



Qualifications and
Curriculum Authority

A review of GCE and GCSE coursework arrangements

2005

Contents

Foreword by Ken Boston, Chief Executive, QCA	3
Executive summary	5
1. Introduction	6
2. The evidence base of the review	9
3. The value of coursework	10
4. Coursework assignments	12
5. The issues affecting coursework assessment	13
6. The issues affecting confidence in marking and moderating coursework	18
Recommendations	22
Response to the recommendations	23
Appendices	27

Foreword

By Ken Boston, Chief Executive, QCA

With the agreement of the regulatory authorities for England, Wales and Northern Ireland, QCA has carried out a review of GCE and GCSE coursework as part of its regulatory programme. This was a routine review designed, as are all regulatory reviews, to monitor and report on the quality of the particular aspects of the national assessment system and to make such improvements as might be necessary. It is through such vigilance that standards are maintained.

The specific aim of the review was to consider the role of coursework in current GCSE and GCE specifications, to canvass opinions on the effectiveness of coursework in teaching, learning and assessment, to examine issues relating to the authentication, marking and moderation of coursework and to ensure that appropriate risk-management procedures are in place to minimise the potential for malpractice.

Views were gathered from candidates, teachers, parents, senior examiners and moderators, awarding body staff and the staff of regulatory authorities. There is clear but not universal agreement among teachers, examiners and candidates about the value of coursework in teaching and learning, and in assessing skills and knowledge that cannot be assessed by written examination papers. Coursework is also an important motivator for many candidates in many subjects, giving them a rich opportunity to study an area in depth and to take responsibility for their own learning.

The review's findings confirm the value of coursework in many subjects. However, the report recommends that the assessment arrangements – including the role of coursework – for all qualifications should be kept under regular review. It also notes concerns raised by teachers about coursework in mathematics. The regulatory authorities will take full account of these concerns in their current development work on future mathematics specifications. The report also identifies some concerns about coursework, mainly about ensuring that work submitted for qualifications is the candidate's own work. Issues raised include uncertainty among parents and teachers about the kinds of help allowed, lack of consistency in the awarding bodies' rules regarding the ways in which teachers may help candidates in different subjects, and suggestions that in a very small proportion of cases there is deliberate malpractice. The availability of the internet is a powerful aid to learning but carries a new generation of risks of plagiarism.

The report's recommendations are set out in full on pages 22–26. The regulatory authorities are fully committed to the further regulatory actions recommended. In particular, we shall require awarding bodies to have common and agreed approaches to all aspects of handling coursework, across specifications and awarding bodies and across England, Wales and Northern Ireland. We shall also use our powers to require special reports from awarding bodies on action taken in 2006 to detect suspected malpractice in coursework, and on the sanctions applied.

In response to this report QCA has:

- established a task force to be chaired by Mrs Sue Kirkham, a member of the QCA Board and an experienced headteacher, to report in February 2006 on the strengthening of arrangements for authenticating coursework for the summer 2006 examination series
- invited Professor Jean Underwood of Nottingham Trent University to advise QCA as regulator on the technical aspects of detecting internet plagiarism, and to help develop a detection strategy across awarding bodies and centres

- committed to produce guidance for parents and candidates on the scope for legitimate family support for coursework, on the nature of plagiarism and collusion and on the consequences of malpractice.

Coursework has clear educational benefits, but carries some risk. This report enables the regulatory authorities to take further action to manage the risk, obtain greater clarity for teachers and parents, and ensure that any malpractice is detected and penalised.

Executive summary

This report contains the findings of a review carried out by QCA on behalf of the three regulatory authorities in England, Wales and Northern Ireland. Its main aim was to consider the role of coursework in current GCSE and GCE specifications and how coursework was perceived by those involved. The work did not, therefore, focus on future changes to GCE and GCSE coursework that might be introduced as e-assessment develops. Nevertheless, most of the assessment principles considered here will also apply in an e-assessment future.

The views of a wide spectrum of stakeholders including candidates, teachers, parents, senior examiners and moderators, awarding body staff and regulatory staff have helped to shape this report. There is a general consensus about the positive values coursework brings to teaching, learning and assessment. Coursework is invaluable for assessing the skills and knowledge that cannot be assessed by written examination papers. Coursework is also a powerful motivator for many candidates in many subjects, giving them a chance to study an area in greater depth and take more responsibility for their own learning.

The benefits of coursework generally outweigh any drawbacks. Nevertheless, the review has led to proposals for strengthening present arrangements. The main areas warranting improvement are summarised below.

1. Teachers must be confidently and consistently able to confirm that work they mark is the candidate's own. Further guidance on redrafting work, setting coursework tasks and using technology to detect internet plagiarism is required.
2. Teachers and parents offer a great variety of help and advice to candidates because of limited guidance detailing what is permitted. Clear guidelines explaining the limits of permitted help and advice would alleviate much of this problem.
3. Teachers and centres have limited knowledge and understanding of what constitutes malpractice. Giving a higher profile to malpractice and the penalties it incurs would go some way to deterring both deliberate and inadvertent malpractice.
4. Standardisation of marks within a centre is required and there is much good and often very thorough practice taking place. However, internal standardisation is not apparent or consistent across all centres. Awarding bodies need to carry out further checks and provide better guidance.
5. The purpose and format of feedback from moderators to centres needs clarification.
6. Although coursework is widely valued there is disquiet in some subject communities about aspects of it. A subject-by-subject evaluation of the weighting and value of coursework assessment should permit better-designed coursework in future specifications.

1. Introduction

- 1.1 Coursework is defined as any type of assessment of candidate performance made by the centre (that is, the school or college) in accordance with the specification (or syllabus) of the course of study that contributes to the final grade awarded for a GCE or GCSE qualification. Coursework is a component of 65 per cent of GCE qualifications and 90 per cent of GCSE qualifications as either a mandatory or an optional component of assessment. It has been a feature of most general qualifications since the introduction of GCSEs in 1988.

