

# Radical solutions in demanding times: alternative approaches for appropriate placing of ‘coursework components’ in GCSE examinations

## 1

### Definitions

Throughout this paper, we shall use the term ‘coursework’ to describe candidate work undertaken in the course of a learning programme, which typically has been deemed important enough to be assessed and contributes to the award of the qualification. Usually internally assessed and subject to external moderation, coursework is currently assigned an important function in ensuring that learning programmes cover key outcomes relating to skills and competences and certain elements of knowledge and understanding, all of which are deemed essential to broad-based achievement. This includes experimental techniques (science); fieldwork (geography); and creative production (art).

## 2

### The importance of coursework

Skills and abilities such as practical and field work, research, independent study, extended writing and proof-reading are an integral part of a broad-based education. They are also skills strongly demanded by higher education and employers.

So it is vital that these elements (typically associated with coursework assessment in the past) remain important outcomes of the education system.

This paper sets out a radical approach that will ensure vital elements of coursework are locked into the education system, but are not adversely affected by assessment and accountability arrangements.

## 3

### Background and context: problems of the current system

The history of coursework shows marked changes of function and form. During the 1970s, 1980s and early 1990s, ‘coursework’ could mean, in the same subject across a group of children in a class, that different things which ‘represented the best work of the pupil’ could be included – a report for one, an artefact for another etc. The driver for this was validity, not absolute comparability of outcomes and reliability in marking. Increased ‘standardisation’ of coursework and refinements in awarding body systems did attempt greater control of the measurement, through control of the tasks and the centre-level marking. 100% coursework GCSEs emerged shortly after the introduction of GCSE in 1988, and by the early 1990s ‘about two-thirds of 16 year olds were taking GCSE English through syllabuses which had no examinations – they were 100% coursework. Following a change to the (national) subject criteria, coursework was reduced to 40%’ (QCA 2006). In 2012, with coursework contributing up to 60% of the award, issues around the tolerances in coursework marking were implicated in the problematic results in English GCSE from AQA and Edexcel.

However, even before development of hyper-accountability during the late 1990s, parental support and teacher guidance and support were driving disparities between the outcomes of external assessment and internal assessment (compression of range and apparent leniency). Plagiarism and undue support (e.g. multiple reworking of work after teacher advice) became a greater concern, resulting in the State developing ‘controlled assessment’.

Evaluations by Cambridge Assessment and others<sup>1</sup> suggest that controlled assessment is cumbersome, disliked by many teachers and is loathed in some subjects (e.g. physics). What is more, the higher education sector in the UK has complained that certain key outcomes such as research skills and independent learning imputed to coursework are not actually attained by pupils taking controlled assessment, suggesting that – as a particular manifestation of coursework – it has failed to achieve many of its objectives.

In the past couple of years coursework increasingly has been associated with highly instrumental behaviours, with schools using it to optimise students' grades and to reduce peaks in assessment load by 'getting some of the assessment out of the way early'. The issues around GCSE English 2012, which resulted in a judicial review and a select committee enquiry, provide ample evidence to support this.

Moreover, statistical review of coursework shows problems in the marking of coursework – which is carried out internally, with a tendency towards bunched marks (poor differentiation of candidates), and upward-tilted marking in comparison to examination results (potential leniency).

Drivers in the current context put intolerable pressure on teachers, pulling them in very different directions. On the one hand their performance must continually improve, and on the other they must be impartial and reliable assessors. This leads to a highly-conflicted professional role regarding internal assessment. External accountability measures exert very high pressures for continual improvement and attaining grades at and above the C threshold at GCSE. Many elements such as professional recognition, status and progression are contingent on performance against targets and measures. For the majority of teachers this does not lead them to maladministration of assessment, but it does appear to drive bunching and upwards tilting of marking, and may include a strong element of 'benefit of the doubt'. At the same time, awarding bodies expect teachers to behave as consistent, fair markers, ensuring that each standards and marking practice are in line with marking schemes and national standards.

