style-type: none"> a variety of appropriate resources from a variety of sources Select <ul style="list-style-type: none"> general and specific information appropriate to questions/focus best and most suitable resources related to questions/focus Gather <ul style="list-style-type: none"> a list of resources Collaborate <ul style="list-style-type: none"> to share findings and ideas resources and research process to date 	<i>Finding signal words</i> <i>Extending vocabulary</i> <i>Most/least important idea/info</i> <i>Sort ideas using a concept map</i> <i>Reading informational texts</i> <i>Reading graphical texts</i> <i>Determining key ideas</i>	 24 – 28 30 – 33 44 – 47 48 – 54 80 – 82 84 – 86 166 – 168
STAGE THREE: Processing Information		
Analyze and Evaluate <ul style="list-style-type: none"> information for accuracy, bias, currency, authority Test <ul style="list-style-type: none"> does my information relate to my topic and support main ideas Sort <ul style="list-style-type: none"> by choosing best note-making technique information looking for patterns and relationships Synthesize <ul style="list-style-type: none"> by making connections between ideas by formulating conclusions 	<i>Use context to find meaning</i> <i>Read between the lines</i> <i>Most/least important idea/info</i> <i>Sort ideas/concept map</i> <i>Visualizing</i> <i>Making notes</i> <i>Responding to text</i> <i>Draw conclusions</i> <i>Making judgments</i> <i>Reading literary texts</i> <i>Web/map and more</i> <i>Develop and organize ideas</i> <i>Think/pair/share</i> <i>Take five</i> <i>Determining key ideas</i> <i>Jigsaw</i> <i>Discussion – web</i> <i>Discussion – four corners</i>	 34 – 39 40 – 43 44 – 47 48 – 54 56 – 59 60 – 65 66 – 69 70 – 73 74 – 78 88 – 90 108 – 110 118 – 122 152 – 153 154 – 155 166 – 168 170 – 171 172 – 180 182 – 184
STAGE FOUR: Transferring Learning		
Revise <ul style="list-style-type: none"> a first draft that includes appropriate format and proper documentation Present <ul style="list-style-type: none"> my final product to share my new learning Reflect <ul style="list-style-type: none"> on new skills and knowledge learned doing this project Transfer <ul style="list-style-type: none"> these new skills and knowledge to other projects and lifelong learning 	<i>Setting the context</i> <i>Adding content</i> <i>Supporting main ideas</i> <i>Revising and editing</i> <i>Peer revising and editing Proofreading</i> <i>without partners</i> <i>Using templates</i> <i>Timed retell</i> <i>Placemat</i> <i>Triangle debate</i> <i>Presentation modeling</i>	 102 – 103 104 – 107 112 – 116 124 – 130 132 – 135 136 – 139 140 – 149 156 – 157 162 – 164 186 – 192 194 – 196



Developing and Organizing Ideas: **Exploring Topics**


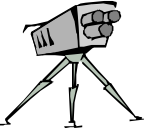



Research Process Grades 7–12 (Preparing for Research)

Stations for Topic Exploration

Team members: _____

Topic(s) to explore:

With your teammates, rotate through the following stations. Use the resource tips to help you explore each resource effectively. List your topic ideas.

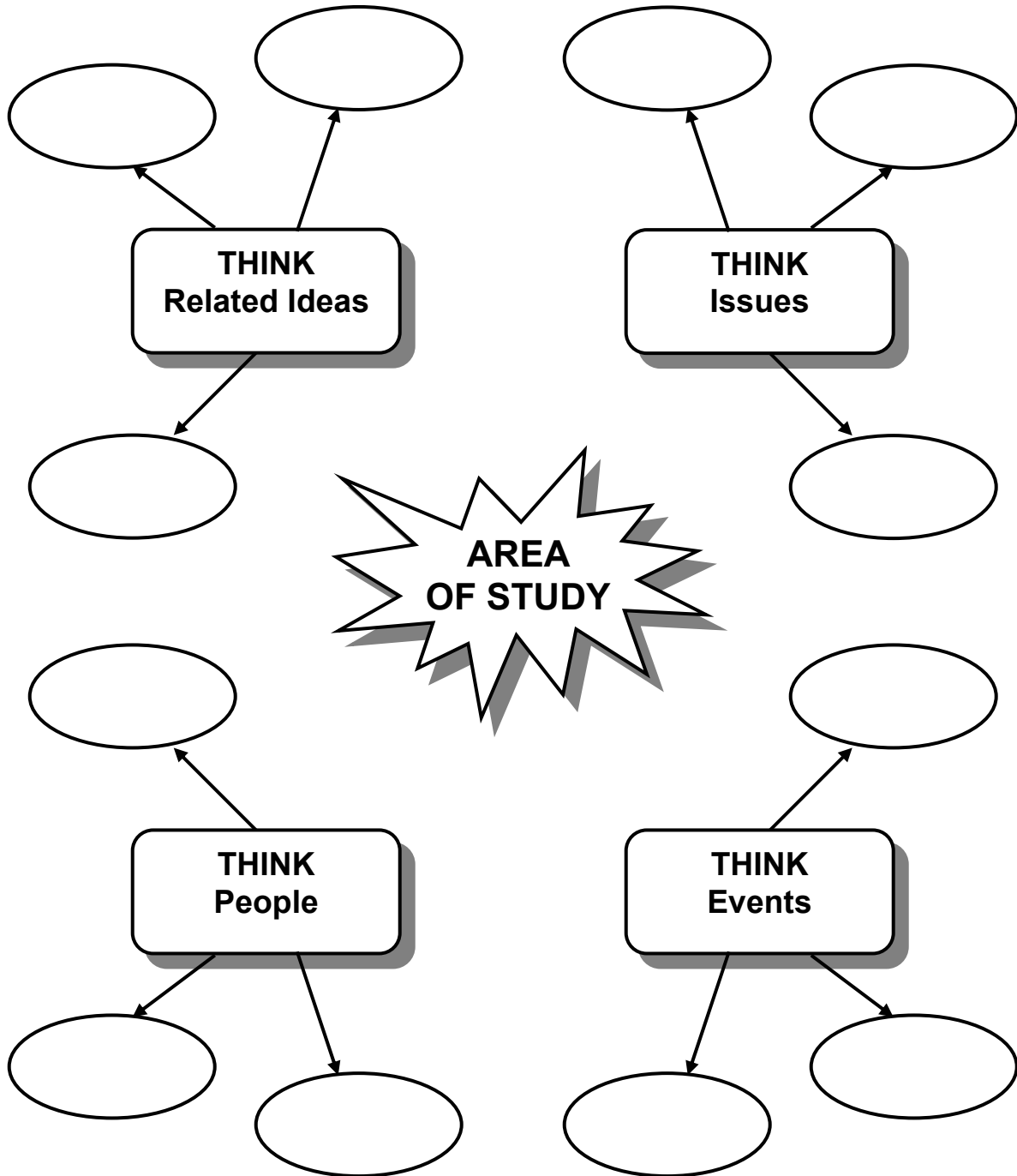
Station	Resource and Tips	Topic Ideas
1 	On-line Encyclopedia <ul style="list-style-type: none"> • Search by Subject and Keyword. • Read Table of Contents. • Check Web Links and other resources listed. 	
2 	Video <ul style="list-style-type: none"> • Focus on key section of video. • View, stop, rewind. • Pay attention to shots, angles, special effects and music. 	
3 	Books <ul style="list-style-type: none"> • Skim Table of Contents and Index. • Focus on chapters that relate to topic. • View images, photos, tables. 	
4 	Databases of Newspaper/Magazine Articles <ul style="list-style-type: none"> • Search by subject/topic/keyword. • Search most current articles. • Skim article titles for relevant articles. 	
5 	Websites <ul style="list-style-type: none"> • Read title, toolbars and menus. • Check navigation buttons. • Check links between pages and to other sites. 	



