

Engineering Education Scheme Wales Project Report & Presentation Guidance



EESW Project Report

Purpose

- Your project report is a record of how your team solved the brief given by your link company
- It should provide guidance to your company to help them implement your solution
- The report is one of the assessment criteria for your project and one of the most important!

Target Audience

- EESW Assessor Panel
- Link Company (CEO, Engineers, Production Management, Finance Department etc).
- Basis for CREST Award and Welsh Baccalaureate submissions

1.	Analysis of Problem	2.	Technical Knowledge	3.	. Solution	4	Evaluation Against Project Brief
3	Shows little or no understanding of the problem. Sufficient understanding of the problem, but some areas lack clarity. Full analysis of the problem in context, disentification of the parameters and cruck of the problem and explanation of the issues imolved.	3	Little understanding of the technical knowledge and principles shown. Has an adequate understanding of the knowledge involved and has applied these principles to produce the solution/response. Has an excellent understanding of the technical knowledge required, has demonstrated that this knowledge has been applied to the project and has produced a design using sound principles.	3	The product/system/design chosen barely meets the need and no others have been identified. The product/system/design demonstrates that he need oubde explored. The product/system/design demonstrates early that the need and have been met and all potons were fully explored.	3	Has submitted little or no evidence of evaluation. Has evaluated the project against a detailed specification derived from the original brief <u>evid</u> . Has evaluated the project against a detailed specification and shown awareness of the commercial socia and environmental implications of their brief.
5.	Project Management & Teamwork	6.	Report	7.	Display Stand*	8	Formal Presentation
3	Shows little evidence of planning, time and resource management or teamwork. Some evidence of dividing tasks between members in a reasonable manner, demonstrated planning skils and shown evidence of time and resource management. Project has been well managed and the team have clearly allocated roles throughout the regist to ensure delivery at all key stages.	3	Has submitted a barely adequate report. Has submitted a clear report but which lacks precision or contains too much superfluous information. Has submitted a report which is clear and concies, well presented, accurately sets out the process undertaken and includes adequate and relevant information.	3	Insufficient material which has not effectively presented the problem and its solution. Used reasonably effective material which has communicated the problem and its solution quite well, but requires further development. Has displayed well-presented material including good quality images to show that the solution can fulfi the brief.	3	Has not effectively presented the problem and its solution with only some team members contribution. Has communicated the problem and its solution quite well, including all team members and answered questions accordingly. Has made a professional presentation which would convince industry to consider their response (with or without further development and fully answered all questions with a coold understanding.

*Please note that no additional marks should be awarded for use of company barners which are included within the team's display stand. Only the student teams' owr display work and any associated solutions/models/prototypes/coding examples etc will be scored.

What makes a good report?

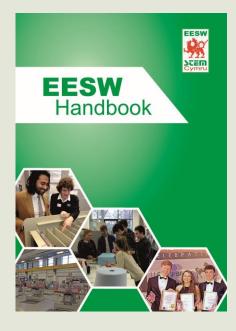
- Concise sentences
- Short paragraphs
- Easy to read
- Well-structured
- Title and abstract to give an overview of the project
- Use photographs and diagrams
- Conclusion which summarises the outcomes

Reports should be between 25 and 40 pages and include references, appendices, graphs, tables, photographs and any other supporting information



The Report Structure

The format of your report is outlined on page 5 of your EESW handbook



- 1. Title Page
- 2. Contents Page
- 3. Executive Summary
- 4. Introduction
- 5. Analysis
- 6. Procedure
- 7. Design
- 8. Conclusion
- 9. Evaluation

