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EXPERT GROUP REPORT FOR AWARD SEEKING ADMISSION TO THE UCAS TARIFF

Scottish Highers and Advanced Highers

Jill Johnson and Dr Geoff Hayward
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THE CONDUCT OF THE COMPARABILITY STUDY

In order to ensure a robust and transparent procedure for allocating UCAS Tariff points to qualifications seeking admission to the framework, UCAS approached the University of Oxford, Department of Educational Studies for assistance in developing an appropriate methodology.

Acknowledging the problematic nature of comparability studies, and recognising that a mechanical procedure would not work, the Department proposed a procedure based on the premise that such comparisons can only be achieved through the exercise of collaborative judgement by an Expert Group.

Guidelines were drawn up for the composition of the Expert Group, the evidence that would need to be collected and examined and the choice of a benchmark qualification.

Procedures were developed for the conduct of the work of the Expert Group, including detailed sets of questions to be addressed at different stages in the process. Questions appropriate to the awards under consideration are selected and are used to guide, not constrain, the work of the Expert Group.

The judgements made by the Expert Group in this report are presented as suggested allocations of UCAS points which take account of the size and demand of the award seeking admission to the Tariff, and a candidate's level of attainment within that award. The guidelines also provide for an automatic review process to be conducted at a later stage in the light of further evidence. This latter point acknowledges the fact that both benchmark qualifications and those seeking admission to the Tariff may still be relatively new. Consequently, there may only be a relatively small amount of evidence (particularly candidate evidence) available at the time of the work of the Expert Group. There is, therefore, a need to review the decisions of the Group when more evidence becomes available and when HE admissions tutors have gained more experience of using the awards as entry qualifications.

The work of the Expert Group is subject to a quality assurance procedure by an independent auditor from higher education.

SUMMARY AND RECOMMENDATIONS

Expert Groups convened in April 2008 to review UCAS Tariff allocations for Scottish Highers and Advanced Highers. In an attempt to reflect the wide variety of subjects available, subject specific groups considered chemistry, English, geography, mathematics and the ungraded health and social care Higher. This was the first review of the graded qualifications since their incorporation into the UCAS Tariff in 2002, and the first consideration of the ungraded Higher.

Graded Highers and Advanced Highers

In embarking upon this work, the Expert Group members recognised that attainment in Highers, a one-year programme of study, remains the main route into Scottish Higher Education and that students choose to stay on for an additional year to take Advanced Highers for a number of reasons, such as not yet feeling ready to progress into HE. The Scottish graded Higher and Advanced Higher system is adapted to support progression into four year Scottish honours degrees.

As a consequence of this pattern of decision making, the candidature for Advanced Highers is much smaller than for Highers. It was also noted that candidates generally take four or five Highers in a very full programme of study.

Whilst Highers and Advanced Highers are two separate (but linked) qualifications – the Advanced Higher does not subsume the Higher in the same way that the A level subsumes the AS. However, with the exception of mathematics, the Expert Groups recommended allocations of UCAS Tariff points to attainment in these qualifications as if the Advanced Higher did subsume the Higher, as does the Tariff.

Whilst working to standard, quality assured procedures, the four subject groups made different recommendations for UCAS Tariff points:

Chemistry Group

Higher was considered to be a smaller qualification than A level, assessing a wider range of material than AS but at less depth than A level. The Higher does not offer the stretch and challenge that the A level does.

The Group concluded from the basis of the available evidence, including descriptors and assessment instruments, from the alignment of grades, comparisons of size and the domain scoring exercise, and from the exercise of professional judgement, that grade A at Higher should represent approximately two thirds of grade A at A level.

It was agreed that grade A at Advanced Higher should receive a score slightly more than grade A at A level but less than the likely score for A*. This recommendation was made on the understanding that the Advanced Higher points score subsumed that for the equivalent Higher and that the scores should not be added together. The Group considered grade A in Advanced Higher to be worth more than grade A at A level and the score of 130 was proposed without dissent as a collective judgment.

There was initially felt to be a big difference between the bottom of grade B for A level (70%) and for Higher/Advanced Higher (60%), but it was noted that grade B was regarded by Scottish universities as suitable for 2nd year entry. Given the judgments on larger content and the assessment demand, it was agreed that grade B in A level and Advanced Higher should be aligned at 100 points.

There was debate about the score for grade A in Higher, with different members favouring 75 and 80. The Group wished to align this slightly above grade C at Advanced Higher, and above grade A at AS, and therefore a score of 80 was agreed.

There was also debate about the score for grade D at Advanced Higher, which was raised from 40 to 50 on the grounds that that it was felt to be a little above the baseline for grade E at A level. It was noted that the existing score for grade D was 72, but the Group could not see a justification for raising the score beyond 50. It was felt that in Advanced Higher candidates obtaining a grade C or lower would be able to do so without demonstrating logical abilities. For Higher grade D a similar debate was held, resulting in a lifting of the score from an initial 25 to 30.

The scales for Scottish qualifications are non-linear. As Scottish qualifications use only grades A – D while A level uses A – E, an adjustment was necessary to retain a fair comparability.

Table 1: Chemistry - recommended Tariff scores

Grade	A level	Higher	Advanced Higher
A	120	80	130
B	100	60	100
C	80	45	70
D	60	30	50

This recommendation was tentative and it was essential that it should be reviewed when sufficient candidate evidence becomes available.

English Group

The Group felt that Highers and Advanced Highers were currently undervalued in terms of UCAS Tariff points. It was felt that a grade A in the Higher was equivalent to a GCE A level grade C and the Tariff score should be increased from the current 72 points to 80 points. This proposed increase was justified on the basis of comparison of the grade descriptors, reading candidate work and by the greater emphasis on independent thinking and distribution of all Assessment Objectives across the range of assessed work.

Consideration of relative size (number of units, range of texts), relative demand (study of an author as opposed to study of an individual text, scale of coursework, question demands, assessment standards) challenging nature of the personal study element led the Group also to recommend that Tariff points for the A graded Advanced Higher increase from the current 120 points to 130.

Otherwise, the qualifications were considered to be relatively similar in terms of the skills that the candidate is equipped with. After some discussion it was decided to recommend that the D grade for the Higher and Advanced Higher be maintained within the Tariff.

The status of a D in Highers was considered somewhat ambiguous, but given the evidence considered throughout this process, the Group concluded than points should be allocated to reflect their consideration that it provided less utility for progression to HE than an A level Grade E. Hence a score of 30 UCAS Tariff points is recommended.

The Group envisaged an even interpolation of grades between the A and D points already established. The following table summarises the Group's recommendation for allocation of Tariff points:

Table 2: English - recommended Tariff scores

Tariff points	A level	Higher	Advanced Higher
130			A
120	A		
100	B		
80	C	A	
72			D
60	D		
40	E		
30		D	

Geography Group

The Group felt that an A grade at Advanced Higher provided a greater utility for progression to HE than an A level grade A. The Group therefore suggested a Tariff score of 140 for A grade Advanced Higher. The ability to pick up a wider range of

higher level skills through the Advanced Higher was recognised this with an allocation of 120 points for grade B (aligned to A grade A level) and 100 for grade C.

Given that many HEIs are unwilling to accept an Advanced Higher grade D as suitable for entry onto an HE course of study, the Group felt that D had limited utility for progression. As a result of the Group's deliberations a non-linear approach was adopted giving a Tariff points score of 60 for a D grade. This equates to a D grade at A level and was considered to signal that a D grade at Higher is still an acceptable entry to HE, but only attracting a minimal score.

The non-linearity of Tariff points highlights the vast difference in utility to progression that a D grade presents in comparison to a C grade at Advanced Higher.

Following consideration of examination papers, the Scottish Higher Grade A was considered similar to an Advanced Higher grade C. Based on a consideration of sample assessment materials, aided by the experience and knowledge of examiners and HE representatives, the Group considered that an A grade Higher candidate would be performing at similar level to a B or C grade A level candidate.

In considering the comparative nature of the qualifications, it is clear that there is a compression of achievement in the Higher. Learners who have completed the more mechanistic Higher are able to develop their knowledge and interpretation skills in the Advanced Higher, but taken on its own, it does not provide candidates with the stretch and challenge opportunities available in the other two qualifications. As a result the A, B and C grades were allocated at 100, 90 and 80 respectively. Taking account of the limited utility coming from D grades in the Scottish system, the same approach was taken for the Higher as for the Advanced Higher and 40 points allocated – aligning a Higher grade D to an A level E.

After nominally allocating Tariff points for the two Scottish qualifications, the Group felt that the 100 points suggested for an Advanced Higher C grade did not adequately reflect the interpretation and research skills gained.

The additional learning associated with a further year's study at Advanced Higher level means that students should have derived some utility beyond that of a Higher grade A. In order to recognise the additional independent study, research and synoptic skills the Group recommended allocating 105 Tariff points for Advanced Higher grade C. It was a strong recommendation of the Group that Higher Tariff points be subsumed into Advanced Higher points in the same subject.

Table 3: Geography - recommended Tariff scores

UCAS Tariff points	A level	Advanced Higher	Higher
140		A	
120	A	B	
105		C	
100	B		A
90			B
80	C		C
60	D	D	
40	E		D

Mathematics Group

The following previous findings were taken into account in allocation of Tariff points by the Group:

- The Higher was about 80% of the volume of the AS and that the Higher and Advanced Higher together were broadly equivalent in volume to an A
- All awards offered the opportunity for synoptic assessment
- In terms of assessment demand, both A and B grades were somewhat higher in the Higher and Advanced Higher than in A level, and that C and D grades were roughly equivalent
- Domain scores were essentially the same across all awards.

Given the above, starting with the Advanced Higher, the A and B grades were given Tariff points somewhat higher than the A level at 130 and 110 points respectively. This assumes that, as for the AS and A level, Tariff points allocated to the Higher are subsumed within the Advanced Higher, when the latter follows the former. However, given that the Group considered the Higher to represent only about 80% of the volume of the AS, Tariff points were adjusted downwards to be fewer than half the equivalent Advanced Higher scores, producing 60 and 50 points for A and B respectively.

Scores were then moderated to ensure reasonable conformity between the intervals on the Tariff scale and the intervals between grade boundaries, for the Higher and Advanced Higher. This gave the Tariff values shown in the table below.

Table 4: Mathematics - recommended Tariff scores

Grade	Tariff points		
	Higher	Advanced Higher (subsuming Higher)	A level
A	60	130	120
B	50	110	100
C	35	85	80
D	30	70	60
E	N/A	N/A	40

Overall recommendation for graded Highers and Advanced Highers

In general, it was felt that in the case of both the graded Highers and Advanced Highers that the top grade was not being allocated enough UCAS Tariff points, and that there was a case for uplift, yet the Expert Groups differed considerably in their judgment of the magnitude of this uplift. Following in-depth analyses of candidature performance and other available evidence it was recommended that uplift should be to 130 for a Grade A. There was no evidence to suggest that this uplift of 10 UCAS Tariff points (8%) should apply across the whole of the range of attainment in the Scottish Advanced Higher.

Given that the English A level grade descriptors (E/U) do not align with the grades in the Scottish system, and the absence of extensive candidate evidence in the process, it was proposed that UCAS Tariff points for Advanced Higher Grade D should remain at 72 with other grade values interpolated.

On the basis of evidence made available during the Tariff review process, the Higher grade A is judged to offer greater utility for progression to HE than is apparent in the existing Tariff points (72). As a result the recommendation was made to increase the value for Grade A to 80 UCAS Tariff points.

There review process also took into account the need to address the anomalous difference between a Grade C and a Grade D Higher being only six UCAS tariff points compared to 12 for all other grades. It was felt that the allocation to the Higher grade D was overinflated and, assuming a linear relationship between grade and UCAS Tariff points on the basis of the current allocation, the value should be 36. With UCAS Tariff points then fixed for grades A and D, interpolation provides the allocation for the other grades.