Developing and Organizing Ideas: Exploring Topics

Research Process Grades 7–12 (Preparing for Research)

THINK TOPICS WEB



Generating Ideas: Setting the Context: **Developing Questions**

Research Process Grades 7–12 (Preparing for Research)

Developing rich questions about the topic helps students to direct and focus their research. Questions guide the research process and ensure breadth and depth in their investigation. Good research questions allow students to probe for deeper understanding.

Purpose

- Focus and direct research.
- Introduce different kinds of questions.
- Probe for deeper meaning.
- Engage students' personal interests.

Payoff

Students will:

- focus research through developing questions.
- recognize the purpose of using different kinds and levels of questions.
- understand that meaningful questions generate quality and relevant information.

Tips and Resources

- Encourage students to understand that different kinds of questions foster different levels of thinking and understanding.
- Aim for higher-level questions. Different questions determine different kinds of information. Move your students beyond questions that generate purely factual information to higher level questions requiring analysis, inference and problem solving.
- Make developing questions a regular part of classroom instruction (e.g., beginning a new topic, predicting the ending of a story, planning an interview).

See:

- *Questioning Toolkit* by Jamie MacKenzie, <http://questioning.org>
- Morgan, Nora and Juliana Saxton. 1994. *Asking Better Questions: Models, Techniques and Classroom Activities for Engaging Students in Learning*. Markham, ON: Pembroke.
- Historica Minutes (see History by the Minute), www.historica.ca.

Further Support

- Question prompts such as those found in 'The Question Matrix' approach developed by Dr. Chuck W. Wiederhold can assist struggling students.
 - Wiederhold, Chuck W. 1995. *Cooperative Learning and Higher Level Thinking*. San Juan, CA: Kagan Cooperative Learning.
 - Question Matrix http://sci.tamucc.edu/~eyoung/4382/question_matrix.html
- For further support with the process of research:
 - Booth, Wayne et al. 2003. *The Craft of Research*. Chicago: University of Chicago Press.
 - Koechlin and Zwaan. *Build your own Information Literate School*. San Jose, CAL: Hi-Willow Research and Publishing, 2004.
 - *Success@ your library™*. Toronto District School Board, 2005.



Generating Ideas: Setting the Context: Developing Questions

Research Process Grades 7–12 (Preparing for Research)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> Using think/pair/share, ask students: <ul style="list-style-type: none"> How do they know someone is curious? What does this look like and sound like? What makes them curious? Debrief discussion and make the connection between curiosity and questioning. Introduce the importance of questions to set research focus and direction. 	<ul style="list-style-type: none"> Think and reflect on what curiosity means. Discuss their ideas with a partner. Share responses with the class.
<p>During</p> <ul style="list-style-type: none"> Put the students into roles as a reporter or journalist and show one Historica Minute related to student interest. Instruct students to think of questions they need to ask in order to extend and clarify their understanding of their viewing. Share. Handout Student/Teacher Resource, <i>Developing Questions Using the 5 W's and How</i>. As a class develop more questions about the Historica Minute using this framework. Share. Handout Student/Teacher Resource, <i>Extend your Thinking Using Higher Level Questions</i>. Discuss prompts to develop higher level questions that relate to: Prediction, Imagining, Possibility, and Probability. Share examples and have students extend their thinking by applying the prompts for these question types to generate higher level questions about the Historica Minute. Discuss how these approaches improve the level and quality of questions. Instruct students to individually develop questions for their own topic considering the 5 W's/HOW and the higher level types of questions using the handouts. 	<ul style="list-style-type: none"> View Historica Minute. In pairs or small groups, list on chart paper questions about the Historica Minute that extends and clarifies what was viewed. Share questions with the class. Develop more questions using Student/Teacher Resource, <i>Developing Questions Using the 5 W's and How</i>. Share group questions.
<p>After</p> <ul style="list-style-type: none"> Conference with students to monitor questions and overall progress. Instruct students to try to focus their research by completing the <i>Focus Your Question</i> section at the bottom of S/T Resource, <i>Extend your Thinking Using Higher Level Questions</i>. 	<ul style="list-style-type: none"> Share their questions with teacher, teacher-librarians and/or students. Complete <i>Focus Your Question</i> section at the bottom of Student/Teacher Resource, <i>Extend your Thinking Using Higher Level Questions</i>.

Notes



Generating Ideas: Setting the Context: **Developing Questions**

Research Process Grades 7–12 (Preparing for Research)

Developing Questions Using the 5W's/HOW

Topic : _____

WHO	
WHAT	
WHERE	
WHEN	
WHY	
HOW	



Generating Ideas: Setting the Context: Developing Questions

Research Process Grades 7–12 (Preparing for Research)

Extend Your Thinking Using Higher Level Questions

	TYPE OF QUESTION	EXAMPLE	YOUR QUESTION
PREDICTION	Who What + WILL When Where Why How	What will encourage peace in outer space among all nations?	
PROBABILITY	Who What + WOULD When Where Why How	What would it take for humans to colonize Mars?	
POSSIBILITY	Who What When Where Why + CAN How	Why can we not seem to exceed the speed of light when traveling in space?	
IMAGINING	Who What When Where Why How + MIGHT	How might we communicate with extraterrestrial intelligence?	

Focus your question by completing a focus statement. (adapted from W. Booth, 2003)

I am researching _____
 because I want to find out _____
 in order to help my audience understand _____.

Example: I am researching *black holes* because I want to find out **what they are and what causes them** in order to help my audience understand **why their existence is necessary in the universe.**

Getting Ready to Read: Developing Keywords and Search Plans

Research Process Grades 7–12 (Accessing Resources)

During the accessing stage, students need to search a wide range of print and non-print materials to locate the best sources to support their inquiry. The amount of information available today on any one topic is overwhelming for students. If they are to be successful in their searches for specific information students need to develop a set of handy strategies. Students must be able to find information they need effectively and efficiently. Time invested in mapping out a search plan will provide students with more time to actually use and process information.

Purpose

- Introduce students to search tools and strategies.
- Help students locate relevant sources of information.
- Model for students how to map their search plan.
- Encourage independence when searching for information.

Payoff

Students will:

- develop keywords about their topic to focus searches.
- collect a repertoire of search strategies.
- learn when to use specific information types.
- use appropriate search tools to target needed data.

