

Principal Assessor Report 2004

Assessment Panel:

Technical Education

Qualification area

**Subject(s) and Level(s)
Included in this report**

Craft and Design – Advanced Higher

Statistical information: update

Number of entries in 2003	56
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Number of entries in 2004	75
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General comments re entry numbers

It is pleasing to record an increase in candidates from the previous year to the highest ever number to complete the course.

Numbers have increased because:

- teachers are now more confident with presenting Higher Craft and Design and therefore are willing to take on the challenge of presenting at a more advanced level.

Statistical Information: Performance of candidates

Distribution of awards

A	10.7%
B	26.7%
C	29.3%
D	10.7%
No Award	22.6%

Comments on any significant changes in percentages or distribution of awards

There was a slight increase in the number of A grades, a little over 2% increase in the number of B grades but there was almost a 100% increase in the percentage of candidates who achieved a pass at C grade. This meant that there was a 68.5% pass rate in grades A-C (ie 50 out of 70 candidates passed Advanced Higher Craft and Design this session). The overall increase in passes of 18.5% from the previous year was a welcome improvement.

It was satisfying to see an upward trend in the A and B grades but the improvement in the number of candidates achieving a C grade was significant. From consultations with the marking team, their conjecture for this increase could be broken into three distinct factors. Firstly, teachers who have presented the course for a number of years are becoming more adept at delivering the course. Secondly, the reduction of evidence requirements implemented at the beginning of last session meant that candidates could devote more time to working on their *Extended Case Study*. Finally, a number of new Centres had presented candidates for the first time and, although it was obvious that the candidates had ability, the presenting teachers were not as familiar with the course or as confident at delivering it as their more experienced colleagues.

Grade boundaries for each subject area included in the report

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
A	10.7	10.7	8	175
B	26.7	37.4	20	150
C	29.3	66.7	22	125
D	10.7	77.4	8	112
No award	22.6	100	17	

General commentary on passmarks and grade boundaries

- While SQA aims to set examinations and create mark schemes which will allow a competent candidate to score a minimum 50% of the available marks (notional passmark) and a very well-prepared, very competent candidate to score at least 70%, it is almost impossible to get the standard absolutely on target every year, in every subject and level
- Each year we therefore hold a passmark meeting for each subject at each level where we bring together all the information available (statistical and judgmental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the senior management team at SQA
- We adjust the passmark downwards if there is evidence that we have set a slightly more demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- We adjust the passmark upwards if there is evidence that we have set a slightly less demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- Where the standard appears to be very similar to previous years, we maintain similar grade boundaries
- An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions are different. This is also the case for exams set in centres. And just because SQA has altered a boundary in a particular year in say Higher Chemistry does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related as they do not contain identical questions
- Our main aim is to be fair to candidates across all subjects and all levels and maintain standards across the years, even as arrangements evolve and change.

Comments on grade boundaries for each subject area

The grade boundaries are in line with the 50%, 60% and 70% standardised grade boundaries for C, B and A grades respectively.
This is consistent with the level of difficulty and accessibility of the external assessment.

Comments on candidate performance

General comments

For the past three years, there has been a steady decline in the number of 'No Awards' and again this year there was a reduction from the previous year of some 25%. There was a small increase in the number of 'A' and 'B' grade passes but the biggest increase was in the number of candidates who achieved a 'C' grade pass. Overall, this meant that there was a much better ratio of passes to fails than in any of the previous years. There was a noticeable improvement in the standard and quality of the *Extended Case Studies*. It was particularly encouraging to see that a large number of candidates had selected challenging topics which lent themselves to development and improvement rather than trying to improve or modify 'design icons'. There were many instances of pupils conducting appropriate and relevant research into real problems using suitable and pertinent strategies to provide very good attempts at presenting feasible solutions. There was an even better improvement in the overall responses from candidates to the written paper. The majority of candidates obviously had a good understanding of the theory of Advanced Higher Craft and Design and a high number of pupils were able to display an in-depth knowledge of the theory and practice of design. It was heartening to see that so many Centres had obviously taken on board the advice given in previous Principal Assessor reports and passed it on to their students – to good effect. As with previous years there was, in general, a difference in the overall performance between candidates from Centres which had presented candidates for the first time and those which had previously made presentations.

Areas of external assessment in which candidates performed well

There was a larger number of full and comprehensively produced folios this year than in previous years. The markers suggested that one of the prime reasons for this was the increase in time available to candidates in which to produce their *Extended Case Study* due to the reduction of evidence requirements in the Units. As mentioned previously, a large proportion of candidates this year selected products for their Extended Case Study which were conducive to good analysis and development.

