# Examiners' Report June 2009

**Projects**

# Dissertation, Investigation, Performance and Artefact
# Level 3

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# Extended Projects Qualification

## Level 3 Introduction

Projects follow the same processes as traditional GCSEs and GCEs. As with any GCSE or GCE, each unit is awarded to ensure that the standard is established and will be maintained. It is necessary to ensure consistency of standard in each examination window and as a consequence of this, grade boundaries could be subject to change.

# Level 3 Unit 1: Dissertation

## Learner Performance

Most learners put a lot of hard work into the production of the main body of the dissertation (introduction, discussion and conclusion) but other sections (e.g. abstract and evaluation) were weaker. Too often, a standard essay format was seen. The most common problem was that learners' literature reviews supplanted the discussion and so argument was confined to the (often brief) conclusion.

Strong learners met the criteria for structure and produced well supported arguments and counter-arguments, making use of appropriate Level 3 technical vocabulary and frameworks.

A significant number of centres came into the Award this year having previously worked on the Perspectives on Science AS programme. The work from these centres tended to be well adjusted to the requirements of the EPQ, and often showed high standards of writing, argumentation and presentation.

The best learners used a clear and consistent reference system, a full bibliography with over twenty different sources of a range of types. Another mark of high performance was that the learner had fully evaluated their sources. Some evaluated the sources in footnotes; others had a separate section within the bibliography where sources were critically evaluated. However, many lower marked pieces of work made no attempt to assess the reliability of their sources. A few centres submitted work where the research review was little more than pages of extended quotations. This was worthy of little credit as there was no synthesis being shown. A number of students relied almost solely on primary research of their own, which did not make for a high level dissertation.

The strongest dissertations showed mature presentation of an argument with time given to considering and dealing with objections and counter arguments. It was clear that these pieces of work were produced by learners who had understood what constitutes a well structured dissertation.

At the lower end, many pieces simply developed the learner's opinions without reflecting on other points of view. A significant number, although they were well written and structured, with good written communication and structure, were simply not of a level 3 standard in terms of the depth of subject material or the sophistication of argument. A poor or vague title is hard to turn into a high level dissertation. A number of mid and low level pieces did not provide a clear conclusion that summarised the learner's position. Many had sections entitled 'conclusion' that simply continued or repeated the argument.

## Suitability of Work Submitted

In general, it was encouraging to see that most candidates were making use of research questions. At the weaker end, some of these questions were not really ones that could be given a Level 3 treatment.

Often, highly accomplished pieces of work were submitted that were not dissertations, but simply long essays. Some centres adopted a formal approach to the use of the marking grids but showed insufficient sensitivity to the need for a

genuinely Level 3 treatment of the central ideas in the work. In some cases centres had submitted work for the Investigation unit as a dissertation.

Some centres submitted work which would have been more appropriately submitted for a lower level award. It is important that centres support candidates with initial teaching (of around 40 guided learning hours) and ongoing supervision during the research process, to ensure that Level 3 technical vocabulary can be used with understanding and that the work submitted has both analytical depth and a proper research methodology underpinning it.

## Assessment Evidence

There was in general a good level of understanding of the assessment evidence requirements. The vast majority of dissertations were supported by project proposal forms and activity logs and in many cases, there was also evidence of the presentation in the form of power point summaries / handout pages. Most centres submitted candidate mark record sheets and also oral presentation record sheets to support the marks awarded for the presentation.

The large majority of learners submitted clear activity logs and proposal forms, as well as numbered contents pages. Clear structuring of the written work and supporting comments about organisation from the teacher-assessor were also seen.

In some cases, high marks were awarded for very thin logs and/ or cursory project proposal forms. Learners should be encouraged to keep full and accurate logs as they go through their work. There was evidence that some centres had produced logs for candidates. Whilst general indications about time management are helpful, candidates should take responsibility for time management within the project phase and logs should provide personalised accounts of this.

## Centre Performance

The inclusion of learner presentation slides was useful to moderators and marked an improvement on last year.

In some cases it was clear that internal standardisation was not carried out effectively before submitting marks to Edexcel. It is the centre's responsibility to ensure that, when a number of teacher-assessors are contributing to the assessment of work within one unit, that a common understanding of the criteria is in place, and that a suitable process of internal standardisation takes place. It assists the external moderator if brief details of how the work was internally standardized are provided with the sample called for moderation. A typical procedure would involve the appointment within the centre of a chief internal moderator, who would sample work from each of the other teacher-assessors, and provide feedback to ensure that there is a shared standard across the centre. This process should take place within each of the 4 units; it is not necessary to cross-standardise between different units.

