

SATEC @ W.A. Porter C.I.

Technological Education Rubric

Rubrics for Design Documents in Your Design Portfolio

1 To Get a Better Mark -- Start with a Good Foundation – A Template

1.1 Marking Scheme for Your Personal Portfolio Template -- Out of 10

Create and save your own Portfolio template document **using the following criteria**. Your Portfolio Template must include:

- a) Header with your name and date
- b) Footer with Topic, Course, automatic page number
- c) Numbered headings in at least 3 Levels such that you can generate an automatic Table of Contents (based on “Heading Styles”)
- d) Heading placeholder or table at the top of the template where you will always insert the “Expectation(s)” (eg. the assignment description or the question that the teacher is asking)
- e) Heading placeholder or table at the bottom where you will self-assess your work and where a colleague will peer-assess your work.
- f) Personalize it with your choice of fonts and styles etc.
- g) Heading placeholders for at least the following stages of the Design Process: Design Brief; Investigation; Requirements; Specification / Design Screenshots; Parts / Materials List; Fabrication Plan; Test Plan; User Guide / Instructions / Markings; Reflection
- h) Optional
 - i) add a personal logo in the header
 - ii) add a personal mission statement in the footer

Mark __/10	Criteria
10	Meets all criteria listed above
8	Meets at least 6 criteria listed above
6	Meets at least 5 criteria listed above
4	Meets at least 3 criteria listed above
0	Submits the teacher's sample template

2 The Assignment -- Any Design Document or Other Report

Any design document or report (or portfolio entry) will be evaluated against the Achievement Categories:

- Communication (see these rubrics below)
- Thinking: Refer to the detailed rubric in Rubric_Information_Processing.doc.

2.1 Criteria for a Particular Design Document

The teacher will give you some minimum criteria / requirements for the particular design document – refer to DesignProcessDetails.ppt and DesignTeamRoles.doc. Depending on the situation / scenario as given to you, it is your job to add any other necessary requirements for a particular document. And, of course, add a couple of your own requirements for the purposes of improving your own learning. For example:

#	Abbreviation	Criteria / Details
1	LEN	Length: I think I should write about 500 words in my Investigation / Research report because this product is something I have never really thought about before

#	Abbreviation	Criteria / Details
2	13CONC	In the context of this product, I believe I need to deeply investigate the following Fundamental Concepts of Technology: Energy, Material, Structure, Fabrication, Safety
3	IMAG	I want more practice using the draw application in the word processing software, so I will do at least one mind map of my own design
4		

3 Rubric for a Written Report, Design Document or Other Portfolio Entry

Student Name: _____ **Learning Unit:** _____

Precise Topic Being Addressed: _____

Assessed By: _____ **Signature:** _____ **Mark:** ____/90

Note: Part marks depending on how many of the criteria were met. Part marks if the student demonstrates competence somewhere between "novice" and "master". Alternatively, each criteria could be marked out of, say, 4. Using the higher thinking skills – analyze, synthesize and evaluate -- makes the student more of a master. Refer to the “*Rubric for Quality of Communication*” below. Refer to the “*Rubric For Quality of Thinking and Depth of Understanding*”. Refer to the details of the situation in the Scenario documents. You should be using your own “Portfolio Template” as your “foundation for technical communication”. For improved marks, refer to document TechComm_Software.doc.

Criteria (Each Category Out of 30 Marks)	Level 1 (Up to 18 Marks)	Level 2 Novice (19 to 21 Marks)	Level 3 (22 to 24 Marks)	Level 4 Master (25 to 30 Marks)	Mark / 30
Content: General Criteria (Thinking): (see details above or in the applicable assignment) (refer also to Rubric_Information_Processing.doc for how your thinking will be evaluated)	Meets none of the criteria at a master level. Meets a few of the criteria at a novice level.	Meets some of the criteria at a master level. Meets many of the remaining criteria at a novice level.	Meets many of the criteria at a master level. Meets most of the remaining criteria at a novice level.	Meets most of the criteria at a master level. Meets all of the remaining criteria at a novice level.	
Clarity of Message and General – Criteria (Communication) -informative Introduction / overview -clear and articulate sub-sections -logical progression of topics -assumptions are clearly stated -sound Conclusion -convincing argument -relevant helpful graphics / images -structured data is shown in table format with repeated heading rows -graphs are labelled -length is within range specified -correct spelling, grammar and sentence structure -references are properly cited and bibliography is thorough	Meets none of the criteria at a master level. Meets a few of the criteria at a novice level.	Meets some of the criteria at a master level. Meets many of the remaining criteria at a novice level.	Meets many of the criteria at a master level. Meets most of the remaining criteria at a novice level.	Meets most of the criteria at a master level. Meets all of the remaining criteria at a novice level.	
Format / Presentation – Criteria (Communication) -Title page: name, date, topic, course -accurate, useful and automatically generated table of contents -meaningful headings / sub-headings	Meets none of the criteria at a master level. Meets a few of the criteria at a novice level.	Meets some of the criteria at a master level. Meets many of the remaining criteria at a novice level.	Meets many of the criteria at a master level. Meets most of the remaining criteria at a novice level.	Meets most of the criteria at a master level. Meets all of the remaining criteria at a novice level.	

Criteria (Each Category Out of 30 Marks)	Level 1 (Up to 18 Marks)	Level 2 Novice (19 to 21 Marks)	Level 3 (22 to 24 Marks)	Level 4 Master (25 to 30 Marks)	Mark / 30
-header and footer on every page, with Name, date, page #, topic -uncluttered layout -ample “white space” in the report -font is appropriate and is legible					
Total mark					90

Peer Comments: (Give the student at least one clue for improvement of performance)

4 Rubric for Quality of Communication

NOTE: Use the following Rubric to get a sense of the difference between a "Novice" and a "Master" -- the "Quality" of the communication. For example, in a written design document, a “Master” would have no spelling mistakes while a Novice may perhaps be allowed one spelling mistake in every 30 words.

Rubric For Quality of Communication -- Novice vs. Master Developing Core Skills for Communication				
	Level 1 Poor <60%	Level 2 Novice 60% to 69%	Level 3 70 to 79%	Level 4 Master 80% to 100%
Evidence supporting the quality of the Communication	-Many spelling mistakes -Almost every sentence has either a grammar mistake or poor sentence structure -Report does not have either Introduction or Conclusion / Summary section -poor organization of the information and data -argument is poorly supported -No sources are listed or are not identified by title / URL with author's name	-One spelling mistake per 30 words. -Approx half of the sentences have either a grammar mistake or poor sentence structure -Organization of the information and data is logical and reasonable -Report is modestly supported by reference to the work of others -report is understandable	One spelling mistake per 40 words -Few grammar mistakes / cases of poor sentence structure -Meets Level 2 and in addition: -Broke the information down into logical groupings, classifications or sub-systems and describes the significance and value of this grouped or hierarchical information. -Structured data is in a purposeful sort order -Report is well-supported by logical and sound arguments principally by the student	-Virtually no spelling mistakes -Virtually no grammar mistakes -Sentence structure is consistently good -Meets Level 3 and in addition: -Opinion is well-supported by an exceptional depth of careful analysis of the concepts and data -creatively describes at least one example in support of argument or conclusion -Compares / contrasts claims of different authors and discusses the merits of the different conclusions -Professional-looking format and presentation

Comments: (Give the student one clue for improvement of performance)

5 Rubric for Quality of Thinking and Depth of Understanding

NOTE: Refer to the detailed rubric in Rubric_Information_Processing.doc for how your thinking skills will be evaluated.