## **Research Skills Continuum**

Information and Digital Literacy Skills to Support Student Achievement

Skill	Grade 9 and Grade 10	Gi
Explore	Preparing for Research	Preparing for Research
Begin the research process by choosing a topic and developing a question to guide research YRDSB Inquiry-Based Learning: Engage and Explore Information Studies: Prepare for Research	<ul> <li>Information Literacy:</li> <li>define and understand the assignment requirements</li> <li>generate a list of potential keywords, phrases and questions related to a topic</li> <li>identify the types of information required (facts, opinions, pictures, statistics etc.) with the help of a graphic organizer and teacher guidance</li> <li>understand the difference between questions and statements</li> <li>develop a research question with teacher guidance</li> <li>relate prior knowledge to research task</li> <li>create a research plan using organizers, templates, checklists</li> </ul>	<ul> <li>Information Literacy:</li> <li>formulate research questions based or research.</li> <li>develop and refine the research question plan for research a self-directed action plan for research question question plan for research question q</li></ul>
	<ul> <li><u>Digital Literacy</u>:</li> <li><b>use</b> meta search engines (Yippy, Dogpile, Meta-Eureka, IxQuick) to develop list of topic keywords &amp; phrases</li> </ul>	
Investigate	Sources of Information	Sources of Information
Design a research plan, select sources (print & digital), and formulate a clear focus	<ul> <li>Information Literacy:</li> <li>Iocate and select suitable secondary &amp; tertiary sources including books, magazines &amp; encyclopedias</li> <li>use call numbers to locate and choose resources for research or personal interest</li> <li>identify fiction genres and select books for research or leisure reading</li> </ul>	<ul> <li>Information Literacy:</li> <li>find a variety of resources primary and</li> <li>use abstracts to determine relevance</li> <li>use bibliographies from articles and jo</li> <li>independently select a variety of relevance</li> </ul>
Inquiry-Based Learning: Engage and Explore	<ul> <li><u>Digital Literacy</u>:</li> <li><u>locate</u> digital resources using simple search techniques</li> <li><u>use</u> search engines and subject directories (IPL2) to locate resources</li> <li><u>select</u> suitable websites, databases (Britannica School, Gale Cengage) and e-books with teacher assistance</li> <li><u>locate</u> books using the on-line library catalogue</li> </ul>	<ul> <li><u>Digital Literacy</u>:</li> <li>find specific information from e-book statistical sources and government per use advanced search options in a da</li> <li>locate relevant information from soci</li> </ul>
Process	Evaluate and Take Note	Evaluate and Take Note
Analyze information and evaluate ideas. Organize and synthesize findings Inquiry-Based Framework: Analyze and Interpret Information Studies: Process Information/Information Studies and Society	<ul> <li>Information Literacy:</li> <li>sort information using note-taking organizers to paraphrase, summarize information</li> <li>synthesize information and distinguish between fact and opinion as it relates to a research question</li> <li>understand the meaning of academic honesty and obligation to acknowledge sources used in research</li> <li>create an annotated bibliography with teacher guidance</li> <li>use embedded citations in research with teacher assistance</li> <li>cite sources (print/digital) using the proper conventions (MLA, APA) style with teacher guidance</li> </ul>	<ul> <li>Information Literacy:</li> <li>sort information and choose suitable</li> <li>identify resources that support or ref</li> <li>make inferences and support them w</li> <li>synthesize findings and make connerformulate conclusions</li> <li>apply strategies that support the ethi</li> <li>create an annotated bibliography and</li> <li>cite resources properly from a variety embedded reference for MLA, APA a</li> </ul>
	<ul> <li>evaluate website credibility with teacher direction</li> <li>navigate a site or database to locate relevant information</li> <li>use citation generator to create bibliography or citation tool in a database with teacher guidance</li> <li>use Turnitin to submit research assignment</li> </ul>	<ul> <li><u>Digital Literacy</u>:</li> <li>create personalized digital organizati</li> <li>uses digital tools to create a bibliogra</li> <li>use Turnitin to submit research assignment</li> </ul>
Create	Final Product	Final Product
Make product that presents the results of research. Assess the product and process and transfer knowledge to new contexts. Draw conclusions	<ul> <li>Information Literacy:</li> <li>present research in a variety of forms (oral, written, or pictorial) to answer the question investigated</li> <li>write a content-related report that answers research question</li> <li>participate in a group activity/production (debate, interview, presentation, radio program etc.)</li> </ul>	<ul> <li>Information Literacy:</li> <li>reflect on topic and findings, new ski</li> <li>select a product format that complim</li> <li>use appropriate vocabulary to preser</li> </ul>
Inquiry-Based Framework: Organize and Connect with and from each other Information Studies: Process Information/Transfer Learning	<ul> <li><u>Digital Literacy</u>:</li> <li>use multimedia software to present research findings (podcast, Audacity, Bitstrips, MovieMaker etc.)</li> <li>create and communicate using Web 2.0 tools (Voki, Glogster, Prezi etc.) and GAFE (eg. WeVideo)</li> </ul>	<ul> <li><u>Digital Literacy</u>:</li> <li>integrate a variety of technologies w perspectives on the research assignr</li> <li>produce a product for a particular control</li> </ul>
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Sources: Together for Learning: School Libraries and the Emergence of the Learning Commons, OLA, 2010. Inquiry-Based Learning, YRDSB. Information Studies: Kindergarten to Grade 12, 1999. Ontario Curriculum Grades 1-8: Science and Technology, 2007. BCSS Research Skills Continuum, 2013, MediaSmarts.com, Research Success @ Your Library, TDSB, 2005. Think Literacy, 2005.

## Grade 11 and Grade 12

d on assigned topic or text, interests, issues, and preliminary

uestion independently with limited teacher guidance research

PL2, Virtual Reference Shelf) to develop research question

and secondary sources: interviews, editorials, academic articles e of source for research

journals as sources of information

evant resources on a topic or to answer a research question

ooks, academic articles, peer reviewed journals, primary sources, publications using advanced search techniques database to locate resources

ocial media sources, blogs, Twitter, Ted Talks etc).

le note-taking strategies to classify and record information refute a particular point of view and/or describe potential biases with evidence

nections, discover trends and patterns from information and

thical use of information and avoid plagiarism and or literature review of sources ety of sources using the proper bibliographic conventions and and Chicago styles.

ational system for taking and sorting notes (ie. Evernote, GAFE) graphy (MLA, APA, Chicago) signment

skills, knowledge learned and suggest areas for further research iments the research assignment ent findings

where appropriate to communicate findings and or multiple Inment context or audience

Created by Liana Marinelli, Stephen Lewis Secondary School Updated: March, 2015