Tips and Resources

- Students need lots of practice developing keywords and trying out search strategies. Model several examples using the ‘think aloud’ strategy then give them lots of opportunities to practice and experiment.
- A dictionary and thesaurus are needed so students can look for synonyms and related phrases to develop keywords and expand their search terms.
- Students need to build background about their topic so they have a working vocabulary. See *Developing and Organizing Ideas: Exploring Topics*.
- Similar strategies apply when using either print or on-line resources. Help students to see the relationship by charting the text features used in a non-fiction book to help locate information and comparing them to the features used on an internet site (e.g., table of contents and index tabs, bolded text and hypertext, maps and interactive maps).
- Compare the number and quality of hits students get when they surf using broad terms compared to how many usable hits they get with a focused search.
- Explore other tools available to help your students:
 - Internet Search Skills, Library and Archives Canada <http://www.collectionscanada.ca/education/008-3040-e.html>
 - Debbie Abilock’s Noodle Tools <http://www.noodletools.com>
 - Kathy Schrock’s Guide for Educators <http://school.discovery.com/schrockguide/yp/iypsrch.html>
- Build Your Own Information Literate School pp.24-27

Further Support

- ESL and special needs students will benefit from individual coaching with a learning partner.



Getting Ready to Read: Developing Keywords and Search Plans

Research Process Grades 7–12 (Accessing Resources)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Ask students to brainstorm a list of activities that require careful and often strategic planning (e.g., holidays, purchasing a computer, preparing for a football final). • Share student lists and discuss possible scenarios and outcomes without plans. • Relate planning to the next stage of the research process. • Demonstrate for students on-line searches for broad topics without a plan (e.g., a search for the word ‘nutrition’ would result in millions of hits). Discuss the problems with unplanned searching. 	<ul style="list-style-type: none"> • Brainstorm a list of activities that require careful planning. • Share lists and participate in discussion. • Share in the discussion of problems with surfing instead of planned searching.
<p>During</p> <p>Part 1 Developing Keywords</p> <ul style="list-style-type: none"> • Demonstrate for students how to develop keywords and search terms using <i>Easy Steps to Keywords</i>. • Using ‘think aloud’, model for students the thoughts and questions one asks as they develop keywords using the organizer. • Test out some keywords to show students how effective and efficient keywords are. • Demonstrate how Boolean Operators can be used to narrow and broaden a search. • Give students time to practice. <p>Part 2 Using on-line resources</p> <ul style="list-style-type: none"> • Ask students what resource they would use to find an up-to-date map, an archival map, a news item, information about an author. • Use Student/Teacher Resources, <i>On-Line Search Plan</i> and <i>Selecting Web-Based Resources Using Directories and Search Engines</i> as a guide for discussion. Remind students to think about and decide what type of on-line resource is best for their information need. • Give students many opportunities to practice and experiment with these search tools. 	<ul style="list-style-type: none"> • Practice developing keywords and using Boolean Operators. • Respond to teacher questions about specific information sources. • Practice and experiment with search tools and strategies modeled by the teacher.
<p>After</p> <ul style="list-style-type: none"> • Instruct students to use Student/Teacher Resources, <i>Easy Steps to Keywords</i> and <i>On-line Search Plan</i> to develop keywords and map out their search plan. • Ask students to assess how well their plans worked and discuss their results with a peer. 	<ul style="list-style-type: none"> • Use <i>Easy Steps to Keywords</i> and <i>On-line Search Plan</i> to develop keywords and a search plan. • Assess what worked and what didn’t work and why.

Notes

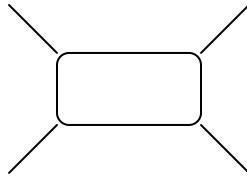
Getting Ready to Read: Developing Keywords and Search Plans

Research Process Grades 7-12 (Accessing Resources)

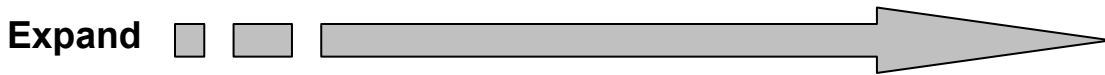
Easy Steps Keywords

Focus Question/Thesis Statement:

Develop a word web for your topic:



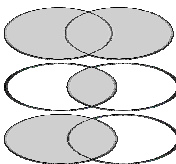
Select three important words from your word web. Use this word expander chart and a dictionary or a thesaurus to develop a list of related terms.



Tips

Check your spelling

Use Boolean Features to FOCUS your hits



A or B

pollution or smog

A and B

pollution and smog

A and not B

pollution and not smog



Getting Ready to Read: Developing Keywords and Search Plans

Research Process Grades 7–12 (Accessing Resources)

On-Line Search Plan

Name:.....Topic:.....

Focus Question/Thesis Statement:

Possible key words/search phrases:

<p>Use this checklist to help you target your information need.</p> <ul style="list-style-type: none"> • Quick facts • Statistics • Maps • Primary sources • Multimedia • Biographical information • Government sites • News coverage • Perspectives on an issue • Historical data • Explore a topic • Authoritative information • “How to” information • Shopping • Entertainment • Travel • Education • Weather • 	<p>Now think about the best search tools to address your information task.</p> <ul style="list-style-type: none"> <input type="checkbox"/> On-line Encyclopedias are often reliable starting points for research and often have good links to selected websites and periodicals. <input type="checkbox"/> Search engines are effective when you know the information is there (e.g., places, organizations, and people). Remember a search engine sources and links web pages by machine. <input type="checkbox"/> Directories are useful to explore a topic and to find academic information. Web pages in a directory are sourced and linked by people. <input type="checkbox"/> Periodical databases are best when you are looking for current news and perspectives on issues.
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Which search tools worked best?

What didn't work so well?

Adapted from *Build Your Own Information Literate School*. Hi-Willow Research and Publishing, 2004. Used with permission.

Getting Ready to Read: Developing Keywords and Search Plans

Research Process Grades 7–12 (Accessing Resources)

Selecting Web-Based Resources Using Directories and Search Engines

	What They Are	How They Work and When to Use	Selected Examples*
Internet Directories	<ul style="list-style-type: none"> organize links to other websites into categories and subcategories created by human beings who select the best links and classify them for a particular audience results are fewer than with a search engine list more reliable sites when created by a respected source 	<ul style="list-style-type: none"> organize links into subject or alphabetical lists (sometimes called “indexes”) different directories organize information differently may have an internal search engine may have a way of filtering results (e.g., by country, by media) use when you want results that have been selected by an authoritative source, such as a library or educational institution 	<ul style="list-style-type: none"> Canadian Information by Subject <collectionscanada.ca/caninfo/ecaninfo.htm/> Digital Librarian <digital-librarian.com/> Infomine Scholarly Resources <infomine.ucr.edu/> Internet Public Library Teen Space <ipl.org/div/teen/> Librarians’ Index to the Internet <lii.org/> Yahoo! Canada <dir.yahoo.com/Regional/Countries/Canada/>

	What They Are	How They Work and When to Use	Selected Examples*
Search Engines	<ul style="list-style-type: none"> electronically gather Internet information into a database database is then searched using keywords and Boolean logic with AND, OR, and NOT operators narrow terms (by country, by date) can filter results 	<ul style="list-style-type: none"> search engines do NOT search the Internet, but only that engine’s database different databases give different results companies may pay to list their sites first browse from a wide range of results to find a particular reference combine specific keywords read the Help page to understand other features use Advanced Search features to narrow the search 	<ul style="list-style-type: none"> All the Web <alltheweb.com/> AltaVista Advanced Search <altavista.com/> Ask Jeeves <ask.com/> Google Canada <google.ca/> Teoma <teoma.com/>

