ELC

Design & Technology

Entry Level Certificate **R371 – R375**

OCR Report to Centres

June 2013

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It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

OCR will not enter into any discussion or correspondence in connection with this report.

CONTENTS

Entry Level Certificate

Design & Technology (R371 – R375)

OCR REPORT TO CENTRES

R371 – R375 Design and Technology

General Comments

This was the second full year of running what is still a relatively new specification. Centres had the opportunity to enter candidates from one or more of the following five materials areas: Electronics, Graphics, Industrial Technology, Resistant Materials and Textiles. OCR provided a range of themes and tasks from which candidates selected one task. The task focussed on the design, development and making of one product that was capable of being tested and evaluated. Centres are increasingly entering candidates for more than one material area.

A good standard of practical work was observed in the majority of centres, particularly in the range of skills and techniques used in the making of the products. There was very little unfinished work submitted, most was complete, functioning and suitable for the design task selected.

The presentation and standard of work was very good from the majority of centres, with folios being clear and well presented with a good range of photographic evidence shown. Where students had been encouraged to label clearly and organise their folios into the separate objectives, moderation was made much easier. Many centres had used the coursework cover sheets (CCS/R371-375) with annotation explaining how the marks had been awarded - this was very helpful to moderators.

There was increasing evidence of the successful use of ICT. Candidates were able to research information, use CAD packages to model ideas and provide digital images.

A number of centres are using this new qualification for candidates with special educational needs, as well as to engage and motivate disaffected students. Some candidates start working at GCSE level and for whatever reason cannot complete the course but have managed successfully to complete an Entry Level course. In addition, some centres are using the Entry Level course in year 9 to prepare candidates for GCSE Design and Technology qualifications.

Moderation

Moderators appreciated the assistance given by centres in promptly sending samples to moderators, clearly marking folios with centre number, candidates' names and clear description of the different objectives and the marks awarded. There were fewer clerical errors which needed to be chased up. It would be helpful if centres could indicate in some way on the cover sheets the actual mark awarded within each level of response rather than just the total.

Photographic evidence of the final product is a basic requirement of this process, and supporting photographs showing the process of making the product provided moderators with further information. In most cases photographs were taken using a digital camera and the overall quality of these is generally becoming much better, with a very good range of photographs, particularly in the making section.

In some cases writing frames and prompts were helpful to candidates in forming appropriate responses. Centres have to be careful as this may have restricted some candidates for instance on occasions work was over-structured by centres, resulting in one-word answers.

In Entry Level, additional teacher assistance is welcomed but marks may only be awarded for work undertaken and completed by the candidate. Many teachers provided good annotation on individual performance showing clearly how much and where assistance had been given.

Design and Creativity (AO1)

In this objective most candidates were able to recognise a design opportunity or need. Candidates were able to carry out basic research, often using the internet, in response to their brief. There is increasing use of digital photography by candidates researching their chosen task. The candidates occasionally need to be more discriminating in the type and amount of research submitted for moderation.

With a clear starting point, they were able to produce suitable ideas that satisfied their design need or brief. Candidates then successfully developed their design ideas, many through the use of modelling. There was evidence of both three-dimensional modelling and computer-based CAD modelling. This is to be particularly encouraged since it helps candidates to overcome problems before construction begins. This information allowed candidates to provide clear evidence of contribution to a more detailed design specification, although this was carried out with varying degrees of success.

Where candidates had carried out a detailed product analysis this gave them all the information required to produce a quality product as they identified the key qualities of successful product design.

Making (AO2)

Candidates need to contribute to a plan of making. There was evidence that candidates found this difficult although it was well answered in some cases with clear evidence backed by notes and drawings.

Candidates need to select and use suitable materials, tools and equipment. Once again, the candidates achieving the higher marks showed clear photographs of themselves using tools and equipment with annotation and sketches to explain the process. There were a number of candidates who found the recording of this difficult and it is here that the centres annotation on the Coursework Cover Sheets is important.

Candidates have to use a range of skills and techniques appropriate to the task. Here again the centres annotation helps record the amount of guidance candidates require. This is also the area where centres were sometimes generous in the marking of candidates who had used a very limited range of skills.

This objective requires candidates to recognise possible problems in the designing and making process and suggest solutions. This seemed to be an aspect of the designing process that was not fully covered during teaching. If centres are to award high marks in this section there needs to be evidence to support the candidate's suggestions. The best examples provided product information by way of annotated diagrams and using modelling and testing in real-life situations. The majority of centres submitted practical work which was of a high standard and there was very little unfinished work submitted.

Evaluation (AO3)

This was a weak section by some centres with minimal evidence of testing the product and limited references made to materials, tools and equipment. Candidates needed to use the product for its intended purpose to test its suitability and suggest some development of the product. Centres need to look at the assessment criteria on the Coursework Cover Sheet and focus candidates on to the specific requirement to achieve the higher marks. There were some good examples of third-party testing. Some of the better examples demonstrated testing of the product with some reference to the original specification and a review of the materials and time used. Some centres provided photographic evidence showing the product in use and which the candidate could comment on.

Administration

It was encouraging to note that the majority of folders were well organised and well presented with clear labelling and secure binding. Please note that the Coursework Cover Sheet form (CCS) is required. As one is required per candidate, it is helpful to have this affixed to the front of each candidate's folio. The Coursework Summary Form (CSF) is an optional form that allows centres to list all of the candidates on one form and is particularly helpful to the moderation process.

If a candidate begins working towards a GCSE in a related subject area and then changes to an Entry Level course, the centre should ensure that the work submitted is relevant to the new course and covers the Assessment Objectives.

Conclusion

It is clear that the Entry Level Design and Technology qualification is providing accreditation for a number of candidates who would not have been able to successfully achieve at GCSE. It provides a valuable course for those with special needs, whilst it also motivates and engages disaffected students. Whilst it is designed to work alongside the GCSE, it is also successfully being used by some centres in Year 9 as an entry route in preparing for the GCSE. Candidates have been given the opportunity to succeed and reach their true potential, producing quality outcomes and products to be proud of.

Centres are reminded that this specification can be taught over one or two years and candidates may be entered for more than one material area.

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