SENIOR INSTITUTE



Barry Goldwater High School

A + School of Excellence

Barry Goldwater High School Ideals and Beliefs

- We are committed to creating meaningful relationships and a community of kindness
- Teaching and learning are standards based, rigorous and relevant Students will interact globally to gain diverse perspectives We will demonstrate transfer of learning to new situations and disciplines We will discover and cultivate intellectual traditions

Purpose of the Barry Goldwater High School Senior Institute

To ensure graduates from BGHS have a significant edge in competing for post-secondary experiences by creating high school learning practices focused on relationships, relevant tasks, and rigorous content.

What is the Senior Institute?

The Senior Institute is designed to be the culmination of each student's academic experience at Barry Goldwater High School, highlighting the skills each has learned and the ability to learn for one's self. It is a genuine opportunity for seniors to merge their various interests, passions, and curiosities with their academic lives at school. Similarly, the Senior Institute is a vehicle for seniors to demonstrate the fullest extent of the autonomy, complexity, and awareness they have learned throughout their time at Barry Goldwater High School.

There are three distinct components that make up the Senior Institute: the research, the product, and the exhibition. This project will be the culmination and demonstration of not only the senior year, but the student's entire educational career. The culmination of this project is a showpiece you can take with you into your adult life.

What are the Exit Outcomes?

Critical Thinking

Students will exhibit critical thinking through problem solving and reasoning.

Life Skills

Students will be able to foster personal development to achieve independence in authentic situations.

Communication

Students will demonstrate the ability to express complex concepts in multiple mediums with clarity and precision.

Habits of Mind

Students will display strong character, civility, and responsibility, with community/world involvement. Each of the assessed components is described in detail in the pages that follow. Each component incorporates the exit outcomes and is assessed individually.

Senior Institute Assessment

There are three assessed components of the Senior Institute: Research, Artifact, and Exhibition.

Formative assessment with continuous feedback will take place throughout the instructional phase of the project. Summative assessment will take place during the second semester, at which time the advisor will assign a final exit outcomes grade based on performance on the three assessed components. This grade is then used by the teacher of record (Language Arts, Gov/Econ) to determine final levels of proficiency. If a student chooses to incorporate their project into any additional class(es), they may do so as long as their project aligns with the subject's standards and they receive approval from their advisor and the teacher of the additional subject(s).

Senior Institute Essential Question and Proposal

The first formal element of the Senior Institute is your proposal. After spending some time brainstorming ideas, you will create a 2 page project proposal that explains how you intend to address each required element of the project. After this proposal is approved, it will become your formal project description, which you will be responsible for keeping current throughout the year. It is expected that elements of your project will shift and be revised as you gain knowledge through the year; however, these revisions must be documented in your project description so that it accurately reflects the work you are doing on your project.

The Six Tenets of the Senior Institute

The Essential Question (Critical Thinking, Communication)

Because a successful and meaningful Senior Institute necessarily involves genuine inquiry around a topic of the student's choosing, each senior will focus their work around a complex, interesting, and sustainable essential question.

Benefit to the Larger Community (Life Skills, Habits of Mind)

Because we are all members of a global community, each Senior Institute must incorporate some aspect of "giving back" to others. In this regard, each senior's work, time, and energy should result in a contribution that has an impact on individuals or an entity that goes beyond the student or the project.

Complexity (Critical Thinking, Communication, Life Skills)

Because of the complex nature of each Senior Institute, seniors must incorporate a variety of skills in the planning, implementation, and exhibiting of their projects.

An Investigative Component (Critical Thinking, Life Skills)

No Senior Institute will be successful without a substantial element of <u>new learning</u>. This learning can take place in many ways, one of which must be research. Investigation must be both experiential (interviews, internships, surveys, etc.) and text-based (library, internet, etc.), although the degree to which each form is emphasized will vary from student to student.

Community (Communication, Habits of Mind)

One of the most important skills in life is the ability to work with and learn from other people. Each Senior Institute must incorporate some element of community benefit (live and/or virtual).

Academic Rigor (Critical Thinking, Communication)

Each Senior Institute must be conceived in a way that challenges the student to think deeply and critically beyond what he/she already knows and is able to do. The topic must be big enough for the student to consider multiple perspectives but not so big that it will lead only to superficial understanding.

