ES2631 Critique and Communication of Thinking and Design AY2025-2026 Semester 1

Assignment 2
Critique of Engineering Design Presentation

In Assignment 1, you teamed up with one or two classmates to identify a problem and propose a potential engineering solution to address the problem. You were required to use the elements of thought from the Engineering Reasoning Framework (Paul, Niewoehner & Elder, 2019) to demonstrate how you thought through different aspects of the project. Although you used all the relevant elements, you were expected to highlight the **three** most significant ones. You also responded to questions from your classmates.

In Assignment 2, you will critique the **reasoning** articulated by the team whose presentation and Q&A session you have been assigned to evaluate.

Task

1. **Consider and critique three elements of thought** covered and/or articulated by the team in their presentation and Q&A session. The team **may or may not have highlighted** the elements despite covering them. In addition, note that **the presentation may not necessarily have correctly identified the elements**, so you should **ensure that you correctly identify the elements in your critique**. For example, if a team mislabelled 'inferences' as 'assumptions,' mention this and assess 'inferences.'

2. In your critique, use the Engineering Reasoning Framework by applying **one applicable intellectual standard to each of the three** elements of thought. The standards **should NOT be repeated** and **only the following nine intellectual standards should be applied**: **clarity, accuracy, relevance, logicalness, breadth, depth, precision, fairness** and **significance**. Please refer to pp. 21-30 of the book for an understanding of the standards and their application.

3. Support your evaluation with appropriate **examples and evidence** from the presentation and Q&A session and, where necessary, external sources. If assessing an element negatively, you may (optional) provide a **recommendation** after you substantiate your evaluative claim.

4. Write a **500-600 word critique essay** that:
    - Questions and assesses the quality of the elements of thought conveyed in the presentation. Since this is a critique, your essay **must include both positive and negative assessments**. In other words, one element could be assessed positively and two negatively. Alternatively, you could have two positive and one negative assessment.
    - Makes **evaluative claims** on the reasoning articulated in the presentation and developed or clarified during the Q&A session and substantially supports these claims with **clear evidence** and **well-reasoned arguments/explanations**.
    - Uses **appropriate academic language** in arguing and supporting your assessment of the presentation, to effectively convey your stance.
    - Organizes ideas clearly and logically.

5. **To avoid plagiarism, work *independently* on the assignment and refrain from discussing ideas or sharing drafts with other members of your OP team**.

6. **Cite the sources** you use in **APA format**, providing both in-text citations and a reference list.

7. Include an **AI use declaration** at the end. Please note that an essay without an AI declaration in the recommended format (whether or not AI was used) may not be assessed.

Submission Guidelines

1. There are **two draft submissions** as follows:
   a. Submit the **first (conference) draft (ungraded)** of your assignment to CANVAS **6 days after your Week 8 tutorial**. For example, if your tutorial is on Tuesday, you should submit the draft by 2359 hours, Monday, Week 9.
   b. Meet your tutor for an **individual conference** on your draft in **Week 10 or 11**.
   c. Submit your **final (graded) draft** to the designated CANVAS folder **6 days after your conference.** For example, if your conference is on Wednesday in Week 10, you should submit your final draft by 2359 hours, Tuesday, Week 11. If your conference is on Tuesday in Week 11, your final draft should be submitted by 2359 hours, Monday, Week 11.

2. Please note that there is a **penalty (of deduction of 10% of the final marks) for late submission** (**12am onwards**, unless there is a **technical issue with documentation proof**, such as a screen shot, of the issue) and for **exceeding the word limit of 600 words** (e.g., a **word count of 601 words** will incur the 10% penalty). The **661st word (10% over the limit is 660 words) onwards will not be read**. Part III of the 'Schedule and Assessments' document uploaded to CANVAS Week 1 provides more details on the penalties.

3. The **word count includes the in-text citations** and any footnotes but excludes **the reference list and AI use declaration**. In addition, the **title** of the presentation and the **name of each speaker** will be **counted as one word each** (i.e., the presentation title and three speakers' names will be a total of 4 words).

Assessment Criteria

- Content (50%)
  - Text explicitly and competently demonstrates understanding of task requirements, i.e., purpose (stating the elements that will be critiqued) is addressed and supported throughout, and the writing is persuasive.
  - Evaluative claims correctly identify the elements and appropriately apply the intellectual standards.
  - Claims are substantially supported through the critical use of evidence from the presentation and/or the writer demonstrates competent and credible analysis of the arguments conveyed in the presentation and Q&A session.

- Language (30%)
  - Text is expressed in clear and appropriate scientific style, i.e., vocabulary/expressions, tone and syntactic structure.
  - Sources are properly referenced and effectively integrated in APA format.

    - Use of linguistic features is competent and effective in conveying the writer's voice and stance throughout the text.
    - Effective use of appropriate signposts and transitions to connect ideas within and between paragraphs.

- Organisation (20%)
    - There is a clear thesis statement with a clear outline or roadmap that accurately reflects the order of ideas in the essay.
    - All body paragraphs have clear topic sentences that support the thesis.
    - Ideas are logically developed within and across paragraphs and all connections are clear.
    - The conclusion is logical, and the overall organizational pattern is sophisticated and effective.

Reference

Paul, R., Niewoehner, R. & Elder, L. (2019). *The Thinker's Guide to Engineering Reasoning*. Rowman & Littlefield.