As a result of these considerations, the recommended allocation of UCAS Tariff points to the Scottish Higher and Advanced Higher Qualifications (figures in parentheses are the current allocations) are:

Table 5: All graded Highers and Advanced Highers - recommended Tariff scores

	Higher	Advanced Higher
Grade A	80 (was 72)	130 (was 120)
Grade B	65 (was 60)	110 (was 100)
Grade C	50 (was 48)	90 (was 80)
Grade D	36 (was 42)	72 (was 72)

The ungraded Higher

In reforming and updating their qualification system SQA have introduced a range of ungraded Highers, such as the social and health care Higher examined as part of this Expert Group meeting.

As the regulator SQA considers a pass in this qualification to equate with a Grade C in a graded Higher it could be argued that the pass grade in an ungraded Higher should attract 50 UCAS Tariff points. However, the expert group considering this qualification were adamant that a pass in the ungraded Higher did not have the same utility for supporting progression into HE as a Grade C in a graded Higher for three reasons:

- Some content of the ungraded Higher had more relevance for supporting progression into employment than higher education.
- The assessment model, based on internal assessment of project work rather than the terminal external examination used for the ungraded Higher was deemed to be less critical.
- HE admissions staff consider ungraded qualifications to have a lower facility for differentiation of applicants.

The higher education representatives on this expert group attested that the pass grade should attract 44 points – rounded to 45 UCAS Tariff points for neatness of presentation.

All recommendations were endorsed by the Tariff Reference Group and Tariff Advisory Group and formally approved by the UCAS Board in December 2008.

SECTION 1: THE COMPOSITION OF THE EXPERT GROUPS

The following individuals with expert knowledge and experience of the qualifications under consideration in this study were selected to form the Expert Group:

1.1 Chemistry

- Archie Gibb, PA Advanced Higher, SQA
- Andrew Shield, Qualifications Manager, SQA
- Dr Douglas Buchanan, PA Higher, SQA
- John Older, OCR Principal Moderator, chemistry A level, OCR
- Dr Gordon McDougall, Senior Lecturer, chemistry, Edinburgh University
- Dr Steve Roser, Admissions Tutor, University of Bath
- Dr Hugh Cartwright, University of Oxford

The Curriculum Vitae of the experts within the Group are attached as Appendix A2A.

1.2 English

- Ann Bridges, Examiner Higher, SQA
- DC Cassidy, PA Advanced Higher, SQA
- Bridget Loney, Qualifications Manager, SQA
- Andy Archibald, Principal Examiner, English Language and Literature, AQA
- Professor Diana Whaley, Prof of Early Medieval Studies, Newcastle University
- Professor Patricia Waugh, Head of Department & Chair of the Board of Studies, University of Durham
- Dr John Coyle, Head of Department, University of Glasgow

The Curriculum Vitae of the experts within the Group are attached as Appendix A2B.

1.3 Geography

- Jack Bairner, PA Higher, SQA
- Dr Gordon Dickinson, PA Advanced Higher, SQA
- Keith Wright, Qualifications Manager, SQA
- Chris Martin, Chief Examiner – Geography, OCR
- Gill Miller, Senior Lecturer, University of Chester
- Dr Joanne Sharp, Director of Learning and Teaching, University of Glasgow
- Dr Barbara Rumsby, Senior Lecturer, The University of Hull

The Curriculum Vitae of the experts within the Group are attached as Appendix A2C.

1.4 Mathematics

- Jim Reid, on behalf of the PA for Higher, SQA
- WP Richardson, PA Advanced Higher, SQA
- Elaine Riley, Qualification Manager, SQA
- Greg Attwood, GCE A level Chief Examiner, Mathematics, Edexcel

- Dr Graham E Bell, Admissions Tutor for Mathematics and Statistics, University of St Andrews
- Sally Barton, Teaching Officer, University of Nottingham
- Dr Niall Mackay, Admissions Tutor, University of York

The Curriculum Vitae of the experts within the Group are attached as Appendix A2D.

1.5 Health and Social Care

- Jennifer Tollemache, Senior External Verifier, SQA
- Tom Stannage, Qualifications Manager for Social Sciences and Care, SQA
- Dr Alison J Thomson, GCE A level Principal Examiner, Health & Social Care, Edexcel
- Jacqui Gladwin, Senior Lecturer Adult Nursing, Manchester Metropolitan University
- Dr Steve P Townsend, Director of Studies (Admissions) Science, University of Aberdeen
- Jill Jepson, Course Director – BSc OT, University of East Anglia

The Curriculum Vitae of the experts within the Group are attached as Appendix A2E.

UCAS staff acted as facilitators for the work of the Groups, ensuring that the Group worked systematically through the procedures. UCAS staff also performed the secretarial roles for each Expert Group.

The whole process was overseen and quality assured by Dr Geoff Hayward, an independent higher education-based consultant.

In addition to the experts mentioned above, Sarah Breslin, Project Manager, External Development from SQA was also in attendance.

SECTION 2: OVERVIEW OF THE AWARDS SEEKING UCAS TARIFF REVIEW

SECTION 2A: ALL GRADED HIGHERS AND ADVANCED HIGHERS

2A.1 Aims and purpose of the qualification

The purpose of the Higher is to provide certification for a broad general education. The Higher is the 'gold standard' of Scottish education, and the main route to higher education since 1888. Prospective university candidates would be expected to take between three and five Highers in their fifth year of secondary schooling (S5). This would provide these candidates with entry to Scottish university courses, which take 3 years for an ordinary degree, and 4 years for an honours degree.

Advanced Highers are taken in the sixth year of secondary schooling (S6). The purpose of the Advanced Higher is to offer the opportunity for in-depth study, specialisation and to develop independent learning. Advanced Highers can offer subject exemptions, or direct entry into the second year of a Scottish 4 year degree programme. In S6, good candidates might take 2 or 3 Advanced Highers or additional Highers.

Staying on in school past the minimum leaving age is a good indicator that the young person will enter a positive destination upon leaving school. 44 per cent of all students remain in learning onto S6[1]. Just over 94 per cent of school leavers who left at the end of S6 entered a positive destination, compared with around three quarters (76.5 per cent) of those who left at the end of S4 (fourth year of secondary schooling)

Each individual Higher or Advanced Higher course has its own particular rationale and aims, but all follow a common set of design rules and have a common structure of units and external assessment. The broad objectives of National Courses are to provide high standards, and breadth and depth of learning for individual students. Learners also have opportunities for progression, to gain 'marketable' qualifications and to develop Core Skills. It is worth noting that Core Skills (i.e. numeracy, communication, information communication technology, problem solving and working with others) are 'embedded' within units and courses through a process of audit and validation.

2A.2 History of the qualification

The current Higher and Advanced Higher courses were introduced in 1999 as part of the Higher Still reforms, replacing the Higher Grade and Certificate of Sixth Year Studies (CSYS). The Higher Still reforms provided a unified system of national

The S6 staying on rate is calculated by dividing the September S6 roll by the S4 roll two years before.

qualifications (including units, courses and Group awards) embracing general and vocational subjects.

The unified system of National Courses is levelled in the Scottish Credit and Qualification Framework (SCQF). The SCQF provides a national vocabulary for describing learning, and thereby makes the relationships between qualifications clearer. It also clarifies entry points and exit points, and routes for progression. Two measures are used to place qualifications in the framework. These are the levels of the outcomes of learning, and the volume of these outcomes, described in terms of SCQF points. The SCQF has 12 levels, the Higher is placed at level 6 with 24 SCQF points and the Advanced Higher is placed at level 7 with 32 SCQF points.

In 2004, the Scottish Executive Report A Curriculum for Excellence called for more skills for work options for young people, that were robustly assessed and helped them progress into further qualifications and employment. In 2005, SQA introduced a new type of National Course known as Skills for Work. These courses differed from other National Courses in that they were ungraded and had no external course assessment. The first Higher level Skills for Work course, Health and Social Care was introduced in session 2007/08.

2A.3 Entry requirements for the qualification

Entry to a course is at the discretion of the school or college, but each course has a recommended entry level, usually at the SCQF level below the course in the subject or a related subject.

2A.4 Age of candidates

Scottish Primary school runs from the age of 5 for a total of 7 years. Secondary school runs for up to 6 years. At the end of the fourth year of secondary school (S4) at age 16 pupils sit a broad range (covering 7 to 9 different subjects) of Standard Grade or Intermediate exams.

Higher and Advanced Higher courses were designed as post-16 qualifications. The typical S5 ‘Higher’ candidate will be 17 years old, and the typical S6 ‘Advanced Higher’ candidate will be 18 years old. Adult returners seeking to gain admission to Higher Education may also sit Highers.

2A.5 Guided Learning Hours

The Higher is placed on Level 6 (NQF Level 3) of the Scottish Credit and Qualifications Framework (SCQF). The Higher course carries 24 SCQF credit points, indicating that the course takes 240 hours of learning time in the Scottish system. The Advanced Higher is placed on SCQF Level 7 and carries 32 SCQF credit points, indicating that the course takes 320 hours of learning time in the Scottish system.

2A.6 Content and structure of the qualification

All graded National Courses follow common principles of curriculum design, assessment and certification. Each National course has a common structure of three units, which provide the full content coverage; and a further unit which provides integration and enhancement of the preceding three units via an external assessment. Units are assessed on a pass/fail basis and the external assessment provides 'added value' both across and beyond the level of the units. Course awards are graded by performance in the external assessment and also require candidates to pass all the unit assessments associated with the course.

It is worth noting that each unit is considered a qualification in its own right and, therefore, has its own specification, covering the learning outcomes, evidence requirements, content and context. Each course has an assessment rationale that describes the relationship between the units and the external assessment and defines the added value of the course. The course arrangements, including the unit specifications, detail the requirements and content of the course. The arrangements also stipulate the internal and external assessment requirements, content, and grade descriptors for the course. Suggested teaching/learning approaches are provided, although schools and colleges are free to deliver the units and course content as they wish.

2A.7 Assessment – procedures, methods and levels

In order to achieve a National Course, learners must complete and pass the units and also complete the external assessment, which is graded A - D. The external assessment usually takes the form of a written examination, but can also involve projects, performances or practical tasks carried out under controlled conditions. Projects, performances or practical tasks have to be completed by a given date. For each course, unit and external assessments are at the level of the course award. Unit assessment can be undertaken at any time during the course. Examinations are timetabled in a single series of examinations at the end of the academic year in May/June. There is no resit facility within the same academic year.

The external assessment samples knowledge and skills from across the whole course (including all component units of the course) and provides added value over and above the evidence required for unit assessment by requiring retention and integration of skills and knowledge from across the course, and/or application of skills and knowledge in unfamiliar contexts.

Each course has an assessment rationale that details the requirements of unit assessments, external course assessments, the relationship between unit and course assessments, and the 'added value' of the course. As well as describing the

requirements for course coverage, an important part of the added value of a course is in additional abilities and levels of understanding – such as integration, synthesis, cross-application of knowledge and skills from the individual units – that differentiate course from unit assessment

2A.8 Grading

Course awards are graded by performance in the external assessment and also require candidates to pass all the unit assessments associated with the course. A candidate's grade is based on their total score from all parts of the external assessment.

For each examination (series of exams and examination boards that happens at the end of the academic year), SQA aims to set external assessment and create marking instructions that will allow a candidate to score a minimum 50 per cent of the total available marks for the notional C grade boundary. The aim for the notional A grade boundary is 70 per cent of the total available marks of the external assessment. However, because of the unique nature of external assessments, the level of demand, challenge and difficulty can vary from year-to-year. Therefore, for each examination diet, SQA conducts a Grade Boundary Meeting for each National course.

Grade Boundary Meetings are conducted with the aim of maintaining comparability of demand and difficulty from one year to another. Boundary decisions are made by an expert panel of senior managers, statistician, Qualifications Manager and Principal Assessor (PA). Decisions are informed by qualitative evidence presented by the PA - from sources such as Marker Reports, comments from Setters and Examiners, personal experience of marking and scrutiny of scripts and archived benchmarking scripts. Where the standards, demand and levels of difficulty are comparable with previous years, grade boundaries are maintained. Grade boundaries are adjusted downwards if there is evidence that a slightly more demanding and difficult external assessment has been set. Conversely, grade boundaries are adjusted upwards if there is evidence that a slightly less demanding and difficult external assessment has been set.

