Sample Journal 9

Year: 2024/2025

Grade: G10

Semester: 1ˢᵗ Semester

Question 1:

IT'S YOUR FIRST TIME TO WORK IN GROUP TO MAKE A PROJECT. ILLUSTRATE TWO THINGS YOU WILL DO TO BE SURE YOUR GROUP WILL BE EFFECTIVE, SHOWING THE BENEFIT OF EACH OF THEM.

As a new STEM student, I expect this project to be a pleasant experience even though it could be the most difficult one. As we are going to express our ideas with each other. We must know how to share our ideas in a clear, effective, and informative way; however, simplicity is a requirement which needs concern. The two things that we can do to make our group are:

The first thing is to distribute the tasks between us as all of us must know what are his /her tasks and the rules are disturbed as the following: The leader which we can also call him/her the organizer of the team. This person should assign the other team members to their tasks and monitor if this person is doing his/her job. The designer whose rule is to design the posters, portfolio, and our presentation. The writer authors essays, research papers, and the abstract that would be in the poster. The time manager, which I think is the most significant role to decrease the effort and the time consumed. But why? This helps us to reduce effort, and the time consumed during the distinct stages of our research.

The second thing which is also essential is having good presentation skills as all our projects depend on this skill. Why do I think that? To be able to deliver our ideas clearly to make it understandable to the team members during the design process and the evaluators during the evaluation process.

Grade: Green

Feedback:

Strengths:

1. The response has a clear structure, starting with an introduction and directly addressing the question.
2. It identifies two distinct strategies for effective teamwork: task distribution and presentation skills.
3. The breakdown of roles (leader, designer, writer, time manager) is logical and shows an understanding of how group work functions.
4. The benefit of presentation skills is explained in relation to both the team and external evaluators, reflecting awareness of the project's communication demands.
5. Vocabulary use is mostly appropriate, and the tone fits the context of a reflective school journal.

Weaknesses:

1. The introduction spends too much time on general expectations rather than getting to the core of the question.
2. Several grammar and phrasing issues reduce clarity, examples: "the rules are disturbed" ➔ "the roles are distributed", "What are his/her tasks" ➔ "what his/her tasks are".
3. Some wording is awkward or vague, e.g., "authors essays" → better as "writes essays".
4. The relationship between the roles and their value to the team can be expressed better and clearer.
5. The response does not provide a conclusion by summarizing the two points and how they have an overall influence on group effectiveness.

General Notes:

The response demonstrates a solid understanding of what makes a team function well. While the ideas are relevant and thoughtfully chosen, language accuracy and sentence structure need more attention. Some sentences are long or informal in tone (e.g., "Why do I think that?"), and could be revised for smoother flow. Adding a short final sentence would also help close the answer with more impact.

Question 2:

IN EGYPT'S STEM EDUCATION SYSTEM, THE ENGINEERING DESIGN PROCESS (EDP) IS A THINKING PROCESS USED TO LEARN AND APPLY CONCEPTS AND SKILLS IN AN INTEGRATED MANNER. THE FIRST STEP OF THE EDP IS DEFINING THE PROBLEM. IDENTIFY TWO REASONS THAT MAKE DEFINING THE RIGHT PROBLEM TO SOLVE IMPORTANT TO THE SUCCESS OF AND PROJECT. ALTERNATIVE: "EXPLAIN HOW A POORLY DEFINED PROBLEM COULD NEGATIVELY IMPACT TWO LATER STEPS IN THE ENGINEERING DESIGN PROCESS.

As we have learned the Engineering Design Process (EDP) during our capstone sessions. We also know that the first step to it is defining the problem correctly and in a formal way that could help us to understand it clearly. But what would happen if the processes were not defined clearly or were understood in the wrong way?

This could affect the following steps where the background research will not be accurate enough. Therefore, the brainstorming and evaluating processes will be affected badly and in the step of choosing that design that we are going to be uncertain. (This was a problem that has faced me and my teammates during our definition to the project as there was a certain drop in the measurement so that affected us while doing the background research an also while brainstorming phase and selecting the solution).

But how can we be sure that we have the right problem by a small and simple step which is double-checking the information that we are gathering about our problem and by asking our teachers for help.

Grade: Green

Feedback:

Strengths:

1. The response clearly shows how a poorly defined problem can harm later steps—specifically background research and brainstorming—demonstrating a good understanding of the EDP.
2. A personal example is included to illustrate the point, which makes the explanation more relatable.
3. The suggestion to double-check information and consult teachers is practical.
4. The structure logically flows from problem definition to its effects and solutions.

Weaknesses:

1. Some sentences are a bit long or awkward, affecting clarity (e.g., "were not defined clearly or were understood in the wrong way").
2. The response doesn't explicitly list the two reasons clearly as asked by the question. They are mentioned, but they're not clearly labeled
3. The phrase "certain drop in the measurement" is unclear and should be clearer or removed.
4. There is no conclusion to wrap up the explanation.

General Notes:

The response seems to be a little bit short, but in general, it is a quality answer. Its sentence structure is underdeveloped. Clearly labeling the two main points and a conclusion would improve overall it.

Question 3:

(LO 1.01) YOU HAVE STUDIED SKETCHUP PROGRAM. SELECT TWO MOST IMPORTANT TOOLS IN YOUR OPINION AND EXPLAIN HOW YOU CAN BENEFIT FROM THEM IN YOUR CAPSTONE PROJECT.

As we were studying sketch up app, we explored different tools in the tool bar and their different tasks. These tools are the most useful and we can use them during designing the prototype: The line: that is used to make lines (For example I have used it to join between the two ends of the bridge or to define the triangles that are found in the Truss bridge that we have chosen.) The push and pull tool: that can be also an easier way to design three dimensional shapes (3D shapes). Just by pulling or pushing the shape that we what to make.(We have used it to make the base of the bridge them after that we use them to design the columns that the bridge will be centered on) Paint packet: Which can be used to add a colorful paint or style to our design to make it more Lively and appealing shape (Our team have used this tool to see the material that we are using which is palm trees as a result in an aesthetic way) Follow me: This has helped us to make round and spherical shape (we used that to add an aesthetic form).

Grade: Green

Feedback:

Strengths:

1. The response mentions multiple SketchUp tools and connects them to real, practical uses in the student's capstone project.
2. The explanation is straightforward and easy to follow.

Weaknesses:

1. The prompt asks for two tools, but the student lists four without clarifying which two are most important.
2. Some phrases are awkward or grammatically off, such as: "the shape that we what to make" ➜ "the shape that we want to make".
3. The explanation for the "paint packet" tool is unclear and slightly inaccurate.
4. The overall flow would benefit from better punctuation, smoother sentence structure, and avoiding cluttered parentheses.

General Notes:

There are no extra notes.