	What They Are	How They Work and When to Use	Selected Examples*
Metasearch Engines	<ul style="list-style-type: none"> find results from multiple search engines different metasearch engines combine different search engines 	<ul style="list-style-type: none"> some rank results others complicate searches with duplicate “hits” combine results for the broadest search read the Help page to learn how to use each metasearch engine effectively 	<ul style="list-style-type: none"> ixQuick <ixquick.com/> KartOO <kartoo.com/> Vivisimo <vivisimo.com/>

Specialty Directories and Search Engines Created to Search within Particular Disciplines

<input type="checkbox"/> Artyclopedia (Fine Arts) <artyclopedia.com/>	<input type="checkbox"/> EEVL (Eng., Math, Computing) <eevl.ac.uk/>	<input type="checkbox"/> Health Web <healthweb.org/index.cfm/>
<input type="checkbox"/> HUMBUL (Humanities) <humbul.ac.uk/>	<input type="checkbox"/> Online Books Page Book Search <digital.library.upenn.edu/books/search.html/>	<input type="checkbox"/> Pinakes: A Subject Launchpad <hw.ac.uk/libWWW/irn/pinakes/pinakes.html/>
<input type="checkbox"/> Scholarly Sports <ucalgary.ca/library/ssportsite/>	<input type="checkbox"/> Scirus (Science) <scirus.com/srsapp/>	<input type="checkbox"/> SOSIC (Social Science) <sosig.ac.uk/>

* Tip: Consult your school library website for current Internet directories and search engines.

Research Success @ your library™. Toronto District School Board, 2005. Used with permission.



Reacting to Reading: Making Judgements: **Critically Evaluating Resources**

Research Process Grades 7–12 (Accessing Resources)

During the accessing stage of research, readers need to be reflective and discriminating when making judgments about the appropriateness and reliability of the sources they plan to consult. Due to the volumes of information available today on any given topic, students need to know how to examine information sources critically. Students should be given multiple opportunities to examine and evaluate all kinds of materials (e.g., books, internet, periodicals, interviews, videos).

Purpose

- Critically evaluate source materials for credibility and signs of stereotyping, bias.
- Identify and assess different and varied perspectives.
- Make informed judgements about the appropriateness and reliability of resources.
- Keep accurate records of resources consulted.

Payoff

Students will:

- develop and demonstrate critical thinking skills when assessing resources.
- identify and acknowledge differing viewpoints and opinions.
- recognize the right resource for the specific information need.
- keep an organized list of resources consulted.

Tips and Resources

- Classroom teachers and teacher-librarians should work collaboratively to assist students when critically evaluating resources.
- Students, when making judgments, should draw upon experience and prior knowledge, and engage in collaborative discussions with peers, teachers and teacher-librarians.
- Ask students to check for conflicting information and opinions found in their resources.
- Frequent teacher and teacher-librarian conferencing ensures that student research has sufficient breadth and depth, and that the sources are adequate and reputable.
- More tools to apply critical thinking when judging appropriateness and reliability of source materials :
 - Student Resource. *The Good, the Bad, and the Ugly: Why It's a Good Idea to Evaluate Websites*. (Susan E. Beck. www.lib.nmsu.edu/instruction.eval.html)
 - Student Resource. *Website Evaluation Guide*. (Think Literacy. Information Technology. 2004.) pg. 5. Available at www.ecoo.org
 - Student Resource, *Checklist for Evaluating Websites*. (Think Literacy. Information Technology. 2004.) pg. 6. Available at www.ecoo.org
 - Student Resource. *Both Sides Now – Template for Making Judgments*. (Think Literacy. Cross Curricular Approaches. 2003) pg. 77.
 - Student Resource. *Template for Drawing Conclusions*. (Think Literacy. Cross Curricular Approaches. 2003) pg. 73.

Further Support

- Modeling and peer coaching will be beneficial to some students as they evaluate resources.
- Encourage students to analyze resources by 'thinking out loud', in order to challenge their own opinions and those expressed in their resources.
- Use pairs or small discussion groups to help students test and develop their own opinions and those expressed in their resources.



Reacting to Reading: Making Judgements: Critically Evaluating Resources

Research Process Grades 7–12 (Accessing Resources)






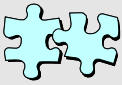

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Introduce this topic, having students view website <i>The Good, the Bad and the Ugly</i>. • Introduce the criteria for evaluating information sources: authority, objectivity, accuracy, completeness, currency, relevancy and format. See Student/Teacher Resource, <i>Evaluating Information Sources</i>. • Give each pair of students one of the evaluation criteria and have students brainstorm what this key term means and what key questions should be asked to determine this. • Share and discuss student responses. • Hand out Student/Teacher Resource, <i>Evaluating Information Sources</i>, and have students compare their responses to the handout. 	<ul style="list-style-type: none"> • In pairs, review the site. <i>The Good, the Bad and the Ugly</i>. www.lib.nmsu.edu/instruction.evaluation • Develop definitions of the criteria and develop key questions to ask to help determine this criterion. • Contribute to discussion about the meaning of criteria. • Compare group responses to the definitions and key questions on the handout, <i>Evaluating Information Sources</i>
<p>During</p> <ul style="list-style-type: none"> • Find examples of two brief readings on the same topic or event which have distinctly different viewpoints. Consider using controversial issues or current events. • Instruct students to read and highlight the points of difference in the two readings. • Ask students to consider the criteria for evaluating sources and discuss with a partner the differences in the two readings. • Complete together Student/Teacher Resource, <i>Evaluating Information Sources</i> for each reading. • Hand out Student/Teacher Resource, <i>Checklist of Evaluating a Website</i> and review the terms as they apply to websites. • Instruct students to use this strategy in accessing one print resource using <i>Evaluating Information Sources</i> and one website using <i>Checklist for Evaluating a Website</i>. 	<ul style="list-style-type: none"> • Read and highlight the main differences found in the readings. • Revisit the criteria for evaluating sources and discuss with a partner the differences in the two readings (e.g., What facts or evidence are included? What is omitted? Is the language objective and neutral? Why?). • Participate in evaluating each reading using Student/Teacher Resource, <i>Evaluating Information Sources</i>. • Review <i>Checklist for Evaluating a Website</i>. • Select one print resource and use <i>Evaluating Information Sources</i> to make a judgment about that resource. • Select one website and use <i>Checklist for Evaluating a Website</i> to make a judgment about that website.
<p>After</p> <ul style="list-style-type: none"> • Engage students in class discussion about the evaluation of resources for research and the effectiveness of the handouts. • Hand out Student/Teacher Resource, <i>Log of Resources</i>, and instruct students to complete it accurately. 	<ul style="list-style-type: none"> • Participate in class discussion about the evaluation of resources for research and the effectiveness of the handouts. • Thoroughly complete Student/Teacher Resource, <i>Log of Resources</i>, including all sources accessed for the research topic.

Notes

Reacting to Reading: Making Judgements: **Critically Evaluating Resources****Research Process Grades 7–12 (Accessing Resources)****Evaluating Information Sources**

Information comes in different formats—print, electronic, and media. However, you can use similar criteria to evaluate any source for quality and usefulness.