Exam boards also are conflicted. They design qualifications to national criteria, some of which lead to highly-compromised qualification structures. Indeed, the judicial review into GCSE English in 2012 – which had a 60% coursework component – cited poor design criteria, emanating from the State, as a principal contributing factor to the issues surrounding the award. Exam boards are under pressure from subject organisations and teachers to include coursework, but at the same time have to ensure dependability, something which is hugely costly (contradicting pressures to hold or reduce fee levels) and perceived as draconian and external by schools (producing tensions around locus of control).

We would assert that, in the current context of drivers and incentives in arrangements (a condition of hyper-accountability on all parties), that coursework assessment exerts unmanageable contradictions on teachers, and different but equally unmanageable contradictions on awarding bodies.

Yet the skills, understanding and knowledge associated with coursework remain desirable educationally. This paper examines alternative approaches to the conundrum around coursework assessment, and recommends a radical model (Model 4) which enhances both learning programmes and qualifications. The paper also outlines a fifth model, which holds considerable promise in securing the educational aims associated with coursework assessment, but which requires a more extended development period. This last model is

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<sup>1</sup> Ofqual (2011), *Evaluation of the introduction of controlled assessment* Ofqual SLN Geography Forum 2011

based on the provision of linked assessment and learning resources, using an approach akin to that formally used in successful innovations such as SMP maths and Nuffield sciences.

On assessment-driven education, Cambridge Assessment has argued elsewhere that a dissonance has entered educational thinking and practice in England – ‘these things are educationally highly desirable, but if they’re not in the assessment, then we won’t teach them...’. Model 4 attempts not only to deliver dependable assessment, but to erode this dysfunctional thinking.

#### **4 Current Models of Coursework**

Since the introduction of coursework in the 1970s, the state has used three ‘dimensions of control’ as a means of ensuring coursework meets the required standards and level of dependability.

- **Dimension 1 - Controlling structure of assessment**  
Tightly defined tasks etc – reduces validity; increases ability to anticipate outcomes and ‘learn to the test’; felt, by teachers, to be undue restriction. But should be seen as a dimension – from loosely structured to highly structured
- **Dimension 2 Controlling the conditions of administration**
- **Dimension 3 Use of moderation models**  
Dependence on internal processes versus external processes - this includes remote statistical moderation, sampling of work, moderation visits etc.

I am assuming that construct definition (assessment objectives), mark schemes, etc are optimum and are always of high quality. We should not use management of the dimensions above to offset low quality in these aspects of the assessment.

So, taking these dimensions, we present two principal models of coursework that have been used to this date:

##### ***Model 1***

##### ***Low control of structure, low control of administration, and variable approaches to external moderation***

This is a recipe for serious problems in conditions of high external accountability. This was present in the late 1980s and 90s as coursework increased across the system.

##### ***Model 2***

##### ***High control of structure, high control of administration, low externality (statistical moderation)***

This is the ‘controlled assessment’ model and was the system which contributed to the issues around GCSE English in 2012. Discussions across subjects and with a range of schools suggests that controlled assessment is widely disliked for both logistical and educational reasons, and provides poor insurance against malpractice.

#### **5 What is needed**

Given the problems of previous models of coursework, this section will discuss in more detail the context and how they can be addressed.

#### **Secure evidence regarding key elements of knowledge and performance – validity issues**

Far more attention needs to be paid to subject-specific research on the genuine elements of performance which are required as outcomes of the learning programme and are essential preparation for higher education. In determining necessary educational outcomes there should be no reliance on assumptions, *there should be use of evidence*. We can refer to this as ‘construct elicitation’ – a vital phase of assessment design – which involves determining with confidence the things which should be assessed and by what means.

Cambridge Assessment has had severe misgivings about certain design decisions regarding the proportion of coursework assessment, and coursework assessment objectives, which have flowed from national decisions regarding qualifications. This concern was reinforced by the judicial review surrounding GCSE English in 2012 which highlighted QCA-driven design decisions as a contributing factor in serious problems with the awards.

Greater use of secure evidence in determining the things which should be a focus of the qualification, and which of these should be assessed by what means, is an absolute priority.

From this emerges a recommendation regarding the way Cambridge exam boards develop each qualification and what we say to others (e.g. external subject experts, learned societies) regarding the quality of advice expected from them. For example: is understanding the need for accuracy in measurement highly predictive of being able to measure accurately? Research tells us that it is<sup>2 3</sup>.

