

Identifying questions that did not discriminate as expected

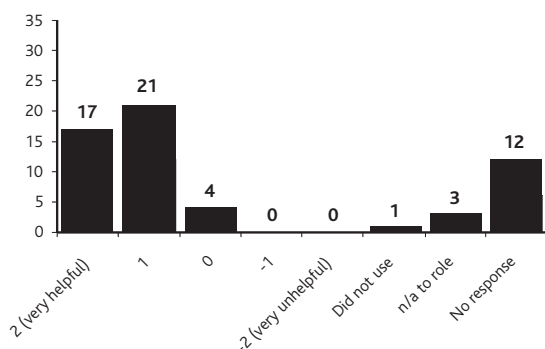


Figure 10: Use of ILD for investigating question discrimination – CIE respondents

Identifying questions that did not discriminate as expected

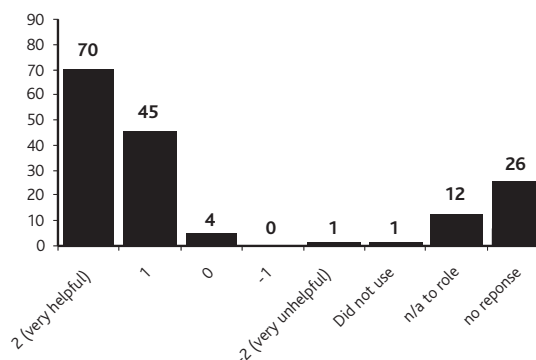


Figure 11: Use of ILD for investigating question discrimination – OCR respondents

## Conclusion

The questionnaire findings provide evidence that Cambridge Assessment has successfully introduced routine reporting of Item Level Data to senior CIE and OCR examiners, and that the reports provide helpful information that is widely used. Further work would be required to probe exactly how the information is used. The main limitations of the study are those which generally affect questionnaire-based studies, principally an unquantifiable self-selection bias arising from examiners deciding whether to complete the questionnaire, and the degree to which participants were willing to be open with us and provide accurate and complete answers.

## Acknowledgement

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## Reference

Johnson, N., Gill, T., Elliott, G. and Black, B. (2006). *Opportunities for evaluating assessments using item level data. Report on 2005–06*. Unpublished internal Cambridge Assessment report.

## EXAMINATIONS RESEARCH

# Practical issues in early implementation of the Diploma Principal Learning

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This short article reports on some of the findings from an interview study conducted in the first year of implementation of the 14–19 Diplomas. The Diplomas were introduced by the Labour government as part of wider educational reforms (DfES, 2005a, 2005b). They were designed to prepare young people for the world of work or for independent study and are intended to combine theoretical and applied learning, to provide different ways of learning, to encourage students to develop skills valued by employers and universities, and provide opportunities for students to apply skills to work situations in realistic contexts. They are also intended to contribute to ensuring that a wide range of appropriate learning pathways are available to young people, thus facilitating increased participation and attainment. The Diplomas are available at Levels 1, 2 and 3 and rather than being taught by an individual school or college, they are available through consortia consisting of a small group of schools and/or colleges working collaboratively.

The Diploma is a composite qualification which is made up of the following elements: principal learning; generic learning; additional and

specialist learning. The current research focused on the Principal Learning (PL). The Principal Learning components are specific to a domain or 'line of learning'. Learning through experience of simulated or real work contexts, through applying and practically developing skills, as well as theoretical learning, is emphasised. The PL components are assessed predominantly via assignments which are internally marked and externally moderated. Teaching of Diplomas in the first five 'lines of learning' began in September 2008 with a further five beginning in September 2009 and four in September 2010.

Several initial evaluations of Diploma implementation and other sources have already provided some insights on various issues. One publicly prominent point has been that the uptake of the Diploma was initially lower than expected. The uptake of any course is likely to be strongly affected by whether learners and teachers have a good understanding of that course in order to make informed choices. McCrum *et al.* (2009) interviewed Year 11 students and found that many had limited or incorrect knowledge about Diplomas and that it tended to be

seen as narrowing their options for the future. It seems that early in the implementation of the Diploma advice and guidance on the Diploma was only being offered to students who expressed an interest (Ofsted, 2009).

Another issue raised is that of whether the Diploma provides adequate preparation for higher education study. There was less involvement of HEs in the development of the Diplomas than employers and a survey of representatives involved in the development process suggested that there was slightly lower confidence of the Diploma meeting the needs of students for higher education study (Ertl *et al.*, 2009). However, many higher education institutes are accepting at least some Diploma lines of learning for relevant courses and the broadening of learning styles encouraged within Diploma learning is in keeping with developments in higher education to refine the nature of undergraduate learning (Richardson and Haynes, 2009).