The overall aim of setting grade boundaries is to be fair to candidates across all subjects and all levels, and to maintain national standards across the years, even as subject arrangements evolve and change.

2A.9 Quality assurance system and code of practice

Unit assessment

Internal assessment is where schools or colleges decide whether candidates have achieved the standards for the qualification which they are attempting. This is done

by using assessment instruments that are either devised in the school or college, or developed by SQA. All SQA qualifications which are wholly or partly internally assessed are also subject to internal verification. This is an element of the SQA quality assurance framework which is designed to ensure that centres are making consistent and accurate assessment decisions in accordance with the assessment criteria defined in their qualifications. All SQA centres will have devised their own internal verification processes and will have a set of procedures to ensure that assessment decisions are made consistently.

SQA also uses a system of external verification to review centres' assessment decisions for units. External verification is carried out by SQA-appointed staff, and is used to check that qualifications are being delivered to national standards. It focuses on the validity of the centre's assessment instruments, how they are applied, and the reliability of the centre's assessment decisions. Every year a sample of centres is selected for external verification in each unit of a course. All SQA verifiers are experienced education and training practitioners in the subject which they are verifying. Their work is monitored to make sure that they consistently apply national standards of assessment.

External assessment

SQA has long established quality assurance procedures for developing question papers and marking scripts. The process draws heavily on the expertise of practising teachers and, to ensure consistency and continuity, the examination team that develops a question paper also oversees its marking and associated quality assurance procedures. The team also deal with absentee cases and process appeals for that formal examination period.

External assessments are externally marked by trained SQA markers. Markers meetings are held to ensure that a consistent standard is agreed and post-examination quality assurance procedures are carried out by experienced markers acting as examiners. These procedures ensure marking is carried out to national standards. The work of markers and examiners is subject to scrutiny by the Principal Assessor and a Principal Assessor Report is published for each course.

All Markers are experienced teachers who have met SQA appointment criteria (including that they have taught the course for at least 3 years). Each year, markers have to attend a one day Markers' Meeting where the Principal Assessor ensures that marking instructions are fully reviewed and the required standards of marking are discussed and agreed.

All markers' scripts are checked by the examination team at a marker check procedure. The marker check identifies the direction and the extent of any deviation

from the agreed national standard. This allows markers to be graded and classified as acceptable, lenient, severe or inconsistent. On the basis of this, scripts are then prioritised for review at finalisation procedures. At finalisation, scripts are reviewed in the order of priority and any amended marks are recorded and processed prior to certification. Priority is ascertained by system analysis of candidates who are close to a grade boundary.

Examining teams are recruited from the pool of experienced, consistent and accurate markers. Principal Assessors are now selected by interview.

SECTION 2B: HEALTH AND SOCIAL CARE UNGRADED HIGHER

2B.1 Aims and purpose of the qualification

Health and social care is an ungraded Higher (SCQF Level 6). It aims to allow candidates to:

- develop essential knowledge for working in the health and social care sectors
- experience vocationally-related learning
- prepare for further education or entry into the workplace
- develop a responsible attitude to work
- develop the ability to reflect on the learning experience.

The purpose of the Higher is to provide certification for a broad general education. The Higher is the 'gold standard' of Scottish education, and the main route to higher education since 1888. Prospective University candidates would be expected to take between 3 and 5 Highers in their fifth year of secondary schooling (S5). This would provide these candidates with entry to Scottish university courses, which take 3 years for an ordinary degree, and 4 years for an honours degree.

Broad objectives

Upon achieving this qualification candidates' should be able to:

- have a clear understanding of some psychological theories of human development and to apply these in a care setting
- develop skills in practical contexts
- develop confidence in own knowledge and skills
- communicate effectively.

Each individual Higher course has its own particular rationale and aims, but all follow a common set of design rules and have a common structure of units. The broad objectives of National Courses are to provide high standards, and breadth and depth of learning for individual students. Learners also have opportunities for progression, to gain 'marketable' qualifications and to develop Core Skills. It is worth noting that Core Skills (ie numeracy, communication, information communication technology, problem solving and working with others) are 'embedded' within units and courses through a process of audit and validation

2B.2 History of the qualification

This qualification was developed in response to the sector's request for a qualification at SCQF level 6 that combined academic ability with vocational and experiential learning. The theoretical and knowledge-based content was benchmarked against the graded Higher in Care with vocational elements benchmarked against National Occupational Standards. The course was developed in close consultation with further education colleges and with reference to the entry requirements for Access to Nursing degree programmes.

The current Higher and Advanced Higher courses were introduced in 1999 as part of the Higher Still reforms, replacing the Higher Grade and Certificate of Sixth Year Studies (CSYS). The Higher Still reforms provided a unified system of national qualifications (including units, courses and Group awards) embracing general and vocational subjects.

The unified system of National Courses is levelled in the Scottish Credit and Qualification Framework (SCQF). The SCQF provides a national vocabulary for describing learning and thereby makes the relationships between qualifications clearer. It also clarifies entry points and exist points, and routes for progression. Two measures are used to place qualifications in the framework. These are the levels of the outcomes of learning, and the volume of these outcomes, described in terms of SCQF points. The SCQF has 12 levels, the Higher is placed at level 6 with 24 points and the Advanced Higher is placed at level 7 with 32 points.

In 2004, the Scottish Executive report A Curriculum for Excellence called for more skills for work options for young people, that were robustly assessed and helped them progress into further qualifications and employment. In 2005, SQA introduced a new type of National Course known as Skills for Work. These courses differed from other National Courses in that they were ungraded and had no external course assessment. The first Higher Level Skills for Work course, Health and Social Care was introduced in session 2007/08.

2B.3 Entry requirements for the qualification

Entry to a course is at the discretion of the school or college, but each course has a recommended entry level, usually at the SCQF level below the course in the subject or a related subject, eg:

- An Intermediate 2 course in Care or Childcare.
- Communication at SCQF level 5.

2B.4 Age of candidates

Higher and Advanced Higher courses were designed as post-16 qualifications. The typical S5 Higher candidate will be 17 years old, and the typical S6 Advanced Higher candidate will be 18 years old. Adult returners seeking to gain admission to higher education will also sit Highers.

2B.5 Guided Learning Hours

The Higher is placed on Level 6 (NQF Level 3) of the Scottish Credit and Qualifications Framework (SCQF). The Higher Course carries 24 SCQF credit points, indicating that the course takes 240 hours of learning time.

2B.6 Content and structure of the qualification

Skills for Work courses also follow common principles of curriculum design, assessment and certification. Each Skills for Work course has a common structure of four units. These units are internally assessed on a pass/fail basis and externally verified by SQA. Assessments involve a range of tasks, including practical assignments, short tests and personal records. The added value of Skills for Work courses is focused on the development, assessment and progress in an agreed set of generic employability skills. Syllabus topics are:

- Understanding and Supporting People in Health and Social Care Settings
- Care Principles and Practice
- Working in Health and Social Care Settings
- Health, Safety and Protection Issues in Care Settings

2B.7 Assessment – procedures, methods and levels

In order to achieve a National Course, learners must complete and pass the units. For each course, units are at the level of the course award. Unit assessment can be undertaken at any time during the course.

Each course has an assessment rationale that details the requirements of unit assessments, external course assessments, the relationship between unit and course assessments, and the 'added value' of the course. As well as describing the requirements for course coverage, an important part of the added value of a course is in additional abilities and levels of understanding that differentiate course from unit assessment.

Exam dates (If appropriate)

There is no final examination. Internal assessments are undertaken at appropriate times in relation to completion of component units.

Level description

Tasks are set at SCQF Level 6

2B.8 Grading

There is no grading of course awards. Achievement is on a pass/fail basis. Pass is considered equivalent to a C grade pass in a graded course

2B.9 Quality assurance system and code of practice

Unit assessment

Internal assessment is where schools or colleges decide whether candidates have achieved the standards for the qualification which they are attempting. This is done by using assessment instruments that are either devised in the school or college, or developed by SQA. All SQA qualifications which are wholly or partly internally assessed are also subject to internal verification. This is an element of the SQA quality assurance framework which is designed to ensure that centres are making consistent and accurate assessment decisions in accordance with the assessment criteria defined in our qualifications. All SQA centres will have devised their own internal verification processes and will have a set of procedures to ensure that assessment decisions are made consistently.

SQA also uses a system of external verification to review centres' assessment decisions for units. External verification is carried out by SQA-appointed staff, and is used to check that qualifications are being delivered to national standards. It focuses on the validity of the centre's assessment instruments, how they are applied, and the reliability of the centre's assessment decisions. Every year a sample of centres is selected for external verification in each unit. This verification can be either visiting or central depending on the type of subject and evidence required. All SQA verifiers are experienced practitioners in education and training and in the subject which they are verifying. Their work is monitored to make sure they consistently apply national standards of assessment.

External assessment

There is no external assessment in Skills for Work courses.

SECTION 3: OVERVIEW OF THE BENCHMARK AWARDS

3A OCR GCE A LEVEL CHEMISTRY

3A.1 Aims and purpose of the qualification

The OCR AS/A level GCE is designed to allow students to continue their study of chemistry to A level suitable both for those wishing to apply for associated courses at a tertiary level and for those with an interest in acquiring a knowledge beyond GCSE. It aims to allow candidates to:

- develop their interest and enthusiasm for chemistry
- appreciate how society makes decisions about scientific issues and how sciences contribute to society
- develop a deeper appreciation of the skills, knowledge and understanding of 'How science works'
- develop essential knowledge and understanding of different areas of chemistry and how they relate to each other.

Broad objectives

Upon achieving this qualification candidates should be able to:

- seek entry to colleges and universities for chemistry and associated sciences
- use the qualification as a support for applications for other courses or employment requiring education to this standard
- appreciate some aspects of the methodology of chemistry and its role in the economy and success of society.

3A.2 History of the qualification

Following the publication of the Qualifications and Curriculum Authority's amended subject core requirements, a major revision of the A level specification was developed for first use in the academic year commencing in September 2008. This builds on both the linear A level chemistry course last examined in 2002 and on the previous modular course developed in the 1990s and revised extensively in 2000. It incorporates the QCA core requirements for the subject.

3A.3 Entry requirements for the qualification

The recommended entry requirements are a GCSE at grade C level in Additional Science or Chemistry.

3A.4 Age of candidates

Candidates will normally be between the ages of 16 – 18.

3A.5 Guided Learning Hours

Qualifications and Curriculum Authority (QCA) recommend 180 Guided Learning Hours in each year of study (AS and A2).

3A.6 Content and structure of the qualification

Unlike other revised GCE A level specifications, most of which now have four assessment units, science A levels retain six assessment units to accommodate the need for assessing practical work. The syllabus content for each unit is outlined below:

Table 6: OCR GCE A level Chemistry unit structure

AS Unit 1 - Atoms, Bonds and Groups	**A2 Unit 1 – Rings, Polymers and Analysis**
• Atoms (structure), Moles and Equations, Acids, Redox reactions • Electrons, Bonding and Structure • The Periodic Table	• Arenes, carbonyl compounds, acids, esters and amines • Polymers and Synthesis – aminoacids, polyesters, polyamides and synthesis • Analysis – Chromatography (TL and GC), NMR spectroscopy (high resolution proton and ^{13}C). Combined techniques for the identification of organic compounds.
AS Unit 2 - Chains, Energy and Resources	**A2 Unit 2 – Equilibria, Energetics and Elements**
• Basic Concepts (formulae, structure and naming of organic compounds) and Hydrocarbons • Alcohols, Halogenoalkanes and Analysis (mass spectrometry and IR spectroscopy) • Energy – enthalpy changes and an introduction to rates and equilibrium • Resources – chemistry of the air and 'green' chemistry	• Rates, Equilibria and pH • Energy – lattice enthalpy, entropy and free energy • Electrode potentials and fuel cells • Transition metals
AS Unit 3 – Practical Skills in chemistry	**A2 Unit 3 – Practical Skills in chemistry**
• Experiments to include qualitative, quantitative and evaluative tasks	• Experiments to include qualitative, quantitative and evaluative tasks

3A.7 Assessment – procedures, methods and levels

The four theory units each have separate assessments available in January and June of each year. The outline of each paper is given in Table 7. The one hour papers are marked out of 60 and the 1 h 45 m papers are marked out of 100. The assessment of practical skills is carried out internally by a centre and requires them to submit the best mark achieved by a candidate on each of three task categories – qualitative (10 marks), quantitative (15 marks) and evaluative (15 marks). The marks submitted are subject to external moderation.