Fotheringham’s work<sup>4</sup> suggests that learning to measure is easier than learning the need for accuracy, but that the latter predicts sustained professional competence in the former. You can encourage learning the need for accuracy through practical work in the course, but the assessment should best focus on whether the person *understands* the need for accuracy and the degree of accuracy in a range of settings. This can be tested in an examination. Furthermore, there are broader hard trade-offs in qualifications, such as whether understanding entropy (and assessing this) is more important than developing practical skills in experimentation (and assessing these).

We have to be far more evidence-based regarding the desired outcomes and the utility of coursework.

In securing this, important questions must be addressed:

- do we want general study and research skills – critical thinking – etc – and why?
- do we desire them for HE, for employment, for social goods, for individual goods?

In addressing the utility of coursework in respect to GCSE and GCE the question goes beyond (the undoubtedly important) ‘HE needs this’. Indeed, the HE sector needs to be clear what skills and knowledge it requires learners to have *prior* to entry onto HE courses, or whether it prefers to recruit people who are well disposed to learning these things in HE (not the same thing at all). An example of an area of HE that has been successful at this is medical education. Medical schools have looked at the respective role of selection criteria and the content of learning programmes in areas such as communication skills, professional values, and financial management.

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<sup>2</sup> Eraut M (1994) *Developing professional knowledge and competence* London: Falmer Press

<sup>3</sup> Oates T (1992) “Core skills and transfer: aiming high” *Innovations in education and training international* vol29, no.3 p227-239

<sup>4</sup> Fotheringham J (1984) Transfer of training: field investigation in Youth Training Journal of Occupational Psychological

We should place far greater emphasis on criteria regarding the evidence for the constructs to be assessed through coursework – a legitimacy test: ‘...*you say this is important...on the basis of what evidence?...*’.

### **Skills & knowledge requirements & ‘Validity’**

We need to drive much greater refinement into the discourse regarding ‘we need these skills (proposition 1) and coursework assessment is the way to deliver this (proposition 2)’. These should be treated as *two separate stages* of the argument regarding qualification design – 2 does not naturally follow from 1.

On proposition 1, HE consultations on GCE English have thrown up the need to include:

- 1 encouraging wider reading
- 2 research skills
- 3 ‘recreative’ skills
- 4 independence
- 5 proofreading skills

It is instructive to take each of these in turn and subject them to ‘alternatives to coursework’:

#### *Encouraging wider reading*

This is a desirable general good emerging from the course of study. We should not use assessment alone to drive this – although it can have a role, but not exclusively through coursework assessment. In the past, written timed examinations **were** used to encourage this. Unseen traditional papers could be asked on any aspect of a range of set books. This encouraged all books to be covered in depth. The ‘transparency and fairness’ discourse ruled this out.

We could encourage research and wide reading by designing assessments which allow pre-prepared material into the exam hall – eg lists of references, which can be used in construction of an unseen essay question. Or if not, mark schemes could be used to allocate marks to use of references. This would encourage wide reading in key texts. Model essay responses could demonstrate how wide reading can lead to outcomes which gain higher marks. Grade descriptors could emphasise this.

Awarding bodies could set comparative questions – eg compare three poems from three separate epochs.

However, we prefer wide reading to be encouraged through the **course approach and pedagogy** rather than the assessment. One route to this is an SMP or Nuffield style approach (outlined in model 5 below), where we create a ‘qualifications package’ which gives high detail in these elements, all presented as a linked whole:

- Course content
- Teaching materials and student materials
- In service training re course content
- Formative assessment instruments
- Exam content

In the past, this model promoted the idea of an integrated offer (course and assessment coherently linked) – which must be consistent with ‘expansive’ rather than ‘instrumental’ education. But developing this is slow, and expensive. It is a viable way forward, but is a long term strategy, due to the high level of both resource and co-ordination required.

#### *Research skills*

Again, breadth of mark scheme can reward those who clearly have researched an area and remember what they have researched. This can be assessed by traditional assessments in English.

### *Recreative skills*

The creative range of students is maximised where control over the form of the coursework tasks is low (see below). Creative range in outcomes tends to mean lower reliability in assessment. This is a harsh but necessary trade-off.