Coursework activities can include:

- written work and extended essays
 - project work and investigations
 - practical experiments
 - production of works of art or other items
 - production of individual or group performance work
 - oral work
 - statistical and numerical tasks.
- 1.2 Some coursework is done out of school hours; some is done under supervision in school. Teachers mark it according to assessment criteria laid down by the awarding body. Teachers and candidates are required to confirm that the coursework is the work of the candidate. Marks given by teachers are moderated by the awarding body across centres, and thus may be changed.
- 1.3 This review has been undertaken to determine whether coursework is operating effectively as an assessment instrument, to identify any changes that might need to be made, and to put those changes into effect. An evaluation has been made of:
- the appropriateness of coursework as an individual component of subjects and specifications
 - the appropriateness of the weighting given to coursework in the context of the whole scheme of assessment
 - the skills that are assessed through coursework
 - the operational methods used to assess coursework
 - the procedures and processes used to quality assure the assessment of coursework.
- 1.4 The review was undertaken by the Quality Assurance Division in QCA in collaboration with the regulatory authorities in Wales and Northern Ireland. The regulatory authorities are jointly responsible for the code of practice that sets out the rules and regulations governing the assessment of general qualifications, including coursework. The code is updated annually.

- 1.5 The weighting given to coursework varies between subjects and specifications. The table below shows the weighting given to coursework, and the nature of the coursework task, in the largest entry specification for the top ten most popular subjects. The figures for GCSE relate to the full course examination; for GCE they relate to the full A level (AS+A2) examination. An asterisk indicates that a written or practical examined option can be taken as an alternative to coursework.

GCSE

Subject	Coursework weighting	Coursework task
Science (double award)	20%	Assessment of investigative skills based on scientific enquiry. Candidates' performance in four skill areas is assessed through a variety of teacher-set activities based on candidates' collection of evidence, including observations, measurements or other data.
Mathematics	20%	Two pieces of work including a handling data project and a using and applying mathematics task. Some coursework must be conducted in the classroom under direct supervision and evidence of candidates' ability to respond orally to mathematics is collected.
English	40%	Three assessed speaking and listening activities consisting of individual extended contribution, group interaction and a drama-focused activity, plus responses to reading and writing comprising Shakespeare, prose study, media and original writing. The teacher conducts the assessment of speaking and listening in the classroom.
English literature	30%	Each candidate's submission must contain a response to each of the three categories of literature: pre-1914 drama, pre-1914 prose and post-1914 drama.
Design and technology	60%	Single integrated project consisting of a 3D product and a concise design folder.
French	25%*	Three assignments, selected from a bank of assignments in the specification and written in the target language, totalling 4–500 words. At least one assignment must be conducted under controlled conditions.
History	25%*	Two written assignments totalling 2,500–3,000 words. Expectation that coursework is a taught element of the course.
Geography	25%	2,500-word coursework folder based on fieldwork that includes first-hand data collection. The teacher is expected to provide advice on the topic of investigation.
Art and design	60%	Two, three or four units of coursework. A coursework option should include preparatory work, sketchbooks, logs or journals related to the final pieces and the chosen areas of study. Expectation that coursework is undertaken in normal conditions of study, which includes work done in class.
Religious studies	20%	Two assignments of 1,000–1,500 words on a clearly stated topic on any aspect of the subject content of the options chosen of the basis of the written papers.

GCE A level

Subject	Coursework weighting	Coursework task
English literature	0–30%*	For AS, candidates submit one essay of approximately 2,000 words on one Shakespeare text. For A2, candidates submit one essay of approximately 2,500 words that compares two texts (at least one of which is prose).
General studies	0–16.7%*	For AS, one assignment of approximately 1,500 words on society, politics and the economy, assessing candidates' ability to analyse a group of sources.
Biology	0–20%*	Candidates' experimental and investigative skills are assessed during the course using suitable practical activities based on laboratory fieldwork.
Mathematics	0%	No coursework.
Psychology	15%	A project brief and 2,000-word report on one psychological investigation.
History	0–30%*	For AS, a submission of 1,750–3,000 words in which candidates explore the significance of key individuals and/or events in depth and respond to source material. For A2, an assignment of 2,000–3,250 words which includes the examination of source materials and the analysis of the process of change over a period of at least 100 years.
Art and design	60%	Candidates are required to submit a number of final pieces accompanied by preliminary/supporting studies. At A2 they also have the option to submit either a written study of approximately 3,000 words, or written work of approximately 1,000 words in support of their practical work
Chemistry	0–12.5%*	Assessment of candidates' performance in four skill areas based on assessments carried out during the course, reflecting and emphasising the scientific approach to the study of the subject content.
Geography	24.2%	For AS, a fieldwork investigation of a site or small-scale area. Candidates develop a 2,500-word research action plan on an issue or question arising from the fieldwork, and are assessed on their ability to collect, represent and analyse data using a range of techniques, evaluate their findings and draw conclusions. For A2, candidates submit a report of 1,500 words from a list of titles published by the awarding body each year.
Business studies	15%*	Project of approximately 3,000 words involving primary research, whether within a specific organisation or via a survey of consumers or retailers.

2. The evidence base of the review

- 2.1 A variety of primary sources of evidence was used for this review. The evidence base was selected from the range of GCE and GCSE subjects under regulatory scrutiny by QCA in 2003 and 2004. Fourteen subjects¹ were selected initially for research in 2003; the range of subjects was reduced to nine² in 2004.
- 2.2 The evidence base comprised the following.
- Findings from postal questionnaires sent to centres offering GCE and GCSE courses with coursework elements. This was a stratified sample of 265 centres in England, Wales and Northern Ireland. Questionnaires were sent to teachers of fourteen subjects at both GCE and GCSE level. There were approximately 1,700 responses from teachers, representing 75 per cent of the potential initial sample of teachers. Comments on qualifications across the range of awarding bodies were also received.
 - Follow-up interviews with 47 teachers from across 16 centres that offered the nine subjects selected for subsequent review work.
 - A total of 460 interviews with candidates from nine different centres.
 - Telephone interviews conducted by MORI with 400 parents of GCSE candidates about their contribution to homework and in particular to coursework.
 - Statistical research, including analysis of mark adjustments, marking to tolerance, marking to grade boundaries and comparison of candidates' performances between examined and coursework routes.
 - Significant regulatory report findings, script-review activity evidence and previous coursework reports.
- 2.3 Additionally, a conference on coursework was held to elicit the views of awarding body staff and senior moderating personnel responsible for the quality assurance of coursework and for dealing with malpractice.
- 2.4 Appendices 2 to 6 present the information gathered from the centres responding to the postal questionnaire.