There was some evidence of concern that some students might be unable to pass functional skills and thus would not complete the Diploma. This led some schools to set entry requirements for Level 2 Diplomas based on Key Stage 3 achievements (O'Donnell *et al.*, 2009).

Further issues identified relate to practicalities of the Diplomas. For example, some problems with collaboration between schools or colleges, or a reluctance to collaborate as consortia has been found in some cases (AoC, 2009). Designing compatible timetabling was challenging with some clashes occurring (AoC, 2009; Ofsted, 2009). Also, whilst travel between sites was in some cases not problematic due to good public transport and relatively close sites, for some consortia there were challenges in this regard (Ofsted, 2009). During preparation for the Diploma, funding was available to assist in its introduction. However, some colleges considered the method of government funding overly bureaucratic requiring negotiations between schools/colleges in a consortium (AoC, 2009).

Thus, a range of challenges around the Diploma had emerged in early implementation. This study aimed to further explore such themes.

## Method

Six consortia running Phase 1 Diplomas in the first year of implementation agreed to take part in this research. These groups of schools/colleges were running the Diploma in Creative and Media, IT, Engineering or Society, Health and Development. All were teaching Level 2 Diplomas, plus two consortia were running either the Level 1 or 3 Diploma in addition. The consortia were visited and, at each, one or more teachers and (in all but one case) a number of learners were interviewed. Learners were interviewed in pairs or groups of three. In total, 11 teachers and 27 learners were interviewed. The visits were made in March to May 2009, thus, the insights gathered are from towards the end of the first year of teaching. The interviews were semi-structured in nature and covered a range of themes relating to the assessments, the learning occurring and various practicalities. The current article will report on the latter. The interview data were analysed by grouping comments by theme and summarising the views expressed.

## Findings

The summarised views on the themes relating to practicalities are presented below.

### Logistics of moving between sites

#### *Teachers' views*

At two of the centres visited, there was no sharing of learners between schools in the consortia and hence no additional travel involved, except for organised induction days or visits to businesses. At these centres teachers were keen to minimise travel, so as to avoid any associated difficulties. At another consortium, learners were taught in two separate centres but the locations of these were linked by playing fields. At the three remaining consortia, learners spent one or two complete days a week at a centre other than their home school. This was generally not problematic because the second centre was not far away, bus services were available and in at least one case these buses were free. Movement between sites was felt to be more manageable when they were dealing with whole days. There was some indication of teachers being more willing for Level 3 learners to study across sites than Level 2 learners. Two teachers mentioned that they had heard of problems relating to travel from other consortia or other schools within their consortia. Difficulties included the cost of travel, taxis not turning up and students arriving late. Transport did seem to be a more general concern for some centres, particularly where sharing of students was likely to increase over time. An associated difficulty mentioned by one teacher was that differences in behaviour policies between centres made it harder for him to apply sanctions for poor behaviour.

#### *Learners' views*

Those students whose Diploma learning was based in one place, apart from occasional induction days or trips, reported no problems in relation to transport. At the consortium where students move between two linked sites this was usually unproblematic but inclement weather could make it difficult to walk across the playing fields. This would mean a longer walk between centres or, if a driver was available, a minibus might be organised. At another consortium, students reported that travelling to their second place of learning for their Diploma was unproblematic due to a convenient bus service. At a further consortium, learners would soon be travelling to an additional centre for some classes requiring two bus journeys. This was a worry for some students due to cost and a lack of financial assistance.

### Deadlines, scheduling and timetabling (how deadlines fit in with other parts of the Diploma and other courses)

#### *Teachers' views*

Generally, no major problems were reported by the teachers in relation to deadlines and scheduling, although some noted that it was still early days. In most cases students were thought to be coping with the demands of work for different aspects of their Diploma and for other courses. Some teachers sensed a degree of tension for students as deadlines approached, but the Diploma was not thought to have added to the pressure and teachers tried to prevent problems by making sure there was time to complete work in lessons. Where common timetables had been agreed between centres sharing learners, this worked well. However, in some cases there were reports of a degree of tension between centres over what should take precedence. There were examples of clashes between classes and with events at the home school leading to missed lessons and learners needing to catch up. At one consortium agreeing between centres on the scheduling of functional skills tests and on who was responsible for paying for them was problematic. One teacher commented that co-ordinating classes between two centres had

been relatively easy this year, but that co-ordinating between more centres in future years would be more difficult in terms of covering linked topics in parallel.