All units may be sat more than once with the best mark achieved counting towards the final grade.

Table 7: Chemistry AS/A level unit structure

AS units	**Time**	**Weight**
1 Atoms, Bonds and Groups - structured questions	1 h	15%
2 Chains, Energy and Resources - structured questions including some extended writing	1 h 45 m	25%
3 Practical Skills in chemistry 1 – tasks set by OCR, marked by teachers using specific OCR mark schemes	Not time-limited but designed to be completed in 1 h	10%
A2 units		
4 Rings, Polymers and Analysis - including stretch and challenge and synoptic assessment within structured questions including some extended writing	1 h	15%
5 Equilibria, Energetics and Elements - including stretch and challenge and synoptic assessment within structured questions including some extended writing	1 h 45 m	25%
6 Practical Skills in chemistry 2 – tasks set by OCR, marked by teachers using specific OCR mark schemes	Not time-limited but designed to be completed in 1 h	10%

All questions on the external assessment for Units 1, 2, 4 and 5 are compulsory and each is structured. Units 4 and 5 each have some questions containing more demanding parts designed to discriminate between the more able candidates. These are designated as Stretch and Challenge when the papers are compiled but are not separately identified within the paper.

Grades are assigned A - E with equal divisions between the A/B boundary set at 80 per cent and the E/U set at 40 per cent of the total mark. The marks for practical assessment are submitted in June of each year and marked out of 40. Grades as above are also assigned judgementally and converted to a uniform mark scale.

Level description

Formal performance level descriptors are provided from a grade A and a grade E candidate.

Candidates achieving grade A will demonstrate an extensive knowledge and understanding of the essential facts and key principles of chemistry. They will be able to apply these principles in new contexts and explain phenomena and draw conclusions. They will be able to write accurate and fluent accounts using correct scientific terminology. They will perform experiments confidently and skilfully, interpret their results accurately and evaluate their methods and conclusions.

Candidate achieving a grade E will be able to recall a range facts and understand most principles. They will be able to apply these principles to familiar situations. They will be able to communicate their knowledge with sufficient accuracy to be understood clearly. They will perform experiments safely and be able to reach a conclusion. They will recognise the main weaknesses in the procedures adopted.

3A.8 Grading

Grade boundaries are decided judgementally by a team consisting of representatives of the examining board, the chief examiner and all principal examiners of the units. Using these judgements, the raw marks achieved on each unit are converted to a uniform mark scale. The total mark obtained from all three units is multiplied by 1.5 to give a mark out of 300. The grade boundaries are then assigned at 240 (A/B) to 120 (E/U) in equal divisions.

AS is awarded separately but A2 is a combination of the AS and A2 marks with the boundaries from A/B at 480 to E at 240.

For A2 only an A* award is available for those achieving a grade A overall and a total mark of 270 or more on the A2 units.

3A.9 Quality assurance systems and code of practice

Examiner recruitment

All examiners have an appropriate tertiary qualification, such as a degree, in chemistry. They will normally have experience of teaching at AS and A2 level.

Question setting

Papers are set by experienced examiners to a structure which specifies that each question should include:

- a specification reference
- a reference to 'How Science Works'
- the intended target grade for each part of the question (represented as A/B, C/D or E/U)
- a statement of the Assessment Objective covered

Standardised examining

The paper overall must conform to the balance of Assessment Objectives included in the specification and be such that the intended outcome corresponds to 80 per cent of the marks for the A/B boundary and 40 per cent of the marks for the E/U boundary.

Grade review

A grade review is held after each examination session (both January and June) to re-mark the work of any examiner found to be unreliable during checks made within the marking period.

3B AQA GCE A LEVEL ENGLISH LANGUAGE AND LITERATURE

3B.1 Aims and purpose of the qualification

AS and A level courses based on this specification should encourage candidates to:

- use integrated linguistic and literary approaches in their reading and interpretation of texts
- engage creatively and independently with a wide range of spoken, written and multimodal texts, exploring the relationships between texts
- undertake independent and sustained studies to develop their skills as producers and interpreters of language.

The new specification aims to develop students' understanding of English Language and Literature as a combined discipline, drawing on their experiences at GCSE as well as offering a meaningful foundation for the study of English beyond GCE level. The specification aims to give students opportunities to play to their strengths and deepen their enjoyment by offering a great deal of choice within its parameters. To this end, there will be elements of choice within the specification that have hitherto been unavailable. These are listed below.

- Maximisation of set text choice with set text lists being expanded wherever possible.
- The facility to study either prose or drama as the foundation for AS textual and analytical study.
- The facility to do both prose and drama at AS Level if centres or candidates so wish.
- The opportunity to choose a meaningful comparative route through a coursework unit, to include the study of a poetry text.

3B.2 History of the qualification

This specification is a development of the current 5721/6721 specification that has run successfully for the past eight years.

3B.3 Entry requirements for the qualification

The specification follows naturally from the GCSE English courses available. There are no specific entry requirements.

3B.4 Age of candidates

Mostly 16-18, although there are many adult candidates as well and some advanced GCSE students who begin the qualification in Year 11.

3B.5 Guided Learning Hours

Not specified although generally estimated to be four to five hours weekly. In a 30 week year this would be 120-150 hours at AS and a total of 240-300 hours at A2.

3B.6 Content and structure of the qualification

The content and structure of the qualification are outlined in Table 8.

Table 8: AQA GCE A level English Language and Literature structure

Unit 1: Integrated Analysis and Text Production (ELLA1)	**Unit 3: Comparative Analysis and Text Adaptation (ELLA3)**
1 hour 30 minutes examination 2 questions on two set texts • 1 question will address literary and stylistic issues • 1 question will be a language production task 50% of total AS marks 25% of total Advanced Level marks	2 hours 30 minutes examination 2 questions; one unseen analysis, one on a set text • 1 question will be an unseen comparative analysis of three different types of text of different genres, modes and/or historical periods • 1 question will be on a set text and will require candidates to do a re-casting task of a particular kind, followed by a commentary in which they will explain the approaches they used in the task. 30% of total Advanced Level marks
Unit 2: Analysing Speech and Its Representation (ELLA2)	**Unit 4: Comparative Analysis through Independent Study (ELLA4)**
1 hour 30 minutes examination 2 questions; one on a set text, one an unseen analysis • 1 question will be an unseen comparative analysis of different speech texts • 1 question will be on a set text and will examine both the representation of speech and other stylistic issues within the set text. 50% of total AS marks 25% of total Advanced Level marks	Coursework unit 1 question • 1 coursework task to be completed on an aspect of two texts (one of which must be poetry) chosen from a list approved by AQA. Evidence of drafting is a requirement. 20% of total Advanced Level marks

3B.7 Assessment – procedures, methods and levels

Table 9: AQA A level English Language and Literature

Assessment Objectives		% Weighting		
		AS	A2	A level
AO1	Select and apply relevant concepts and approaches from integrated linguistic and literary study, using appropriate terminology and accurate, coherent written expression	30%	29%	29.5%
AO2	Demonstrate detailed critical understanding in analysing the ways in which structure, form and language shape meanings in a range of spoken and written texts	30%	27%	28.5%
AO3	Use integrated approaches to explore relationships between texts, analysing and evaluating the significance of contextual factors in their production and reception	20%	29%	24.5%
AO4	Demonstrate expertise and creativity in using language appropriately for a variety of purposes and audiences, drawing on insights from linguistic and literary studies	20%	15%	17.5%

3B.8 Grading

The AS qualification will be graded on a five-grade scale: A, B, C, D and E. The full A level qualification will be graded on a six-point scale: A*, A, B, C, D and E. To be awarded an A*, candidates will need to achieve a grade A on the full A level qualification and an A* on the aggregate of the A2 units. For AS and A level, candidates who fail to reach the minimum standard for grade E will be recorded as U (unclassified) and will not receive a qualification certificate. Individual assessment unit results will be certificated.

3B.9 Quality assurance systems and code of practice

This specification complies with the following.

- The Subject Criteria for GCE English Language and Literature A
- The Code of Practice for GCE
- The GCE AS and A level Qualification Criteria
- The Arrangements for the Statutory Regulation of External Qualifications in England, Wales and Northern Ireland: Common Criteria

3C OCR GCE A LEVEL GEOGRAPHY

3C.1 Aims and purpose of the qualification

The AS specification enables candidates to:

- develop knowledge and understanding of selected physical, human and environmental processes that underpin key geographical concepts
- develop a knowledge and understanding of the key concepts of place, space, diversity, interdependence, people-environment interaction, the processes associated with these, and change over time
- study at a range of scales, from the local to the global, in both the physical and human components and to understand the importance of scale as a geographical idea
- use a range of skills and techniques, including the use of maps and images at different scales necessary for geographical study
- carry out research and out-of-classroom work, including fieldwork, as appropriate to the topics selected
- use modern information technologies, including geographical information systems, as appropriate to the content
- develop an understanding of the application and relevance of geography.

In addition, the Advanced GCE specification enables candidates to:

- undertake individual research/investigative work, including fieldwork
- extend their understanding of geographical ideas, concepts and processes
- identify and analyse the connections between the different aspects of geography
- analyse and synthesise geographical information in a variety of forms and from a range of sources
- consider new ideas and developments about the changing nature of geography in the 21st century

- critically reflect on, and evaluate, the potential and limitations of approaches and methods used both in and outside the classroom.

Also the Advanced GCE specification:

- emphasises global issues of current and future relevance
- retains the principal of options
- provides a balance between environmental and economic/social issues which is reflected in options from two distinct sections.

Broad objectives

Upon achieving this qualification candidates should be able to:

- develop and apply their understanding of geographical concepts and processes to understand and interpret our changing world
- develop their awareness of the complexity of interactions within and between societies, economies, cultures and environments at scales from local to global
- develop as global citizens who recognise the challenges of sustainability and the implications for their own and others' lives
- develop critical and reflective thinking and appreciate the importance of attitudes and values, in decision making
- become adept in the use and application of skills and new technologies through their geographical studies both in and outside the classroom
- be inspired by the world around them, and gain enjoyment and satisfaction from their geographical studies and understand their relevance.

3C.2 History of the qualification

Written in March 2006.

Approved by QCA July 2007.

To be first taught in Sept 2008.

To be first examined in Jan 2009.

3C.3 Entry requirements for the qualification

No prior knowledge of the subject is required. The specifications build on, but do not depend on, the knowledge, understanding and skills specified for GCSE Geography. It is recommended that candidates have attained communication and literacy skills at A level equivalent to GCSE grade C in English.

3C.4 Age of candidates

None specified

3C.5 Guided Learning Hours

AS GCE Geography requires **180** Guided Learning Hours in total.

Advanced GCE Geography requires **360** Guided Learning Hours in total.

3C.6 Content and structure of the qualification

Table 10: OCR GCE A level Geography structure

AS units	A2 units
Unit F761: Managing Physical Environments	**Unit F763: Global Issues**
• River environments • Coastal environments • Cold environments • Hot arid and semi-arid environments	Environmental issues: • Earth hazards (Option A1) • Ecosystems and environments under threat (Option A2) • Climatic hazards (Option A3) Economic issues: • Population and resources (Option B1) • Globalisation (Option B2) • Development and inequalities (Option B3)
Unit F762: Managing Change in Human Environments	**Unit F764: Geographical Skills**
• Managing urban change • Managing rural change • The energy issue • The growth of tourism	• Identifying a suitable geographical question or hypothesis for investigation • Developing a plan and strategy for conducting the investigation • Collecting and recording appropriate data • Presenting the data collected in appropriate forms

Candidates at AS are required to develop fieldwork skills in the context of human and physical geography which relate directly to their course of study.