¹ English, mathematics, French, German, Spanish, science, biology, chemistry, physics, history, geography, art and art and design, media studies, design and technology

² English, mathematics, history, French, geography, psychology, design and technology, religious studies, biology

3. The value of coursework

- 3.1 In many subjects coursework is the most valid and reliable way of assessing performance against certain aspects of the specification. For example, practical creativity can be assessed in subjects such as design, design and technology, drama, art, extended writing in English, practical experiments in science, and research skills in subjects such as history, geography and psychology. Coursework gives candidates the capacity to demonstrate their ability to work at their own pace and to take responsibility for their own learning. It also gives candidates an opportunity to study a topic in depth, often transferring skills from one subject to another. Teachers are able to set tasks to suit the level and interest of individual candidates.
- 3.2 Teachers, candidates, parents and principal moderators for GCE and GCSE qualifications were asked to define the extent to which they valued coursework as both a tool for learning and a method of assessment. Moderators are those who confirm or otherwise, on the basis of sampling, the reliability of teacher assessment of coursework.
- Over 95 per cent of **English** teachers, moderators and candidates confirmed the value of coursework. They believed it stimulated discussion and imagination, as well as developing oral and written skills. Record keeping for GCSE English speaking and listening tasks was cited as being onerous for teachers, but this did not detract from the formative as well as summative value of coursework.
 - Almost 100 per cent of **history** teachers surveyed felt that coursework was an important integral part of the course. Teachers said that coursework allowed time to build candidates' confidence and guide thought processes, giving time to discuss issues and follow events through.
 - **Psychology, geography and design and technology** teachers, candidates and moderators stated that their courses would be incomplete without coursework tasks and that the skills learnt through coursework were not developed in other parts of the course. The value placed on coursework was extremely high. Psychology teachers believed that the skills acquired during coursework units were beneficial for candidates going on to higher education.
 - In contrast, 66 per cent of **mathematics** teachers indicated that coursework was sometimes problematic. GCSE mathematics teachers were concerned about authenticating candidates' work when formulae and answers were so readily available on the internet and because older siblings or parents could readily complete coursework tasks for candidates. The open-ended nature of the data-handling exercise at GCSE left some candidates frustrated: there was no sense of completion since the exercise lent itself to continual development. The significant written element in this exercise was felt to disadvantage the candidates who were good at mathematics but poor at written English. The investigational project for mathematics coursework did, however, elicit some favourable comments from teachers and candidates alike.
 - Teachers for both GCE and GCSE **science**³ referred to coursework as 'jumping through hoops' in order to maximise marks, and regarded coursework as a poor educational tool. Teachers and moderators stated that since the introduction of coursework there had been a narrowing of the curriculum, with teachers using only

³ Biology, chemistry and physics

a small range of investigations or practical experiments in order to satisfy the qualification requirements.

- GCSE **religious studies** teachers supported the principle of coursework, but felt that the coursework assignments for some specifications were too prescriptive – they were poor learning tools and a poor discriminator of performance.
- Teachers of **French** thought coursework gave a fair reflection of candidate attainment, particularly for middle- and lower-ability candidates.
- **Candidates** valued the coursework in subjects they enjoyed. It was said to help them with planning and IT skills, and increased their knowledge of the subject. However, the repetition of tasks was a tedious aspect of coursework for students, particularly in subjects they disliked. Of candidates canvassed, 50 per cent said that coursework became stressful at certain times of the year with the bunching of coursework deadlines.
- Seventy-three per cent of **parents** interviewed by MORI stated that they thought the amount of coursework undertaken by candidates was 'about right'.

4. Coursework assignments

Task setting

- 4.1 The setting of appropriate coursework assignments is essential for achieving successful outcomes. Assignments must be designed so that candidates have the opportunity to fulfil all assessment criteria. Assignments must differentiate between candidates on the basis of attainment, allowing less able candidates to access the assessment objectives without capping the more able candidates. The code of practice states that 'the awarding body must set down parameters and guidance for task setting. The parameters must define the scale and nature of the tasks.'

Specifications

- 4.2 Teachers were of the view that the majority of GCSE specifications are very clear in setting out the criteria and parameters of coursework tasks. This facilitates the planning of assignments and provides a good structure for learning. Three-quarters of teachers surveyed stated that they were confident in interpreting the specification and teacher guidelines. Many GCSE specifications state minimum requirements for coursework assignments, such as the number of pieces of work and the length of the work; this is regarded by teachers as better than stating maximum limits, which cannot be enforced.
- 4.3 GCE specifications received a more mixed response. Some teachers believed that coursework guidelines were sometimes difficult to interpret, and noted that attendance at centre-assessor guidance and training sessions was often necessary to gain further information about the interpretation of coursework requirements. Two-thirds of teachers appreciated the flexibility of some assignment guidelines, but thought there was a lack of consistency by teachers in the application of the assessment criteria. Problems occurred in specifications where both the assignment guidelines and the marking criteria were open to interpretation.

Coursework advisers

- 4.4 Two awarding bodies have systems in place enabling coursework advisers to be available to provide advice to teachers on some specifications. Coursework advisers are generally practising moderators at other centres. The amount and type of advice sought by teachers varied considerably, but virtually all teachers appreciated the service even if they did not personally use it. However, there was concern among a quarter of teaching staff interviewed that advice and approval on task setting was not consistent between advisers, particularly from one year to the next. The problem was compounded if the task was deemed unfit at moderation stage, even though the same task the previous year had been acceptable. This lack of consistency eroded teachers' confidence in the coursework advisory system.

Task completion

- 4.5 The timing of coursework completion varied from centre to centre with some candidates completing their coursework in the first year of the course, other centres having coursework interspersed throughout the course, and the rest completing coursework towards the end of the course. There are no rules or advice governing when coursework should be completed within the course: for some candidates coursework will therefore be a reflection of final attainment, whereas for other candidates it is a reflection of partial attainment.

5. The issues affecting coursework assessment

- 5.1 The supervision and authentication of candidate work is the key to the integrity and reliability of coursework assessment within general qualifications. The code of practice states that:

the awarding body must specify the conditions under which internally assessed work can be undertaken. The awarding body must require that sufficient work takes place under direct supervision to allow the internal assessors to authenticate each candidate's work with confidence.

- 5.2 The conditions under which coursework should be conducted are defined in detail not in the specifications but in advice and guidance from the awarding body. These cannot be specific to the point of being mandatory. Each centre must finally determine the conditions under which coursework is undertaken, within the framework of the advice and guidance.

