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Moderators' Report/ Principal Moderator Feedback

Summer 2014

Pearson Edexcel GCE Engineering
Unit 6932_01
The Role of the Engineer

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Samples were received from most centres in advance of the issued deadline. The associated documentation was included and complete for the majority of centres, although, as in previous series, some centres did not include all/some of the following:

Student Authentication Statements
Mark Allocation Records

Centres that were contacted regarding documentation usually responded quickly to the moderator requests and the moderation process was not over- delayed.

Some centres are still using their own version of record sheet for recording student marks. Some of these were unsuitable this year and centres should ensure in advance of assessment, that the correct documentation is used.

Best practice was observed when centres annotated the MAR form and the student work. Some centres were thorough here, with some not annotating the student work at all.

This year, there were many centres that used local companies for the focus of the investigation. Centres are reminded to keep the focus on an engineer for this unit and relate the tasks to the work the engineer does. Students should be encouraged to investigate a current local engineer where possible, with the emphasis on both terms.

Some centres are encouraging students to produce sections targeted at each mark band, which is useful, although this must actually explain, or justify if the marks are to be awarded, rather than simply fit into the section.
In a number of samples, students were providing evidence for Mark band 1, then copying this and extending to Mark band 2, and copying all again to extend to Mark band 3. This was unnecessary and the students and assessors need to be aware of this.

Assessment Criterion ‘a’

The majority of samples demonstrated good links with local engineers. This benefitted the students and they were able to obtain useful information to use in their reports. Students should be encouraged not to provide background information in this section, such as the qualification and education/work history of the engineer. This section requires students to focus on the activities that the engineer does at present. More students were accessing higher mark bands than previously. There were some good examples of detailed role explanations and justifications across the centres.

Assessment Criterion 'b'

Students identified and described a range of useful and appropriate technologies. Some identified those that were unique to a particular engineering role. In addition, general technologies that the engineer would use on a daily basis were evident. Students should be reminded to always link the technology to the engineer. This will aid the description and give relevance to the role. This can also lead to the higher mark bands if the students justify the use. In a number of samples, students did not identify or describe general technologies. The importance of these should not be overlooked as they all play a part in assisting the engineer.

Assessment Criterion 'c'

Student work often focused on standards only. The centres are reminded that legislation and standards are required for this criterion.
A range of standards was evident, with some clear reference to the product or engineer, which was good. Often assessors were lenient in their marking even when students did not provide much evidence of legislation, or the essential Mark band 3 evidence compliance and how the engineer ensured that standards were met, was missing. Most common evidence here was HASAWA, COSHH and students performed better when a wide range of both standards and legislations were evident and detailed.

Assessment Criterion 'd'

Common standards in this section included the HASAW. Often a range of standards were provided, although clear links to the engineer was sometimes overlooked. As in (c), the requirements of the higher mark band were often overlooked and marking was sometimes lenient. Students need to clearly explain how the engineer ensured that the standards were met and assessors need to ensure this is evident when awarding higher marks.

Assessment Criterion 'e'

Evaluations in the main were good. Some students supported the evaluation with useful data, obtained from testing or provided by the engineer. A number of students wrongly evaluated each section of their report, rather than evaluating the product or service. It is important to remember that in order to award the higher marks, there must be evidence of the use of some testing in the evaluation.

QWC

Centres are rewarding QWC for this section, with clear statements evident, supporting those at the higher mark bands. A number of centres are overlooking the QWC element and awarding higher marks when the QWC evidence is not equally matched to the mark band.

Assessment Criterion ‘f’

Overall, modifications were better than previous, although there were some simple suggestions across some samples. Some students appeared to struggle with this section, and suggested modification linked to the energy use, such as installing wind turbines or solar power. The students should be reminded of the link to section (e) here. A good evaluation with clear observed detail will provide a solid starting point in the modification section. In this series, more students were supporting their modifications with diagrams to show how it might be implemented or costing calculations. Both were useful and students should be encouraged to use diagrams particularly to aid the descriptive detail.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:
http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

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