

STUDENT GUIDE TO THE INQUIRY PROCESS



GEO631A
Global Issues



*Prince
Edward
Island*

CANADA

Education and Early
Childhood Development
English Programs



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STUDENT GUIDE

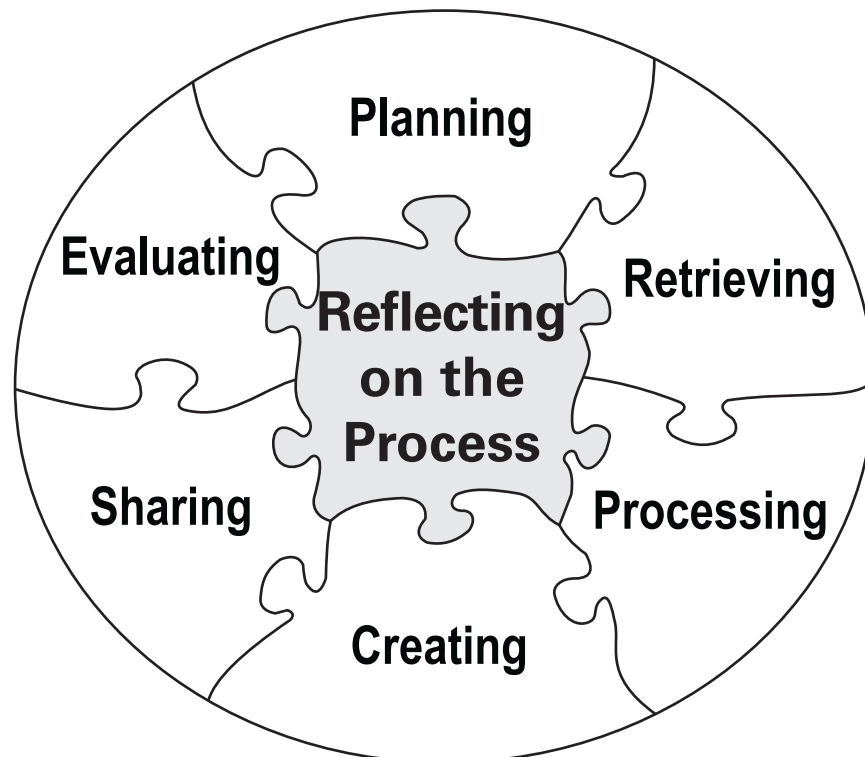
to the INQUIRY PROCESS

GEO631A

Global Issues

Guided Practice
and
Project Planning

Inquiry Model



Guided Practice

Selecting a Topic and Planning an Inquiry

Outcome 2.1.1

How do I select a topic and plan my inquiry?

Brainstorm ideas and ask questions that interest you. For example, if you want to know more about “child soldiers,” then you need to come up with a number of questions that interest you. This will help you narrow the focus to something that can be researched. Remember—you are trying to answer a question that has not been asked before—not just looking for someone else’s answers. As you search for sources that relate to your question, you could find that your inquiry question changes or needs to be refined more.

TIPS: Web Searches

GOOGLE is a search engine, not a website or a source that can be cited in your research. It is a good starting place to get ideas, but do not rely totally on this for your research.

Wikipedia may be tempting to use too but is not always reliable as a source, and it should be viewed only as a starting point—a place to find ideas and additional sources at the end of each article.

Guided Practice:

Enter “child soldiers” into an online search engine. Notice how many possible links there are for this topic—obviously, we need to narrow the topic!

Broad Topic:	child soldiers
Narrower Topics:	recruitment of child soldiers, gender-related experiences, organizations and efforts to reintegrate children into society, international laws related to child soldiers
Possible Question:	How do former child soldiers move back into society?
Possible Sources:	Websites, encyclopedias, journals, and other sources that can provide reliable information. Use a variety of formats
Audience:	Class/teacher/community/other
Format of Presentation:	Digital presentation, mini-documentary, photoessay, research paper, oral presentation, talk show simulation
Evaluation Criteria:	Teacher and/or student-generated criteria to evaluate product AND process (includes “learning to learn skills”)

Project Planner

Selecting a Topic and Planning an Inquiry

Outcome 2.1.1

What is my broad area of inquiry?

Narrowing the focus...

Some possible inquiry questions...