At AS, candidates are required to become proficient in a range of research and investigative skills, including:

- the use of modern technologies (such as electronic image and map interpretation)
- statistical analysis
- presentational techniques.

Candidates at A2 extend their research/investigative work in one chosen study based on the content of Unit F763 Global Issues.

Both A2 units provide an opportunity to acquire new skills, such as more advanced statistical and analytical strategies, as well as consolidating and extending those from AS. At A2, candidates will be assessed on all skills covered by AS and A2 units.

AS skills enable candidates to seek evidence to support explanations and understanding. These skills are further developed and extended at A2 to enable candidates to use individual application, interpretation, evaluation and informed judgements with a degree of confidence.

3C.7 Assessment – procedures, methods and levels

Table 11: OCR GCE A level Geography assessment

AS Unit F761: Managing Physical Environments	**A2 Unit F763: Global Issues**
This paper has two sections: Section A: Candidates are required to answer two questions chosen from four structured data-response questions which are each divided into four parts. To do this, candidates choose one question from either Coastal Environments or River Environments and one question from either Cold Environments or Hot, Arid and Semi-Arid Environments. Questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information. Section B: Candidates are required to answer one question chosen from four extended-writing questions. There will be one question set for each of the four environments. The question answered must be on a different topic from the two topics chosen in Section A. 50% of the total AS GCE marks 1.5h written paper 75 marks Candidates answer three questions.	This paper has two sections. Section A: Candidates are required to answer three questions, at least one from three questions on Environmental Issues and at least one from three questions on Economic Issues. All questions present a set of data and candidates are expected to identify any issues they show and suggest appropriate strategies to manage them. Section B: Candidates are required to answer two essay-type questions, one from six questions on Environmental Issues and one from six questions on Economic Issues. 30% of the total Advanced GCE marks 2.5h written paper 90 marks This unit is synoptic. Candidates answer five questions.
AS Unit F762: Managing Change in Human Environments	**A2 Unit F764: Geographical Skills**
This paper has two sections: Section A: Candidates are required to answer two questions chosen from four structured data-response questions which are each divided into four parts. To do this, candidates choose one question from either Managing Urban Change or Managing Rural Change and one question from either The Energy Issue or The Growth of Tourism. Questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information. Section B: Candidates are required to answer one question chosen from four extended-writing questions. There will be one question set for each of the four human geography topics. The question answered must be on a different topic from the two topics chosen in Section A. 50% of the total AS GCE marks 1.5h written paper 75 marks Candidates answer three questions.	This paper has two sections: Section A: Candidates are required to answer one question chosen from three structured data-response questions which are each divided into three parts. These questions are based upon stimulus material, which may include maps (OS and other types), written material, photographs, satellite and other images, diagrams and statistical information; and upon the skills and techniques used during the geographical research that candidates will have undertaken at both AS and A2. Section B: Candidates are required to answer two extended writing questions. Questions focus on the skills and the techniques used during the geographical research including analysis, interpretation, evaluation and drawing conclusions. 20% of the total Advanced GCE marks 1.5h written paper, partly based on candidates' own investigation/research. This unit is synoptic Candidates answer three questions in total.

Exam dates

There are two examination series each year, in January and June.

In 2009, only AS units will be assessed.

From 2010, both AS units and A2 units will be assessed.

Level description

Table 12: Geography AS/A2 level descriptions

	Assessment Objective 1	**Assessment Objective 2**	**Assessment Objective 3**
AS			
	Demonstrate knowledge and understanding of the content, concepts and processes.	Analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts.	Select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.
A/B boundary performance descriptions	Candidates characteristically: a) demonstrate detailed knowledge and understanding of a range of concepts and processes b) demonstrate detailed knowledge and understanding of subject-specific material.	Candidates characteristically: a) analyse and interpret geographical information, issues and viewpoints b) offer a valid evaluation of geographical information, issues and viewpoints c) demonstrate the ability to apply geographical understanding to unfamiliar contexts at different scales.	Candidates characteristically: a) select and use appropriately a range of methods, skills and techniques (including new technologies) when investigating questions and issues b) reach valid conclusions and communicate findings clearly in a structured manner appropriate to the task.
E/U boundary performance descriptions	Candidates characteristically: a) demonstrate some knowledge and understanding of some concepts and processes b) show basic knowledge and understanding of subject-specific material.	Candidates characteristically: a) offer limited and inconsistent analysis and interpretation of geographical information, issues and viewpoints b) attempt some limited evaluation of geographical information, issues and viewpoints c) show some limited ability to apply aspects of geographical understanding to unfamiliar contexts.	Candidates characteristically: a) use a limited range of methods, skills and techniques (which may include new technologies) to attempt to investigate questions and issues b) draw some limited conclusions c) communicate findings which broadly address the tasks.
	Assessment Objective 1	**Assessment Objective 2**	**Assessment Objective 3**
A2			
	Demonstrate knowledge and understanding of the content, concepts and processes.	Analyse, interpret and evaluate geographical information, issues and viewpoints and apply understanding in unfamiliar contexts.	Select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.
A/B boundary performance descriptions	Candidates characteristically: a) demonstrate knowledge and understanding of a	Candidates characteristically: a) accurately and competently analyse and	Candidates characteristically: a) select and use appropriately and

	wide range of concepts and processes b) show thorough knowledge and understanding of subject – specific material.	interpret geographical information, issues and viewpoints b) offer a thorough evaluation of geographical information, issues and viewpoints in relation to specific geographical concepts c) demonstrate the ability to apply accurate and appropriate geographical understanding to unfamiliar contexts with precision at a range of scales.	accurately a wide range of methods, skills and techniques (including new technologies) when thoroughly investigating questions and issues b) reach substantiated and valid conclusions c) communicate findings accurately and appropriately to the task.
E/U boundary performance descriptions	Candidates characteristically: a) demonstrate some knowledge and understanding of the main concepts and processes b) show some understanding of subject specific material.	Candidates characteristically: a) show some attempts to analyse and interpret geographical information, issues and viewpoints with varying degrees of success b) offer some evaluation of geographical information, issues and viewpoints with variable success c) show some ability to apply geographical understanding to unfamiliar contexts with some degree of accuracy.	Candidates characteristically: a) use a range of methods, skills and techniques (which include new technologies) to investigate questions and issues with varying degrees of success. b) draw some straightforward conclusions c) communicate findings broadly appropriate to the task.

3C.8 Grading

All GCE units are awarded A-E. The Advanced Subsidiary GCE is awarded on the scale A-E. The Advanced GCE is awarded on the scale A-E with access to an A*. To be awarded an A*, candidates will need to achieve a grade A on their full A level qualification and an A* on the aggregate of their A2 units. Grades are reported on certificates. Results for candidates who fail to achieve the minimum grade (E or e) will be recorded as unclassified (U or u) and this is not certificated.

A Uniform Mark Scale (UMS) enables comparison of candidates' performance across units and across series. The two-unit AS GCE has a total of 200 uniform marks and the four-unit Advanced GCE has a total of 400 uniform marks. OCR converts the candidate's raw mark for each unit to a uniform mark. The maximum uniform mark for any unit depends on that unit's weighting in the specification. In these geography specifications, the four units of the Advanced GCE specification have UMS weightings of 25% / 25% / 30% / 20% (and the two units of the AS GCE specification have UMS weightings of 50% and 50%). The uniform mark totals are 100/100/120/80 respectively.

3C.9 Quality assurance systems and code of practice

Examiner recruitment

Existing examiners (all having been graded as 1 or 2) to be transferred to the new specification.

Question setting

Existing procedure followed as set out in the code of conduct.

Standardised examining

Standardised on line via Scoris.
Sampled by PEs, TLs and CE.

Grade review

Awarding procedure followed as set out in the code of conduct.

3D EDEXCEL GCE A LEVEL MATHEMATICS

3D.1 Aims and purpose of the qualification

This specification is based on the GCE AS and A level subject criteria for mathematics, which is prescribed by the regulatory authorities and is mandatory for all awarding bodies.

The 18 units have been designed for schools and colleges to produce courses which will encourage students to:

- develop their understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment
- develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs
- extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems
- develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected
- recognise how a situation may be represented mathematically and understand the relationship between 'real-world' problems and standard and other mathematical models and how these can be refined and improved
- use mathematics as an effective means of communication
- read and comprehend mathematical arguments and articles concerning applications of mathematics
- acquire the skills needed to use technology such as calculators and computers effectively, recognise when such use may be inappropriate and be aware of limitations
- develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general
- take increasing responsibility for their own learning and the evaluation of their own mathematical development.

The knowledge, understanding and skills required for all mathematics specifications are contained in the subject core. The units C1, C2, C3 and C4 comprise this core material.

3D.2 History of the qualification

This series of units is the replacement for earlier Advanced Subsidiary GCE and Advanced GCE in Mathematics and Further Mathematics

3D.3 Entry requirements for the qualification

Students embarking on Advanced Subsidiary and Advanced GCE study in Mathematics are expected to have covered all the material in the GCSE Mathematics Higher Tier. This material is regarded as assumed background knowledge and will not be tested by questions focused directly on it. However, it may be assessed within questions focused on other material from the relevant specification.

3D.4 Age of candidates

There is no age restriction.

Edexcel's access policy concerning recruitment to their qualifications is that:

- they must be available to anyone who is capable of reaching the required standard
- they must be free from barriers that restrict access and progression
- equal opportunities exist for all students.

3D.5 Guided Learning Hours

There are no standard GLH outlined within the AS or A level specifications.

3D.6 Content and structure of the qualification

The syllabus content for each unit is outlined overleaf.

Table 13: Mathematics A level unit structure

Core Mathematics	
C1	Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; differentiation; integration.
C2	Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; trigonometry; exponentials and logarithms; differentiation; integration.
C3	Algebra and functions; trigonometry; exponentials and logarithms; differentiation; numerical methods.
C4	Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; differentiation; integration; vectors.
Further Pure Mathematics	
FP1	Series; complex numbers; numerical solution of equations; coordinate systems, matrix algebra, proof.
FP2	Inequalities; series, first order differential equations; second order differential equations; further complex numbers, Maclaurin and Taylor series.
FP3	Further matrix algebra; vectors, hyperbolic functions; differentiation; integration, further coordinate systems.

Mechanics	
M1	Mathematical models in mechanics; vectors in mechanics; kinematics of a particle moving in a straight line; dynamics of a particle moving in a straight line or plane; statics of a particle; moments.
M2	Kinematics of a particle moving in a straight line or plane; centres of mass; work and energy; collisions; statics of rigid bodies.
M3	Further kinematics; elastic strings and springs; further dynamics; motion in a circle; statics of rigid bodies.
M4	Relative motion; elastic collisions in two dimensions; further motion of particles in one dimension; stability.
M5	Applications of vectors in mechanics; variable mass; moments of inertia of a rigid body; rotation of a rigid body about a fixed smooth axis.
Statistics	
S1	Mathematical models in probability and statistics; representation and summary of data; probability; correlation and regression; discrete random variables; discrete distributions; the Normal distribution.
S2	The Binomial and Poisson distributions; continuous random variables; continuous distributions; samples; hypothesis tests.
S3	Combinations of random variables; sampling; estimation, confidence intervals and tests; goodness of fit and contingency tables; regression and correlation.
S4	Quality of tests and estimators; one-sample procedures; two-sample procedures.
Decision mathematics	
D1	Algorithms; algorithms on graphs; the route inspection problem; critical path analysis; linear programming; matchings.
D2	Transportation problems; allocation (assignment) problems; the traveling salesman; game theory; further linear programming, dynamic programming; flows in networks.

3D.7 Assessment – procedures, methods and levels

All units are externally assessed.

All examination papers last 1 hour 30 minutes.

All examination papers have 75 marks.

