

Evaluation of Student Learning Outcomes in Design

Group Evaluated:

For each topic, circle the category that best describes the presentation. Mark N/A for categories not covered by the presentation.

Identifying Functional Objectives

Students have addressed all objectives and identified primary (key) and secondary (desired) goals. Key goals are matched in design plan.	Objectives clearly address design goals and client demands, but are <i>incomplete or missing some elements</i> . Objectives identify key goals and match design plan.	Objectives are <i>inadequately described or do not match the design plan</i> .	<i>Functional objectives do not appear to have been considered.</i>	Not Available
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Engineering Analysis and Methodology

The key design elements were all correctly and appropriately analyzed. Students demonstrated knowledge of key engineering concepts applied to a real life situation.	<i>Some analyses appear to be missing</i> . However, the analyses that are described appear to be correct and demonstrate sound knowledge of engineering concepts.	Analyses that should have been performed were <i>missing or performed incorrectly</i> . Students appear <i>not to understand some key engineering concepts</i> .	<i>Students did not demonstrate knowledge or understanding of key engineering concepts.</i>	Not Available
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Evaluation and Testing

Students have developed a full and appropriate evaluation of the design to assess appropriate design objectives. Experimental methodology is clearly described and correctly implemented.	Students have developed an evaluation and testing plan that assesses appropriate design objectives <i>but could be more clearly described or should be more thorough</i> .	Evaluation and testing plan is clearly described but <i>does not appropriately assess design objectives</i> .	Evaluation and testing plan <i>does not appear to have been considered but should have been</i> .	Not Available
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Inventiveness and Creativity

Innovative or creative thinking is <i>evident</i> (even if the eventual design is more traditional).	The developed design showed <i>some</i> innovation and creativity. <i>Some</i> clever or creative components were included in the design.	Students designed a reasonable and functional product but <i>do not appear to have gone far beyond existing approaches</i> .	Students showed <i>little creativity and innovation in their design</i> .	Not Available
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Team Chemistry, Interest and Passion for the Work

The students are excited about their work and animated in their presentation of the work.	There is <i>mixed enthusiasm</i> within the group or by the presenter.	Students put on a good face, but go through the motions <i>without real enthusiasm</i> .	<i>Students appear to be uncommitted or disinterested.</i>	Not Available
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Written and Visual Presentation

The slides are clearly organized, easy to read, and visually interesting. There are few obvious mistakes.	The slides are <i>fairly</i> clear, easy to read and visually interesting. <i>There are some editing mistakes or difficult to read graphics</i> .	The slides are not hard to read, <i>but are not well formatted or have significant editing mistakes</i> .	<i>The slides are poorly organized and difficult to read.</i>	Not Available.
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Oral Presentation and Questions

Students speak clearly, make eye contact, and show a solid understanding of material. Students answer difficult questions with ease.	Students speak clearly, make eye contact, and show a solid understanding of material. <i>Students have some difficulty answering questions</i> .	Students speak clearly, make eye contact, and show general understanding of material. <i>Students have significant difficulty answering questions</i> .	<i>Students do not speak clearly and/or show limited understanding.</i>	Not Available.
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