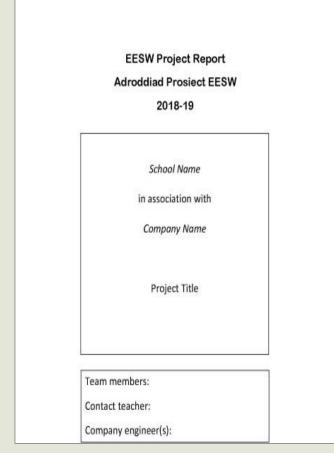
10. Recommendations

- 11. Acknowledgements
- **12.** References
- 13. Appendices

 give a practice presentation to link engineers 	5. Analysis
and other company employees and consider	The theoretical background to the project, with an
any feedback in advance of the awards and	outline of research, possible solutions to the problem
presentation day.	and any decision energials
maintain contact with the link engineer and	f. Procedure
arrange support for the presentation and	A description of processes leading to the selection of
display of the project.	the best solution. How were ideas generated?
	7. Design:
arch/April - Awards and Presentation Day	A clear. Australiad account of the process of arriving
ams, teachers and engineers attend a regional	at the final solution
ards and Presentation Day event. Teams display	
ojects and give a presentation to a panel of	8. Conclusion
sessors. Teams may be nominated for an award	A concise statement of the solution to the problem.
nated by a sponsor for excellence in various	Discuss the level of benefit achieved and highlight the strengths of your learn's solution. Note any
tegories. For more information on awards and	
sessment, see pages 6 to 8).	weaknesses and how they could be improved.
e event will include exhibits from companies.	9. Evaluation
e event was include exhibits from companies, iversities and other organisations and is open to	A full and clear presentation and interpretation of
iting schools and guests. Teams can also view	data, with a detailed explanation and implications of
exhibition and take part in other interactive	results. How successful was the prototype? How
twites.	could the company implement the proposals? What
wides.	ware the environmental issues identified? What are
eport Writing Guidance	the development and implementation costs? What
	are the cost benefits to the company?
ams must submit a written report, which should be	10 Recommandations
proximately 25-40 pages long and include	indicate what the company should do next, such as
erences, graphs, tables, illustrations, photographs	further development required, reactiving any issues,
d appendices as appropriate.	training staff in the new process or developing an
pical report sections and contents are as follows.	implementation process.
1. Title Page	11. Acknowledgements
me of school and company, project Mie, team	List any people that have helped with the project with
inducts feacher, project engineer and company.	a note of thanks.
tool and EESW logos	12 References
2 Contents	indicate where the user can find the information
seved list of contents in the project	referred to in the written report.
	13 Appendices
 Executive Summary: sential datable of the project, such as a statement 	Tables, calculations and other important information
	that cannot be incorporated into the main lext.
the problem, the main results and conclusions	
 Introduction: 	Please refer to the "EESW Report and Presentation
brief profile of the school and company; student	Guidance' PowerPoint for more information.
offes, project brief and background information	

1. Title Page

- School & Company Names
- Project Title
- Team member names
- Teacher name
- Link Engineer name
- Year of report
- EESW, School & Company Logos



2. Contents Page

- Should list all sections and subsections of the report and corresponding page numbers
- Makes it easier to find certain sections of the report

Contents

Introduction	1				
CREST Awards					
WJEC Welsh Baccalaureate					
School Commitment					
Information for Company Engineers					
EESW Project Calendar					
Report Writing Guidance					
EESW Awards & Presentation Day					
Assessment Criteria	6				
Presentation Preparation	6				
Display Preparation	7				
Rules and Eligibility Criteria	7				
Project Assessment Procedure	7				
Awards Procedure	8				
Health & Safety					
Publicity and Public Relations					

3. Executive Summary

- Should provide reader with a brief overview of the project and report aims
- Concise and to the point
- No more than one page

4. Introduction

- Brief profile of school & company
- Student profiles
- Project brief
- Background information
- Outline of proposed solution
- Any acronyms used in the report

5. Analysis

- Assessing the project brief
- Gathering & analysing information
- Identifying issues & specific requirements
- The theoretical background to the project
- Possible solutions
- Any decisions based on analysis

6. Procedure

- Time management & planning
- Description of processes leading to the selection of the best solution

7. Design

- All potential ideas & solutions
- Selection criteria for the proposed solution
- Success of prototype/model/design
- Testing/evaluation of the final solution
- Any refinements
- A clear, illustrated account of the process of arriving at the final solution

8. Conclusion

- Recap of project brief
- Summarise main points of process
- Brief justification of chosen solution

9. Evaluation

- Concise statement of the solution
- Full and clear presentation including data interpretation
- Detailed explanation of results
- Discuss benefits to the company
- Highlight strengths of the solution
- Note weaknesses & possible improvements
- Cost/benefit analysis

10. Recommendations

- What should the company do now?
- Is further development required?
- Suggest an implementation programme

11. Acknowledgements

• Thank any parties involved

(e.g. company, engineer – representative , teacher, school, EESW STEM Cymru etc.)