Significant numbers of centres missed the May 15 deadline but work tended to be provided reasonably promptly thereafter. In a number of cases, it was clear that the time allocated to the project was quite short, it is difficult in these situations for candidates to achieve the required depth of engagement with their research material. Centres should bear in mind that the Level 3 EPQ is equivalent in size and learner demand to half an A level. In all but exceptional cases, it is not realistic to

expect learners to reach this level in a time period much less than the recommended 120 guided learning hours.

There was a slight increase in cases of plagiarism, in which candidates had lifted large sections of material from websites without attribution. Teaching and reinforcement of proper academic protocols for citation is vital.

**Review of work**

Many learners did not provide an in-depth evaluation of the work they had done. Many confused an evaluation of their work and learning with an evaluation of the content of the dissertation. Centres must make it clear that the review is aimed at reflection on the process of learning and developing the project from the learner's perspective. Again, there were often sections entitled 'evaluation' that were continuations of the conclusion. Centres are advised to stress that concluding and evaluating are quite separate skills.

# Level 3 unit 2: Investigation

## Learner Performance

Unit 2 tended to produce rather polarised work; at the top end, a clear hypothesis was suggested and then fully tested with 50 + data points. Results were displayed graphically and statistical analysis was used to accept or reject the hypothesis. Often highly professional Power Point presentations were given and good evidence of this through witness statements and copies of presentation slides were given. Good projects also showed a deep and wide ranging research base form 20 + sources which put the research into a context and showed the cross-curricula extension required at this level. However, at the lower end there was little to differentiate work from a single task piece of coursework, which might commonly be seen in a Geography AS for example. The data, often resulting from questionnaires was sometimes sparse and from as few as 10 or less respondents. Results were also often accepted at face value. The time allowed for the development of the project was often insufficient (a few weeks) to fulfil the development and iteration of ideas needed. Few projects had really good abstracts and clear focussed questions or numerical hypotheses. And evaluation often was brief and showed little grasp of statistical methods and significance.

One-off tasks do not make an extended project and gathering of class data on a single field trip for example is unlikely to show the development expected.

Bibliography sources must be fully referenced in the text and too often sources were accepted without comment. A Literature review is still expected in Unit 2, though its importance within the Project is less than in the Dissertation and less argument and counterargument is expected given that the research instead should be based on data and finding (or failing to find) patterns in this data.

At the lower end, many pieces of work simply developed the learner's ideas without reflecting work done elsewhere. A significant number were simply not of A level standard in terms of the depth of data analysis, synthesis of ideas or the sophistication of argument used.

## Suitability of Work Submitted

In general, it was encouraging to see that most candidates were making use of research questions. Though there were rather few testable hypotheses. At the weaker end, some of the titles were not really ones that could be given a Level 3 treatment and were not suitable for mathematical analysis.

Often, highly accomplished pieces of work were submitted that were not investigations, but simply data gathering tasks.

There was a problem in some cases with centres who had submitted non-numerical work with no or sparse primary data and were more suited to Unit 1 Dissertation.

Unfortunately several centres submitted work which would have been more appropriately submitted for a lower level award and were awarding high marks at level 3 where projects were only mark band 2 at level 2. It is important that centres support candidates with initial teaching (of around 40 glh) and ongoing supervision during the protracted research process, to ensure that Level 3 data gathering and

analysis techniques can be used with understanding and that the work submitted has both analytical depth and a proper research methodology underpinning it. Where work had been fitted into a very short time span it was impossible to support mid or high band marks, particularly with AO2 and AO3.

## Assessment Evidence

There was in general a good level of understanding of the assessment evidence requirements. The majority of Investigations were supported by useful project proposal forms giving a rationale for the work and activity logs which documented the journey undertaken. In many cases, there was also evidence of the presentation in the form of Power Point summaries / handout pages. Though centres submitted candidate mark record sheets and also oral presentation record sheets to support the marks awarded for the presentation, it would have been very helpful to see annotations throughout the scripts to show evidence for the award of marks in each AO.

The submission of numbered contents pages was a good indicator of a structured project. Clear structuring of the written work by the use of paragraphs and illustrations were also seen. Extensive Data tables and questionnaire results should be put in an Appendix and the inclusion of all raw questionnaire responses is not expected and does not assist the communication of the project.

Candidates should take responsibility for time management within the project phase and logs should provide personalized accounts of this. Independent organisation is expected at this level and Centre produced grids and logs tend to restrict this.

## Centre Performance

In this first year post pilot, the range of titles and general administration by centres was greatly improved and  bar a couple of centres, all documents requested were received within a couple of days of the due date. Some centres did not include visual evidence of presentations, though most gave witness statements. There were instances where high marks had been given on the oral mark sheet for succinct, clear and high audience impact presentations, though accompanying slides were monotone, lacking in images and packed with writing. The taught course should specifically cover construction of slides and effective presentation techniques.