Help and advice from teachers

- 5.3 The code of practice includes some description of the kinds of help and advice to candidates that are permitted. The code requires teachers to 'record full details of the nature of all assistance given to individual candidates that is beyond that of the teaching group as a whole.'
- 5.4 However, the rules given in specifications or teachers' guides on teacher advice, redrafting and interim marking are limited and open to interpretation. Most teachers in the sample treated coursework as a method of formative assessment until the deadline date was reached, whereupon the same piece of work was regarded as an item for summative assessment. This is perfectly understandable, but demonstrates the need for awarding bodies to give much clearer direction on the nature of activities permitted during the developmental phase, and to be more specific about the transition from development to final assessment.
- 5.5 The amount and type of help given to candidates varied between teachers and subjects. Writing frames, templates and checklists – given to teaching groups as a whole – were cited as common teaching strategies for coursework. This approach sometimes led to 'coursework cloning', with candidates fulfilling the minimum requirements and displaying little original work.
- 5.6 At the coursework conference (see 2.3 above) some awarding body staff regarded the use of writing frames and templates as malpractice, and noted that some centres had been warned about over-coaching. This must also be a source of confusion for teachers. There is a need for clarity and consistency about the nature and permitted use of writing frames and templates, with examples of good practice and malpractice in the use of such aids.
- 5.7 Teachers reported use of a variety of different coursework teaching methods in addition to whole-group teaching, including:
- one-to-one individual tutorials either organised on a regular or an ad hoc basis
 - after-school coursework clinics for interested candidates
 - the provision of comments on coursework (either verbally or with notes) to help the candidate redraft work (which they may do more than once). However, it was noted that redrafting was not allowed in some centres, with the first submitted coursework being taken as the final version. Redrafting and marking rules are very specific in some specifications, for example OCR and Edexcel GCE history, but these are the exception rather than the rule.

- 5.8 Candidate coursework record sheets have to be signed by both the teacher and the candidate. They include a section in which details of all individual help, beyond that given to the group as a whole, should be documented. This has been understood by some teachers to mean that if individual tutorials were offered to the whole group, then they did not need to mention this help, even if only half of the cohort took advantage of the offer. Teachers stated that this is a grey area and that (understandably) they gave their candidates 'as much help as conscience permitted' in the absence of tighter controls. The majority of teachers also stated that they would welcome clearer rubrics, specifying the conditions under which coursework should be undertaken.
- 5.9 Assistance given to individual candidates was recorded by only 15 per cent of teachers surveyed. These were almost exclusively teachers of art and design, media studies, and design and technology.
- 5.10 There is a considerable burden on teachers and candidates resulting from the desire to redraft or rework coursework assignments in order to improve the quality of the product before final assessment. Many teachers mark the same assignments or parts of assignments several times, at both GCE and GCSE level. The same is true for the candidates redrafting their work, at GCSE level in as many as 10 subjects.

Help and advice from parents

- 5.11 Candidates can and do obtain help from parents, guardians, siblings and friends, as well as from teachers. Parents are of course encouraged to engage fully with their children's education, including coursework: discussing the topic, reading and commenting on the drafts, the art-work or the portfolio, suggesting possible sources of data and information, advising that the piece be put through a spelling and grammar check or arguing about whether the evidence supports the conclusion. In most situations that help is benign, reasonable and proper. The review obtained information from parents about the kinds of help that they provided. This information will inform judgements on precisely where to draw the line between help and encouragement and doing all or part of candidates' coursework for them. The latter is clearly malpractice.
- 5.12 MORI carried out a telephone survey of a random stratified sample of 400 parents of 14- to 16-year-olds. Of the parents questioned, 63 per cent had helped their children with GCSE coursework in some way, most of them with only a small proportion of a single piece of work: 50 per cent had given occasional advice, 39 per cent had helped find articles, websites or other sources of information, 37 per cent had checked spelling or grammar, and 26 per cent had supervised the work being done but had not given any specific advice. GCSE mathematics was the subject in which most parental help was given, according to both candidates and parents.
- 5.13 Of the 400 parents, 84 also had children studying A levels. Only 37 per cent of them had helped their children with A level coursework in some way: 33 per cent by giving occasional advice, 14 per cent by helping find sources of information, 16 per cent by checking spelling or grammar, and 20 per cent by supervising the work but not giving specific advice. At A level, business studies was the subject which commanded most parental help. Other subjects with which some parents regularly gave help included English, history and geography. However, the survey also showed that five per cent of GCSE parents and one per cent of GCE parents actually drafted some of their children's coursework.
- 5.14 Some of the help given is undoubtedly due to uncertainty about the boundaries of parental responsibilities, and ignorance of the fact that the candidate could be disqualified from the qualification as a result of inappropriate parental involvement. A few schools had tried to inform

parents about their proper involvement in coursework by writing to parents and spelling out the rules of coursework for public examinations. However, the penalties for breaking such rules were not highlighted.

Authentication

- 5.15 The code of practice states that 'the awarding body must require internal assessors to confirm that they have taken steps to satisfy themselves that work produced is solely that of the candidate concerned.' Authentication was an issue for most teaching staff, particularly mathematics staff.
- 5.16 Much coursework in the majority of subjects is undertaken as homework completed outside the classroom. Teachers of subjects in which over half the coursework was completed under direct supervision had much less difficulty in authenticating work. Teachers who were engaged in ongoing dialogue and redrafting work with their candidates said that such involvement made authentication easier.
- 5.17 Teachers reported various strategies for ensuring that coursework submitted was the candidate's own work. These included:
- requiring a *viva voce* to check candidates' knowledge and understanding
 - changing the focus of homework from writing up at home to writing up in class and researching at home
 - setting an additional essay with a different title if the teacher was unhappy about authenticating the original essay
 - viewing early drafts and assessing the progress.
- 5.18 Teachers did not feel that they had sufficient support from awarding bodies if they suspected cheating, or adequate advice on how to check the authenticity of assignments. Consequently, authentication sometimes became a tokenistic process, lacking the intended rigour.
- 5.19 Participants at the coursework conference suggested that changing the focus of assessment from the final outcome to validation of the process might facilitate authentication. Assessment might become pass/fail, thus taking away the pressure to maximise marks through redrafting. There was also a suggestion that tasks might be formally assessed in stages in order to help teachers authenticate candidate work.