<p>Where can I find reliable information sources?</p>

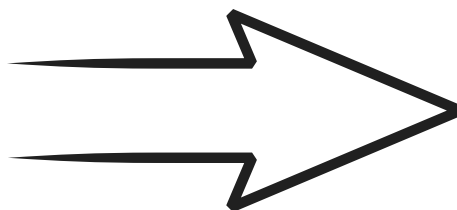
<p>Who will be the audience and what format will I make my presentation?</p>
--

<p>How will I be evaluated on this inquiry project?</p>

What is my plan and schedule? Include checkpoints.

Start date

Completion date



Guided Practice

Retrieving Information

Outcome 2.1.2

How do I go about retrieving information for my inquiry?

Searching for information can be a tough job for even the most experienced researcher. Stay organized and keep a record of your searches. You will likely need to find these sites again. Start by planning out your search. You might assume that the World Wide Web is the best place to begin but there are lots of other options too. Online searches can be time-consuming and frustrating. Try out encyclopedias, texts, videos, periodicals (magazines), and databases such as EBSCO; they are right within reach at school, home, or your local library. There are often community sources as well such as government records or materials produced by community organizations. Don't forget to ask for help!

TIPS: Primary and Secondary Sources

Primary sources are first-hand materials such as a novel written by an author, letter, diary or journal entry, autobiography, speech, personal interview, first-hand account of an event, photograph, painting, or other original work. **Secondary** sources include all second-hand accounts of primary sources or materials that have been interpreted by others—movie and book reviews, text books, translations, encyclopedia articles, historical accounts (written by someone who was not there at the time of the event), or recreated artifacts or replicas. Sometimes it is difficult to tell if a source is primary or secondary (and, may in fact be a bit of both). In the case of web searches, articles on a specific topic with a stated author are generally primary sources, but these would be considered secondary if the article interprets work that has already been published.

Guided Practice:

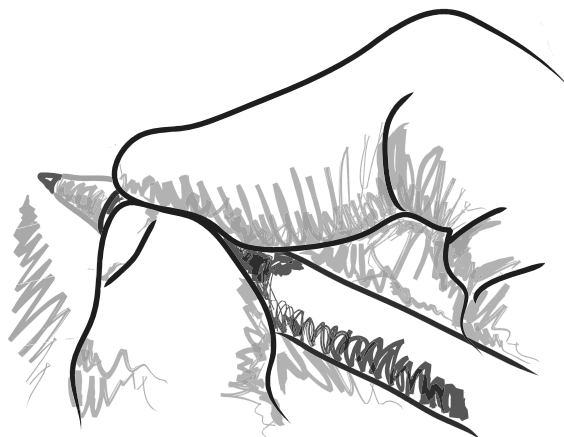
1. Make a checklist of all the possible places where you might find information.
2. Keep detailed records of the sources you find that you intend to use. If a source is not a good match, discard the record to avoid confusion.
3. Look closely at the URL addresses of any websites that you may use – URLs hold clues to reliable sites or ones that may be biased. Enter “child soldiers” into a search engine such as GOOGLE and note the domain tag on the URLS (this is the 3-letter clue to the origin). For example, “edu” refers to an educational organization or institution; “org” refers to a (usually) non-profit or governmental organization; “gov” refers to _____; and “com” means the site is _____.
4. Scroll through the first 20-30 hits for “child soldiers” and see how many fit the four categories above: edu ____; gov ____; org ____; com ____

Project Planner

Retrieving Information from the Web

Outcome 2.1.2

URL	Author	Audience	Current	Citation
Note the domain tag and the country of origin: ca- Canada; uk - United Kingdom; us - United States; au - Australia, etc.	Is this an expert author or simply someone's personal view? Is there any information on the author at the end of the article or in other websites?	Who is the intended audience of the article? For example, is it for educational purposes or intended to sell a product or a point of view?	Is the site current or dated? When was it last updated or how long has it existed?	Is there a recommended way of citing material from the site?
Source #1				
Source #2				
Source #3				
Source #4				
Source #5				



Guided Practice

Evaluating Sources

Outcome 2.1.3

How do I know if a source is a good one?

While you may think that you'll never find enough material to complete your project, more often the complete opposite is the case. Finding sources is one thing — finding **good** sources is a whole other thing. Just as important as knowing a bit about the author and the intended audience of the information is being certain that the information is relevant to your work.

TIPS: Plagiarism

Avoiding plagiarism can be tricky when you are selecting information. If you are using data, findings, arguments, or any other work of others, you must give credit to that source. For example, if you are using statistics about the number of child soldiers worldwide, or research results about the psychological impact of war on children, you must cite the source. Common knowledge need not be cited as it is generally shared by all readers (e.g., recruiting child soldiers is a violation of their human rights). If you are not sure, check with a teacher or librarian, or refer to a writing handbook for more guidelines.

