

GT Exhibition of Independent Studies



2018 Student Independent Study Project Guide

Table of Contents

GT Exhibition Independent Project? What's a GT Exhibition Independent Project?	2
Time Commitment:	3
Steps to Create an Exhibition Project	4
Step One: Brainstorm	4
Step Two: Narrow the Field	4
Step Three: Generate Questions	4
Step Four: Determine Source Availability	5
Step Five: Topic Selection	5
Step Six: Source Location and Citation	5
Step Seven: Get Started	5
Step Eight: Project Research Summary and Proposal	5
Step Nine: Create a Product	6
Step Ten: Final Checkpoint	6
Step Eleven: Bio Sculpture	6
Step Twelve: FRED Talk	6
Step Thirteen: Exhibit Your Project	6
Appendix A	8
Appendix B	9
Appendix C	11
Appendix D	13
Appendix E	14
Appendix F	15
Appendix G	16

GT Exhibition Independent Project? What's a GT Exhibition Independent Project?

Here's everything you'll need to know to help you create an awesome GT Exhibition Project!

GT Exhibition Independent Projects are projects chosen by students in pursuit of an area of high interest. If a student is not enjoying the GT Exhibition Independent Project, s/he has chosen the wrong project topic! **Choose a project in a subject area in which YOU are strongly interested** (not your friends or family members; they may have different interests from yours!).

GT Exhibition Projects should reflect the following three (3) **criteria**:

1. New Learning: Either study a new topic, or take a new direction on a previously studied topic.
2. Creative Thinking: Creativity can be reflected in the product itself, such as an invention, creative writing, creative choreography, or musical composition, or in the display of the project, such as a multimedia exhibit.
3. Higher Level Thinking/ Depth and Complexity: Create, evaluate, analyze, explore depth & complexity. See Appendix A, Bloom's Revised Taxonomy, and Appendix B, Sandra Kaplan's Depth & Complexity Chart.

Your project will have three (3) components:

1. Product: Either a unique item of the student's own creation or a product that will showcase the student's work on a topic. This should include both a written and a visual product of some sort, such as a model, sculpture, video of a performance, invention, display of a musical composition, etc.
2. Bio Sculpture: Create a sculpture using any materials of your choice to tell the "Story about Me." This sculpture will be placed alongside each student's project at the GT Exhibition, to inform the audiences about the presenter of the projects they are viewing.
3. FRED Talk: Similar to a "TED" talk, this video will chronicle the student's journey in their project development, and will be shared during the Exhibition. FRED stands for:
 - **Fun & Fascinating** to study, with a formulated plan
 - **Research** is included
 - **Enlightening, Educational, & Engaging** presentation
 - **Depth & Complexity** is shared

Key Dates for Your Project: Please note that due dates are reflected in the date of the class meeting. If your class meets on Wednesday that week, your assignment is due Wednesday.

- Week of February 5th - 9th Topic Due
- Week of February 12th - 16th : Five Sources Due (must include statement of evaluation and correct MLA citation.) See resources in Appendix F.
- Week of February 26th - March 2nd : Project Research Summary and Proposal Due. See Appendix C
- Week of April 2nd - 6th: Final Checkpoint Due
- Week of April 9th – 13th FRED Talk Due
- April 18th: GT Exhibition Project Due. Evening Exhibition. Attendance is mandatory.
- April 19th: Morning Exhibition. Students will miss class periods 1-3.
- Week of April 23rd - May 18th: In-class presentations

Time Commitment:

In order to explore an independent project in a meaningful way and produce a quality product, students should expect to use their class time wisely. You may find it helpful to use a Weekly Planner, such as the one provided in Appendix G.

Please note that class time will be dedicated to productive work on the GT Exhibition Project. If your product must be created outside of class, it is expected that you will use class time to conduct research or interviews, work on the project proposal, or work on the script for the FRED talk. Please consult your teacher ahead of time if you need to schedule a quiet location to conduct your interview.

Steps to Create an Exhibition Project

Step One: Brainstorm

Think about topic selection and formulate a broad list of possibilities. Note: An image of this list will make an effective element in your FRED talk.

- What are your areas of interest?
- Is there a skill you have always wanted to learn or hobby you'd like to explore?
- Are there questions you have always wondered about?
- Are there inventions you could create to solve a large or small problem?
- Is there an area of interest you have begun to explore, but might want to explore more fully?