Plagiarism and internet abuse

- 5.20 Plagiarism is the submission of another's work as one's own, and failure to acknowledge the source correctly. It sometimes occurs innocently and by default, when candidates are unaware of the need to reference or acknowledge their sources. The awarding bodies penalise plagiarism, once detected.
- 5.21 The internet was available in the homes of 93 per cent of candidates interviewed in the course of this review. It has significantly expanded and enriched the resources available for coursework preparation, and poses no threat to coursework providing internal assessors are able to authenticate candidates' work. However, the internet has increased the potential for plagiarism.
- 5.22 Coursework assignments are available on the internet at any level and in any subject. Some of it is freely accessible, while much can be custom made and is available for sale. There are at least

ten popular websites producing coursework from GCSE to degree level. With so much work being completed outside school, the use of such sites cannot be controlled.

- 5.23 In interview, many candidates confirmed their awareness of websites offering coursework, and some admitted trying to download coursework. Candidates were less willing to confirm that they had submitted downloaded material as their own work for final marking. Some candidates admitted using the coursework of friends or siblings as their own.
- 5.24 Teachers reported that internet plagiarism was easier to spot than collusion between candidates. This is especially so among less able candidates because the quality is out of character with the rest of their work; it is more difficult to identify plagiarised work submitted by more able candidates.
- 5.25 Higher education institutions are now routinely using detection software such as Turnitin, Findsame, Copyscatch, Wordcheck and Eve2. This technology detects both internet plagiarism and collusion. At least one awarding body has also used software for checking accusations of plagiarism. However, such technology was not yet in use in the centres interviewed.

Collusion

- 5.26 Collusion between candidates is sometimes inadvertent rather than deliberate. Coursework projects are often set up collectively by the teacher, and team work is encouraged. It is therefore not surprising that friends continue working together on projects. Over half the candidates interviewed said that they worked on coursework with their friends and that they helped one another.
- 5.27 The coursework conference concluded that the setting of individual tasks was the cornerstone to alleviating the problem of collusion. Creating personalised coursework tasks for the individual, making the outcomes of those tasks specifically measurable, and assessing the work in stages could together lessen the problem of collusion. However, delegates recognised that individualising coursework tasks is not practical in all subjects.
- 5.28 Known cases of plagiarism are not as prevalent as collusion, with one case of plagiarism being detected for every three cases of collusion.

Malpractice

- 5.29 The code of practice states that 'the awarding body must have procedures in place for dealing with malpractice on the part of candidates, centre staff or others involved in providing a qualification.' There were 3,500 cases of alleged malpractice investigated by awarding bodies in 2004, but not all of the malpractice involved coursework. The incidence of coursework malpractice cases is small in comparison to the candidate entry. Malpractice identified before marks for coursework are submitted to the awarding body is a matter of internal discipline within the centre, and not by the awarding body. The most common malpractice offences in relation to coursework are collusion, plagiarism and over-coaching by teachers. The penalties available to awarding bodies for instances of malpractice in centres include warning to the centre, a warning to the candidate, and exclusion of the candidate from the component of the qualification, from the qualification as a whole or from any qualification offered by the awarding body for a specified period of time.
- 5.30 The awarding bodies have malpractice committees to investigate allegations and determine penalties. These are comprised of appropriate professionals with no vested interests in the qualifications or the awarding body. The awarding bodies also have malpractice appeals panels

made up of independent personnel to hear appeals about decisions made by malpractice committees.

Marking to tolerance

- 5.31 Custom and practice has determined a six per cent marking tolerance for coursework. This means, for example, that for a component with 100 marks, a centre's marks are accepted (for the sampled candidates) if they are all no more than six marks different from the moderator's marks.
- 5.32 Data from specifications with large numbers of candidates was analysed to look at the distribution of the difference between centre and moderator marks. Close inspection of the findings reveals no evidence to suggest that centres were marking to the upper limit of tolerance. In most components there was a tendency for the mean mark from the centre to be slightly higher than the mean mark from the moderator; most centres with marks within tolerance were marking to within one mark of the moderator.

Grade creep

- 5.33 Grade creep in coursework could manifest itself through changes in coursework boundaries over time, changes in differential between coursework and qualification grade distributions, or changes in the relationship between written components and coursework in both boundary values and grade distributions.
- 5.34 Data from all the awarding bodies for four different examination series were studied to investigate the existence and extent of grade creep. The conclusions were that there was no clear evidence of consistent grade creep. Where changes in coursework boundary marks or grade distributions occurred, there was no consistent pattern across subjects or across awarding bodies.

Marking to grade boundaries

- 5.35 It has been thought that centres might be reluctant to give coursework marks that are just below a notional grade boundary. For example, if 36 is the mark where candidates obtain a grade C, there might be few marks on 35 and many marks on 36. Grade boundaries from previous series are sometimes published in chief examiner reports and, in certain subjects, notional grade boundaries are shown in specifications.
- 5.36 Two awarding bodies analysed the mark distributions (in relation to the grade boundaries) for selected GCSE, GCE, VCE and GNVQ qualifications, highlighting the mark distributions across the coursework marking. There was little evidence to suggest that teachers marked to the grade boundaries, except in GCSE English and art and design. Anecdotally, it seems that some centres were conscious of the grade boundaries and took them into account when marking, while others paid no attention to them.

6. The issues affecting confidence in marking and moderating coursework

Candidate performance and outcomes

- 6.1 The code of practice states that 'statistical information must be used, where applicable, in order to inform the awarding body's final judgements on marks awarded.' Awarding bodies use a variety of data at awarding meetings. They were asked to submit a variety of coursework data for analysis, which suggested evidence that less able candidates underperformed at coursework when compared to their performance in the examined components
- 6.2 Statistics for GCSE mathematics from several awarding bodies showed higher mean marks for coursework components than for examined components for higher-tier and intermediate-tier candidates. Foundation-tier candidates' coursework had a lower mean mark than the examined components. GCSE short-course subjects also replicated the same pattern, with coursework having a lower mean mark than examined components for foundation-tier candidates. It would appear that foundation candidates find it difficult to sustain independent project work, and find external testing more manageable. Teachers also reported that much foundation-tier candidate work was completed in school under direct supervision.

Centre guidance and training

- 6.3 The code of practice states that:

the awarding body must provide clear and comprehensive instructions and guidance to internal assessors. The awarding body must provide training for internal assessors and teachers in task-setting, marking and internal standardisation...and will monitor the effectiveness of the training provided.

Teachers responded very positively to the awarding body centre-assessor guidance and training (CAGT) sessions, and commented on the careful selection of materials used for exemplifying standards. They reported that CAGT meetings were very well run, and focused on the assessment criteria and candidate performance within the mark bands. Teachers said that they felt confident in interpreting and applying the marking criteria.