Proposal Format

Overview

- What is the purpose/ultimate goal of the project? Why did you choose this?
- What field(s) is the project related to?
- ❖ What approach will you take to explore the essential question and to get to your product? (Is it literary, scientific, mathematical, historical, scientific, media-based, artistic, experimental, behavioral, or other kind(s) of approach?) What procedures am I going to follow?

Essential Question

- What question(s) are you going to answer?
 - o It should be a question that cannot be answered yes/no or in a single sentence or paragraph.
 - This question is answered in a way that you must do testing/research/etc. to fully explore
 it.
 - These types of question do not have a single answer.

Product

- ❖ What will you produce? What will you do?
 - This does not refer to how you will present the material in your exhibition, but instead will be included as part of the presentation.

Research/Academic Rigor

- ❖ How & where will you find out information or conduct your research?
- ❖ What kinds of research skills do you expect to employ? (Data searches, trainings, experiments, interviews, classes, surveys, consultations, shadowing, etc.)
- How will you document & organize your research? (Journaling, blogging, emails, NoodleTools, webtools, meeting agendas, etc.)
- How will you demonstrate the depth of your learning?

Multi-faceted Approach

- How will you approach this:
 - o How can you incorporate the visual? The auditory? The "hands-on" approach
 - o How will you incorporate technology?

Benefit to Community

- In the bigger picture, who will this benefit?
- How will this help them?
- Who will you need to work with?

Community

- Who will you need to consult with?
- ❖ Are there internships/interviews/shadowing that you would like to try?
- How do you plan on making contact?
- ❖ Who would you like to sit on your exhibition panel?

Integrate Exit Outcomes

*	How will you use						
		Critical Thinking?					
		Communication?					
		Habits of Mind?					
		Life Skills?					
*	How w	vill your project show the 4 Exit Outcomes?					

More helpful reminders....

- In order to avoid icky plagiarism scenarios, try to just summarize in your own words. Besides, it sounds forced when you over-use the thesaurus.
- Use Times New Roman, 12 point font, **Double Spaced**.
- Your paper still needs to be grammatically correct and be free of spelling errors.

Proposal Rubric

Criteria for Proposal	High Level Proficiency 4	Demonstrates Proficiency 3	Partial Proficiency 2	Minimal Proficiency 1	No Evidence 0
Proposal	You completed all 8 sections in paragraph form with no grammatical errors.	You have completed 7-6 section in paragraph form with few grammatical errors.	You have completed all 8 sections in bullet form.	You have completed 4 or less sections in bullet form.	No evidence
Essential Question	Your essential question is clear and concise. It uses high depth of thought and academic rigor. Additionally, your essentially question is clear in how it will help develop your research throughout the course of the project.	Your essential question is mostly clear. It uses some depth of thought and academic rigor. Additionally, your essentially question is somewhat clear in how it will help develop your research throughout the course of the project.	Your essential question is too narrow with a lack in depth of thought. Additionally, it's unclear how it will develop your research throughout the project.	There is little indication in how your essential question uses high depth of thought along with how it's going to help develop your research.	You have no essential question.

Annotations and Research Summary

Each Senior Institute must be informed and supported by a solid foundation of research. All your research (whether it comes from books and articles or from interviews, films, observations, or other types of sources) needs to be well-documented. This research will then be turned in and formally assessed as a required component of the project. Though every project is different, some general guidelines for sources include:

- Your research should be based on at least 10 sources utilizing a variety of types of research including but not limited to books, articles, handbooks, interviews, and the Internet.
- At least 3 of those sources should be books or academic journal articles.
- At least 1 of those sources should be an experiential form of research (interview, shadowing, internship, etc.).
- A Formatted, Annotated Bibliography of these sources will be uploaded to Canvas when you are turning in your research summary in the spring.

After you do some preliminary research, your first step is to create research questions to guide your research process. As you gather sources and do the research, it is expected that you will keep notes and an annotated bibliography of all sources. You are required to compile your work in a digital portfolio, Noodletools. Your research will be "handed in," electronically, in two parts through Canvas. Annotations of your sources are due each semester, 10 minimum for first semester and the remaining second semester. There are two major components you will "hand in" (electronically): the evidence of research (notes, annotated bibliography, etc.) part 1 and 2 and the research summary.

Annotation feedback will be given periodically during the semester. Final due dates are listed in the timeline, uploaded on Canvas. These are common responses for annotations:

- You are doing certain things well, but there are some other questions to consider and some more sources to gather. Keep going, fix what needs fixing, and "turn in" all of your work in January/February.
- Your research is insufficient or incomplete for this point in your project. It must be revised now
 and re-submitted however many times necessary after to demonstrate you are on track.

