Research Skills Continuum

Information and Digital Literacy Skills to Support Student Achievement

Skill	Grade 9 and Grade 10	Grade 11 and Grade 12
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	 Information Literacy: define and understand the assignment requirements generate a list of potential keywords, phrases and questions related to a topic identify the types of information required (facts, opinions, pictures, statistics etc.) with the help of a graphic organizer and teacher guidance understand the difference between questions and statements develop a research question with teacher guidance relate prior knowledge to research task create a research plan using organizers, templates, checklists 	 Information Literacy: formulate research questions based on assigned topic or text, interests, issues, and preliminary research. develop and refine the research question independently with limited teacher guidance create a self-directed action plan for research Digital Literacy: use subject directories (Infomine, IPL2, Virtual Reference Shelf) to develop research question
	 <u>Digital Literacy</u>: <u>use</u> meta search engines (Yippy, Dogpile, Meta-Eureka, IxQuick) to develop list of topic keywords & phrases 	
Investigate	Sources of Information	Sources of Information
Design a research plan, select sources (print & digital), and formulate a clear focus	Information Literacy: • locate and select suitable secondary & tertiary sources including books, magazines & encyclopedias • use call numbers to locate and choose resources for research or personal interest • identify fiction genres and select books for research or leisure reading	 Information Literacy: find a variety of resources primary and secondary sources: interviews, editorials, academic articles use abstracts to determine relevance of source for research use bibliographies from articles and journals as sources of information independently select a variety of relevant resources on a topic or to answer a research question
Inquiry-Based Learning: Engage and Explore Information Studies: Access Resources	 Digital Literacy: locate digital resources using simple search techniques use search engines and subject directories (IPL2) to locate resources select suitable websites, databases (Britannica School, Gale Cengage) and e-books with teacher assistance locate books using the on-line library catalogue 	 <u>Digital Literacy</u>: find specific information from e-books, academic articles, peer reviewed journals, primary sources, statistical sources and government publications using advanced search techniques use advanced search options in a database to locate resources locate relevant information from social media sources, blogs, Twitter, Ted Talks etc).
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	 Information Literacy: sort information using note-taking organizers to paraphrase, summarize information synthesize information and distinguish between fact and opinion as it relates to a research question understand the meaning of academic honesty and obligation to acknowledge sources used in research create an annotated bibliography with teacher guidance use embedded citations in research with teacher assistance cite sources (print/digital) using the proper conventions (MLA, APA) style with teacher guidance Digital Literacy: evaluate website credibility with teacher direction navigate a site or database to locate relevant information use citation generator to create bibliography or citation tool in a database with teacher guidance use Turnitin to submit research assignment 	Information Literacy: sort information and choose suitable note-taking strategies to classify and record information identify resources that support or refute a particular point of view and/or describe potential biases make inferences and support them with evidence synthesize findings and make connections, discover trends and patterns from information and formulate conclusions apply strategies that support the ethical use of information and avoid plagiarism create an annotated bibliography and or literature review of sources cite resources properly from a variety of sources using the proper bibliographic conventions and embedded reference for MLA, APA and Chicago styles. Digital Literacy: create personalized digital organizational system for taking and sorting notes (ie. Evernote, GAFE) uses digital tools to create a bibliography (MLA, APA, Chicago) use Turnitin to submit research assignment
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	 Information Literacy: present research in a variety of forms (oral, written, or pictorial) to answer the question investigated write a content-related report that answers research question participate in a group activity/production (debate, interview, presentation, radio program etc.) 	 Information Literacy: reflect on topic and findings, new skills, knowledge learned and suggest areas for further research select a product format that compliments the research assignment use appropriate vocabulary to present findings
Inquiry-Based Framework: Organize and Connect with and from each other Information Studies: Process Information/Transfer Learning	 Digital Literacy: use multimedia software to present research findings (podcast, Audacity, Bitstrips, MovieMaker etc.) create and communicate using Web 2.0 tools (Voki, Glogster, Prezi etc.) and GAFE (eg. WeVideo) 	 <u>Digital Literacy</u>: integrate a variety of technologies where appropriate to communicate findings and or multiple perspectives on the research assignment produce a product for a particular context or audience

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