

## Element L: Presentation of designer’s recommendations

This entry would be likely to receive a **score of 2**, based on the EDPPSR.

While extremely brief, the entry does include some specific ways that the project could be improved. However, plans for the implementation of those improvements are missing and the overall impression is that recommendations are only partial at best. Some readers would probably assign a score of 1 since this entry is so “bare-bones.”

Unlike an entry for Element K, which is intended to involve looking backward on the design process as a whole, an entry for Element L should make clear specific ways that the project could be improved if repeated by the designers or someone else. There should be detailed plans for the hypothetical implementation of those improvements. In addition, project designers may wish to include any caveats—cautions or qualifications—that anyone attempting to repeat or build upon this project would be likely to find useful.

### Engineering Design Process Portfolio Scoring Rubric Component and Element Titles

#### Component I: Presenting and Justifying a Problem and Solution Requirements

- Element A: Presentation and justification of the problem
- Element B: Documentation and analysis of prior solution attempts
- Element C: Presentation and justification of solution design requirements

#### Component II: Generating and Defending an Original Solution

- Element D: Design concept generation, analysis, and selection
- Element E: Application of STEM principles and practices
- Element F: Consideration of design viability

#### Component III: Constructing and Testing a Prototype

- Element G: Construction of a testable prototype
- Element H: Prototype testing and data collection plan
- Element I: Testing, data collection and analysis

#### Component IV: Evaluation, Reflection, and Recommendations

- Element J: Documentation of external evaluation
- **Element K: Reflection on the design project**
- **Element L: Presentation of designer’s recommendations**

#### Component V: Documenting and Presenting the Project

- Element M: Presentation of the project portfolio
- Element N: Writing like an Engineer

**Please Note: Elements M and N require no submission from the portfolio author(s) and are intended to be scored based on the portfolio work as a whole from what has been submitted from Elements A through L**

## Element L: Presentation of designer's recommendations

**5** The project designer includes consistently detailed and salient recommendations regarding the conduct of the same or similar project in the future; recommendations include caveats as warranted and specific ways the project could be improved with consistently detailed plans for the implementation of those improvements

**4** The project designer includes generally detailed and salient recommendations regarding the conduct of the same or similar project in the future; recommendations include caveats as warranted and specific ways the project could be improved with generally detailed plans for the implementation of those improvements

**3** The project designer includes a few detailed and salient recommendations regarding the conduct of the same or similar project in the future; recommendations include some specific ways the project could be improved along with what may be only minimally detailed plans for the implementation of those improvements and may also include one or two caveats for others

**2** The project designer includes recommendations regarding the conduct of the same or similar project in the future; recommendations may include some specific ways the project could be improved but plans for the implementation of those improvements may be missing OR the recommendations (with or without plans) may be partial and/or overly general.

**1** The project designer includes one or two overly general and/or questionably relevant recommendations regarding the conduct of the same or similar project in the future; any plans for implementation included are vague/unclear or minimally related to the recommendations provided

**0** The project designer includes one or two recommendations (with or without plans) that bear little/no relation to the conduct of the same or similar project in the future OR fails to offer any recommendations or plans regarding the conduct of the same or similar project in the future.



SafeCleanStore

PRESENTATION OF DESIGNER'S  
RECOMMENDATIONS L

In recreating this project, including support under the screen is recommended. The cleaning screen should be recessed slightly to cover sharp corner edges of metal.

Control of markers should be addressed to limit potential exposure of hazardous materials. A more sophisticated design would allow only storage of markers, and make it very obvious when a marker is missing from its designated storage location.

An MSDS sheet should also be included with any future prototypes to highlight the hazards of Dry Erase markers.

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