C1 is a non-calculator paper: for all other unit examinations, calculators can be used.

3D.8 Grading

The minimum uniform marks required for each grade for each unit are as follows:

Table 14: Mathematics A level uniform marks

Unit grade	A	B	C	D	E
Maximum uniform mark = 100	80	70	60	50	40

Students who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–39.

3D.9 Quality assurance systems and code of practice

Examiner recruitment

In accordance with JCQ policy.

Question setting

The Principal Examiner sets an initial draft of a whole unit paper. This is then moderated at a QPEC meeting and a final draft agreed.

Standardised examining

Following the sitting of the examination the principal examiner will mark some scripts using the latest version of the mark scheme. He will then propose changes to the mark scheme, variations etc in the light of the students' responses. A pre-standardisation meeting is usually held with the team leader where a final mark scheme is agreed. The chief examiner would be present to agree any changes or alterations to the scheme. The standardisation meeting will then be held to explain the scheme to the examiners. At Edexcel, this process would be carried out remotely for some units. All these processes are in accordance with the JCQ code of practice.

Grade review

As examinations are marked on-line the team leaders can monitor examiners in real time. Throughout the marking process examiners are monitored and towards the end of the marking process a final check is made to ensure that no examiners are outside board tolerances. No further checks are made after the award has taken place.

The grading meeting (award meeting) is done with a panel consisting of all principal examiners and all chief examiners to ensure consistency across the different options. Awarding decisions are made on a unit by unit basis and a final check is made at the end to ensure that the overall award is in line with previous years and statistical expectations.

3E EDEXCEL GCE A LEVEL HEALTH AND SOCIAL CARE

3E.1 Aims and purpose of the qualification

The GCE Health and Social Care is a vocational A level, offered at single AS, double AS, single A level and double A level.

It aims to allow candidates to have a broad educational basis for further training, further education or for moving into appropriate employment within the health and social care sector. The qualifications have been designed to be delivered in a work-related context and to allow learners to develop an understanding of the diverse and complex nature of the health and social care sector.

The qualifications aim to:

- widen participation in vocationally-related learning
- allow learners to experience vocationally-related learning to see if it is suitable
- enable learners to make valid personal choices on completion of the qualification
- raise attainment at Level 3/ Advanced level of the NQF.

Broad objectives

The broad objectives of these GCEs are to:

- introduce learners to work-related learning
- provide learners with a broad introduction to a vocational sector
- give learners the technical knowledge, skills and understanding associated with the subject at this level
- equip learners with some of skills they will need in the workplace or in further education or training
- empower learners to take charge of their own learning and development
- provide a range of teaching, learning and assessment styles to motivate learners to achieve their full potential

3E.2 History of the qualification

This suite of qualifications replaces the VCE Health and Social Care, which in turn replaced the Advanced GNVQ qualifications. It is part of a larger Group of vocational A levels offered by Edexcel.

3E.3 Entry requirements for the qualification

Learners who would benefit most from a GCE in Health and Social Care are likely to have one or more of the following:

- Intermediate level qualification
- GCSE profile grades A*-C
- BTEC First Diploma
- other relevant qualifications at Level 2, including NVQs, but with a standard of literacy and numeracy equivalent to GCSE grade A*-C
- some related work experience.

3E.4 Age of candidates

Most candidates would start the course at 16.

3E.5 Guided Learning Hours

180 GLH for the single AS, 360 for the double AS, 360 for the single A level and 720 for the double A level.

3E.6 Content and structure of the qualification

Table 15: Edexcel GCE A level Health and Social Care

Unit 1: Human Growth and Development	**Unit 7: Meeting Individual Needs**
Life stages and aspects of human growth and development Factors affecting growth and development Promoting health and wellbeing	Structure and provision of services Meeting individual needs Practitioner roles Quality assurance and regulation
Unit 2: Communication and Values	**Unit 8: Promoting Health and Well-being A2**
Communication Care value base Transmission of values	Compulsory unit Reasons for promoting health and wellbeing Models and approaches to health promotion Planning and implementing a health promotion
Unit 3: Positive Care Environments	**Unit 9: Investigating Disease**
Values and individual rights Barriers to access Creating a positive environment How society promotes service users' rights	Health and disease: epidemiology Differences between communicable and non-communicable diseases Diagnosis, treatment and support of disease Strategies for prevention of disease
Unit 4: Social Aspects and Lifestyle Choices	**Unit 10: Using and Understanding Research**
Lifestyle choices and life course events Social factors affecting health and well-being Care professional/ service user relationships	The aims and use of research in health and social care Research methods Carrying out a research project
Unit 5: Activities for Health and Well-being	**Unit 11: Social Issues and Welfare Needs**
Types and benefits of activities The planning and implementation of activities Evaluation of activities	Origins of social and welfare issues Demographic change and social and welfare issues Social issues in context Government responses to social issues and welfare needs
Unit 6: Public Health	**Unit 12: Understanding Human Behaviour – A2 compulsory unit**
Public health: origins, aims and data Current issues in public health Promoting and protecting public health in the UK	Influences on behaviour and their effects Theories of human behaviour Human behaviour and care values

For the internally assessed units learners may apply their learning to any of the following service-user Groups:

- health
- early years (care and education)
- care of older people
- individuals with specific needs.

It is suggested that they produce internally assessed work from at least two of the service-user Groups. Learners should choose which of these Groups they study for each internally assessed unit, with guidance from the centre.

3E.7 Assessment – procedures, methods and levels

Assessment is by external examination (1/3 of the units) and by internally assessed, externally moderated portfolios (2/3 of the units).

Portfolios are marked against the four Assessment Objectives. The specification has clear assessment grids, Grouped into three mark bands, (mark band 1 being the lowest mark band and mark band 3 being the highest mark band). There are clear descriptors for each assessment objective enabling the assessor to award the most appropriate mark.

The format of the examination is 1 x 90 minute paper for each of the externally assessed units. The assessments are designed to allow candidates to demonstrate positive achievement and to have a positive experience in completing each assessment. Exams are available twice yearly in January and June

In line with the above, the criteria for assessing each assignment have been written so that a candidate working at the lower end of the GCE ability range should be capable of meeting approximately 80 per cent of the band 1 criteria. This equates to approximately 40 per cent of the total credit available for the assignment.

Level description

The performance descriptions for GCE Health and Social Care aim to describe learning outcomes and levels of attainment likely to be shown by a representative learner performing at the A/B and E/U boundaries for the AS and A2. The performance descriptions illustrate the expectations at these boundaries for the AS and A2 as a whole; they have not been written at specification or unit level.

Each performance description is aligned to one Assessment Objective. An alphabetical system has been used to denote each element of a performance description. There is no hierarchy of elements.

Performance descriptions are designed to assist examiners in exercising their professional judgement at awarding meetings where the grade A/B and E/U boundaries will be set by examiners using professional judgement. This judgement will reflect the quality of learners' work, informed by the available technical and statistical evidence. Performance descriptions will be reviewed continually and updated where necessary.

Table 16: Edexcel GCE A level Health and Social Care performance descriptions

AS Level performance descriptions					
	Assessment Objective 1	**Assessment Objective 2**	**Assessment Objective 3**	**Assessment Objective 4**	**Quality of Written Communication**
Assessment objective	Knowledge and Understanding	Application of knowledge and understanding	Research and analysis	Evaluation	
A/B boundary performance descriptions	A depth of knowledge of health and social care sector as covered. A depth of understanding of the functions of the health and social care sector. A range of relevant work-related skills in a variety of situations in an effective manner.	Apply knowledge, skills and understanding accurately to a range of work-related situations involving different service-user groups.	Undertake research using a range of techniques. Use a wide range of relevant information sources. Use selected information to analyse work-related issues and problems.	Analyse evidence to draw valid conclusions. Make reasoned judgements about work-related issues.	Use written expression which conveys appropriate meaning and uses appropriate specialist vocabulary.
E/U boundary performance descriptions	Demonstrate basic knowledge of the health and social care sector (there may be significant omissions). Show a basic understanding of the purposes of the health and social care sector. Demonstrate a limited range of work-related skills.	Apply knowledge, understanding and skills with guidance to service-user Groups and familiar work-related contexts.	Collect information on work-related issues using given techniques. Use a limited range of relevant information sources. Carry out some basic analysis of work-related issues and problems.	Evaluate evidence to draw basic conclusions about relevant work-related issues. Use written expression which is adequate to convey meaning and may be expressed in a non-specialist way.	Candidates use written expression which is adequate to convey meaning but may be expressed in a non-specialist way.
A2 Level Performance Descriptions					
	Assessment Objective 1	**Assessment Objective 2**	**Assessment Objective 3**	**Assessment Objective 4**	**Quality of Written Communication**
Assessment objective	Knowledge and understanding	Application of knowledge and understanding	Research and analysis	Evaluation	

A/B boundary performance descriptions	Demonstrate in-depth knowledge of the health and social care sector. Show in-depth understanding of functions of the health and social care sector. Demonstrate a range of work-related skills in a variety of situations in an effective manner.	Accurately and independently apply in-depth knowledge, understanding and skills to a wide range of work-related situations, relating these as appropriate to different contexts and service-user Groups.	Select and justify use of research and analytical techniques Use a wide range of relevant information sources. Use the selected techniques and information to analyse work-related issues and problems.	Evaluate a range of evidence to draw and justify valid conclusions Make well-reasoned judgements about relevant work-related issues.	Use written Expression which conveys appropriate meaning and uses appropriate vocabulary.
E/U boundary performance descriptions	Demonstrate basic knowledge of health and social care sector. Show basic understanding of the purposes of health and social care sector (there may be significant omissions). Demonstrate limited range of work-related skills.	Apply knowledge, understanding and skills with guidance to service-user Groups and work-related contexts.	Undertake research into work-related issues, using given techniques using given techniques. Use limited range of relevant information sources. Use collected information to carry out a straightforward analysis of work-related issues and problems.	Evaluate evidence to draw basic conclusions about relevant work-related issues. Identify strengths and weaknesses of the evidence.	Use written expression which is adequate to convey meaning and may be expressed in a non-specialist way.

3E.8 Grading

Qualifications will be graded on a five-grade scale from A to E, where A is the highest grade. Mark bands used for internal assessment do not relate to pre-determined grade boundaries. Following each examination and moderation series, Edexcel will set the grade boundaries for both internally assessed units and the externally assessed units at an awarding meeting.

The raw mark boundaries will be converted to uniform marks on a scale of 0–100. The final grade for the qualification will be determined by aggregating the uniform

marks for the units. The following table gives details of the uniform mark scales (UMS) used for the units and for the qualifications.

Unit results

The minimum uniform marks required for each grade:

Table 17: Health and Social Care A level uniform marks – per unit

Unit grade	A	B	C	D	E
Maximum uniform mark = 100	80	70	60	50	40

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–39.

Qualification results

The minimum uniform marks required for each grade:

Advanced Subsidiary

Table 18: Health and Social Care AS uniform marks

Unit grade	A	B	C	D	E
Maximum uniform mark = 100	240	210	180	150	120

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–119.

Advanced GCE

Table 19: Health and Social Care A level uniform marks

Unit grade	A	B	C	D	E
Maximum uniform mark = 100	480	420	360	300	240

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–239.

Advanced Subsidiary (Double Award)

Table 20: Health and Social Care AS Double Award uniform marks

Qualification grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
Maximum uniform mark = 1200	480	450	420	390	360	330	300	270	240

Candidates who do not achieve the standard required for a grade EE will receive a uniform mark in the range 0–239.

Advanced GCE (Double Award)

Table 21: Health and Social Care A level Double Award uniform marks

Qualification grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
Maximum uniform mark = 1200	960	900	840	780	720	660	600	540	480

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range 0–479.

3E.9 Quality assurance systems and code of practice

Examiner recruitment

Examiner recruitment is through national adverts.