A couple of Centres submitted work which, by the candidates admission was called, for example 'Geography coursework'; though there was no sign of double submission, it would be better if Centres made it clear that all learners should refer to Extended Project work on their scripts. No large folders were received and most work was well presented with all forms present as expected.

Though comments on the Mark Grids were most helpful, comments relating to the specific award of AO marks on the scripts would greatly assist the moderation process. If there was a weakness, in general it was the extent and analysis of Bibliography sources and referencing. It was disappointing that in all but a few centres the detail of mathematical analysis was also lacking and questionnaires, where used, still often rely of minimal sample sizes. For a statistically relevant result, one would expect 50 + data points and in the analysis some form of graphical representation is needed.

There were a couple of cases where a Centre had been overawed by a project outside their normal area of study and had consequently over estimated its attainment level.

It was clear that internal standardization was carried out in many centres before submitting marks to Edexcel. This process should take place within each of the 4 units; it is not necessary to cross-standardize between different units.

In a number of cases, it was clear that the time allocated to the project was short, indeed some were started in April for the May 15th Edexcel hand-in deadline. This does not allow candidates to achieve the extension expected at level 3. See comments for Unit 1 regarding the recommended 120 guided learning hours. Centre marking often realised the limitations of a project and some candidates would have indeed fared better at level 2

Material, data and formulae were often used from websites and books without attribution and few projects showed an acceptable level of referencing. Plagiarism must be avoided and teaching of proper academic protocols for citation is required.

**Review of work**

In Unit 2 there must be a review not only of the learning process but also of the data collection methods, weaknesses and improvements possible and also of the significance and relevance of the results. Use of secondary sources within the research field is vital here to show the work in context.

# Level 3 unit 3: Performance

## Learner Performance

The majority of learners submitting work for this unit had a good understanding of the requirements for developing performance work. Most learners focused on the development of a performance in the expected form, covering music, dance and drama. Some other forms of response were submitted and their success followed a similar pattern to more conventional approaches. Where the learners had responded to a focused research style question or production brief, the development process tended to be informed by the research undertaken and therefore generated something much more fit for purpose as an Extended Project.

## Suitability of work submitted.

The majority of learners undertook their project as a genuine extension to their studies and in turn the skills developed should aid progression. Good language of performance was seen in many projects along with skills and techniques appropriate for level 3 performance work. Where learners had opted for a performance outcome and did not have an appropriate skill set, in some cases this led to under developed and simplistic techniques being used.

The genre and style of the work submitted for P303 was across a broad range, but the common factors in the more successful projects were: a focused research style question, appropriate resources that could be understood within the performance context and then selected from and a development process that allowed for ongoing review. The strongest projects had a good understanding of the desired effect on the target audience.

## Assessment Evidence

Assessment evidence on the whole was well structured and included the essential components. In the strongest cases the project proposal forms were detailed and well thought through. For group projects individual roles were agreed as part of this phase and were needed by the project rather than undertaken as an afterthought. The activity logs were less clear in several cases, and a focus for centres should be to support learners to capture the process in an appropriate form that will support the evidence submitted for AO3 and allow the learner to be able to review the detail that is often evidenced via the outcome but would benefit from being submitted in a more overt way.

## Centre Performance

For nearly all projects, the practical evidence was suitably formatted.  A few centres submitted recordings that were of a poor standard. The main problem was that several centres submitted work on either CD or DVD that failed to identify the individual candidates. Centre number and learner name and number should be recorded to camera at the start of any filming and equivalent detail provided for sound recordings. Some centres provided printed photographs of candidates with their learner numbers and this was an effective way to support the moderation process.

**Review of work**

Where candidates undertook review against clear objectives, inevitably it produced stronger evidence. Where learners failed to recognise the effect any research would have on their project it lacked the necessary focus. Where learners had individual and group rehearsal objectives that were understood in terms of the initial creative idea and in terms of the practical development of projects, the learner tended to review and analyse their work more systematically and aptly.

# Level 3 unit 4: Artefact

## Learner Performance

There were examples of well planned, intelligently researched and skilfully made project work in a range of making disciplines. In the best project work learners had built upon skills in the use of materials and techniques developed in other studies and used these for extended study. There were examples where learners had made use of new disciplines or ways of working that encouraged innovative approaches to study.

It should be noted that a significant amount of the evidence produced did not meet level 3 (A level) standard in terms of use of visual or other appropriate language. The depth and relevance of research and effectiveness of design development was not at an appropriate level.

## Suitability of Work Submitted

There were examples of projects that had been carefully planned with clear and detailed objectives and rationale. However, even in well-planned projects there was often a lack of monitoring of progress against the project objectives. There was also evidence of inappropriate time spans with some overly ambitious project ideas and, worryingly, some timetables that did not represent sufficient time or commitment for this qualification.

