

2012 EWB Challenge Submission Review Criteria

Aim	Review Criteria		Mark Allocation				
			1	2	3	4	5
Demonstrate application of technical knowledge to the specified problem.	1a	Students to explain how their design criteria were developed to suit the specific needs of the community	Very little or no attempt to explain how their design criteria were developed.	Some attempt made to explain how their design criteria were developed. Poor documentation.	Satisfactory attempt made in explaining how their design criteria were developed. Meets the needs of the community.	Good explanation made in explaining how the design criteria were developed. Good documentation. Meets the needs of the community.	Detailed explanation of how the design criteria were developed. Good documentation. Improves the lives of the people in the community.
	1b	Each team to compare design options against their design criteria and determine a preferred option	Very little or no attempt to use basic science and engineering fundamentals in the design process.	Some attempt made to use basic science and engineering fundamentals. Poor documentation.	Some understanding of basic science and engineering fundamentals displayed. Some application of fundamentals in a logical and mostly relevant manner. Reasonable documentation.	Good understanding of basic science and engineering fundamentals displayed. Application of fundamentals in a logical and mostly relevant manner. Good documentation.	High understanding of basic science and engineering fundamentals displayed. Excellent application of fundamentals in a logical and highly relevant manner. Good documentation.
	1c	Design criteria should include consideration the communities perspective of the design proposal.	No consideration given to the community.	Some consideration given to how the community will respond to the proposal.	Consideration given to the community. An explanation of how the community is likely to respond is given.	Consideration given to the community. Gives an explanation of how and why the community is likely to respond in a particular way to the proposal.	Consideration given to the community. Gives a detailed explanation of how and why the community is likely to respond in a particular way to the proposal.
Develop skills in integrating Sustainable Development and Design Context into the decision making process	2a	Appreciation for the ethical responsibilities of engineers.	Decisions and recommendations fail to meet the Institute of Engineers Australia of the Code of Ethics.	It is unclear whether the decisions and recommendations meet the Institute of Engineers Australia of the Code of Ethics.	The minority of recommendations - uphold the Institute of Engineers Australia Code of Ethics.	The majority of recommendations clearly uphold the Institute of Engineers Australia Code of Ethics.	Decisions and recommendations clearly uphold the Institute of Engineers Australia Code of Ethics.
	2b	Students outline the environmental benefits and impacts of the proposal in a form that the community can readily understand.	No consideration for the design's environmental context.	Some reference to the design's environmental context but little / no connection made to the design.	Description of the design's environmental context. Some connections made to the design.	Good description of the design's environmental context. Relevant connections made to the design.	Detailed description of the design's environmental context. Outstanding and relevant connections made to the design.
	2c	Students outline the economic benefits and impacts of the proposal in a form that the community can readily understand.	No consideration for the design's economic context.	Some reference to the design's economic context but little / no connection made to the design.	Description of the design's economic context. Some connections made to the design.	Good description of the design's economic context. Relevant connections made to the design.	Detailed description of the design's economic context. Outstanding and relevant connections made to the design.
	2d	Students outline the social benefits and impacts of the proposal in a form that the community can readily understand.	No consideration for the design's social context.	Some reference to the design's social context but little / no connection made to the design.	Description of the design's social context. Some connections made to the design.	Good description of the design's social context. Relevant connections made to the design.	Detailed description of the design's social context. Outstanding and relevant connections made to the design.
	2e	Demonstrate how they have attempted to use locally available materials for the proposed design.	Very little or no mention of using locally available materials for the proposed design.	Mentions using locally available material. Information not very detailed.	Good description of the local materials used.	Good description of the local materials used. When local material is unavailable, some explanation is given to explain how the material would be sourced and transported to the remote location.	Detailed description of the local materials used. Detailed explanation is given as to how materials and resources will be obtained and transported to the remote location in a manner that minimises negative impacts.

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Assessment Criteria	Sub-Criteria	Mark Allocation Continued					
		1	2	3	4	5	
Develop effective communication and teamwork skills for a development context.	3a	Report writing skills	Poorly written report which lacked clarity and understanding. Very poor grammar and spelling.	Average written report that has some clarity and understanding. Poor grammar and spelling.	Well written report that has some clarity and understanding. Average grammar and spelling.	Well structured and written report. Good clarity and demonstration of understanding of the report. Good grammar and spelling.	Excellent structured and written report. Clear understanding and explanation of the design. Perfect grammar and spelling.
	3b	Undertake reflection of the effectiveness of their consultation with the community throughout the design process	Little / no reflection provided	Reflection provided but lacks appreciation of the importance of being able to communicate with the community through the design process.	Some appreciation of the importance of being able to communicate with the community through the design process.	Good reflection of the effectiveness of their consultation with the community through the design process. Give examples of how it could be improved.	Deep reflection of the effectiveness of their consultation with the community through the design process. Give a detailed example of how it could be improved.
	3c	Outline the difficulty they might expect to encounter, when trying to communicate with the community.	Little or no mention of the difficulty that might be encountered, when trying to communicate the proposal to the community.	Some mention of the challenges that could be encountered. More detail needed.	Good description of the difficulties that might be encountered. Little mention of how these difficulties could be overcome.	Good description of the difficulties that might be encountered. Propose ways to solve these difficulties.	Detailed description of the difficulties that might be encountered. Effective and detailed proposal as to how these difficulties might be overcome.
	3d	Outline the role of each team member.	No mention of the role of each team member.	Brief explanation of the Role of each member.	Good explanation of the role of each team member.	Good explanation of the role of each team member. Some discussion of difficulties faced and team member contribution.	Detailed description of the role of each team member. Detailed discussion highlighting the difficulties each member faced and detail their main contribution to the report.