12. References

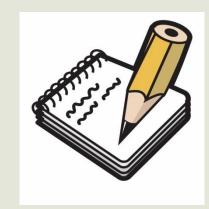
- Indicate where the reader can find information referred to in the report
- Note your references as you research, it is difficult to remember later
- List in alphabetical order
- Use an appropriate and consistent style of referencing e.g. Havard Referencing
- You may find using an Online Reference Generator Tool helpful

13. Appendices

- Should be considered early on in the report
- Should be used to keep the main body of the report short and interesting
- Include evidence of research, contacts, development, evaluation etc (e.g. Gantt chart, EESW progress reports)
- Include tables, calculations and other important information that cannot be incorporated into the main text

Include illustrations

- Photographs, diagrams, charts and tables
- These can help to show complex information
- Label all graphics use a logical order
- Keep any mind maps, photos and research



Writing the report

- WHO allocate team and individual tasks
- WHEN start the report now, don't rush through it a day before the deadline
- TAKE CARE accuracy, grammar, spelling use spell check
- REMEMBER to show a draft of your report to your link company BEFORE submission
- they may be able to give you some suggestions

IMPORTANT INFORMATION

Your project report **MUST** be submitted to EESW directly.

Projects and reports contain sensitive company information and may be subject

to a **NON-DISCLOSURE** agreement and must NOT be shared with anyone other

than your company and EESW.

CREST Awards

Each team member will need to complete an individual CREST profile form.

You can download a CREST form at http://www.stemcymru.org.uk/home/resources/eesw-project-resources/

Electronic versions have been emailed to registered students.

IMPORTANT INFORMATION

If you would like to enter for a Gold CREST award, this **MUST** be submitted to EESW directly.

Do NOT upload your forms to the CREST website, nor the project reports.



Video presentation of your project

- Please note this guidance only applies if a physical event is unable to be held
- Please refer to our Video preparation guide to produce your presentation for assessment –

https://www.stemcymru.org.uk/home/resources/eesw-project-resources/

• The Video will only be for the project presentation aspect,

there will be a virtual (or live at the Awards event) Q&A session arranged with a panel of assessors

following submission of your project report and video.

• Please send a draft to your link company for their comments before submitting your team's final version

to EESW – the deadline date for both is Monday 4th April 2022 at 4.30pm

EESW 2020-21 Video Preparation Guide

Written Report & Video Submission Dates

Written Report & Video Submission Deadline: Monday 4th April 2022 at 4.30pm

Written Report Documents you should submit:

- Your report
- All team members' completed CREST profile forms (individual)

These documents should be submitted by email to <u>submissions@eesw.org.uk</u>

Video submission (if applicable)

What you need to submit:

- Your Video presentation
- The EESW Video guidance document tells you how to submit your file to us

EESW Awards and Presentation Day (Virtual/Event) – DATE TBC



If a Physical Awards & Presentation Day can be held

You will be provided with:

- A stand (3m wide x 2m high x 1m deep)
- A small table
- 1 power socket
- Header board & lighting

You should bring:

- Display prototype/models
- Pre-printed LARGE display material
- Pre-printed graphics/handouts/photos etc
- Pre-printed logo printouts & banners
- A laptop/tablet & projector if you wish
- Velcro/Blu-tac/Scissors/Sellotape etc
- A printed copy of your report
- Packed lunch



Please note, there are NO printing facilities available

at the venues and the items listed

will NOT be available from EESW or the venue

on the day.

Awards & Presentation Day

You will be allocated a timeslot to give a verbal presentation to a panel of assessors at your stand. You should:

- Ensure the presentation follows a logical sequence
- Introduce your project
- Explain your individual roles
- Summarise your research and ideas
- Discuss your final solution
- Respond to questions from the assessors (make sure you are prepared!)

The whole team should deliver the presentation in 10-12 minutes and you should be enthusiastic throughout.

Visit your company in advance of the event to deliver the presentation to your link engineer and their colleagues.

The assessors will nominate teams for awards and your stand may be visited by award sponsors during the afternoon session.

Please see pages 6 and 7 of your EESW handbook for further information and guidance.

EESW – Questions and Contact Details



ANY QUESTIONS?

Follow us on Twitter or Facebook and visit our website!

T: 01656 669381

W: www.stemcymru.org.uk

Email: info@stemcymru.org.uk

Twitter: @EESWSTEMCymru

Facebook: EESWSTEMCymru



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Cronfa Gymdeithasol Ewrop European Social Fund