You will then continue to work on your research to finalize it for the spring deadline. At this time, your investigative component will be formally assessed with the rubric.

What do I "hand in" when for my Research Summary?

Second Semester

Evidence and analysis of research, organized, labeled, and including (at least):

- A typed 2-3 page <u>research summary</u> that explains major findings from research, using MLA formatting, grammar and writing conventions.
- An annotated bibliography, properly formatted, containing all sources you used;
- Summarize major trends and findings in your research (3rd person);
- Note any questions the research raises for you and explain their relevance (1st person);
- Discuss how your research so far informs the future direction of your research, product, benefit, timeline, etc. (1st person).
- Discuss how your research informs your answer to your Essential Question, the creation of your product, and the completion of your Senior Institute (1st person).

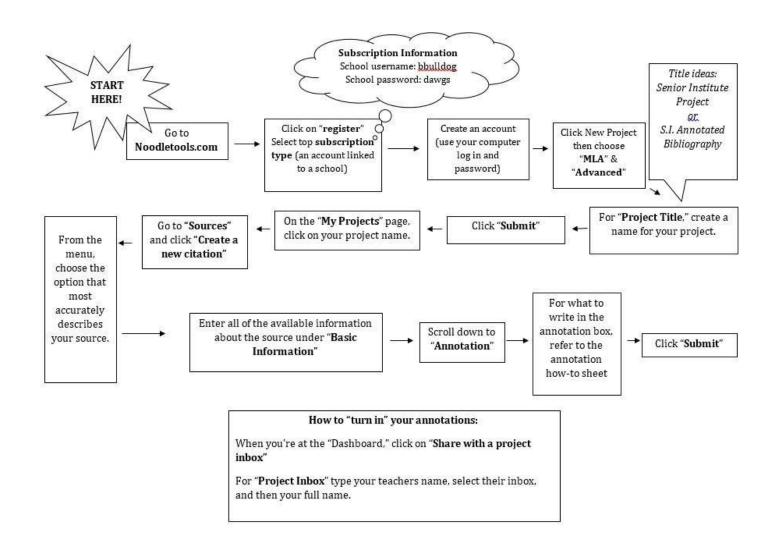
How to Write an Annotation for a Source

Once you've selected a topic and some sources, it's time to start thinking about what you've found and how it supports and/or influences your research topic. If you investigate, think about, and answer the following questions about each source, writing the final annotations will be easier. You might not be able to answer *all* of the questions for all of your sources, but try to answer *as many as you can*.

Use the below to break down the article and write your annotation:

Who is the author and why should you pay attention to what she or he has to say? That is, what are the author's credentials?	7
What are the author's main ideas?	
What is the purpose and depth of the work? Is it a broad, general overview? Does it cover something specific? Does it leave an	ything out?
What is the author's point of view, perspective or assumptions upon which the work is based? Are there indications of bias, su or a one-sided presentation of the facts/issues?	ch as strong language
of a one-sided presentation of the facts/issues:	
Does the author seem to be trying to reach or influence a particular audience? If so, who is the intended audience? Scholars?	General adult
population? Everyday consumers? A group of people sharing a particular point of view?	
How does this source compare/contrast to others in your bibliography?	
How does this source support/influence your thesis?	
How is your source organized? Is there any supplemental information that is helpful, such as appendices, index, and bibliograp	ohy?

How to Register/Use NoodleTools



Suggested Outline for the Senior Institute Research Summary

Length: 3 pages for 'Proficiency of the Standard (3)'

*Reminder: "If you receive an assessment below "Proficient" on your research, you must revise until your research does meet standards."

Introduction:

- State and explain your essential question
- What type of research did you do and why?

Body:

Section 1

- Summarize the main trends and findings from your sources
 What kept on coming up again and again? (Showing you it's obviously important)
- How does your research connect to the essential question?

 Remember: this research and process is all in the hunt to answer your essential question! (It's okay if your essential question still needs to be tweaked)

Section 2

- What was shocking or surprising?
- What did you read or learn that you were not expecting?
- What information might contradict what you're trying to prove/find?

 *Don't be afraid if that happens! In fact, it would be naïve of you to ignore any contradictory evidence. Most of the time, that's where the most interesting discoveries happen.