Guided Practice:

1. Ask yourself if the material is closely related to your inquiry. For example, if your topic is about how child soldiers are rescued and move back into society, you need not include information about the climate of their country, or the national sport.
2. Use the same guidelines for measuring reliability of the author as you as you would for selecting sources. Nationally-known organizations, educational institutions, or expert authors are the most reliable sources.
3. Is the information up-to-date, or, is there historical data that may be useful? Older materials may prove to be valuable but check to be sure that the data is still current and has not been replaced by newer information.
4. Is the material easy to access when you need it? Remember to record it!
5. Is there an obvious bias or does the article present a balanced view?
6. Is there enough material to help out your inquiry? Or, is there so much that you need to be selective in matching it to your work? Select three sources of information on child soldiers and try to answer the guiding questions above to get a sense for how relevant or valuable the material is to you.

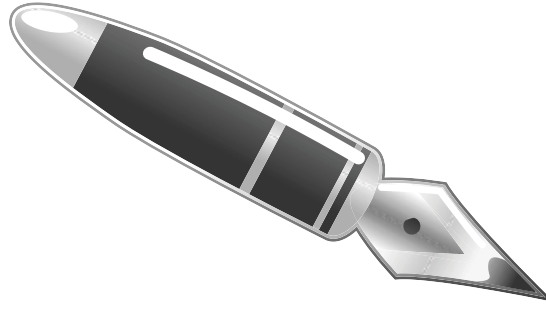
Project Planner

Evaluating Sources

Outcome 2.1.3

My topic: _____ Inquiry question: _____

Source	Relevance Score 1-3	Reliability evidence	Timelines current/dated	Availability easy to find	Bias 1-3	Quantity



Guided Practice

Processing

Outcome 2.1.4

Now what? How do I pull it all together?

By now, you've gathered a number of sources of information for your inquiry. You've done some weeding, sorted through materials, and already learned quite a bit. Now, it's time to finalize your focus and select the most relevant information. You may find that you've shifted your focus a bit as you came across new information and changed paths. That's all part of the inquiry process and shows that you are constantly evaluating and re-evaluating information. At this point, you may discover that you either need to narrow your focus or broaden it somewhat to capture what it is you want to find out about this topic.

TIPS: Note-taking and Summarizing

Being able to take good (not necessarily lengthy) notes and summarizing information is a skill that will benefit you for a lifetime—but it takes practice and patience. Some people like to use a note-card system or other means that works for their particular styles. The main thing is that you stay organized and efficient.

Do...

- record the source, author, and page somewhere obvious.
- copy quotations exactly as they appear in the original.
- summarize ideas in your own words—see below.

Summarizing v. Paraphrasing

- Both mean restating original work into your own words.
- Summarizing reduces the original ideas by at least 50% whereas paraphrasing will be about the same length as the original.
- Concept maps are a form of note-taking and can be very detailed.

Guided Practice:

1. Select an appropriate source of information on a topic such as child soldiers or a variation of this topic and summarize a principal paragraph or section. Use a SQ3R strategy - survey, question, read, recite, review to help you. Ask your teacher for assistance on this strategy if you aren't sure.
2. Try to reduce the original paragraph or section by half using your own words and the key ideas of the section.
3. Share with a partner to evaluate how well you did in summarizing.

Project Planner

Processing

Outcome 2.1.4

Reintegration of child soldiers

Dr. Samantha Nutt

War Child Canada

<http://www.theglobeandmail.com/archives/article670332.ece>

- 300,000 child soldiers worldwide
- children easily led into military
- girls are especially vulnerable
- many are rejected by families and communities or orphaned
- need for education and jobs

Planning for My Learning Style

My biggest challenge with taking notes for this inquiry project will be ...

I can overcome this by ...

Explain your preferred method of note-taking or draw a sketch of the “system” that works for you ...

One of the advantages of being disorderly is that one is constantly making exciting discoveries.”

A.A. Milne, author of Winnie the Pooh

Guided Practice Sheet

Creating

Outcome 2.1.5

How do I go from data collection to product creation?

Now things really start to get interesting! You are now ready to transform all the factual data that you have collected into a product of your own creation. Chances are, you have already decided on (or, have been given) a particular format for your product. This is where the planning part helps a lot. Think about what sections of your research will fit best into the introduction, the main body, and the conclusion. Physically move your written notes around, or use sticky notes to help organize your thoughts. Seeing the information fit together visually often helps. Look for any gaps or areas that may need a bit more attention.