### *Independence*

Without high control over the way coursework is done (see below) there can be no assurance that independent work has been undertaken. Indeed, notionally - and under contexts not conditioned by hyper-accountability - this can best be assured by the teacher, since there is strong research which shows that the teacher is the best judge of the authenticity of students' work. This really is best left to the teacher and the school.

### *Writing/proofreading skills*

Consider this: a three hour exam **does** test writing skills. In the 1960s and 1970s many high quality schools simply used essays from week one of the two years of A level study as a means of refining students' writing and proofreading skills. Again, we see this more as a part of the general goods from education and part of the general duties of schools, not something which should derive from the assessment alone. Of course, **formative** assessment tasks provided by awarding bodies could be very important in encouraging this in learning programmes.

As a footnote, on innovative forms of terminal assessment, in the 1970s and 1980s, Sussex University used three and five-day 'take-away' papers which allowed greater scope for writing and proofreading. While still vulnerable to parental support etc, they led to very high quality written output. But this was outside a context of hyper-accountability.

## **Proportion of coursework**

The proportion of coursework assessment in a qualification should be determined by the following considerations.

The proportion of coursework has for the last two decades (given the 1992 Café Royale speech by John Major) been determined less by specific evidence relating to the development of specific qualifications for specific contexts, than by elevated national discussions regarding generic design criteria.

The discussions need to return to:

- **validity of content:** driven by well evidenced discussion of key constructs
- **validity of form:** allocation of constructs to assessment modes and forms
- **value:** educational benefit
- **dependability:** considerations of the potential risks and conflicts when teachers are responsible for assessment – including understanding the true drivers and incentives operating on teachers in the role of assessors
- **utility:** issues of cost and manageability

In other words, the proportion of coursework assessment (from 100pc to 0pc) is a contingent matter – which should be determined once the form of constructs and form of assessment has been determined, and is best optimised at a late stage in the qualification design process - and definitely is not some crude blanket recommendation across subjects or assumed at the start of the process, in the absence of a validity argument regarding the key

constructs/assessment objectives. But consideration of 'cultural, social, operational and political context' is vital; I have referred repeatedly to consideration of the drivers and incentives operating in education arrangements at any one time – currently in the period of hyper-accountability and weak professionalisation of the teacher role in assessment.

## **6 Looking forward: alternative models**

If Awarding Bodies adopt external moderation visits, with a facility to interview students and question them regarding the work, it is possible to open up the forms of coursework assessment, depending on subject. This interacts with the marking schemes and the external moderators' ability to make consistent judgements, but is an option. It is frighteningly expensive, and complex to organise in a manner which delivers higher levels of dependability in the assessment. Done to a level which might command very high levels of confidence, it could consist of complete re-assessment, by external assessors, of all material produced by students and assessed by their teachers. This would raise serious questions of the benefit and cost to schools.

### **Model 3**

#### ***More openness in structure; high control of administration (but with a range of scenarios for schools not just a single option); and high external moderation***

This is expensive and complex, but could give the assurance needed, and the educational licence to do interesting assessment tasks. The high control of administration may be required to ensure lack of parental plagiarism etc.

A note: In respect of this 'high levels of moderation' model, awarding bodies could offer a cheaper non-coursework option and a high-fee coursework option (external moderation visits) with (much?) higher fees. The relation between outcomes could provide additional measures in statistical moderation approaches. But this scenario would require variable national criteria in respect of coursework assessment weighting in the qualifications.

Further models which move from assessed coursework:

### **Model 4**

#### ***A programme-based approach to high quality coursework***

This is described in considerable detail, since we consider this approach to have high potential for delivering dependable assessment and development of necessary learning outcomes associated with coursework.

In the light of the analysis of the conflicting pressures on teachers and awarding bodies, the cost to schools, and complexity of ensuring that coursework can be delivered as dependable assessment contributing to grades is regarded as **unmanageable**. Not in an absolute sense, but in the current context.

As with the other possible models, this model assumes that rigorous analysis is completed, in each subject, by qualification developers working in conjunction with the subject community and accessing leading research, to determine the skills and knowledge which are best developed through activities such as practical experiment, fieldwork, creative activity etc. This would yield a list of key outcomes associated with coursework.