Section 3

- What questions does this research raise for you? (That are relevant)

 Perhaps something you will have to take into consideration that you hadn't planned on before now...
- What path does your research lead you down?
 Perhaps you assumed your project would go one way, but now that you've learned X, your project will go another way...
- How does your research help you decide what kind of product you will create?

Conclusion:

- As of now, what answer do you have for your essential question?
- What steps will you have to take to reach completion of this project?

Remember, although you may be done with the summary, that doesn't mean you're done with the project!

More helpful reminders....

- In order to avoid icky plagiarism scenarios, try to just summarize in your own words. Besides, it sounds forced when you over-use the thesaurus.
- If you want to include a quote from one of your sources in your summary, remember to cite it! (author, pg #)
- Even if you paraphrase a source, you need to cite it! (same way as a quote)
- Use Times New Roman, 12 point font, **Double Spaced**.
- Your paper still needs to be grammatically correct and be free of spelling errors.

Putting the effort and work into it the first time around is better than doing it at the last minute, then having to do it over again.

Research Summary

Criteria for RESEARCH	High Level Proficiency 4	Demonstrates Proficiency 3	Partial Proficiency 2	Minimal Proficiency 1	No Evidence 0
Sources	You gather relevant information from 11 or more authoritative sources, including: at least 2 experiential and 4 academic journals or book- based sources, in addition to using advanced digital searches. You follow a standard format for citation. Your sources clearly connect to and extend your findings beyond the essential question and product.	You gather relevant information from 10 authoritative sources, including: at least 1 experiential and 3 journal or book based sources, in addition to using advanced digital searches (DAZL Digital Arizona Library, etc.). Your research clearly connects to an essential question and product.	You gather relevant information from 5-9 sources, though variety of sources may be lacking. Your research is not clear in connecting your findings with an essential question and/or product.	You gather relevant information from less than 5 print, digital, or interview sources. There is little connection to your essential question/product. Your research lacks foundational knowledge.	No evidence

Documentation	You use a highly effective system of organization Cornell Notes, NoodleTools, thinking maps) for your sources and research notes. All sources are documented in an	You use a system of organization for your research notes and sources. All major sources are recorded in an annotated bibliography using a standard format (MLA or APA)	Your system to organize your research is unreliable or unclear. Your records of sources have some missing elements (e.g. annotations or notes).	You lack evidence of an organized system for your research. There is little evidence of a record of sources that you have consulted for your research.	No evidence
	annotated bibliography using MLA or APA style standards which assesse the strengths and limitations of each source in terms of the task, purpose, and audience.	which assesses the strengths and limitations of each source in terms of the task, purpose, and audience.	Information isn't always classified by group or some may not be labeled.	Information is not labeled, classified or grouped appropriately.	

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Research Summary	Your annotated bibliography and 4+ page research summary demonstrate a high degree of academic rigor & application of new learning. You integrate information to maintain the flow of ideas, avoiding plagiarism and Overreliance on any one source. Your summary synthesizes information and creates new ideas by proving/supporting a significant thesis/ hypothesis. You use specific, carefully chosen words, skillfully crafted into phrases and sentences that enhance meaning with an intentional and appropriate tone. Effective use of a wide range of conventions with few errors. This must include annotated work cited of 11 plus sources.	ideas and attempts to prove a significant thesis /hypothesis which relates to your product. You use effective word choice and	You try to integrate information, and avoid plagiarism, but may have an overreliance on one source. Your summary relates existing ideas but lacks a clear thesis/ hypothesis. Reliance on overused words or clichés showing little awareness of appropriate tone. Monotonous and/ or misused words create mechanical sentences, although simple constructions are usually correct.	Your research demonstrates little new learning or knowledge about your topic. Your summary relates existing ideas but lacks an essential question, thesis/ hypothesis or connection to product. Reliance on repetitive, monotonous, and/ or misused words strung into awkward sentences that are difficult to read, demonstrate a lack of audience awareness and tone. Little control of basic conventions impedes readability. Your annotated work cited is less than 5 sources/incomplete.	No evidence
		annotated work cited of 10			

sources.

Senior Institute

Each Senior Institute will result in a product of some sort. The product needs to be a logical and clear manifestation of your investigation, thinking, and work. A product could be anything from a performance, to a painting, a business proposal, an event, etc. The product is your way of making an impact with what you've learned. The product of each Senior Institute will be assessed using the general criteria on the rubric.

Your product is not your senior institute presentation.