- 6.4 However, teachers also commented that exemplar material was often only available to centres that attended CAGT meetings, and worried that subtle changes and nuances in task setting and marking discussed at such meetings did not filter down to those teachers who did not attend.
- 6.5 It was also noted that many CAGT meetings were held too late after the start of the course. Teachers would appreciate training much earlier in the course, particularly for new centres and teachers.
- 6.6 At the coursework conference, senior moderators felt that there was a need to train teachers in coursework task setting. It was suggested that setting tasks that were formally assessed in stages might go some way in helping to authenticate candidates' work.

Moderation adjustment

- 6.7 One-quarter of the postal respondents indicated that they had had their coursework marks adjusted during the past two examination series. Of these, the marks of one-third were increased and the marks of two-thirds decreased, with the majority of the adjusted centres having only a portion of their mark range adjusted. Many teachers felt that the coursework

marking criteria are applied differently by teachers, moderators and awarding bodies. However, some subjects were much more consistent in coursework marking than others.

- 6.8 In this sample, art and design had the highest number of adjustments, closely followed by design and technology, modern foreign languages and biology. English and mathematics had the fewest marks adjusted. Adjustments were not evenly distributed among awarding bodies: some had a much greater variation of adjustments than others across a range of subjects. Further analysis would be necessary to determine why some subjects and some awarding bodies require less moderator adjustment than others.
- 6.9 Teachers from some centres that had had marks adjusted were unhappy with the scaling process used by some awarding bodies. This affected the whole cohort when only a portion of the candidates' marks warranted adjustment.
- 6.10 The different sampling methods adopted by awarding bodies are clear, and no centres reported difficulty in adhering to the sampling rules.
- 6.11 End-of-course moderation can lead to problems not being detected until too late. Earlier detection of problems would be appreciated by centres. One awarding body is trialling a different approach to moderation, which allows centres to become involved in the moderation process much earlier in the course, thereby enabling potential problems to be dealt with ahead of the final assessment process.

Annotation

- 6.12 The code of practice states that 'internal assessments and associated assessment criteria must indicate how credit has been assigned.' Internal assessors are required to annotate the coursework, clearly showing how the marking criteria have been applied. However, half the teachers said that they did not know the official requirements for annotation; some teachers used sticky notes that were removed after the final assessment had been made while other teachers made no annotations at all.

Internal standardisation in centres

- 6.13 The code of practice says that 'the awarding body must require centres to standardise assessments across different assessors and teaching groups.' Accordingly, the awarding bodies all state in their guidance for teachers that where more than one teacher is teaching the specification in a centre, then coursework must be standardised across the whole specification group.
- 6.14 The code of practice also requires the awarding body to 'specify the necessary procedures, including the use of reference and archive materials where available and trial marking of common pieces of work.' However, not all awarding bodies provide guidelines as to how internal standardisation might be achieved, and not all awarding bodies provide examples of proven standardisation practices. Teachers would like this requirement highlighted as a mandatory part of the examination process, as no official time is given to this activity in many centres. In centres that do not formally acknowledge this examination requirement, many teachers meet after school or at weekends to complete this procedure.
- 6.15 In the absence of prescribed procedures, the centres interviewed had adopted solutions such as the following:

- appointing one member of staff to be responsible for the coursework element, thus avoiding the need to standardise internally
 - all teachers marking an exemplar piece of work prior to a departmental standardisation meeting
 - each teacher presenting three pieces of work judged to be representative of the standard, and the group leader standardising the marks
 - sampling of all staff-assessed coursework by the head of department
 - marking each item of work twice or even three times
 - double marking the sample to be moderated
 - pairing teachers to mark each other's coursework.
- 6.16 One awarding body offers centres the opportunity to check the appropriateness of their application of the assessment criteria by providing comments on assessed work prior to submission of marks.
- 6.17 The coursework conference revealed different approaches by awarding bodies to checking that internal standardisation had taken place. Some awarding bodies target moderation according to the previous performance and perceived risk of centres. Others sample work on the same mark by all staff teaching the course, thereby satisfying themselves that they are all marking within tolerance.

Moderation feedback

- 6.18 There was a mixed response from centres about the quality of moderation feedback. This was also a topic of debate at the coursework conference. In order to improve the quality of feedback, there is a need to clarify its purpose and communicate this to centres. At present there is inconsistency of purpose, and inconsistent means of communication between subjects within as well as between awarding bodies.
- 6.19 The recipients in the centres also have different expectations of moderation feedback, and those can differ from the intentions of the awarding body. Feedback currently includes comment on all, some or none of the following:
- the accuracy of the teacher's assessment
 - the teacher's ability to interpret the assessment guidance
 - the task or tasks set
 - the administrative procedures
 - the effectiveness of internal standardisation procedures
 - the teaching and learning strategies.
- 6.20 As a few centres use moderator feedback as an indicator of teacher performance, the intended recipient and intended audience of the moderator feedback form is another important issue.

- 6.21 It was clear at the coursework conference that some awarding body practices restrict the access of moderators to previous centre feedback reports in order to keep bias to a minimum. This also increases the chances of inconsistent comments from year to year.

Recommendations

1. That further action be taken to ensure that teachers are able confidently and consistently to confirm that the coursework they mark is the candidate's own work.
2. That further action be taken to clarify the role, responsibilities and constraints upon teachers in relation to coursework.
3. That action be taken to clarify the support for, and assistance with, coursework that might legitimately be provided by the families of candidates.
4. That further action be taken to ensure that awarding bodies have a common and agreed understanding of what constitutes malpractice, and that centres and candidates fully understand the penalties for deliberate or inadvertent malpractice.
5. That further action be taken to ensure there is effective internal standardisation.
6. That the purpose and format of moderator feedback be clarified.
7. That the subject criteria for all qualifications be reviewed, to decide in each case whether coursework is a necessary and appropriate assessment instrument.

The actions to be taken in response to these recommendations are set out on the following pages.

Response to the recommendations

The regulatory authorities will formally direct each of the awarding bodies to implement the further requirements specified below. For most of these requirements, implementation will be expected in time for the summer 2006 examination series.

1. That further action be taken to ensure teachers are able confidently and consistently to confirm that the coursework they mark is the candidate's own work.

The regulatory authorities will:

- review the current requirements under the code of practice to ensure that they address the findings of this report and take into account recent technological developments.