Format	<input type="radio"/> Book	<input type="radio"/> Periodical Article	<input type="radio"/> Software	<input type="radio"/> Audio Tape	<input type="radio"/> Film/Video			
Author								
Title								
Publication Date				Overall Rating:	<input type="radio"/> Excellent	<input type="radio"/> Good	<input type="radio"/> Fair	<input type="radio"/> Poor

Criteria	Consider These Key Questions
AUTHORITY 	Can you trust the author? What are his/her credentials to write this particular work?
OBJECTIVITY 	Is the author's purpose and intended audience clearly stated? Does the work provide factual information, opinion, or propaganda? Does the author have a biased point of view or stereotype people?
ACCURACY 	Are the author's facts correct? Are the opinions supported with data? Is there evidence of good research and documentation?
COMPLETENESS 	How completely and deeply does the work cover the topic? Does the work answer the question completely?
CURRENCY 	Is the date of publication given? Is the information current enough for your topic or task?
RELEVANCY 	Does the source contain the information you need? Does it provide information that is relevant to your topic?
FORMAT 	Does the format of the source present the information in an attractive and clear way? Are there special visual features to aid understanding and pleasure?

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Reacting to Reading: Making Judgements: Critically Evaluating Resources

Research Process Grades 7–12 (Accessing Resources)

Checklist for Evaluating a Website

Title			
URL			
Date Accessed		Overall Rating: <input type="radio"/> Excellent <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor	

AUTHORITY	Details/Comments
<input type="checkbox"/> The author of the site is clearly identified.	
<input type="checkbox"/> The author has appropriate credentials.	
<input type="checkbox"/> The publisher of the site is identified.	
<input type="checkbox"/> The site contains contact information.	
<input type="checkbox"/> A reputable group has rated the site.	
<i>Tip: Information experts choose wisely. Check up on authors and sites in online library catalogues and databases.</i>	

OBJECTIVITY	Details/Comments
<input type="checkbox"/> The purpose of the site is clearly stated.	
<input type="checkbox"/> The sponsors of the site are clearly identified.	
<input type="checkbox"/> The intended audience of the site is clear.	
<input type="checkbox"/> The site is free of bias and stereotyping.	
<input type="checkbox"/> Advertising does not influence the information.	
<i>Tip: There are always people behind websites. Determine if these people wish to advocate, inform, or entertain.</i>	

ACCURACY AND COMPLETENESS	Details/Comments
<input type="checkbox"/> The site contains accurate information.	
<input type="checkbox"/> The site is well researched and documented.	
<input type="checkbox"/> The site's information can be verified.	
<input type="checkbox"/> The site's links are reputable and working.	
<input type="checkbox"/> The site's information is deep and well written.	
<i>Tip: Start with quality information. Use the School Library Website for sites that model accuracy and depth.</i>	

CURRENCY	Details/Comments
<input type="checkbox"/> The date that the site was created is given.	
<input type="checkbox"/> The date that the site was updated is given.	
<input type="checkbox"/> Key information has been revised recently.	
<i>Tip: Currency affects accuracy. Check dates on the site to see if the information is current enough for the task.</i>	

TECHNICALITIES	Details/Comments
<input type="checkbox"/> The site is easy to navigate.	
<input type="checkbox"/> The site's graphics and layout add to its value.	
<i>Tip: Looks can be deceiving. Check that animations, frames, colours, and special effects actually inform.</i>	

Reacting to Reading: Making Judgements: Critically Evaluating Resources

Research Process Grades 7–12 (Accessing Resources)

Log of Sources

Record only the sources you found and used for your project. This list will help you find the resources again if you need to. It will also help you to make a formal Reference List if it is required for your assignment. Record all sources of information, print, digital and human.

Type of Resource / Call#	Resource Data	Your Notes / Pages Used
	Title:..... Author(s):..... Publisher:..... Place of Publication.....©.....	
	Title:..... Author(s):..... Publisher:..... Place of Publication.....©.....	
	Title:..... Author(s):..... Publisher:..... Place of Publication.....©.....	
	Title:..... Author(s):..... Publisher:..... Place of Publication.....©.....	
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	Other.....	
	Other.....	

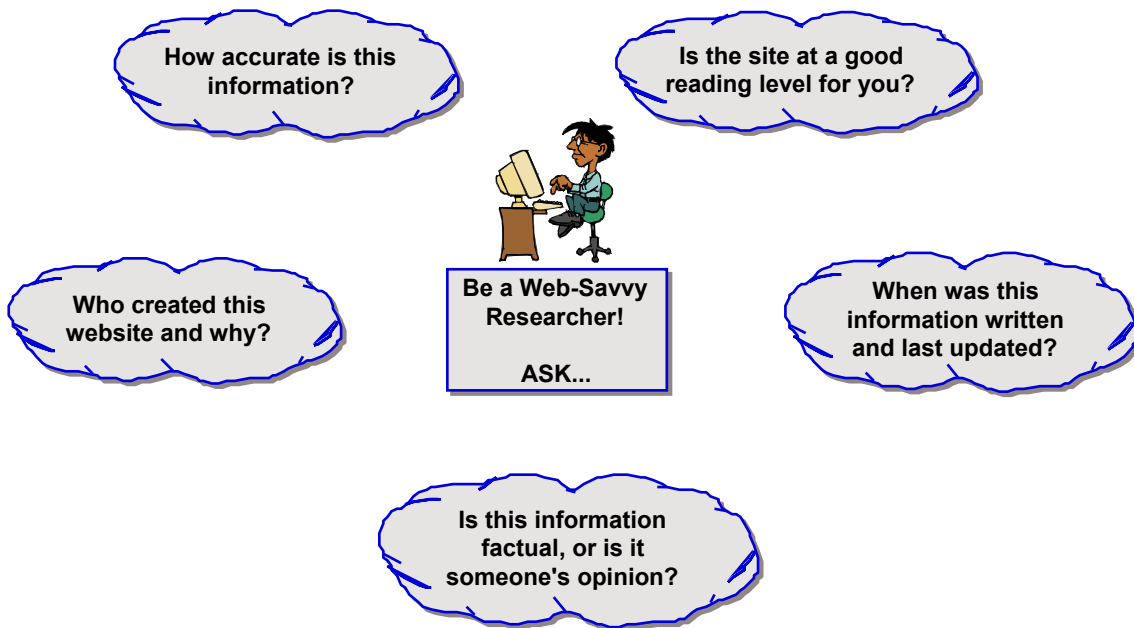
Build Your Own Information Literate School. Hi-Willow Research and Publishing, 2004. Used with permission.

Reacting to Reading: Making Judgements: Critically Evaluating Resources

Research Process Grades 7–12 (Accessing Resources)

Be a Web-Savvy Researcher

Your Topic:	
Website:	
URL:	Last Updated:
Created by:	



Bottom Line!

Will this site be useful for your project?

Why? Or why not?

Developing and Organizing Ideas: Looking for Relationships

Research Process Grades 7–12 (Processing Information)

Stage Three, Processing Information, is the meaning-making stage of research. The notes collected through research are reflected upon and reworked as students make connections, see patterns and relationships and draw inferences. Prompts and visual organizers are useful processing tools. “Visual organizers are frames, matrices, grids, webs and similar forms used to represent knowledge in a visual format.” *Ontario Curriculum Planner*. CD-ROM. 2002.

Purpose

- Make personal meaning from notes gathered.
- Organize information into logical categories.
- Develop generalizations and organize evidence from analysis.
- Encourage analytical thinking.

Payoff

Students will:

- sort and categorize information.
- learn how to use organizational tools to make connections.
- find relationships among the facts and ideas.
- use evidence to support main ideas.
- visually conceptualize and consolidate their thinking.