Benefit of Your Product to the Larger Community

A benefit to the community can be one of two types. It can either be a direct benefit, one through which you are working with the people (or animals or other living organisms) you are helping, or it can be an indirect benefit, one through which you are working with an organization or person that gives direct assistance to others.

Doing free labor is not, in and of itself, a benefit, nor is your work a benefit if it is solely about your learning and not about helping others. The assistance your benefit offers should *fill a need or provide access to something otherwise unavailable to the person or entity you are helping*. If you are creating a publication, website, curriculum unit, etc., your work becomes a benefit when you target and access your audience. You should also get and incorporate feedback from that audience so that your work is truly useful and beneficial as you intended.

Senior Institute Exhibition

The purpose of the Senior Institute Exhibition is to provide an opportunity for you to:

- Defend and explain your work as it relates to the four exit outcomes:
- Critical Thinking, Communication, Life Skills & Habits of Mind;
- Explain the learning you did over the course of the project. Explain the product of your school year-long project Explain the process you used to complete the work.

You will conduct a 10-15 minute presentation of your Senior Institute to a panel (as well as other invited audience members). The presentation is your Exhibition. The panel is responsible for assessing both the substance and the style (the content and the delivery) of the Exhibition. There will also be a question and answer component to the Exhibition. Students are expected to be able to answer difficult questions from members of the panel on demand regarding how their work satisfies the four exit outcomes. An inability to answer relevant questions sufficiently will impact the assessment of the Exhibition as a whole.

Please note: You will be showcasing your product as part of the exhibition.

Each panel could have the following positions represented: a BGHS teacher, non-senior students. In some circumstances there could be additional DVUSD teacher(s) and outside community members (can be a topic "expert" or other DVUSD staff). You may request an outside expert of your choice, but you will need to get appropriate visitor permission in advance. Exhibitions **cannot** be redone and **will not** be rescheduled.

Question Bank for the SI panel

After each presentation, there will be a Q&A. You are free to ask questions specifically addressing the content the group spoke of, but in case you cannot come up with any questions of your own, feel free to use this bank of generic back-up questions. (These are the same questions they will ask you during your SI Exhibition)

- Why did you choose the topic you did?
- What is the answer to your essential question?
- How did your research and process help you reach that answer?
- What did the majority of your research tell you?
- What was your process?
- Can you discuss the highs and lows of your process?
- What worked well and what would you do differently?
- What would you do next if you were to continue your project?

Preparing for the Senior Institute Exhibition

JUST THINK: Even if you just spend 2 minutes hitting each of these, you've already spoken for more than 20 minutes! Plan wisely to make sure you cover all the information you need to, while not running out of time. Also, you can arrange these in whichever order you think makes the most sense for your project

•	Introduce yourself! Something like: "Hi, my name is(spell out if necessary)
	My advisor is and my essential question is
	*This is best to have on an intro slide; panelists will be writing all that information down.
	How you arrived at your topic/essential question:
	Why did you look into what you did?
	Is it something you want to pursue later as a career? Is it an interest/curiosity/hobby?
	• If you changed ideas, what made it so difficult to settle on just one?

- - What kind of research did you do?
 - What did the majority of your research tell you? Even if it did not tell you what you were expecting...you're not getting graded based on finding a "right answer."
- How your research and process helped you reach your answer:
 - This would be a great time to mention people you collaborated with! Interviews, people you spoke with, how you decided to go about finding your answer...
- **5.** Your answer to your essential question:
 - Based on what you found during the process of your research, what appears to be the answer to your essential question?
 - If you couldn't "find an answer," why not? Did you realize that perhaps you should have *narrowed your question?*
- **6.** WHAT your product is: Whether it be some artifacts, a movie/documentary, a portfolio...

- **7.** HOW you chose and created the actual product:
 - Why did you choose the type of product you did? (Movie so that the panel could see how you researched/what you did, etc.)
 - How does your product "benefit a larger community"?
- **8.** What your process was:
 - Basically, tell us the story of your work on this project.
 - Include elements that display your project's academic rigor.
- **9.** The highs and lows of your process:
 - What obstacles did you face?
 - How did you overcome them? (This is the perfect place to talk about the Habits of Mind!)
- **10.** What worked well and what you'd do differently:
 - Looking back with all you know now, what would you have done to make the project better?
- **11.** What you would do next if you were to continue your project:
- **12.** A concluding statement that lets your panel know you are finished speaking (rather than "Um, that's it..."):
 - Example- "Thank you for taking time out of your day to listen to what I did this year. Do you have any questions, or comments that I haven't already addressed?"