#### *Learners' views*

Most learners reported that, so far, they had been able to meet their deadlines for completing assignments and that the deadlines set were realistic. So far, work for different strands of the Diploma and for other courses had reportedly fitted together without problems. However, some felt that it was sometimes challenging to keep on top of their workload and that dealing with their work for different subjects was sometimes hectic. Deadlines were generally viewed positively because they were felt to help them learn more (e.g. report writing skills, managing their own work) and motivated them. Some students commented that they were keen not to fall behind with work as it would be difficult to catch up. Learners reported finishing off work at lunchtimes, after school in supervised sessions, or at home. In two consortia there were some timetabling difficulties which had resulted in some missed lessons that learners had to catch up. One student commented that because their teachers did not know what to expect in the first year of the course this had led to some initial difficulties with timetabling, for example.

#### **Funding**

##### *Teachers' views*

There was concern about funding for equipment and materials to support Diploma teaching. At one school the funding for the course had arrived at the school, but had been delayed in arriving in the relevant departmental budget. Several teachers reported that funds had been available for the first year but were concerned that this might not continue.

#### **Workload**

##### *Teachers' views*

One teacher commented that the PL required "*an awful lot of work*", perhaps implying that the amount of work for the assessments was excessive in her view. This linked to a comment from another teacher at the same consortium, who felt that insufficient curriculum time had been allocated to the Diploma at her school.

#### **Policy issues and fast introduction of the Diploma**

##### *Teachers' views*

Several teachers noted issues around the newness of the qualification. One suggested that a longer pilot period would have been valuable, another that it would take time to find the best ways of delivering the course for their students and two others commented that more guidance (e.g. exemplar work, training) would have been helpful. More exemplar work and written guidance was likely to be available in the second year of delivery.

A number of comments related to policy. One teacher felt that schools and colleges had not been adequately consulted with regard to the Diploma and that policy decisions had not been guided by experience and education. Another thought that a complete change to replace GCSEs altogether with Diplomas would be easier for students to understand, and that the current situation left learners somewhat confused as to the relationship between their different courses. A teacher who was very keen on the Diplomas in her subject area was not in favour of the introduction of Diplomas in 'academic' subjects as existing qualifications fulfil these goals sufficiently. An FE teacher for Creative and

Media commented that they already ran the National Diploma at level 3 in their college, and that this meant it was not financially viable to run the new 14–19 Diploma at level 3 as well.

#### **Composite nature of the qualification**

##### *Teachers' views*

Teachers expressed concern that some students were struggling with maths functional skills which could mean failing the Diploma overall.

##### *Learners' views*

One pair of learners expressed concerns about aspects of the Diploma qualification. They were worried about what would happen if they failed one section of the assessment and whether this would mean an overall fail or whether retakes would be possible. They also expressed concerns about recognition of the Diploma by universities.

## **Discussion**

Whilst this research was small-scale, it provides further insights into practical issues in the early days of implementation of the 14–19 Diplomas. Of those consortia where students were studying for their Diploma across more than one site, there were a few difficulties noted in terms of moving between sites and timetabling clashes. This echoes such logistical issues identified in some consortia by earlier research/evaluation (Ofsted, 2009; AoC, 2009). Other consortia had planned compatible timetables across sites, organised classes into whole days spent at one site (rather than moving between sites part way through a day) and were fortunate in terms of public transport links such that these practicalities were unproblematic. Funding was also raised as a constraint. For some consortia, the funding provided in the first year had been very beneficial. For others there had been issues with the funding arriving at a centre, but taking some time to become designated to the appropriate budget to assist with resources specific to the Diploma. This is likely to be a 'teething problem' at the local level which should hopefully be avoided in future. Another concern related to the longevity of funding, with some worries that funding may not continue in the future at the current level. The AoC (2009) noted that due to initial low uptake some colleges were currently subsidising the implementation of Diploma courses, and that this would not be sustainable long term. Some difficulties in relation to functional skills were noted, specifically in relation to collaborating over timetabling and prioritisation and issues around who is responsible for examination fees.

Whilst some of the challenges experienced by some consortia may have been short-term 'teething' problems which may now have been resolved, some may be longer term issues or may become more problematic as numbers of students or collaboration between centres increases. In contrast to some of the practical difficulties sometimes experienced in early Diploma teaching and learning, other themes explored in the interviews (to be reported in full elsewhere) suggested substantial positive feeling amongst teachers and learners about the aims of the Diploma, and the nature of the learning encouraged. A wide range of subject specific and wider skills, that would be valued in work places (e.g. independent working, project management, teamwork and interpersonal skills, research, report writing), were reportedly being developed via Diploma courses. Most of the teachers were enthusiastic and most learners were motivated by the work.