Step Two: Narrow the Field

Generate a list of 3-5 areas you might explore from your brainstormed list of topic ideas and your Topic Scavenger Hunt (based on a visit to the library.) Begin to explore these to find out:

- How much information is available on each topic
- How expensive will it be to study this topic, learn this skill, begin this hobby, etc.
- How passionate you actually are about this topic now that you have seen more information
- How possible it will be to demonstrate creative thinking with this topic
- How possible it will be to demonstrate higher level thinking

Step Three: Generate Questions

Generate a minimum of three (3) questions that could be answered in relation to each of the possible topic ideas from Step Two. These should be **substantive** questions, not questions that can be answered in a few words. For example, "Who invented the electric refrigerator?" is not a substantive question. However, "What was the process the inventor of the electric refrigerator used to create his invention?" is substantive.

Step Four: Determine Source Availability

Begin to briefly search for answers to the three questions in Step Three. Locate articles, websites, books, etc., and jot down a short summary of each. Record the sources you find. **This is not the step for in-depth research.** You are simply checking to see if there are helpful materials and sources available to you. You'll want to record the information so you can go back to it when you select your final topic.

Step Five: Topic Selection

Based on what you have learned in Step Four, select one topic of interest that is truly interesting to you. Be certain that it is both possible and enjoyable. Submit this topic to your GT teacher by the week of February 5^h - February 9th.

Step Six: Source Location and Citation

Locate a minimum of five (5) quality resources to help you in the pursuit of your topic. Be sure to evaluate them using the criteria you learned about during the library lesson. No more than two (2) of these sources can be personal interviews. You are welcome to conduct more interviews than this, and you are expected to include them in your final project citations. However, any interviews beyond two (2) will not count toward your five (5) source minimum.

Create correct MLA citations for each source. You are welcome to use EasyBib for this. You may also consult the resources listed in Appendix F. Annotate the bibliography to include your justification for why this is a quality source based on what you have learned during the library lesson. Submit this to your teacher the week of February 12th-16th, no later than the day your class meets that week.

Step Seven: Get Started

Begin to research, design, choreograph, invent, compose, write, paint, etc.

Step Eight: Project Research Summary and Proposal

This step should give you the road map to your final project. You will summarize your resources, and analyze all of the components for your final project. Review the information you have gathered and determine what your project will be. Create a Project Research Summary and Proposal that includes a summary of EACH source, Project Management Timeline, and Budget. The Project Proposal is due the week of February 26th-March 2nd, no later than the day your class meets that week. **See Appendix C for details on completion of this step!!**

Step Nine: Create a Product

Begin to design/create a creative product/visual/hands-on activity/multimedia presentation to accompany your project information. You must include source citation somewhere in your product or it must be incorporated into your display. If your product is visual in nature, you may find it helpful to consult Appendix E, Principles of Design, and the resources from the J. Paul Getty Museum Education on Understanding Formal Analysis listed in Appendix F.

Step Ten: Final Checkpoint

To ensure you are progressing toward the GT Exhibition, complete a final checkpoint. You should list work you have completed to this point, and identify what you have left to complete. Components you should address include the project, the display, FRED talk, bio sculpture, resource citations, and acknowledgments. Include a timeline of remaining items.

Step Eleven: Bio Sculpture

You will be asked to create a creative sculpture of yourself using any materials of your choice. This sculpture tells the “Story About Me” and can include any autobiographical information you would like to share, such as family info, hobbies, interests, etc.

Note: You may wish to create a brief printed autobiographical bio to attach to a presentation board or digital display. This will be similar to a book jacket description of an author or illustrator or the bios of performers in fine arts programs. Give it an appropriate title based on your project, such as “About the Engineer,” “About the Inventor,” “About the Artist,” “About the Choreographer,” etc. Include information about your hobbies, your family, and why you became interested in the project you chose.

Step Twelve: FRED Talk

Begin to create a FRED talk. See Appendix D for more information. You should have a well-developed “script” for this with key points. Your FRED talk will not be a video of you speaking in a stream-of-consciousness. Identify any visual elements you plan to include. Your FRED Talk should be a minimum of three (3) minutes in length, and no longer than eight (8) minutes in length. Be sure it is recorded in a format that can be shared with your teacher electronically.

Step Thirteen: Exhibit Your Project

Share your completed project with the community and your classmates at the GT Exhibition. Be sure you have included ALL of your sources including images and acknowledgments, and your bio sculpture.