Question & Answer Tips:

- Within the 30 minute time slot of your Exhibition, there is time built-in for Q&A. If you are struggling to fit all your information within a 10-15 minute presentation, plan to include additional information while answering your panel's potential questions.
- To help you anticipate potential questions that might arise, practice presenting—ideally, to people who have no idea what you've been working on.

Exhibition Rubric

		EXIIIDICIOII			
Criteria for EXHIBITION	High Level Proficiency 4	Demonstrates Proficiency 3	Partial Proficiency 2	Minimal Proficiency 1	No Evidence 0
General Presentation	Your presentation structure is very clear and all phases were coherent and connected. Your use of time is succinct and well planned. All of your presentation aids and materials are utilized to the fullest. Your use of innovative multimedia always supports your presentation in all aspects.	supporting materials.	Your presentation structure is sometimes not clear. Your time is used effectively for some of the presentation. You sometimes use presentation aids and other supporting materials. You understand, anticipate and fulfill your technological needs some of the time.	Your presentation lacked clear and coherent structure. You did not use time effectively. Your presentation lacked appropriate use of supporting materials. You did not anticipate, understand or fulfill your technological needs.	No evidence
Essential Question	Your essential question clearly drove the project and led you to rich and rigorous thinking. You continuously and effectively refer to your essential question in several ways. All components of the project are relevant and aligned to your essential question.	Your essential question drove the project and led you to new thinking. You continuously refer to your essential question. All components of the project are aligned to your essential question.	Your essential question could not lead you to new thinking because of its narrow focus. You sometimes refer to your essential question. Not all components of the project are aligned to your essential question.	You lacked an essential question that was able to guide your work. You did not refer to your essential question. Few or none of your project components are aligned to your essential question.	No evidence

Expertise	You use evidence to demonstrate expertise in your topic, supported by an established expert in that area (live or virtual). Your knowledge invites deep thought and reflects high levels of academic rigor.	You use evidence to demonstrate expertise in your topic. Your knowledge reflects high levels of academic rigor.	You sometimes use evidence to demonstrate expertise in your topic. Your knowledge sometimes reflects high levels of academic rigor.	There was a lack of evidence to demonstrate expertise. Your knowledge is basic and/or foundational; it does not reflect academic rigor.	No evidence
Explanation of Project Components (Process and Product)	disciplines are	You can efficiently explain use of your findings or project to benefit a community. Multiple disciplines are involved and you apply your new learning.		You did not explain how your findings or project benefit a community. There is no evidence of new learning.	No evidence
Addresses Questions	You comfortably and confidently answered questions thoroughly with a high degree of knowledge, engaging in discussion with your panel.	You comfortably answered questions thoroughly with a high degree of knowledge.	You sometimes answered questions thoroughly with a high degree of knowledge.	You rarely answered questions thoroughly with a high degree of knowledge.	No evidence

Use of Presentation	You speak clearly, loudly, and at an appropriate pace at all times.	You speak clearly, loudly, and at an appropriate pace. Your tone and language are	You sometimes spoke clearly, loudly and at an appropriate pace. Your tone and language were	Rarely did you speak clearly, loudly or at an appropriate pace. Often, your tone	No evidence
Conventions	Your tone is appropriate and your use of language is highly skilled. You always make effective eye contact with your audience. Your enthusiasm is engaging and transforms your presentation.	you make effective eye contact with your audience. You demonstrate enthusiasm and confidence about material/subject. Your presentation style is engaging.	ranguage were sometimes suitable. You sometimes made eye contact with the audience. There were moments of enthusiasm and engagement in your presentation.	and language were not suitable. There was little evidence of eye contact with the audience or enthusiasm, confidence and engagement.	
Quality of Product	Your work is complete and of high quality. Your product is rich, deep, complex, original and creates new thinking. Your final product shows excellent craftsmanship with attention to every detail.	Your work is complete. Your product is rich, deep, complex, and original. Your final product shows good craftsmanship and attention to detail.	Your work has some missing pieces. Your product could be deeper and more complex. Your final product shows some craftsmanship and could use more attention to detail.	Your work is not complete. Your product does not show depth, complexity or originality. There are significant deficiencies in craftsmanship with no attention to detail.	No evidence