This year, most candidates made a good start to their folios by making a fair attempt at the **Problem Definition**. This sets the tone for the folio and a good response to this sub-section focuses the candidate exactly on what they are attempting to achieve in the development of their folio. The Who, What, When and Why of the **Problem Definition** is an important part of the design process and should never be underestimated. In Section 2 (a), **Quality of Ideas and Concepts**, there were numerous examples of imaginative proposals and it was refreshing to see the depth and quality of concepts produced by some candidates. It was also good to see an increase in the number of candidates who focussed more on producing sketches which were not 'quality' rendered sketches but more of the 'quick pencil' variety. This process reflects how designers generate ideas in the early stages of producing a solution to a problem and should be commended. It should be mentioned however that sketches, no matter how basic, should always be accompanied with some sort of annotation giving explanations and additional information.

In general, candidates still have difficulties synthesising ideas and concepts towards a final solution. There was, however, a marked improvement in this area of the *Extended Case Study* with a higher proportion of candidates demonstrating their ability to narrow down the alternative features of proposals to provide viable design solutions.

All of the marking team commented positively on the standard of presentation and graphics encountered this year. The quality was high and there was a wide variety of mediums utilised. The range included thumbnail sketches, coloured pencil and marker-pen work. There was also evidence this year of an increase in the use of modelling in a variety of mediums and this technique is to be positively encouraged.

The candidates' response to the *Written Paper* was, overall, good and in many cases there was evidence that pupils had been well prepared by their teachers. An additional factor is the annual increase in past papers which adds to the number of questions available for candidates to practice on. Candidates are also able to establish a pattern of the type and standard of questions which are liable to arise.

Most candidates were able to show an understanding of the subject but it is the depth of response which enables candidates to score well. Pupils who responded to questions in a superficial manner did not tend to achieve the bulk of the marks available.

Question 1 (which required candidates to describe the characteristics of what made a product successful), Question 2 (how factors influence designs) and Question 3 (the visualising techniques used by designers) were all answered well. It was particularly pleasing to see the depth of response which a vast number of candidates gave to Question 4 on environmental issues. Question 5 also showed that most candidates appreciated the stages required to be addressed when redesigning products.

Areas of external assessment in which candidates had difficulty

Having commented positively on the good start which the majority of candidates made in the **Problem Definition**, it was disappointing to see that an equally high majority had not emulated this in part (b), **Project Management Planning**. In the early stage of the folios the markers look for evidence of how candidates plan to tackle the design process. It is therefore imperative that candidates set out clearly how they intend to tackle the tasks, the key stages they will cover and the timescales they have allotted to the various tasks.

Pathways and Links is another area where most candidates could improve on. The quality of 'ideas and concepts' was well attempted but there was a distinct lack, in the majority of folios, of a clear pathway through the design process of where the candidates were attempting to go. There should be a distinct thread running through the folio which is easy to track and monitor. In other words, there should be an obvious progression of the candidate's design process throughout the *Extended Case Study*.

Candidates, on the whole, were able to apply justification and reasoning to their ideas, features and concepts. However, when they were required to demonstrate an appreciation of manufacturing techniques and modern materials, there was a deficiency of knowledge by a high proportion of candidates in these areas.

In the *Written Paper*, the process of anodising proved troublesome for a number of candidates and the impact of technology on the design and marketing of products was not answered well. The majority of candidates achieved more than half marks for Question 6 no matter which one they attempted but not many provided sufficient detail to score well in this question.

When responding to questions, it is often a good idea for candidates to exemplify solutions or justify a proposal. If this can be based on some of their previous work, whether it be a Unit or the *Extended Case Study*, so much the better.

Recommendations

Feedback to centres

- Candidates should take time and effort to clearly set out the **Problem Definition**. This will seek to focus the candidate on the work ahead
- Teachers should monitor and advise candidates more closely on Section 1 (b), **Project Management Planning**
- Candidates should be encouraged to produce quickly generated sketches. Elaborate, rendered sketches should be discouraged in the early stages of the folio
- Sketches, no matter how basic or elaborate, should always be accompanied by annotations
- There is still scope for improvement in the area of synthesis. There is ample opportunity for practising this technique in the Units and pupil difficulties in synthesising should be spotted and rectified at this stage
- Candidates should be encouraged to use as wide a variety of presentation as possible. The use of modelling in whatever material, should be promoted by all
- Ideas and concepts should display a coherent progression. Isolated sketches with little relevance to each other is not the way designers operate and will not attract good marks
- Once a design is nearing completion, candidates should begin to consider the possible materials and manufacturing processes which may be required to manufacture the product. Candidates must be exposed to a wider variety of both of these factors
- Candidates should appreciate that, for Advanced Higher, the depth of response required for both the folio and written paper is greater than that of Higher
- When responding to questions or problems, answers must be substantiated with some form of corroborative evidence. Making statements without justifying or exemplifying them will not attract many marks