For students at West Ridge, the community exhibition will be Wednesday, April 18th, from 6:30 – 8:00 PM, and the student exhibition will be Thursday, April 19th, from 8:00 – 11:00 AM. The Exhibition will be held in the cafeteria, hallways, and computer lab.

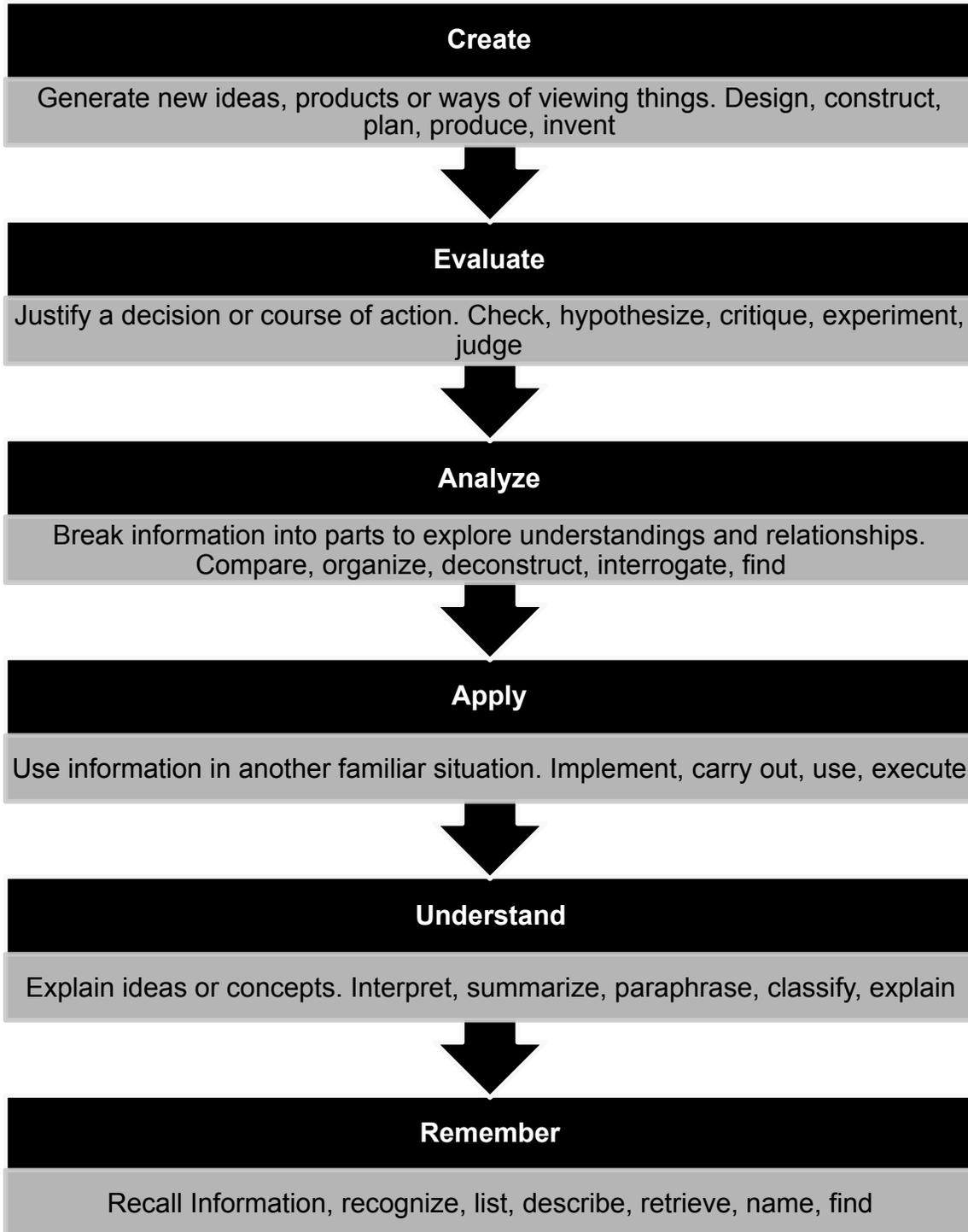
For students at Hill Country, the community exhibition will be Wednesday, April 18th from 6:00 – 7:30 PM, and the student exhibition will be Thursday, April 19th from 8:00 – 11:00 AM. The Exhibition will be held in the small gym.