TIPS: Graphic Organizers and End Products

Graphic organizers are a good way to sort and organize information that will form your final product. There are numerous versions of graphic organizers and it's simply a matter of deciding which one will do the best job for you. For example, if you plan to create a digital sideshow as your end product, you might use a storyboard to figure out the sequence of slides and info on each slide. If you are doing a visual display such as a photoessay, you might choose to practice with a concept map. An oral presentation or newscast simulation may work better using a sequence chart to plan the script or interview.

Other ideas for end products:

- Brochure, Pamphlet, Poster, Chart
- Report, Research Paper, Essay, Editorial, Letter
- Panel Discussion, Debate, Speech, Oral Presentation, Song/Lyric
- Drama, Movie Script, Video, Digital Presentation, Web Page, Audio
- Map, Painting, Scrapbook, Collage, Exhibition

Guided Practice:

You are planning to do your project on some aspect of child soldiers. Decide on a format for your end product by thinking about your interests and strengths, and what might be the most effective means of communicating the information that you have gathered and analysed. Which type(s) of graphic organizers might help you get organized?

I would choose to do (format) _____ because ...

The graphic organizers (select at least two) that I think would work best are ...

Project Planner

Creating

Outcome 2.1.5

Checklist: Getting from the collection stage to end product.

- I've gathered enough information (data) and kept records of my sources.
- I've analyzed my data to ensure that it is connected closely to my inquiry.
- I've used graphic organizers, or some other system, to help sort my data and to analyse the results (what I found).
- I've organized my data into 1) introduction, 2) main body, and 3) conclusion.
- I know what I want to present as an end product and how to get there.

Show one graphic organizer that you like to use to organize your data...

An illustration of a stack of four books of varying thicknesses, with a pen lying horizontally in front of them on a surface. The drawing is in a simple, sketchy style.

Guided Practice

Sharing

Outcome 2.1.6

How do I share my work?

Usually “sharing” work means an oral presentation of some sort—something that many people are uneasy about doing. When it comes to sharing your research work with others, there are a few things that you can keep in mind that will help you to look focused and interesting. It is not important to include every single written thought that you have put into your project—it is more effective and interesting to your audience if you summarize your findings and present the most important ideas or conclusions that you have discovered during your inquiry. Body language is another important component of presenting. Try to keep eye contact with your audience as much as possible and don't get fixated on one person or one side of the room. Speak clearly and make sure you are not chewing gum!

TIPS: Rubrics

Rubrics are tools that help both students and teachers when it comes to big projects or small tasks. These are usually grids with 3-5 columns with descriptions of criteria which are used to evaluate a task or a product. Obviously, it is most helpful to the presenter if he or she knows in advance which criteria (ideas) will be used to evaluate the work and presentation. Students and teachers can create a rubric together at the beginning of a project, or use a pre-existing one and adapt the criteria to fit. Rubrics do not have to be complicated and can be designed to suit every circumstance whether it is to evaluate part of the inquiry process such as a group task, or an end product such as a presentation or exhibit.

Guided Practice:

Your job is to evaluate (mark) a poster product that has been created to raise awareness of the plight of child soldiers worldwide. With your class, or within in a small group, create an evaluation rubric that will measure the most important features of the poster (message, clarity, visual appeal, accuracy of information, variety of sources, etc. Use the following template to get started:

POSTER	Limited	Developing	Proficient	Advanced
<i>Provides several sources of info (at least 5)</i>		has 3 sources but one is not really relevant		

Project Planner

Sharing

Outcome 2.1.6

Use the following template (pattern) to create a one-of-a-kind rubric for the end product that you have chosen to present your inquiry findings and conclusions. Try to be specific about what should be considered a “feature,” such as visual appeal (the sorts of things that make a product attractive to viewers—colour, neatness, size of lettering). Add more rows if necessary or make changes to headings if you wish.

Product to be Evaluated	Limited	Developing	Proficient	Advanced
#1 Feature of product (e.g., clarity of message to viewers)				
#2 Feature of product				
#3 Feature of product				



Guided Practice

Evaluating and Reflecting

Outcome 2.1.7

How do I evaluate and reflect on the “Inquiry Process”?

You have reached the finish line of your inquiry ... or, have you? Not really, and that is because an inquiry process is cyclical (a circle) rather than linear. It is all about thinking and then rethinking about the new information you have uncovered, putting it together with what you already know, and reaching new levels. Although you have learned a lot by the time you reach this stage, you probably raised some new questions too. Ask yourself about what you have learned, what more you would like to learn, and how you might proceed differently the next time. A good inquiry should lead to more inquiry!

