

# SATEC @ W.A. Porter C.I.

## Technological Design: Reflection on Shop Work --Term 1

### 1 Evaluation of Your Reflection: Critical Thinking and Communication /100

**This 300 to 500 word doc is due two school days after the date at the bottom of this page.** Your shop work reflection will be evaluated as both Thinking and Communication – refer to the following rubrics in the Pickup folder to see how your reflection will be marked. The criteria are clearly stated below.

| Filename                              | Document Topic   |
|---------------------------------------|--|
| Written_Report_Rubric.doc             | <ul style="list-style-type: none"> <li>-Rubric for personal portfolio template (see Sample_Portfolio_Template.doc)</li> <li>-Rubrics for design documents and written reports in your design portfolio</li> <li>-Rubric for quality of communication</li> </ul>                        |
| Rubric_Information_Processing.doc     | <ul style="list-style-type: none"> <li>-Rubric for effectiveness of information processing, quality of thinking and depth of understanding</li> </ul>  |
| Fabrication_Rubrics.doc               | <ul style="list-style-type: none"> <li>-Rubrics for Fabrication / Build Skills – product construction &amp; performance</li> <li>-Evaluate your product against this set of rubrics</li> <li>-Did you actually accurately <b>make</b> what you had <b>intended to make</b>?</li> </ul> |
| MarkingScheme_Probl_Solving_3DCAD.doc | <ul style="list-style-type: none"> <li>-Problem Solving – did you actually solve the problem in your design phase using CAD</li> </ul>   |

### 2 Criteria – Reflection on Shop Work

| #  | Criteria for the Reflection Document<br>(Refer to the Supporting Documents From the Teacher During This Course)  | Self-Eval<br>Mark / 10 |
|----|--|------------------------|
| 1  | Write your Reflection as you would any serious design document for an employer -- well-formatted, well-structured with useful headings, name, date, creative title etc. Use your Portfolio Template – a good framework for all of your design documents. Be so proud of this reflection that you would show it to the human resources manager at a job interview.  |                        |
| 2  | Briefly describe the project(s) that you worked on in the shop, including your role and major tasks. Justify the changes that you made along the way – justify the differences between your design drawings and your finished product. <b>Be sure to submit your “as-built” drawing along with this reflection.</b>  |                        |
| 3  | Select something that went particularly well in the shop. Explain what was so good about it and how your skills (hand skills, thinking skills etc) or knowledge improved.  |                        |
| 4  | Select something that went particularly poorly for you. Explain what you believe “went wrong” – why it did not “work out” – be accountable for the underlying problem. How can you do better next time?  |                        |
| 5  | <b>Planning Skills:</b> In detail, discuss the effectiveness of your planning of your project. (eg. brainstorming, sketches, requirements, design for strength/durability etc., CAD model, 3-view drawings, parts list or cut list, task list etc.). Discuss an example such as the importance of materials availability.  |                        |
| 6  | <b>Measurement Skills:</b> In detail, discuss the effectiveness of your measurement skills (eg laying out the cuts to make on a piece of wood). Discuss measuring instruments that would have been helpful in what you were doing, had they actually been available in the shop.   |                        |
| 7  | <b>Hand Skills:</b> In detail, discuss the improvement of your hand skills (eg using a cross-cut saw). Discuss at least one example. Discuss hand tools that would have been helpful in what you were doing, had they actually been available in the shop.   |                        |
| 8  | <b>Following a Procedure:</b> With respect to one portion of your work in the shop, discuss how a well-planned procedure could have given better and / or more efficient results. Discuss a tool that would be important to add to the shop to make this procedure “more do-able”. Discuss the importance of correctly and effectively using the right tool once as opposed to using several tools in a poorly planned way.  |                        |
| 9  | <b>Safety:</b> Discuss your adherence to safety principles in the shop (eg in using power tools or hand tools)   |                        |
| 10 | <p><b>The Teacher</b> -- Either in the shop or in preparation to go into the shop...</p> <p>What can the teacher do better next time? Explain.</p> <p>What should the teacher do more of? Explain.</p> <p>What should the teacher do less of? Explain.</p> <p><b>Note:</b> The teacher “<i>did not do</i>” some things deliberately, with purpose – to encourage critical thinking! The teacher wants to see your critical thinking now – in this reflection -- even if you already discussed it with him earlier!</p> |                        |