

Construction & Design - Independent Project

"The only freedom you truly have is in your mind, so use it."

- M.T. Dismuke

Collecting Evidence of Learning - It is important that you collect evidence to show your growth as you will be submitting this when you are done your project.

1. Think about how you might collect evidence of your learning
 - a. Photographs, video, voice recordings, written reflections, or some other way
2. Decide how you are going to show this evidence
 - a. Print portfolio (folder, poster, scrapbook, journal, etc.)
 - b. Digital portfolio (website, blog, PowerPoint, etc.)
 - c. Other
3. **Every class** you are going to make a brief (shouldn't take more than 5 to 10 minutes) entry into your collection to show the following:
 - a. What you have done **(At least one per class)**
 1. What worked
 2. What didn't work
 3. What would you do differently next time
 4. Suggestions from at least 2 other people about how you can improve
 - b. What you need to do next **(At least one per class)**
 5. What are your next steps?
 6. What skills / techniques do you need to learn and how are you are going to do this?
 7. What supplies / materials do you need to get or prepare and how are going to do this?

By the end of your project you should have at least 2 pieces of evidence for each of the 7 questions above.

"Making for fun is good, but making for good is even better."

- Susan Crichton

Have fun, challenge yourself, try new things, and be amazed at what you can do!

Make sure to use the checklist on the last page to keep track of your progress.

Explore & Plan - In order to be ready to start creating your project work through the steps below:

1. Figure out and record the problem or topic you are going to explore for your project.
2. What are the reasons you want to explore this problem or topic?
3. What do you think you need to learn about the problem or topic and where are you going to get your information from?
4. What are you going to create for your project?
5. Come up with at least two different designs (ideas) for, or ways of doing, your project. Include written descriptions or drawings/sketches.
 - a. **Get and record feedback** from at least two peers on your ideas
 - b. Pick the idea that you now think is the best

6. CHECK IN WITH MR. LANG

7. Do research so that you have the information you need to start your project
 - a. What tools and equipment do you need? (Make a list)
 - i. Do we have them or is there something else you can use?
 - b. What materials and resources do you need? (Make a list)
 - c. Do we have them or can you buy them?
 - i. If not then is there something else you can use?
 - d. What skills and techniques do you need to learn?
 - e. What characteristics / traits does **an amazing** example of your project have? (If you went to the store and bought one what would it be like?)
 - f. Based on these characteristics / traits, what are your goals for your project and how you want it to turn out? (***You will use this at the end to compare your project to your goals***)
 - g. How are you going to make it? Include detailed steps so that anyone could follow them to make your project.

8. CHECK IN WITH MR. LANG

9. Create a timeline for your project and include the following:
 - a. How many classes do you think it will take to finish your project?
 - b. Date and class you plan on starting your design work (*eg. Oct. 7 - Class #2*)
 - c. Date and class you plan on starting each of the main stages of your project (**see 7g above**) (*ex. Finish Design: Oct. 15 - Class #4, Cut material: Nov. 2 - Class #7*)
 - d. The expected finish date

10. CHECK IN WITH MR. LANG

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Design - Now that you have the information you need you can start designing your project.

1. Prototype #1
 - a. Draw / sketch the basic idea for your design. The design should:
 - i. be to scale
 - ii. show depth (be 3D or have different views)
 - iii. include measurements
 - iv. have enough detail to show the main idea but you do not need to over do it
2. **CHECK IN WITH MR. LANG**
3. Include a price list for your materials / supplies
4. Include a cut list and cut diagram for your materials. *(If you do Prototype #2 then you can do this after that)*
5. **CHECK IN WITH MR. LANG**

Create - With your design complete you can work through the creation process.

1. **Prototype #2 - (Optional)**
 - a. You may want to make a prototype to test your idea
 - i. Use simple materials like cardboard and tape
 - b. Record the changes you are going to make to your design?
2. Start creating!
 - a. You have done a whole bunch of work to get to this point. Use all of the information you have gained to start creating your project.
 - b. Go slow and take your time
 - c. Do more research or ask questions if you are not sure about something
 - d. Try or test things out before doing it on your main project so you do not mess it up

Appraise, Demonstrate & Communicate Learning - If you are working on your project and are collecting evidence of your learning then you are appraising, demonstrating, and communicating your learning.

1. Do a final entry into your "Collecting Evidence of Learning" on how your project turned out based on the goals you set for yourself. (Take a look at Explore & Plan 7F for you goals)
2. **Hand in the "Collecting Evidence of Learning" and your checklist. Also ask Mr. Lang to photograph or take video/audio of your finished project.**

Make sure to use the checklist on the last page to keep track of your progress.

Checklist - Use this to keep track of where you are, and where you are going, in the process.

Collecting Evidence of Learning

- ☐ Decided how I am going to collect evidence of my learning

Explore & Plan

- ☐ Explored the problem / topic
- ☐ Picked what I am going to try to create
- ☐ Came up with and shared at least two different designs (ideas) for, or ways of doing, my project.
- ☐ **Checked in with Mr. Lang** _____
- ☐ Did all necessary research (tools, materials, & skills)
- ☐ Figured out what an amazing example would look like and set my own goals for my project
- ☐ Came up with the detailed steps to make my project
- ☐ **Checked in with Mr. Lang** _____
- ☐ Created a timeline for my project
- ☐ **Checked in with Mr. Lang** _____

Design

- ☐ Finished the first prototype (sketch, scale, 3D, & measurements)
- ☐ **Checked in with Mr. Lang** _____
- ☐ Figured out the price of materials / supplies
- ☐ Created a cut list and diagram for materials
- ☐ **Checked with Mr. Lang** _____

Create

- ☐ Made a second prototype if needed
- ☐ Created my amazing project

Appraise, Demonstrate & Communicate Learning

- ☐ Collected evidence of my learning every class
- ☐ Did my final entry about how my project turned out
- ☐ Handed in "Collecting Evidence of Learning" and my checklist.
- ☐ Asked Mr. Lang to photograph or record video/audio of my finished project.
- ☐ Gave myself a high five for being awesome and making a cool project with my own hands



This isn't working.

Make sure to use the checklist on the last page to keep track of your progress.