The awarding bodies will:

- provide guidance and training on task design and on the acknowledgement of sources by candidates to all teachers authenticating coursework
- reach agreement for all specifications on the extent to which coursework can be revised or redrafted, amend the mark schemes accordingly and provide agreed and consolidated advice to centres
- specify for centres – in agreed, common and consolidated form across awarding bodies – the arrangements they must have in place in order to facilitate the supervision and authentication of candidates' work by teachers and internal assessors
- similarly specify, for those internally assessed activities that take place outside a school or college, the amount of work that must take place under direct supervision in order to ensure authentication
- promote the use of technology in the detection of plagiarism
- report on the measures taken in summer 2006 to confirm the authenticity of coursework, leading to a consolidated public report from the regulatory authorities.

2. That further action be taken to clarify the role, responsibilities and constraints upon teachers in relation to coursework.

The regulatory authorities will:

- review the current requirements under the code of practice.

The awarding bodies will:

- review current specifications and teachers' guides to ensure that the parameters for teacher involvement in coursework are clear and consistent across specifications and awarding bodies

- enforce with centres the code of practice requirement for internal assessors to show how credit has been assigned according to the criteria defined in the specification
- clarify for teachers – in a way that is clear and consistent across specifications and awarding bodies – the protocols for the interim assessment of coursework before it is submitted for final marking
- for all new specifications, ensure that the marking criteria and internal assessment process takes into account the teacher assistance and interim assessment that takes place before coursework is submitted for formal marking.

3. That action be taken to clarify the support for, and assistance with, coursework that might legitimately be provided by the families of candidates.

The regulatory authorities will:

- publish guidance for parents and candidates on the scope for legitimate family support for coursework, the nature of plagiarism and collusion, and the consequences of malpractice.

4. That further action be taken to ensure that awarding bodies have a common and agreed understanding of what constitutes malpractice, and that centres and candidates fully understand the penalties for deliberate or inadvertent malpractice.

The regulatory authorities will:

- review the current requirements under the code of practice and require the awarding bodies to have a common and agreed approach to detecting and dealing with alleged malpractice across specifications and awarding bodies.

The awarding bodies will:

- raise the profile of malpractice regulations and the consequences of malpractice with all stakeholders
- apply the agreed detection and investigation procedures consistently
- provide centres with common and agreed advice on detecting and dealing with malpractice
- report on the number and range of alleged cases of malpractice, the number of cases proven and the sanctions imposed, leading to a public consolidated report from the regulatory authorities.

5. That further action be taken to ensure there is effective internal standardisation.

The regulatory authorities will:

- review the current requirements under the code of practice and ensure that they are implemented by the awarding bodies.

The awarding bodies will:

- be accountable for making sure that agreed and consistent internal standardisation procedures and guidelines are clearly communicated in new specifications and other guidance materials
- provide advice to centres regarding the use of archive and exemplar materials, and provide such materials to facilitate the trial marking of common pieces of work
- improve the guidance and training for teachers on internal standardisation methods, and encourage the sharing of good practice
- monitor and report to the regulatory authorities on implementation of internal standardisation processes.

6. That the purpose and format of moderator feedback be clarified.

The awarding bodies will:

- after consultation with recipients, provide common and agreed advice across specifications and awarding bodies on the purpose and delivery of moderator feedback on coursework assessment
- put mechanisms in place to ensure consistent feedback across specifications and awarding bodies
- report to the regulatory authorities on the causes of moderator adjustments and on their impact, and on ways of reducing moderator adjustments in the future.

7. That the subject criteria for all qualifications be reviewed, to decide in each case whether coursework is a necessary and appropriate assessment instrument.

The regulatory authorities will:

- decide for each subject whether and in what form coursework should continue.

The awarding bodies will:

- ensure that current specifications have clear coursework task-setting and assessment guidance
- following the review of coursework by the regulatory authorities, ensure that coursework tasks and mark schemes are fit for purpose and guarantee a reliable and valid assessment.

With regard to the last recommendation, it should be noted that QCA has recently received a remit from the secretary of state for education, following publication of the White Paper *14–19 education and skills*, to review coursework in terms of consistency of approach, fairness and cumulative burden. In responding to this remit, QCA, in collaboration with ACCAC and CCEA, will be:

- analysing large-entry GCSE specifications to establish the most effective mechanism for meeting the assessment objectives which may or may not include coursework
- reviewing the relationship between assessment objectives and schemes of work in order to identify potential alternatives to coursework
- building on experience from current GCSE pilots including alternative assessment methods such as the use of teacher judgement and e-assessment.

Appendix 1

Centres taking part in coursework review

Addey and Stanhope School

Allerton Grange High School

Armagh College of Further Education

Ashfield Comprehensive School

Ballymoney High School

Ballymena Academy

Banbridge Academy

Barton Peveril College

Battersea Technology College

Beacon Community College

Bognor Regis Community College

The Brakenhale School

Brittons School and Technology College

Brockenhurst College

Cardinal Langley Roman Catholic High School

Causeway Institute of Further and Higher Education

The Channel School

Cheslyn Hay High School

Chichester High School for Girls

Chipping Norton School

Chiswick Community School

Christian Brothers Grammar School

City of Norwich School

Clifton Comprehensive School

Cowley Language College

Cowplain Community School

Cranford Community College

Dominican College
Dromore High School
Dundonald High School
Eastbury Comprehensive School
Edgecliff High School
Edmund Rice College
Egerton Park Arts College
Eggbuckland Community College
George Abbot School
Grantham College
Greenshaw High School
Helenswood School
High Storrs School
Highams Park School
Hove Park School
Ivybridge Community College
Kingsmead School
Kirkham Carr Hill High School
The Latymer School
Little Illford School
Longdendale High School
Loreto Grammar School
Malory School
Methodist College
Moorside High School
Movilla High School
Newtownbreda High School
Noadswood School
The Nobel School

Norlington School for Boys
Northcliff School
The Norton Knatchbull School
Okehampton College
Orangefield High School
Paignton Community College
Plumstead Manor School
Portadown College
Priestlands School
Ratton School
Regent House School
Rhyddings High School
The Ridings High School
Runshaw College
Rushcliffe Comprehensive School
Saint Benedict Catholic School
Saint Paul's Catholic School
Sir Joseph Williamson's Mathematical School
St Angela's Ursuline School
St Augustine's Catholic School
St Bernard's Convent School
St James' C of E Secondary School
St John Fisher Catholic High School
St Joseph's High School
St Mark's High School
St Mary's Christian Brothers' Grammar School
St Pius X High School
St Wilfred's C of E High School
Stratton Upper School and Community College