Important Note: If you wish to use a tri-fold board, you may do so if it helps you to present information for visitors to see, since we will not have any walls available for display purposes. You may wish to consult the Principles of Design (See Appendix E) when formatting your display. Do NOT copy and paste information directly from books or the internet onto your display. This is plagiarism, and will be dealt with as such.

Interactive, engaging demonstrations are the most effective way to share information. Consider using an iPad, laptops, models, and other means to share information in addition to or instead of the tri-fold board.

Appendix A

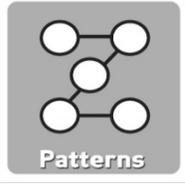
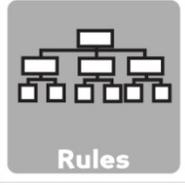
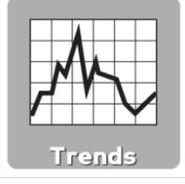
Bloom's Revised Taxonomy



Appendix B

Depth & Complexity Icons Chart

Icon	Descriptions	Key Words / Examples
 <p style="text-align: center;">Across Disciplines</p>	<p>Describe a topic's place in more than one subject area. Relate the area of study to other subjects.</p>	<p>Connect Associate Integrate Link Ideas</p>
 <p style="text-align: center;">Big Idea</p>	<p>Identify the big idea or statement that applies to these ideas. What is the main idea?</p>	<p>Draw conclusions based on evidence Make generalizations Summarize Main Idea</p>
 <p style="text-align: center;">Details</p>	<p>Find evidence and examples to support opinions and ideas. What are the characteristics?</p>	<p>Parts Factors Attributes Characteristics Distinguishing Traits Specifics</p>
 <p style="text-align: center;">Ethics</p>	<p>Examine the ethical or moral principles involved. What is right or wrong?</p>	<p>Values Morals Judging Differing Opinions Dilemmas Biases</p>
 <p style="text-align: center;">Language of the Discipline</p>	<p>Identify and use the vocabulary specific to the subject. What words are used by experts in the field of study?</p>	<p>Jargon Acronyms Vocabulary Special phrases</p>

Icon	Descriptions	Key Words / Examples
	<p>Analyze the subject from different points of view. How would others see the situation differently?</p>	<p>Point of View Ways of seeing and reporting things Slant Bias</p>
	<p>Describe the topic over time. Describe the past, present, and possible future related to this issue or topic. How and why do things change? What doesn't it change?</p>	<p>Past, present, and future Historical perspective Change Compare and contrast</p>
	<p>Identify the sequence of events. Describe the patterns you see.</p>	<p>Repetition Pattern Prediction Recurring elements Sequence Cause and effect</p>
	<p>What are the implicit and explicit rules? What are rules for this subject?</p>	<p>Structure Order Reasons Organization Methods Standards</p>
	<p>Identify patterns over time and make predictions. Where is this going?</p>	<p>General direction Tendency Current styles Forecast</p>
	<p>What information is unclear, missing, or unavailable? What has not been proven?</p>	<p>Puzzle Conundrum Unsolved Incomplete Ideas Dilemma Ambiguity</p>

Appendix C

Proposal Guide

Preparing your proposal may be the most difficult part of your entire project. However, once you complete your proposal, you will be well on your way to completing your project. Your proposal will assist your teacher in evaluating the appropriateness and feasibility of your project. The following elements should be included:

- Your name, grade level, and class period
- The topic or question you will study
- A statement of this project's importance to you (Why are you wondering about it?)
- A statement of the project's relationships to core subjects or the arts (English/Language Arts, mathematics, social studies, science, art, dance, drama, photography, film, music, etc.)
- For EACH of your sources:
 - The MLA citation
 - A summary of new, relevant information you obtained from the source
 - Any information related to Depth and Complexity
 - Reflection on how this source has guided you in your independent *study*
- Any ethical concerns or issues related to your project (use of animals, psychological testing, etc.). If none, state: None.
- A timeline of key steps in your project
- What obstacles you might need to overcome as you develop your project
- What materials you will need to complete your project (i.e. people, technology, materials, supplies, tools)
- A budget for your project and where you will obtain funding
- The format of your final project (technology, performance, demonstration, written work, etc.). Please include any A/V requirements at the exhibition (i.e. iPad, laptop, electricity)
- The format of your supporting materials, if necessary (tri-fold, video of performance, etc.)
- Detailed product description. Questions to ask to determine the appropriateness of your product are:

- Does it solve a problem or provide new information?
- Does it reflect a diversity of research resources?
- Will you be able to complete it within the time limits?
- Will it appeal to the interest of the audience and to YOU?
- Do you have access to the materials necessary to complete it?
- Are the costs of materials within your budget?
- Does it reflect depth and complexity?
- Does it exhibit a suitable level of difficulty for a long-term study project in a middle school GT program?
- Is your product idea creative?