Tips and Resources

- Introduce a variety of visual organizers and explain and model their purposes.
- Provide many opportunities for students to apply using visual tools in assignments.
- Encourage students to develop a portfolio of visual tools to select from. Eventually you want students to adapt these to suit their need and /or create their own visual organizers.
- Sample organizers can be printed and modified for specific needs from the Teacher Companion in the Ontario Curriculum Planner (e.g. Agree Disagree Chart, Grid, Fish Bone, Target, Ladder, Sequence Chart, Venn Diagram, Web, and Diagramming).
- Many technology tools can be used to assist with creating visual organizers (e.g. word-processing, paint and draw software, spreadsheets and commercial software such as SMART Ideas™ which is Ministry-licensed).
- Sample SMART Ideas™ organizers
<http://www2.smarttech.com/st/enUS/Products/SMART+Ideas/Sample+maps.htm>
- Sample completed organizers see *Information Power Pack: Intermediate Skillsbook* pp. 53-57.
- These educational sites provide many more examples:
 - The Graphic Organizer www.graphic.org
 - North Central Regional Education Laboratory
<http://www.ncrel.org/sdrs/areas/issues/students/learning/lr1grorg.htm>
 - Eduscapes <http://eduscapes.com/tap/topic73.htm>
 - Write Design On-Line <http://www.writedesignonline.com/organizers/>

Further Support

- To assist students who need more support, make an overhead of an empty visual organizer and project on a screen. Make additional overlays of the organizer in various stages of completion and, using a think aloud, demonstrate the process of using these tools to organize ideas and frame thinking.



Developing and Organizing Ideas: Looking for Relationships

Research Process Grades 7–12 (Processing Information)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Introduce the topic of using visual organizers. • Brainstorm for organizers the students know and create a list (e.g. Agree Disagree Chart, Grid, Fish Bone, Target, Ladder, Sequence Chart, Venn Diagram, Web, and Diagramming). • Group students and give each group a visual organizer and a problem such as those on Student/Teacher Resource, <i>Technology Today</i>. Ask students to work together to think about the task and show their thinking by completing the organizer. • When completed ask students to share how this activity clarified and inspired their thinking. • Share results and discuss the purposes for different organizers. Add these to the list. See Student/Teacher Resource, <i>Looking for Relationships with Visual Organizers</i>. 	<ul style="list-style-type: none"> • Contribute to the list of organizers. • Discuss the problem within the group and work collaboratively to show group thinking on the organizer provided. • Share thoughts regarding how the activity helped inspire ideas. • Share completed visual organizers and contribute to the development of purposes for specific organizers.
<p>During</p> <ul style="list-style-type: none"> • Have students examine the notes they have documented during their research to date. • Ask them to reflect on their research focus or thesis statement and consider how a visual tool(s) would help them to find relationships in their notes and firm up their thinking. • Instruct students to select a visual tool and use it to clarify their thinking (e.g. use a timeline to plot events, a web to explore connections, a T-chart to look at pros and cons, a branch diagram to examine effects). 	<ul style="list-style-type: none"> • Examine notes and think about the purpose of research. • Review different types of organizers and their purpose. Decide on an organizer to use for analysis of research notes. • Use the organizer to make the relationships needed.
<p>After</p> <ul style="list-style-type: none"> • When the visual analysis is completed by students, ask them to work with a partner to share and reflect on the effectiveness of the tool they selected. 	<ul style="list-style-type: none"> • Share the completed organizer with a partner and evaluate how well it worked in addressing the purpose of original research.

Notes



Developing and Organizing Ideas: Looking for Relationships

Research Process Grades 7–12 (Processing Information)

Looking for Relationships with Visual Organizers

Once you have gathered your research data you need to process it. That means you will have to analyze it - rework, reorganize, reread, reflect on the data you have gathered. It often helps to make use of graphic organizers that provide a visual interpretation for you. Try using these thinking prompts to connect to your own thinking and build meaning. Watch for missing and/or conflicting information.

What do you need to do?	Visual Tools for Analyzing	Prompts for Thinking
Develop a Sequence	Timeline to arrange events chronologically Flowchart to show process Storyboard to plan change over time	How can you show order of events, changes, processes?
Make Comparisons	Venn Diagram Triple T Chart	What are you comparing? Why? Which parts are important to compare? What criteria will you use for comparison? How is _____ like/different _____? Consider the similarities and differences. Can you draw any conclusions? What have you discovered? Why is it important?
Examine Cause and Effect	Flow Chart to illustrate links Fishbone Diagram to cluster causes	What are the causes of _____? What are the effects of _____? What are the possible ripple effects? Have you investigated all relevant perspectives?
Look for Solutions	Flow Chart Web Diagram	What problem(s) need to be solved? List your solution ideas. Evaluate your ideas. Test your solution ideas with a friend.
Sort and Classify	Branch Diagram Cross Classification Chart to sort by attribute	What needs to be organized? Why? Sort items looking for similar characteristics. Some items may fit in more than one place. Decide on a category name for each like group. Review and decide if some items fit better in another category. How will this organization help you?
Sort Ideas and Make Connections	Web to brainstorm and organize Table to sort by topic and subtopics Tree Diagram to sort a topic into groups and sub-groups Sketch, map or diagram to organize detail	What am I sorting? Why am I sorting it? How will I organize things? Which relationships are important? What patterns am I looking for? Is there a better way to sort? How does _____ relate to _____? Can I identify and trends?
Develop a Personal Point of View	Web to brainstorm ideas Table to compare opposing points of view T Chart to analyze pros and cons Flow chart to organize and link reasoning	Whose perspectives do I have? Why does _____ believe _____? Are there points of view missing? Whose? What are the implications of _____? Who or what will _____ influence? Am I getting fact or opinion? Do I have enough evidence to support my opinion?
Evaluate	T Chart Ranking Ladder to prioritize data	What are the strengths and weaknesses of _____? What's good/ What's bad? What are the potential positive/negative impacts of _____? What is the importance of _____?

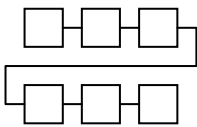
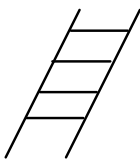
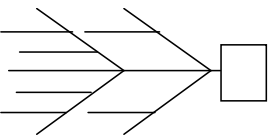
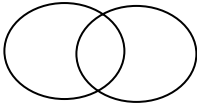
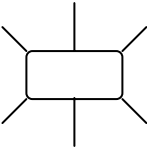


Developing and Organizing Ideas: Looking for Relationships

Research Process Grades 7–12 (Processing Information)

Technology Today

Use a visual organizer to show your thinking about technology today.