Many projects included written research into the properties of materials that had limited usefulness or relevance to the construction or design of the artefacts. Candidates are required to research a range of different types of possible materials and techniques. In practical applications this should include testing and exploring the physical and aesthetic properties of materials and processes to see which are the most suitable for purpose. It must be demonstrated that "clear, concise and detailed links have been established between the research carried out and the project". In some centres, standard handouts had been used for parts of the research and this limited the opportunity for independent achievement and extended study.

While the Extended Project rightly places emphasis on process, there is a level of ability in language, be it visual or technical language, that is necessary to communicate and create effectively. A significant number of candidates entered for the Artefact unit did not demonstrate the required level of linguistic ability.

It would appear from the evidence presented that many centres had not planned project work so as to provide learners with opportunities to meet the assessment criteria. It appeared that 'stock' assignments had been used and that these did not take full account of the very different nature of the Extended Project qualification and the requirements of the Unit Specification. In some cases, there was limited understanding of the terminology used in the specification. The specification provides information about the interpretation of the unit and guidance on the kinds of evidence that may be expected. Extension of study was not always well evidenced and in some cases work produced for projects showed little differentiation from other programmes of study.

Some centres had designed supportive but ultimately restrictive activities for their candidates. In some cases where candidates had worked in groups, research had been shared and/or provided by the centre. There was little evidence in the candidates'

portfolios or in the assessment records of the contributions made by individual candidates or their individual achievement against the assessment criteria.

A significant number of centres seemed to have submitted work for an inappropriate unit. In some cases assessors and tutors referred to the candidates' dissertations or investigations when describing project work entered for the Artefact Unit. There were projects where candidates had undertaken scientific investigations using basic instruments that they had made and had classed these as artefacts. Although the artefact unit covers a range of outcomes, making with skill and the intelligent and skilful use of materials, technologies and processes remain pre-requisites for the unit.

## Assessment Evidence

The range of artefacts presented for moderation included work using traditional painting and fine art work, film making, illustration, photography, graphic design including computer generated and manipulated imagery, engineering and architectural projects, website design and computer programmes for small businesses.

In a significant number of projects learners referred to project processes, design development and decision making for which there was no actual evidence. It is important that learners demonstrate, by the range and relevance of work that they produce and present that they have addressed the assessment criteria. In weaker project work there were examples of work that was repetitive or unconsidered. Sometimes collections of photographic and other forms of source material were included that had little relevance to the project work. The use of ongoing evaluation, reflective practice, editing and synthesising of material by learners is an important characteristic of good project work.

## Centre Performance

All relevant documentation was usually provided including Project Proposal Forms, Authentication Forms and Activity logs. There was varied practice in the completion of Candidate Record Sheets. Best practice included commentary that indicated the location of evidence and justified the award of marks by carefully matching the evidence to the assessment criteria. A general conclusion would be that the more accurate assessments were linked to carefully annotated grids.

## Review of Work

Evaluations of work were often descriptive and lacked analysis and critical evaluation. In some evaluations there was no reference to the original project proposal or brief to inform the learners' responses. In some samples there was little evidence to suggest that an appropriate amount of supported study or learner engagement had been provided to warrant the level or value of the qualification. Some logs recorded only 30 hours of activity on project work.

## Statistics

### Level 3 Unit 1 Dissertation

|  | Max. Mark | A* | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| Raw boundary mark | 54 | 47 | 42 | 37 | 32 | 27 | 22 |
| Points Score | 28 | 24 | 20 | 16 | 12 | 8 | 4 |

### Level 3 Unit 2 Investigation

|  | Max. Mark | A* | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| Raw boundary mark | 54 | 47 | 42 | 37 | 32 | 27 | 22 |
| Points Score | 28 | 24 | 20 | 16 | 12 | 8 | 4 |

### Level 3 Unit 3 Performance

|  | Max. Mark | A* | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| Raw boundary mark | 54 | 47 | 41 | 36 | 31 | 26 | 21 |
| Points Score | 28 | 24 | 20 | 16 | 12 | 8 | 4 |

### Level 3 Unit 4 Artefact

|  | Max. Mark | A* | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| Raw boundary mark | 54 | 47 | 41 | 36 | 31 | 26 | 21 |
| Points Score | 28 | 24 | 20 | 16 | 12 | 8 | 4 |

Notes

Centres are reminded that this is the first summer examination for this new specification and that boundaries may change in the following series

Maximum Mark (raw): the mark corresponding to the sum total of the marks shown on the mark scheme or mark grids.

Raw boundary mark: the minimum mark required by a learner to qualify for a given grade.