Examiners/moderators are graded and invitations for future employment reflect these gradings. Appointment is for one series only. However, the majority of examiners are very experienced and mark each series of examination

Question setting

Questions are written by the principal examiner, revised through question paper evaluation committee (made up of the principal examiner, chief examiner, chair of examiners, reviser and assessment leader, as well as someone with responsibility for the qualification from the board's question paper unit) and pre-standardisation meetings with team leaders.

Standardised examining

Standardised examining is very thorough, with all examiners/moderators in attendance. External papers are marked online (EPEN system) and there is thorough checking throughout.

Grade review

Awarding is undertaken with all principal examiners and principal moderators present. Pre-awarding occurs with the chair of examiners present.

4 THE WORK OF THE EXPERT GROUP

4A CHEMISTRY

4A.1 Prior to the meeting

Prior to this meeting some preliminary work was carried out. This included a detailed mapping of the Scottish Higher and Advanced Higher chemistry against the OCR GCE Chemistry A level, reports from three HE representatives highlighting similarities and differences between the two qualifications, and comparative studies from a representative from each awarding body. Pre-meeting papers were distributed, requiring members of the Group to compare aims, content, study hours, relative size and assessment models of the Scottish Higher and Advanced Higher chemistry and that of the OCR GCE Chemistry A level.

4A.2 The Expert Group meeting

The Expert Group then met on one occasion for two days (24th and 25th April 2008) to examine and discuss the evidence listed in Appendix 3 and the preparatory work completed by Group members. This section contains an account of the deliberations of this meeting.

The opening session provided an opportunity for the SQA Principal Assessor and the OCR Principal Moderator to present their qualifications and for Expert Group members to seek clarification about general issues in relation to the awards.

The Group sought to compare the similarities and differences in the design of the Scottish Higher and Advanced Higher and the OCR GCE Chemistry A level. It was noted that benchmarking was solely against the OCR A level and that this qualification was also available from other awarding bodies. However, it had been a function of QCA, and now OFQUAL, to ensure consistency of standards in GCE A level across awarding bodies, subjects and time.

All three are modular qualifications. A level is normally taken over two years, while the Higher and Advanced Higher are each taken over one year. The A level requires the candidate to take both the AS and A2 components, AS also being a standalone qualification in its own right. However, A2 is not a qualification as such, simply the second year of A level. By contrast, Higher and Advanced Higher are separate qualifications and the Higher stands in its own right as a significant entry route to the first year of four-year Scottish degree courses. The Advanced Higher builds on the Higher but its assessment is completely independent of it.

There were considered to be significant differences in the ways in which the qualifications are assessed. A level theory units are all externally assessed and count

equally towards the final grading of the A level. The practical units count as 20% of the assessment. Synoptic questions within the A2 papers are used to assess the candidate's grasp of the syllabus as a whole. In both Scottish qualifications there is internal marking of the units on a pass/fail basis. This assessment does not count towards the overall grading, although it is necessary for the candidate to pass all units. There is external assessment of the course rather than the units.

From first teaching in 2008 the A level will have an extended grading scale of A*- E compared with a grading scale of A-D for the Higher and Advanced Higher.

The recommended entry requirement for A level is GCSE Science and GCSE Additional Science or GCSE Chemistry. Those following the former (which is the norm in England) will start A level with less knowledge of chemistry than Scottish students possessing an Intermediate qualification.

The entry requirements for Higher are a pass in Standard 1 or 2 or Intermediate. The Higher in chemistry is normally a pre-requisite for the Advanced Higher and the qualifications are sequential and cumulative in a manner similar to AS and A2.

The A2 units of the A level provide the opportunity for stretch and challenge and extended writing, and this is reflected in the introduction of A* in the grading, albeit based on a mathematical sub-division of grade A rather than the introduction of a new performance descriptor. Similar opportunities for stretch and challenge exist in both the Higher and Advanced Higher. Based on the A level specimen papers, it appeared that the level of understanding and synthesis required by the stretch and challenge questions were reflected in some of the questions set at Advanced Higher. There was, however, no equivalent to A* in the Advanced Higher. It is thought that about 4% of chemistry A level candidates will be likely to obtain A*. Currently about 30% achieve grade A.

Both types of qualifications offer re-sit opportunities. For A level, individual AS units can be re-taken, or alternatively the entire AS. It is common for students to re-sit one or more AS units while taking A2. However, current experience relates to the old six-unit AS level - it is possible that the change to a revised four-unit A level with the new A* grade deriving from A2 alone may alter candidate behaviour in respect of re-sits. Candidates can re-sit the external assessment for Higher and Advanced Higher, but only a full year later at the next examination diet. SQA does not offer a second diet in the same way the A level awarding bodies do. It should also be noted that a candidate's certificate will show the most recent performance, so if they achieve less well in a re-sit, this would be reflected on their certificate.

All three chemistry qualifications have demonstrated stability and consistency in recent years and it is not expected that the revisions to A level from first teaching in 2008 will significantly affect this.

4A.3 Comparison of aims

The Group proceeded to consider the aims of the qualifications with particular reference to their utility for progression to HE. During the course of the two days it became clear that there were issues around this concept because of the differences between the Scottish and English systems in terms of the transition point from pre-HE programmes to HE level courses. The Scottish system was seen to be predicated on a four-year honours degree programme, the normal entry requirements for which are expressed in terms of achievement in Highers. The Advanced Higher potentially provides entry with advanced standing to the second year of a four-year degree in Scotland. In practice, some students with Advanced Highers enter the first year of study and it is not uncommon for applicants to receive unconditional offers from HE while studying for Advanced Highers, or alternative offers (unconditional for first year entry and conditional for second year entry). The admissions policies of Scottish HEIs are not uniform over this matter, and HEIs in the rest of the UK vary in their responses to the Higher and Advanced Higher for entry to three-year honours degrees. HEIs may feel unable on grounds of fair admissions to require applicants to offer Advanced Highers as there are understood to be limitations to their subject availability across all centres in Scotland. The use of the Sixth Year in Scotland is variable, with some learners taking more Highers or a mix of Highers and Advanced Highers rather than just Advanced Highers.

Progression to HE in England, Wales and Northern Ireland from A levels is to the first year of an honours degree, most of which are three years in duration. (Those with extended length tend to involve greater depth, a sandwich year or year abroad). In some cases A levels are accepted by Scottish HEIs for entry to the second year of a degree, but other students enter for four years of study. AS is not normally regarded as sufficient for entry to honours degrees.

For the purpose of this exercise utility for entry to HE was judged primarily on the threshold of entry to a three-year honours degree programme, based on the normal point of entry to HE courses in England from the benchmark qualification, GCE A level.

The wording of the published aims is different, but there was thought to be little difference in intent (see Table 17). Much of the expectation in terms of knowledge, understanding and the application of ideas was deemed to be comparable.

Table 22: Comparative aims of chemistry qualifications

A level	**Highers**	**Advanced Highers**
The aims are to encourage candidates to:	The course is designed to provide opportunities in appropriate contexts for the candidates to acquire:	The course is designed to allow candidates to develop:
• develop their interest and enthusiasm for chemistry • appreciate how society makes decisions about scientific issues and how sciences contribute to society • develop a deeper appreciation of the skills, knowledge and understanding of '*How science works'* • develop essential knowledge and understanding of different areas of chemistry and how they relate to each other.	• knowledge and understanding of chemical facts, theories and symbols • the ability to solve chemical problems • the ability to carry out chemical techniques and investigations • positive attitudes, by helping candidates to be open-minded and willing to recognise alternative points of view, and to be interested in science and aware that they can take decisions which affect the well-being of themselves and others, and the quality of their environment.	• knowledge and understanding of chemical facts, theories and symbols • the ability to solve chemical problems • the ability to carry out chemical techniques and a chemical investigation • an awareness of the relationship between experimental evidence and chemical theory.

The SQA examiner explained that Highers are intended as the main Scottish qualification for preparation for entry to a four-year honours degree and provides a broad general education. Advanced Higher is aimed to build on the level of understanding in Higher and provide greater depth. Like the Higher, Advanced Higher is designed for progression to HE, and also potentially provides progression to employment. It gives a sound grounding for first year entry and feedback suggests that the investigation develops research skills which are useful as preparation for HE. Good candidates can enter an honours degree in the second year with advanced standing. One HEI noted that 50% of the intake was qualified to go into the second year, but of these only 50% opted to do so. It was also noted that some Scottish applicants were being admitted to English universities on the basis of Highers alone. However, an HE member did not consider the Chemistry Higher to be sufficient for entry to chemistry degree courses at a number of English universities.

The Chemistry A level is intended to provide progression both to honours degrees and to employment and has a proven track record of both. It is intended as a preparation for degree courses in science-based subjects eg Medicine and is a pre-requisite for entry to many such courses.

As part of the review of aims and purposes, the Group considered the strengths and weaknesses of the qualifications from the point of view of progression to HE. The Group felt that the Advanced Higher offers significant breadth and depth of topics and is closer to a first year degree course in terms of style of learning. The specification of practical work is more formal in the Scottish qualifications. There

were mixed views about the merits of the chemical investigation, and its value will depend on the extent to which it is the candidate's creative work as opposed to being closely directed within the centre. Some felt that it is a real strength of the Advanced Higher, but others suggested that the reliance on the degree of professionalism of individual teachers and the extent to which the work is assisted introduced possible variability which would be a weakness.

A prominent difference is the treatment of the relevance of chemistry to the outside world. The A level places more emphasis on the links between chemistry and real world problems, placing chemistry into context more thoroughly than the Scottish qualifications. However, this enables the latter to offer a more problem-based approach to learning than A level. The HE representatives considered that the structure of the questions in the Scottish qualifications was somewhat more limited than A levels, and that the multiple choice format of the Scottish papers was less demanding than the more open-ended questions which were considered to be a strength of A levels. The Advanced Higher was felt to be more traditional than A level and this could be seen as both a strength and a weakness. HE members felt that there both strengths and weakness in each of the qualifications, and that ultimately the ability to solve problems and tackle questions was more important than knowledge of content.

4A.4 Determining size

4A.4.1 Comparison of Guided Learning Hours

The Group reviewed the published guided learning hours (GLH) for each of the qualifications. These were quoted as follows:

Higher 240
Advanced Higher 320
A level 360

It was noted that the total GLH for a student taking Higher Chemistry followed bv Advanced Higher Chemistry is considerably in excess of the figure for A level, but the Group concluded that the difference is in part a reflection of the different systems of estimating GLH. It was noted that the GLH for the Scottish qualifications include an allowance for the assessment of the course in addition to the units. Scottish qualifications all have a credit value within the Scottish Credit and Qualifications Framework (SCQF) - Higher bears a credit rating of 24 and Advanced Higher 32. Each credit point equates to ten hours of learning.

There was general unease about using GLH as a measure of the relative sizes of the qualifications – on this basis A level would represent around 60% of Higher and Advanced Higher. GLHs are notional measures of average working time for a typical

learner and no more than estimates. Nevertheless this comparison formed a starting point for assessing the relative size of the qualifications.

4A.4.2 Determining size – breadth and depth of content coverage

Members of the Group had undertaken some mapping of content prior to the meeting. In general comparison between A level and Higher + Advanced Higher showed that there were far more similarities than differences and many areas of chemistry were in common. In general the Advanced Higher has greater depth than the Higher and the range of content is significantly broader.

