

Level 1 Digital Technologies 2018

Standards **91886** **91887**

Part A: Commentary

N/A

Part B: Report on standards

91886: Demonstrate understanding of human computer interaction

Candidates who were awarded **Achievement** commonly:

- described the role of a given interface, for example, what it is for, its purpose and the target audience
- identified and described at least four examples from their chosen interface and showed how the examples illustrated usability heuristics.

Candidates whose work was assessed as **Not Achieved** commonly:

- omitted one or more of the criteria, e.g. failed to describe the role of the given interface
- identified less than four heuristics in their chosen interface
- provided a list of four heuristics with no examples or descriptions
- did not name or incorrectly named the heuristics in their examples
- identified four heuristics, but their descriptions showed no clear understanding
- included fewer than four correct illustrations of the heuristics in the report
- failed to link their answer to one of the chosen interfaces provided.

Candidates who were awarded **Achievement with Merit** commonly:

- evaluated more than four out of the ten heuristics
- discussed how and why the interface met or violated the heuristics using examples from their chosen interface
- used a scale for example, from 1-10 to illustrate how well their chosen interface met the heuristic or included severity rating for those heuristics that were violated
- included screenshots from the resources to demonstrate understanding
- demonstrated clear candidate voice throughout the report
- may have included some of the excellence criteria but show weakness in other sections of the report.

Candidates who were awarded **Achievement with Excellence** commonly:

- addressed all of the requirements of the Achieved and Merit grades
- compared and contrasted two different interfaces in terms of the heuristics: compared in terms of similarities and contrasted in terms of their differences, then discussed
- referred to their own work or another interface as well as one of the interfaces supplied
- suggested at least two reasonable and justified improvements for the given interface in terms of the heuristics (no generic improvements) and related these back to those heuristics identified in their evaluations
- used screenshots to support their understanding (must be legible)
- demonstrated clear candidate voice throughout the report.

Standard specific comments

Overall this standard provided clear opportunities for candidates to attain grades at achieved, merit and excellence, using the describe, explain and discuss model. Candidates who achieved higher grades did so by providing insightful analysis and in-depth discussion based on evidence.

They could make suggestions based on clear evidence and their own experiences.

- Many candidates answered the question well, providing their own evaluations and insights as to how well their chosen interface had or had not met the usability criteria.
- It is important for candidates to understand the meanings of the words: heuristics, describe, in depth, evaluate and compare and contrast.
- For an in-depth or comprehensive understanding candidates are expected to talk in context about at least six heuristics
- Candidates who evaluated only four Heuristics, but had shown evidence of some Excellence criteria, could be awarded a Merit.
- In some cases candidates wrote comprehensive and detailed comparisons along with well-thought suggestions for improvement, they didn't always relate them to the heuristics.

Candidates need reminding that the responses should be in terms of usability heuristics, not general observations.

91887: Demonstrate understanding of compression coding for a chosen media type

Candidates who were awarded **Achievement** commonly:

- did not demonstrate an understanding of how data can be represented using bits.
- gave justifications for decisions that were light on evidence
- were able to state which compression methods were most appropriate for a situation, but did not demonstrate an understanding of how they worked
- used screenshots of colour palettes from Word (or similar) to support their explanation of how bits can be used to represent pixel colours in images
- did not demonstrate a technical understanding of how each compression method works
- described compression methods they would use but did not justify their choices. e.g. 'I would set the camera to RAW, because RAW files are better quality'.

Candidates whose work was assessed as **Not Achieved** commonly:

- confused compression types, for example, stating that jpeg was lossless and png was lossy
- provided discussions that were too short, giving no evidence that they understood how compression works
- confused .jpeg and RAW
- chose a compression setting with an incorrect justification
- made incorrect decisions about the appropriateness of compression types
- misunderstood what compression does, for example, stating it reduces file size by decreasing the file dimensions
- showed how a black and white image might be represented with an explanation.

Candidates who were awarded **Achievement with Merit** commonly:

- demonstrated understanding but were not always able to communicate it clearly
- created their own black and white images to demonstrate how RLE works
- wrote explanations that were lacked conciseness and were often inconsistent
- chose the correct file type for specific outputs without explaining the practical application, e.g. 'For printing A3 posters I would choose RAW because of the quality'.

Candidates who were awarded **Achievement with Excellence** commonly:

- demonstrated understanding of the technical complexity around compression coding.
- were able to clearly communicate their justifications and reasoning for decisions.
- were able to relate technical explanations to real-world implications, e.g. how jpg removes information from details that are unlikely to be detected by the human eye
- provided clear justifications for their choices of recording settings and output compression types
- considered user perspectives and technical limitations when selecting output compression types.

Standard specific comments

This standard allows candidates to take a deeper look at a technology that they use every day. In general, candidates were able to explain what compression method or file type would be most appropriate for each situation. The practical application of compression was evident in a number of candidates answers as candidates took into consideration factors such as download speeds or print quality.

Candidates who performed well were able to explain the technical aspects of compression methods, outline the advantages and disadvantages of each and justify choices for the practical application of each method. In order to achieve Excellence, candidates needed to give clear justifications for their choice of compression type, for example, when choosing a recording setting or compression output type.

Some candidates understood that lossy compression resulted in smaller file sizes than lossless compression but were unable to provide any more than a superficial explanation of how either compression type worked.

Candidates who changed the context in the middle of their report, for example changing from audio to images, were disadvantaged.

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Previous years' reports