Visual Tool	Question or Problem																														
<p>Sequence Chart</p> 	<p>What technology changes have you seen during your school years?</p>																														
<p>Ranking Ladder</p> 	<p>Rank the technologies you have in your home from most important to least important.</p>																														
<p>Agree Disagree Chart</p> <table border="1" data-bbox="142 1018 418 1165"> <thead> <tr> <th></th> <th>AGREE</th> <th>DISAGREE</th> <th>AGREE</th> <th>DISAGREE</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		AGREE	DISAGREE	AGREE	DISAGREE	1.					2.					3.					4.					5.					<p>Are cell phones beneficial?</p>
	AGREE	DISAGREE	AGREE	DISAGREE																											
1.																															
2.																															
3.																															
4.																															
5.																															
<p>Fishbone Cause and Effect</p> 	<p>Too much television can be harmful for kids.</p>																														
<p>Venn Diagram</p> 	<p>Compare a laptop computer and a pen.</p>																														
<p>Web</p> 	<p>Brainstorm the uses of computers.</p>																														

Small-group Discussions: **Testing Ideas with Peer-to-Peer Consultation**

Research Process Grades 7–12 (Processing Information)

Testing ideas with others is an important component of processing information. This analysis skill helps to clarify understanding and confirm the logic of ideas before students finalize their thinking. Peer-to-peer consultation involves collaboratively articulating ideas, discussing, questioning, reflecting, challenging, coaching and suggesting. The goal is to help students make meaning and develop personal understanding of the data they have assembled through their research.

Purpose

- Clarify understanding of complex issues and problems.
- Analyze data gathered in research.
- Test ideas with peers.
- Provide time to reflect on progress.

Payoff

Students will:

- confirm the logic of their thinking and conclusions.
- develop communication skills.
- learn how to question effectively.
- listen and respond constructively to alternative ideas and viewpoints.
- develop personal understanding.

Tips and Resources

- This strategy can also be applied at any stage in the research process; broadening a topic, deciding on research questions or thesis statements, evaluating resources, analyzing data collected, testing new ideas, preparing for presentations and goal setting.
- Consultation prompts in the Student/Teacher Resource, *Peer-to-Peer Consultation* are also useful for teacher to student conferences.
- Review communication and collaboration skills:
 - Listen without interrupting and be aware of other people's feelings
 - Give physical reinforcement (e.g., nods, smiles): respond to new ideas and encourage others
 - Accept responsibility for your task
- A prerequisite skill for this approach is active listening and paraphrasing. Provide reflection prompts to assist students when paraphrasing such as:
 - I think you are saying...
 - So, you are saying.....
 - Am I understanding you to say.....?
 - Are you thinking that.....
 - I heard you say that.....
 - You're suggesting that.....
- Questioning skills are also a pre-requisite skill. See *Developing Questions* in Stage 1.
- Writer's workshop is a similar strategy of peer coaching and consultation applied during the writing process to help students find their voice. See *A Community of Writers* by Steve Zemmelman and Harvey Daniels, Heinemann 1988.
- Info Tasks for Successful Learning pp. 41-43, organizer pp. 117.

Further Support

- Encourage students to apply visual analysis strategies such as webbing, charting, graphing and making notes during the consultation. See *Looking for Relationships* in Stage 3.
- Make use of electronic communication tools to set up virtual conferences (e.g., telephone, e-mail, video).



Small-group Discussions: Testing Ideas with Peer-to-Peer Consultation

Research Process Grades 7–12 (Processing Information)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Have students think about occasions when they want to check out their thinking or ideas (e.g., deciding which movie to go to or choosing a career path). • Discuss the benefits of making decisions, working through problems or difficult tasks with a peer. 	<ul style="list-style-type: none"> • Brainstorm personal decision scenarios. • Contribute to discussion of benefits of working collaboratively.
<p>During</p> <ul style="list-style-type: none"> • Introduce the consultation process as a strategy for testing ideas and solving problems. Discuss the role of a consultant in the business world. What attributes and specialized skills does a consultant need to possess? Chart ideas. <ul style="list-style-type: none"> – Active listening and critical reading skills. – Communication skills - questioning, encouraging responding. • Discuss how a businessperson would prepare to use the services of a consultant. Chart ideas. <ul style="list-style-type: none"> – Organize all materials, research notes, visual supports. – Plan to share ideas, problems and theories. – Review and rehearse. • Provide students with reflective prompts so they can examine their peers' work in some depth. See Student/Teacher Resource, <i>Peer-to-Peer Consultation</i>. 	<ul style="list-style-type: none"> • Contribute to the discussion of business consultation. Brainstorm attributes and skills. • Contribute to the discussion of preparing for consultation. Brainstorm preparation ideas. • Review Student/Teacher Resource, <i>Peer-to-Peer Consultation</i>.
<p>After</p> <ul style="list-style-type: none"> • Have students meet with a peer to consult about their research progress to date. • Ask students to share their thesis, present their research findings and test out their theories. • The student partner responds, questions, challenges, encourages, suggests and coaches as necessary. • Students switch roles and analyze the other's research. • Both students take notes, reflect on the experience and adjust their research and ideas as necessary. See Student/Teacher Resource, <i>Thinking About Understanding</i>. 	<ul style="list-style-type: none"> • Participate in peer-to-peer consultation. • Share theses and research to date. • Use the prompts and appropriate additional questions to guide the consultation process. • Switch roles and continue the process. • Take notes and use visual strategies to clarify understanding. • Adjust research and ideas as necessary. • Reflect on the learning process. See Student/Teacher Resource, <i>Thinking About Understanding</i>.

Notes

Small-group Discussions: Testing Ideas with Peer-to-Peer Consultation

Research Process Grades 7-12 (Processing Information)

Peer-to-Peer Consultation

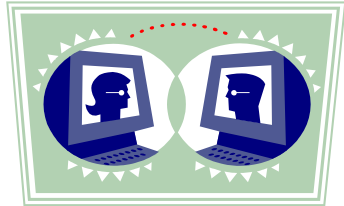
Talking about your research with a partner will help you to reflect on the information you have gathered. By talking about your work you are often able to clarify meaning for yourself. Your peers will help you by asking questions about your research. They may also be able to provide you with some tips regarding other sources you should consult or connections they see with their projects.

Some questions to help you get the consultation started:

- How did you settle on this topic for your research?
Tell me about your project?
What surprised you about your findings?
Have you discovered anything that concerns you?
Are you satisfied with the information you have gathered?
Have you investigated all possible perspectives?

Further ideas to keep the discussion going:

- What is the significance of ?
What are the possible positive/negative impacts of ?
Explain how you came to understand
How might you prove/confirm ?
Describe how
Justify/support/prove/verify
What is the big idea, key concept, moral in ?
Give an example of
What conclusions might be drawn from ?
What might happen if ?



Now switch places. Critique your partner's work and provide supportive suggestions if you can.

Reflections:

What new ideas do you have?

What changes do you plan to make?

How has the consultation process helped you?



Small-group Discussions: Testing Ideas with Peer-to-Peer Consultation
Research Process Grades 7–12 (Processing Information)

Thinking about Understanding

Today I consulted with.....

During the consultation I discovered.....

I had some difficulty understanding.....

I found it helpful to.....

I thought about.....

Now I understand.....

I would still like to know.....

Perhaps I can.....

Presentations: Planning for an Oral Presentation

Research Process Grades 7–12 (Transferring Learning)

In this stage of research, students learn how to select the most appropriate format for communicating new learning to their intended audience. Oral presentations are a component of most formats and provide opportunities to communicate using text, voice and visuals in a dynamic, creative way. Taking time to prepare and plan presentations ensures success. Planning, revising and reflecting on the product help students to understand how to transfer skills and knowledge to new and different situations.

Purpose

- Develop skills to better plan and organize an oral presentation.
- Provide strategies for effective presentations.
- Consolidate understanding of new learning by communicating verbally.
- Create a comfortable and safe environment in which students can make successful presentations.