Within this model, the qualification specification/syllabus would provide a clear description of activities which should be included in the learning programme in order to ensure development of the list of desired outcomes. Stated alongside the description of the assessment outcomes for the examination, this would comprise the 'syllabus' for the qualification.

There would be no coursework which contributes 'marks' or assessment outcomes to the completion of the qualification.

There would be no preferred assessment approaches for coursework, although the syllabus could give indicative assessment activities and show their relationship to the desired outcomes associated with the coursework activities.

The following processes would be linked to high quality coursework/practical activity in order to ensure that it is a part of learning programmes – all elements below could be included in this model:

**Element 1 – assessment, in the examination, of knowledge linked to coursework**

Knowledge elements capable of being assessed through examination and linked to effective performance in the practical activity would be included as questions in the examination. For example, this would include experimental hazards, fieldwork observation protocols, etc. The syllabus would make clear that these knowledge elements would best be learned through practical elements ('grounded theory' – things are more effectively recalled and understood when they have been learned in authentic contexts). The specific assessment objectives, their weighting etc, would be clearly described in the qualification specification; the form of the preferred/ recommended practical activities would be included alongside.

**Element 2 – assurance of practical/coursework activity by the exam board**

Teachers would be required to keep a 'coursework log/diary' which would detail the activities completed by pupils, and would indicate how the desired outcomes were focused upon in teaching and learning. This would require counter-signing by the head of the school/college.

All centres would be subject to a visit to ensure first and continuing approval as a centre with adequate resource to run the qualification. The examination board staff would check the log/diary as part of centre approval and monitoring processes.

Any breach or misrepresentation in the documentation or allied processes would be treated as malpractice. The procedures for compliance and treatment of malpractice would be included in JCQ requirements.

**Element 3 – assurance of practical/coursework activity by Ofsted**

Ofsted subject-based inspection would check the provision of adequate and high quality coursework activities and use the 'coursework log/diary' as part of inspection evidence.

The advantages of this model include:



- removal of deleterious pressure on teachers regarding their role as assessors
- parental involvement in coursework is no longer 'cheating' to boost exam grades, but part of supportive learning of desired outcomes
- allowing variation in precise form of coursework, removing the problems of over-constraint associated with 'controlled assessment' - this opens up control and innovation for schools
- putting in place a 'higher trust' relation between awarding bodies and schools, where the awarding bodies respect schools' ability to put in place high quality learning; awarding bodies are not faced with their own 'impossible task' of policing coursework to ensure trustworthy coursework assessment
- securing the objective of ensuring that coursework is included in the learning programme, that desirable outcomes are focused upon, but that the qualification award is based on dependable assessment
- removing the upwards pressure on exam fees which is present in alternative models which seek to guarantee the dependability of coursework assessment

### **Model 5**

#### **A 'qualifications package' model**

For this we need an SMP or Nuffield style approach where we create a 'qualifications package' which gives high detail in these elements, all presented as a linked whole:

Course content

Teaching materials and student materials

In service training re course content

Formative assessment instruments

Exam content

'Desired skills' and related outcomes are developed through the learning programme. It relies on professional development and highly refined learning materials. Marks in coursework would not contribute to grades in the examination. This model promotes the idea of an integrated offer which must be consistent with 'expansive' rather than 'instrumental' education. But developing this is slow, and expensive. It is a viable way forward, but is a long term strategy, due to the high level of both resource and co-ordination required.

## **7**

### **Conclusion**

Although radical, our proposals seek to secure the highly desirable outcomes of education which traditionally have been associated with coursework assessment, but within a model fit for purpose and fit for the time. Although moving away from formally recognised coursework assessment, it seeks to both reinforce the quality and dependability of public examinations as well as enhance the quality of education. Radical solutions in demanding times.

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July 2013

Note

Teachers' detection of plagiarism

<http://www.tes.co.uk/article.aspx?storycode=2054581>

<http://www.osstf.on.ca/adx/asp/adxGetMedia.aspx?DocID=dd052ff6-447a-49b1-a86f-5aeb921e864a&MediaID=81f783c5-a8a3-4f71-b5a5-aa693df87c36&Filename=growing-success-policy-workgroup-report.pdf&l=English>