TIPS: Self-Assessment

At this stage it is also important to think about how you learned as well as what you learned. If you worked independently, were you able to stay on task and meet the checkpoint deadlines? What were your strengths and weaknesses and how can you work on improving some of these things? If you worked in a group, what did you learn about your work style in that situation or the types of tasks that you like or dislike doing? How could you be more effective to the group? A project log is a good way to keep track of ideas and progress during a project and it allows you to reflect back on how far you came from the launch of the project.

Guided Practice:

Congratulations! You have just completed a group project that involved research and a presentation about child soldiers. Now, it is time to think about how you contributed to the overall project. Fill in the following according to how you think you would in a real-life situation (based upon your class or previous experience).

I contributed to the group project in the following ways....

In this group, I found it hard to...

I can change this by....

I could do the following to make the group more effective....

Project Planner

Evaluating and Reflecting

Outcome 2.1.7

End-of-Project Self-Assessment

Inquiry project topic:	During the project I completed a number of tasks including: <ul style="list-style-type: none">•••
As a result, I learned the following...	
Subject matter (name the most important things that you learned...)	
Working in a group	
Following the inquiry process	
Presenting to an audience	
How I like to learn	

SAMPLE RUBRIC for ASSESSMENT of INQUIRY PRODUCT

Assessment criteria for final product (bottom of grid) may be refined to reflect specific project formats (e.g., multimedia presentation, formal research paper, dramatization, visual presentation).

Inquiry Process Criteria		Proficient	Approaching Proficiency	Developing
Planning	Choosing topic, developing thesis, hypothesis, or driving question, and inquiry plan including presentation format and evaluation criteria	Demonstrates independence and critical thinking in selecting topic and narrowing focus. Completes inquiry plan with minimal assistance including decisions around format and evaluation.	Requires moderate assistance in selection of topic and in focusing inquiry question. Completes plan with assistance, and is able to make most decisions independently regarding format and evaluation.	Requires significant guidance to select topic and to develop inquiry focus. Needs assistance to lay out plan and make decisions regarding format and evaluation criteria.
Retrieving	Locating and gathering sources, selecting relevant information, and evaluating for bias, validity and reliability	Locates a variety of sources on own. Minimal assistance required to evaluate source material. Uses most pertinent sources for inquiry.	Requires assistance in locating sources. Variety of sources may be limited. Needs moderate assistance in evaluating source materials.	Requires significant assistance to locate sources. Selects only one type of source. Difficulty in evaluating source material.
Processing	Establishing a focus for inquiry, recording pertinent information, making connections and inferences, revising plan if necessary	Demonstrates an average level of independence and critical thinking when analyzing information. Capable of revising inquiry plan if necessary.	Requires moderate guidance in recording, analyzing information and making connections. Hesitant to revise plan or unsure how to revise plan when obstacles occur.	Requires significant assistance in recording information, making connections, and in making inferences. Not sure how or when to edit or revise.
Creating	Organizing information, creating final product, editing and revising	Demonstrates organizational ability and originality in clearly understood format and product. Edits and revises.	Requires moderate assistance in organizing new information into logical, engaging product. Some editing and revising evident.	Requires significant assistance to organize information into new product. Edits and revisions are guided.
Sharing	Presenting new understandings, communicating with audience, demonstrating appropriate behaviour	Demonstrates maturity, clarity of message, and content knowledge in sharing new understandings.	Mostly capable of communicating new understandings in a mature and focused manner. Practices appropriate behaviour.	Experiences difficulty in communicating new understandings or content knowledge. May not demonstrate appropriate actions.
Evaluating	Reflecting on process and product to gain new understanding of learning, transfer of new skills to other situations	Uses reflection to critically evaluate learning process and understands how this will transfer to new situations.	Mostly uses reflection to understand how learning transpired and can see how these skills may be transferable to new situations.	Experiences difficulty in making connections between past learning and how this may apply or transfer to new situations.
Final product	Engaging topic, clear focus, original research or perspective-taking, innovative format, or efficient use of medium, meets goal of inquiry project	Product reflects meaningful inquiry process. Evidence of new understandings is clear and focused. Use of medium is appropriate to communicating learning.	Product mostly reflects meaningful inquiry process and formation of new ideas. May need more creativity and originality in selection of medium and construction of product.	Product does not reflect meaningful inquiry process, or it is difficult to comprehend. Minimal evidence of creative or original thought in content or medium selection.