Sutton Community High School
Thornhill College
Tomlinscote School
The Toynbee School
Truro College
Upton by Chester High School
Villiers High School
Wellacre High School for Boys
West Somerset Community College
The Wey Valley School
Whickham School
The Willink School
Wingfield Comprehensive School
Woolwich Polytechnic School for Boys

Appendix 2

Quantitative responses from the centre questionnaire by qualification, subject and awarding body

	Non-response	AQA	Edexcel	OCR	WJEC	CCEA	TOTAL
Non-response	4	0	1	1	1	0	7
English	5	103	12	24	40	7	191
Mathematics	8	42	66	30	21	6	173
French	6	72	17	18	24	2	139
German	2	48	19	12	14	2	97
Spanish	4	38	8	7	6	0	63
Science	4	72	8	26	18	10	138
Biology	1	45	14	15	1	7	83
Physics	1	26	9	19	1	4	60
Chemistry	3	30	13	34	0	6	86
History	3	43	41	37	16	7	147
Geography	2	52	36	40	23	4	157
Art and design	4	60	40	23	17	8	152
D & T	11	57	27	27	15	9	146
Media studies	2	29	1	10	15	0	57
TOTAL	60	717	312	323	212	72	1696

	Non-response	GCSE	AS	A level	TOTAL
Non-response	4	2	0	1	7
English	5	124	24	38	191
Mathematics	8	136	12	17	173
French	14	90	2	33	139
German	2	65	1	29	97
Spanish	1	45	1	16	63
Science	11	120	4	3	138
Biology	1	19	35	28	83
Physics	2	20	20	18	60
Chemistry	7	19	26	34	86
History	6	97	10	34	147
Geography	7	99	21	30	157
Art and design	13	93	16	30	152
D & T	17	99	7	23	146
Media studies	4	26	14	13	57
TOTAL	102	1054	193	347	1696

Appendix 3

Respondents to the coursework questionnaire, by type of centre

	Non-response	11–16	11–18	6th-form college	Further education	Independent	Other	TOTAL
Non-response	3	1	1	0	1	0	1	7
English	0	36	124	12	14	2	3	191
Mathematics	2	47	97	13	6	3	5	173
French	1	39	82	5	6	3	3	139
German	2	17	65	3	6	1	3	97
Spanish	2	15	36	5	4	1	0	63
Science	1	41	81	1	9	2	3	138
Biology	1	3	64	7	3	0	5	83
Physics	1	4	40	8	4	0	3	60
Chemistry	2	6	61	8	7	0	2	86
History	2	33	93	8	5	2	4	147
Geography	1	31	95	10	12	2	6	157
Art and design	3	39	94	6	4	4	2	152
D & T	1	43	89	4	5	0	4	146
Media studies	1	13	25	11	6	0	1	57
TOTAL	23	368	1047	101	92	20	45	1696

Appendix 4

Responses to the question 'Is coursework a valid and reliable method of assessment?'

	Non-response	Yes	No	TOTAL
Non-response	4	2	1	7
English	5	165	21	191
Mathematics	11	54	108	173
French	10	108	21	139
German	6	76	15	97
Spanish	5	51	7	63
Science	6	70	62	138
Biology	2	37	44	83
Physics	7	28	25	60
Chemistry	6	47	33	86
History	5	121	21	147
Geography	2	134	21	157
Art and design	3	140	9	152
D & T	8	132	6	146
Media studies	1	53	3	57
TOTAL	81	1218	397	1696

Appendix 5

Responses to the question 'What, if any, are the validity issues with coursework?'

	Non-response	Multiple assessment of same skills	Inconsistent coursework practices	Inconsistent coursework rules	Reliability of teacher marking	Teacher marking time	Authentication of coursework	Resourcing	Time constraints	Other
Non-response	6	0	1	0	0	1	1	0	1	0
English	166	4	23	12	10	22	21	9	18	6
Mathematics	62	26	75	49	59	78	97	29	86	19
French	112	3	22	20	21	20	20	12	15	5
German	77	1	15	13	13	17	13	10	15	1
Spanish	55	1	5	5	5	5	6	3	6	3
Science	66	18	53	33	40	55	51	20	50	5
Biology	38	15	35	27	28	38	33	17	36	13
Physics	33	11	19	16	15	21	18	12	18	6
Chemistry	52	9	24	15	12	26	18	7	25	6
History	122	1	18	5	13	20	24	4	12	2
Geography	132	5	16	10	10	19	18	11	19	3
Art and design	136	3	5	4	10	16	6	7	11	3
D & T	137	3	4	5	4	8	3	4	9	2
Media studies	52	1	3	2	1	4	1	4	3	1
TOTAL	1246	101	318	216	241	350	330	149	324	75

450 subject teachers identified at least one issue about the validity of coursework, but totals for each subject are not given as each teacher could identify more than one issue.

Appendix 6

Responses to the question 'Is coursework undertaken with direct classroom supervision?'

	Non-response	Yes	No	TOTAL
Non-response	4	0	3	7
English	6	23	162	191
Mathematics	14	36	123	173
French	9	39	91	139
German	10	17	70	97
Spanish	8	9	46	63
Science	4	46	88	138
Biology	3	29	51	83
Physics	7	14	39	60
Chemistry	9	44	33	86
History	5	31	111	147
Geography	7	25	125	157
Art and design	2	44	106	152
D & T	6	41	99	146
Media studies	1	10	46	57
TOTAL	95	408	1193	1696

Responses to the question 'What portion of coursework is undertaken unsupervised?'

	Non-response	0–10%	11–25%	26–50%	51–75%	76–100%	TOTAL
Non-response	4	0	0	1	2	0	7
English	28	21	15	73	42	12	191
Mathematics	44	28	24	45	26	6	173
French	42	19	3	26	28	21	139
German	25	14	0	19	23	16	97
Spanish	13	6	8	16	13	7	63
Science	45	31	14	33	13	2	138
Biology	29	4	12	27	11	0	83
Physics	21	6	2	23	8	0	60
Chemistry	50	13	7	10	6	0	86
History	34	18	19	33	28	15	147
Geography	25	25	15	42	26	24	157
Art and design	40	63	10	31	7	1	1152
D & T	38	59	17	24	4	4	146
Media studies	12	19	3	16	7	0	57
TOTAL	450	326	149	419	244	108	1696