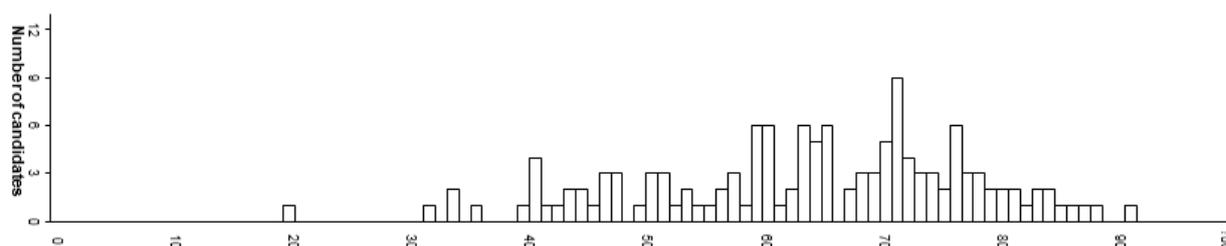




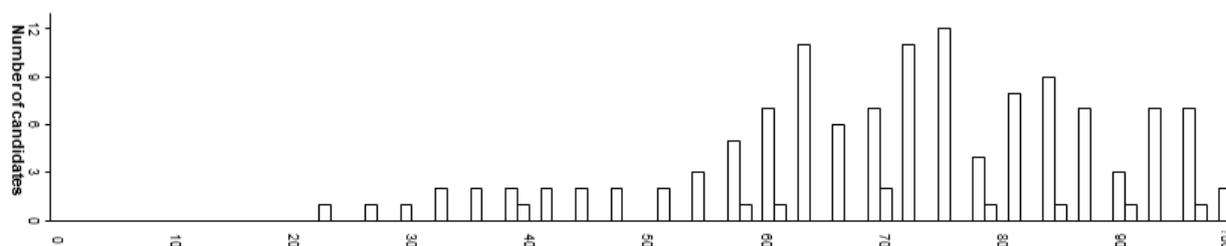
Summary report for candidates on the 2014 WACE examination in Materials Design and Technology Stage 3

Year	Number who sat all examination components	Number of absentees from all examination components
2014	135	0
2013	208	3
2012	223	6

Examination score distribution - Practical



Examination score distribution - Written



Summary

Practical examination

Attempted by 135 Candidates Mean 71.72% Max 50.00 Min 12.12

Section means were:

Practical Portfolio (Metal) Mean 38.15(/50) Max 50.00 Min 19.70

Practical Portfolio (Textiles) Mean 41.74(/50) Max 50.00 Min 31.82

Practical Portfolio (Wood) Mean 32.31(/50) Max 46.47 Min 12.12

Written examination

Attempted by 135 Candidates Mean 64.29% Max 46.04 Min 10.08

Section means were:

Section One: Short answer Mean 5.91(/7.50) Max 7.50 Min 3.41

Section Two: Extended answer Mean 8.75(/12.50) Max 12.20 Min 2.38

Section Three: Wood Mean 17.53(/30) Max 24.44 Min 3.61

Section Three: Metal Mean 17.60(/30) Max 21.94 Min 12.22

Section Three: Textiles Mean 17.39(/30) Max 28.89 Min 4.44

General comments

Practical examination

The standard of the practical (portfolio) submissions has risen considerably in 2014. Most candidates clearly understand the concept of the Design Proposal (Criterion 1), provided strong production proposals (Criterion 4), evidence of production (Criterion 5) and evaluations (Criterion 6). Differences between the contexts occurred in Research (Criterion 2) and Development of Ideas and Concepts (Criterion 3).

As in previous years, the quality of these two criterion was largely due to candidates failing to provide justifications or to make decisions using the fundamentals of design. In Criterion 3 candidates demonstrated weak concept development towards a solution, too few development drawings which were poor in quality and/or a lack of annotation. These drawings lacked the required links to the fundamentals of design.

Advice for candidates

- Ensure all research and design work is supported by justifications for decisions made, using the fundamentals of design terminology.
- Consider creating a final summary page at the end of both the research and design Criterion justifying all of the choices, using the fundamentals of design and linking back to the design brief and the design proposal.
- Ensure all working drawings are fully annotated with construction methods and measurements.
- Ensure costing/materials lists are complete with totals and include all the materials needed e.g. components and small pieces.
- Format production plans and journals so that they do not transverse several pages.
- Ensure any modifications are followed through, by re-doing the plan, costing/materials list/drawing as appropriate. This should be at the end but before the evaluation.
- Avoid going over the required page limit by wasting space.

Written examination

The examination paper had a spread of questions across the syllabus. Candidates very competently applied ergonomic design, occupational safety and health, materials testing methods, elements and principles of design and trend prediction methods. Candidates in Wood and Textiles had a higher than expected degree of understanding of cultural and/or historical influences, however Metal candidates struggled with this question. Candidates across all three contexts had difficulty finding an appropriate number of disadvantages or consequences across several questions. Some candidates also did not appear to have read the question and understood it, for example the question on standardisation of material testing, or they did not re-read their answers. The calculation was a prime example of this, where most candidates appeared to understand how to answer the question, yet made errors they might not have made had they checked their calculations. Finally, candidates struggled to unpack the essay question about environmental impacts.

Advice for candidates

- Read all questions carefully.
- Re-read answers and questions together to ensure questions have not been misinterpreted.
- Re-do calculations – ideally check them once they have been completed, then at the end of the examination if there is time.
- Use examples to support statements where required.
- Create subheadings to answer essay questions. Highlight or underline keywords in the questions. Either create dot points to answer the question under each subheading, or highlight key points. This helps to avoid repeating points.