## References

- AoC (2009). *AoC Diploma Survey Report – Results, analysis, conclusions and recommendations*. London: Association of Colleges. Available at: [http://www.aoc.co.uk/en/newsroom/aoc\\_news\\_releases.cfm/id/C5B28C9E-78EC-4E75-BAE3D47ECDF3BD48](http://www.aoc.co.uk/en/newsroom/aoc_news_releases.cfm/id/C5B28C9E-78EC-4E75-BAE3D47ECDF3BD48)
- DfES (2005a). *14–19 Education and Skills White Paper*. London: DfES. Available at: <http://publications.dcsf.gov.uk/eOrderingDownload/CM%206476.pdf>
- DfES (2005b). *14–19 Education and skills implementation plan*. London: DfES. Available at: <http://publications.teachernet.gov.uk/eOrderingDownload/2037-2005PDF-EN-01.pdf>
- Ertl, H., Stanley, J., Huddleston, P., Stasz, C., Laczik, A., & Hayward, G. (2009). *Reviewing diploma development: evaluation of the design of the diploma qualifications*. London: Department for Children, Schools and Families. Available at: [http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RW080%20\(Rov\).pdf](http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RW080%20(Rov).pdf)
- McCrum, E., Macfadyen, T., Fuller, C., & Kempe, A. (2009). *Vocational education and training: some perspectives from Year 11*. Paper presented at the British Educational Research Association Annual Conference, 3–6 September 2009, Manchester.
- O'Donnell, L., Lynch, S., Wade, P., Featherstone, G., Shuayh, M., Golden, S., & Haynes, G. (2009). *National evaluation of Diplomas: Preparation for 2008 delivery*. London: Department for Children, Schools and Families. Available at: <http://publications.dcsf.gov.uk/eOrderingDownload/DCSF-RW079.pdf>
- Ofsted (2009). *Implementation of 14–19 reforms, including the introduction of Diplomas*. London: Office for Standards in Education, Children's Services and Skills.
- Richardson, W. & Haynes, G. (2009). *National evaluation of diplomas – findings from the 2008 survey of Higher Education Institutions on their implementation and impact*. London: Department for Children, Schools and Families. Available at: <http://www.dcsf.gov.uk/research/data/uploadfiles/DCSF-RR145.pdf>

## EXAMINATIONS RESEARCH

# The effect of changing component grade boundaries on the assessment outcome in GCSEs and A levels

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This paper is based on one section of a report commissioned by Ofqual (the exams regulator in England) as part of its Reliability Programme. For more details on this programme, see <http://www.ofqual.gov.uk/research-and-statistics/92-articles/20-reliability>. We would like to thank Ofqual and its technical advisory group for their feedback. The opinions expressed are those of the authors. Figure 1 and its commentary were not part of the original report.

## Introduction

Investigations of assessment reliability are concerned with answering the question 'how would the assessment outcomes change if the assessment were replicated?' The answer to this question depends on what factors are held constant and what factors change on replication. For example, the examination questions could be different, or the markers (examiners) could be different – or both these could be held constant and the only change might be in the mood or level of preparation or other factors internal to the examinees. A further factor relevant to GCSE and A level assessments is that these are graded examinations, where grade boundaries are set on the raw mark scale of each of the units/components comprising the assessment. These boundaries are then aggregated in a particular way depending on the type of assessment to produce the overall grades for the assessment. It is therefore possible to consider a replication scenario where questions, markers and examinee internal factors remain the same, but the grade boundaries (and hence the grade outcomes) are different.

A variety of sources of evidence can be used to inform the decisions about where to set the grade boundaries, including:

- 'archive' scripts at the key grade boundary marks from previous sessions;
- information about the size and composition (e.g. type of school attended) of the cohort of examinees;
- teachers' forecast grades;
- the distribution of scores (mean, SD, cumulative % of examinees at each mark);
- at GCE, 'putative' grade distributions (grade distributions generated by matching examinees with their GCSE results and taking account of changes in the 'ability' of the cohort of examinees from a previous<sup>1</sup> session, as indicated by changes in the distribution of mean GCSE scores);
- experts' judgements about the quality of work evident in a small sample of scripts covering a range of consecutive marks (total scores) around where the boundary under consideration is expected to be found;
- experts' judgements about the difficulty of the question paper;
- other external evidence suggesting that the particular unit/component (or assessment as a whole) had previously been severely or leniently graded and needs to be 'brought into line' with other examination boards, or with other similar subjects or specifications within the same board.

1. Usually this is the previous session with a cohort believed to be most similar to the current session's cohort, e.g. for a June 2009 unit, the June 2008 session might be used rather than the January 2009 session.