Payoff

Students will:

- understand the elements of an effective presentation.
- become familiar with a repertoire of oral presentation skills.
- learn how presentations are enhanced by using outlines, handouts and audio-visual support.
- plan how to share their new knowledge and understandings.
- begin to develop confidence when speaking to groups.

Tips and Resources

- Give adequate time for strategically planning and preparing for an oral presentation.
- Using the Student/Teacher Resources, *Oral Presentation Check* and *Rating Scale for Oral Presentations*, students can develop a model for positive peer assessment.
- Give clear direction to students regarding peer assessment and model what constitutes constructive criticism.
- Encourage students to effectively use visual reinforcement for oral presentations, such as props, pictures, charts, and appropriate presentation software.
- When students are preparing their own presentations, provide them with multiple opportunities to rehearse and/or videotape and review.
- See Student Resources:
 - *Ideas for Enhancing Oral Reports* www.virtualsalt.com/oralrpt.htm
 - *How-to-Study.com* www.how-to-study.com/OralPresentation.htm
- See Teacher Resources:
 - Bender, Peter Urs. *Secrets of Power Presentations*. Toronto: The Achievement Group, 1991.

Further Support

- Individual conferencing and coaching by the teacher or a peer tutor will benefit all students but especially ESL students and those with special needs.



Presentations: Planning for an Oral Presentation

Research Process Grades 7–12 (Transferring Learning)

What teachers do	What students do
<p>Before</p> <ul style="list-style-type: none"> • Introduce the importance of oral presentations. • Ask students to list different types of presentations and different situations when formal and informal presentations were given (e.g., debates, panels, press conference, thank you speeches, serving a customer). Build a class list of ideas. • Present famous speeches using audio/video clips from CBC Archives (<cbc.ca/archives>). • In groups, ask students to discuss why these were or were not effective oral presentations. Have a recorder write down the main points of the discussion. • Groups share their observations. 	<ul style="list-style-type: none"> • Make a list of situations when formal and informal presentations are given. • Share formal and informal presentation ideas. • View video clips or listen to audio clips from famous speeches. • Discuss what was or was not effective in the video or audio clip viewed. • Recorder keeps a record of discussion. • Share the observations.
<p>During</p> <ul style="list-style-type: none"> • Provide students with some tips for effective oral presentations. See <i>Ideas for Enhancing Oral Reports and How to Study/ Oral Presentation</i>, listed in Tips and Resources. Read and highlight key ideas. • Distribute the formal assessment tools <i>Rating Scale for Oral Presentations</i> and <i>Oral Presentation Check</i> and discuss each with students. Ask them to compare the formal expectations with the tips for oral presentations. Debrief the similarities and differences. • Instruct students in pairs to select a video clip from CBC Archives and apply criteria to this clip (<i>Rating Scale for Oral Presentations</i> and <i>Oral Presentation Check</i>). • View the student-selected clips and ask students to discuss with the class the main strengths or weaknesses they identified. • Debrief with the class. 	<ul style="list-style-type: none"> • Read and highlight key ideas and tips from <i>Ideas for Enhancing Oral Reports and How to Study/ Oral Presentation</i>. • Read and respond to the formal assessment tools, <i>Rating Scale for Oral Presentations</i> and <i>Oral Presentation Check</i>. Compare the tips and the formal assessment tools. • Contribute to the comparison discussion. • With a partner, select a clip and assess it using the <i>Rating Scale for Oral Presentations</i> and <i>Oral Presentation Check</i>. • Share video clip and assessment with the class. • Discuss peer assessments.
<p>After</p> <ul style="list-style-type: none"> • Handout the Student/Teacher Resource, <i>Preparing for Presentations</i> and discuss steps. • Review with students all handouts used in this lesson. Discuss how these resources will help when preparing their own future oral presentations. • Instruct students to keep all these resources in their research folders. 	<ul style="list-style-type: none"> • Contribute to the discussion of the steps to take when planning and preparing for an oral presentation. • Reflect on how to effectively apply the concepts learned and resources used to enhance future oral presentations. • Insert student handouts in a research folder for further reference.

Notes



Presentations: Planning for an Oral Presentation

Research Process Grades 7–12 (Transferring Learning)

Oral Presentation Check



Effective Presentation Skills	Yes/No
Content:	
Is the topic or opinion presented clearly and logically?	
Did the speaker gather information from a variety of reliable sources?	
Did the speaker manage to time components of the presentation appropriately?	
Does the speaker have a thorough understanding of the topic?	
Is the presentation clearly organized with an obvious introduction, middle, and conclusion?	
Did the speaker creatively use a variety of visual aids? (e.g.; pictures, photographs, props, charts, costumes, etc.)	
Presentation Style:	
Did the speaker use appropriate tone and language for a classroom presentation?	
Did the speaker articulate clearly?	
Did the speaker creatively vary the volume and rate of speech?	
Did the speaker effectively use pauses in speech for emphasis and to allow the audience to reflect?	
Did the speaker speak fluently without false starts?	
Did the speaker appear confident and knowledgeable?	
Attention to Audience:	
Did the speaker use effective eye contact with the audience?	
Did the speaker explain unfamiliar terms to others?	
Did the speaker involve the audience?	
Did the speaker maintain the focus of the audience?	
Did the speaker encourage questions and dialogue with the audience?	
Did the speaker engage and inspire the audience?	
Comments:	



Presentations: Planning for an Oral Presentation

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Rating Scale for Oral Presentations						
A rating scale can provide the basis for assessment and discussion following an oral presentation.						
Name of Presenter(s):			Name of Assessor:			
Topic:			Date:			
Rate each of the assessment criteria using the following 5 point scale:						
1 Not at all	2 Somewhat	3 Usually	4 Mostly	5 Consistently		
Content		Rating Scale				
		1	2	3	4	5
There was a clear and interesting introduction and conclusion.						
The presentation stayed on topic.						
The report was well organized and carefully prepared.						
The presenter(s) demonstrated a clear understanding of the topic.						
I understood and learned several things from this presentation, including: (Assess your understanding for each point.)						
Presentation		Rating Scale				
		1	2	3	4	5
The presenter(s) spoke clearly.						
The presenter(s) spoke enthusiastically.						
The presenter(s) used visual aids to support ideas. (e.g., props, charts, illustrations, presentation software)						
The presenter(s) used the timeframe effectively.						
The presenter(s) delivered their ideas confidently, using brief notes or an outline only.						
Additional Comments:						



Presentations: Planning for an Oral Presentation

Research Process Grades 7–12 (Transferring Learning)

Preparing for Presentations

What is the focus of your presentation? What do you want your audience to learn?

Who is your audience?

When are you presenting and at what time?

How much time do you have? How will your presentation be assessed?

- Plan how to organize your information. Use a visual organizer to help you prepare for writing.
- Write, sketch, or create a first draft/plan.
- Conference with a friend and make revisions if necessary.
- Prepare the final version of your presentation.
- Rehearse (with a friend, in front of a mirror, using a tape recorder or a video camera).
- Time your presentation.
- Make revisions as necessary.
- Check and double check that you have everything you need.
- Be prepared to answer questions from your audience.
- Get a good rest the night before your presentation.
- Be confident you have something special to share!

How did you do?

What went well?

How did your audience respond?

Is there something you'd like to improve on? Why and how?

Overall, how do you feel about it?