Appendix D

The FRED Talk

Criterion	Good Start	Great!	Super!	Wow!
F un & Fascinating to study, with a formulated plan	The student selected a topic of interest s/he feels is of high interest	The student selected a topic of interest s/he feels is of high interest and generated a list of unanswered questions that would drive the study	The student's topic of study clearly reflects his/her interests, with an organized plan for study	The student formulated a detailed independent study plan that includes a product for exhibition
R esearch	Evidence of some research is emerging with a minimum of five (5) sources	The student includes background information and reflects on the research process	The student shares information on the topic and reflects on how the research process influenced his/her final product	The student presented a wealth of information on the topic, consulted more than the minimum sources, and clearly ties his/her product to the research process
E nlightening, Educational, & Engaging	The student created a FRED talk on the topic	The student's study was informative and presented in an organized manner	The student included an informative presentation with components and technology that enhanced the presentation	The student's presentation was highly educational, enlightening, and held the interest of the audience
D epth & Complexity	Depth & Complexity is reflected in the presentation	The presentation includes language of the discipline, details, and rules that reflect depth of study	The study not only reflects Depth & Complexity, but the student took the investigation to a higher level	The student's approach to the topic clearly reflected Depth & Complexity in a way that was clearly higher level. An idea worth spreading!

Appendix E

Principles of Design

Understanding Formal Analysis

Principles of Design

The principles of design describe the ways that artists use the elements of art in a work of art.



Balance is the distribution of the visual weight of objects, colors, texture, and space. If the design was a scale, these elements should be balanced to make a design feel stable. In symmetrical balance, the elements used on one side of the design are similar to those on the other side; in asymmetrical balance, the sides are different but still look balanced. In radial balance, the elements are arranged around a central point and may be similar.



Emphasis is the part of the design that catches the viewer's attention. Usually the artist will make one area stand out by contrasting it with other areas. The area could be different in size, color, texture, shape, etc.



Movement is the path the viewer's eye takes through the work of art, often to focal areas. Such movement can be directed along lines, edges, shape, and color within the work of art.



Pattern is the repeating of an object or symbol all over the work of art.



Repetition works with pattern to make the work of art seem active. The repetition of elements of design creates unity within the work of art.



Proportion is the feeling of unity created when all parts (sizes, amounts, or number) relate well with each other. When drawing the human figure, proportion can refer to the size of the head compared to the rest of the body.



Rhythm is created when one or more elements of design are used repeatedly to create a feeling of organized movement. Rhythm creates a mood like music or dancing. To keep rhythm exciting and active, variety is essential.



Variety is the use of several elements of design to hold the viewer's attention and to guide the viewer's eye through and around the work of art.



Unity is the feeling of harmony between all parts of the work of art, which creates a sense of completeness.

Education

The J. Paul Getty Museum

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Appendix F

Helpful Resources

- Understanding Formal Analysis: http://www.getty.edu/education/teachers/building_lessons/formal_analysis.html
- Using the Interview as a Source: <http://rwc.hunter.cuny.edu/reading-writing/on-line/interview.html>
- Your GT teachers: We have a lot of resources in our classroom libraries that may help you.
- Your Librarian: Librarians know lots of tricks for finding sources that have the information you need.

Citation Resources:

- EasyBib: <http://www.easybib.com/>
- Purdue Online Writing Lab (OWL) MLA Formatting & Style Guide: <https://owl.english.purdue.edu/owl/resource/747/01/>
- The Writer's Handbook: Annotated Bibliography: <http://writing.wisc.edu/Handbook/AnnotatedBibliography.html>
Please note that the focus of the annotations for the assigned annotated bibliography is the evidence that this is a quality source.

Appendix G Weekly Planner

Week of:

Week's Goal(s):

Monday

Tuesday

Wednesday

Thursday

Friday

Which of the goals did you accomplish?

If you did not accomplish all of your goals, what obstacles prevented it? What will you do to overcome them?