The following components are unique to A level and not present in Higher and Advanced Higher:

- Thermal decomposition of carbonates
- Use of term “disproportionation”
- Reactions of halide ions
- Terms “E and Z” stereoisomerism
- Atom economy
- Green chemistry
- Some detail on “greenhouse effect”/ozone layer
- Some additional environmental chemistry
- Reactions of phenol (but acidity of phenol covered at Advanced Higher)
- Azo-dyes
- Iso-electric points of amino acids
- Combining mass spectrometry and chromatography
- Stability constants of complexes
- More detail on rates of reaction
- More detail on fuel cells
- Isomerism of transition metal complexes
- ^{13}C NMR

The following are aspects of content unique to Advanced Higher (building on Higher) when compared with A level:

- Calculations associated with electromagnetic spectrum
- Heisenberg’s Uncertainty Principle/Aufbau Principle /Hund’s Rule/Pauli Exclusion Principle
- Atomic emission and atomic absorption spectroscopy
- Superconductors and semiconductors
- Hydrides
- Addition followed by elimination
- Use of acid chlorides in ester formation
- X-ray crystallography
- Medicines/Agonists/Antagonists/Pharmacaphore
- Enzyme catalysis
- More detail of physical properties and structure of elements within the Periodic Table
- More detail on fuels
- The chemical industry
- Electrolysis (including calculations)

- Nuclear chemistry
- Detail and calculations on the electromagnetic spectrum
- Atomic emission and absorption spectroscopy
- Colour in transition metal complexes
- Complexiometric titrations
- Partition coefficients and solvent extraction
- Ellingham diagrams
- Ethers
- Nitriles
- Elemental microanalysis

It appeared that the common areas of content are broadly at the same depth, as are the elements unique to each qualification, but the overall content of Advanced Higher and Higher is greater than A level. While the question papers differ in style, they require equivalent kinds of response. Calculations are for the most part interchangeable between the specifications of A level and Advanced Higher.

It was thought that the differences in the sizes of the specifications reflect the differences in the knowledge that it could be assumed students will possess before the start of the respective courses. Compared to students starting their A level course, Scottish students have a greater knowledge before they start their Highers. As a result students taking both the Highers and the Advanced Highers acquire a greater breadth of knowledge than an A level student. However the depth of understanding is similar.

Scottish students who have taken both Higher and Advanced Higher in Chemistry will know more chemistry and be in a stronger starting position than A level students. This is not true of the Higher which has a greater content than the AS course but significantly less than the full A level, and might therefore not provide sufficient foundation in chemistry for entry to an honours degree in chemistry at some English universities. The depth of understanding is also less.

An HE member felt that an important difference is the level of mathematical understanding of the subject. An Advanced Higher student would have a better mathematical understanding of chemistry than an A level student.

It was noted in discussion that there were issues in allocating Tariff points as A level points subsumed those for AS. Although the Higher and Advanced Higher were two separate qualifications, in practice the points score for Advanced Higher needed to subsume that for Higher as the Advanced Higher built on the content of Higher - it was clarified that this was the current practice in the operation of the Tariff. It was recommended that clear guidance should be issued to users that the new scores for Higher and Advanced Higher should not be added together.

4A.5 Estimating relative demand – comparing assessment models

At Higher there are four units, three assessed internally on a pass/fail basis and the fourth unit assessed externally. As part of the unit assessment, there are three practical reports. At Advanced Higher there are four units (two of which are half units) which are each assessed internally on a pass/fail basis. The assessment consists of a number of fixed response (multiple choice) and extended response questions – these do not integrate knowledge across units but do integrate skills. The questions are split into 60% knowledge and 40% problem solving. Candidates also have to write up one of the prescribed practicals and complete a record of work ("daybook") for the chemical investigation. For both Scottish qualifications unit assessment is internally marked with external verification by SQA. Candidates are required to pass all the unit assessments in order to be awarded the qualification.

For both Scottish qualifications the grading is based on an external two and a half hour examination and there is no contribution from the unit assessments. However well the student has performed on the units, everything depends on performance in a single examination. There is also no choice of questions. The examination is split into knowledge and understanding and problem solving.

For the higher the final grade awarded is based on the mark from the external examination alone, whereas for the advanced higher it is based on the combined mark from the external examination (80 per cent) and the chemical investigation report (20 per cent).

For AS and A level, there are external examinations for each unit, except the practical units, which are internally assessed and externally verified. The AS assessment consists of:

- 1 x one hour external examination (30%)
- 1 x 1.75 hours external examination (50%)
- 3 x one hour internally assessed practicals (20%).

The AS examination papers both consist of structured questions with minor opportunities for extended writing.

A2 repeats the same pattern as AS, but A2 examinations include synoptic assessment, and the questions, although structured, provide more opportunity for extended writing and demonstration of stretch and challenge. At this stage stretch and challenge is still work in progress as the examination papers have not yet been constructed, but it is not expected that this will involve a significant change in the current pattern of assessment. Chemistry always has had questions which have challenged the most able and these will only be slightly extended. The extended writing will be achieved by providing occasions where the extent of structuring is less.

A level is graded on the basis of marks from AS and A2. In both AS and A level it is possible to re-sit units in order to improve the overall performance.

Use of Assessment Objectives

The Higher and Advanced Higher do not have Assessment Objectives as such but have detailed outcome statements for Knowledge and Understanding, Problem Solving and the Practical. A level has three Assessment Objectives - Knowledge and Understanding (AO1), the Application of Knowledge and Understanding (AO2) and How Science Works (AO3).

While expressed differently, the Group did not perceive significant differences between the demand of the Assessment Objectives and Outcome Statements.

Weighting of Assessment Objectives

In the Higher, Knowledge and Understanding is weighted 60% and Problem Solving 40%. In the Advanced Higher the weightings are approximately:

- Knowledge and Understanding – 46%
- Problem Solving – 34%
- Chemical Investigation – 20%

In AS the weighting of Assessment Objectives is:

- AO1 – Knowledge and Understanding – 35%
- AO2 – Application of Knowledge and Understanding – 38%
- AO3 – How Science Works – 7%
- 3 internal assessments – 20%
  - AO1 – 3%
  - AO2 – 2%
  - AO3 – 15%

In A level the weighting of Assessment Objectives for the combined AS and A2 is:

- Knowledge and Understanding – 34%
- Application of Knowledge and Understanding - 44%
- How Science Works – 22%

The effective differences in the written papers appeared on the present evidence to be slight. Application of Knowledge and Understanding broadly equates to Problem Solving. However, the Scottish approach is more mathematical and problem-oriented, while the AS/A level approach is more descriptive. An important difference is that practical skills (consisting of a significant proportion of How Science Works) contribute to the mark awarded at AS but not to the mark awarded to the Highers. But it was nonetheless felt that the Assessment Objectives did not provide a useful indication of the actual demand of the qualifications, and the different wordings of the specifications appeared to amount to much the same thing.

4A.6 Estimating relative demand – comparing examination requirements

The main difference between the Scottish qualifications and A level is the use for Higher and Advanced Higher of 40 multiple choice questions as well as structured questions - A level only has the latter. The Scottish examinations have questions broken into short parts limiting the opportunities for longer answers, but allowing for a greater range of topics to be assessed. This reflects the fact that the Scottish qualifications have a broader range of material to test. The A2 examinations offer more opportunity for extended writing, but on a more limited range of topics.

In practice comparison was difficult and it was hard to judge how this might affect different levels of student performance. In principle, A level examinations seemed as demanding as the Scottish qualifications, but it was noted that the re-sit opportunities gave candidates the potential to improve their performance without extending the duration of the course. Because the grading was based on an end-of-course examination rather than unit achievement, Higher and Advanced Higher did not offer this flexibility and there was an element of criticality. The issues of re-sits occupied the Group for some time, but its judgment was that the impact of re-sits was not very significant.

It was noted that some questions in A level required candidates to give explanations where deductions might be needed. In the Scottish qualifications this might be handled by picking the correct answer from a list, a process which might be considered less demanding. The HE representatives felt that multiple choice was easier than extended response.

The marking instructions appear similar, although half marks are not used for A level. There are circumstances where Higher candidates could gain a half mark for a response, but they could also lose half marks. Overall, these effects probably cancel each other out. The use of half marks assists with differentiation as the examination has a maximum of only 100 marks, whereas marks for A level are out of 600.

However, similar tasks in both Scottish qualifications and A levels are allocated very different marks, which may impact on the level of difficulty. An A level question may be allocated several marks whereas a Higher or Advanced Higher question testing the same thing would only be allocated one or two marks. The level of demand of the question is the same, but the A level candidate has the opportunity to pick up many more marks, whereas the H or AH candidate has to do significantly more to gain the more limited number of marks.

4A.7 Estimating relative demand – comparison of candidate work

No candidate evidence was available for the Chemistry A level as the first teaching of the new specification had not yet started. Such evidence would become available

from summer 2010, and it would be necessary to re-visit the Group's recommendations once sufficient evidence was available.

4A.8 Aligning the grades

It was noted that the grade descriptions for Higher and Advanced Higher described the grade A/B and C/D interfaces while A level had a description of A/B and E/U.

The Group looked at the grade boundaries for each of the qualifications (see Table 23):

Table 23: Grade alignment – chemistry

Boundary	A level	Higher	Advanced Higher
A/B	80	70	70
B/C	70	60	60
C/D	60	50	50
D/E	50		
D/No award		45	45
E/U	40		

The numbers are the percentages achieved by candidates reaching those grade boundaries. The A levels are based on a Uniform Mark Scale which converts the boundaries agreed on a particular paper to a uniform spread where 80% represents the A/B boundary, 70% the B/C boundary etc down to 40% for the E/U boundary.

Grade boundaries are determined each year on the level of demand of a particular paper. SQA uses and publishes actual grade boundaries applied, I believe OCR sets grade boundaries and then scales the marks to 80, 70 etc. I think the point of the information was to illustrate that, in reality, the two are little different although the notional difficulties look to be. If a paper is more demanding than in previous years, grade boundaries would be lowered and if it's less demanding they would be raised.

The percentages typically gaining grade A were as follows:

- A level – just under 30%
- Higher – 30%
- Advanced Higher – 27%

It was suggested that in the Higher the candidate potential and performance aligned well, but there was less fulfilment of potential in Advanced Higher. The Group looked at why proportionally fewer candidates achieved a grade A at Advanced Higher. One suggestion was that there was less fulfilment of potential owing to candidates receiving unconditional offers based on their attainment at Higher. This might lead to lower motivation, but was only one possible reason.

The Group proceeded to attempt to align grades at A level and Advanced Higher, and noted that it was necessary to consider the new A* grade in A level which was felt to be above grade A in Advanced Higher.

An alignment was tentatively proposed as below, but with grade B in Advanced Higher positioned below grade B at A level. However, there was discussion concerning the resulting size of Advanced Higher grade B, potentially spanning grades A-C at A level, and it was decided that that it might more appropriately align with grade B at A level as indicated in the table below. This recommendation was based on professional judgement, largely based on the experience of the Group using the old specification A levels. Documentation was circulated showing work at the boundaries for the Scottish examinations. The conclusion was necessarily tentative, but there was substantial unanimity between the members of the Group.

A level	Advanced Higher
A*	
	A
A	
B	B
C	
	C
D	
	D
E	

There was also discussion about the status of grade D in Advanced Higher, which was reputedly viewed by some as a fail grade. It was established that, from SQA's point of view, it is a substantive award, not a fail grade. While it is treated by some universities as a fail grade it is, in effect, little different from grades D and E at A level which are not accepted for entry to many HE courses. However, some less demanding courses do admit students with grades D and E at A level and could potentially accept grade D in Higher and Advanced Higher. It was therefore recommended that grade D should continue to attract a Tariff points score.

4A.9 Domain scoring

The process of scoring each of the qualifications against a series of strands Grouped within domains was considered to be useful as an adjunct to the main Tariff review process, although it was felt to be laborious and the number of strands, and possibly domains, could usefully be reduced to eliminate overlap and repetition. It was also

noted that this activity potentially detracted from the time available to look at candidate evidence.

The domain scoring charts and the consequent Manhattan charts showing the profile of each qualification are appended to this report.

Overall, a consistent pattern emerged with Higher scoring proportionately less than A level and Advanced Higher slightly more. Scores were often similar across all three qualifications and there was little major divergence.

All three qualifications scored the maximum of 5 for Use and Apply. The scores were also high for application and analysis of ideas, knowledge and theory. They were less strong for synthesis and evaluation and logical and critical thinking, higher being fairly weak in these domains. Given the nature of chemistry syllabuses, it was to be expected that none scored highly for literacy and language, and numeracy, while consistent across all three qualifications, and was not particularly strong. The personal and social domain was felt to be largely irrelevant to these qualifications. Learning skills and vocational and practical skills scored moderately across the qualifications.

Figure 1: Domain scores – Chemistry Higher

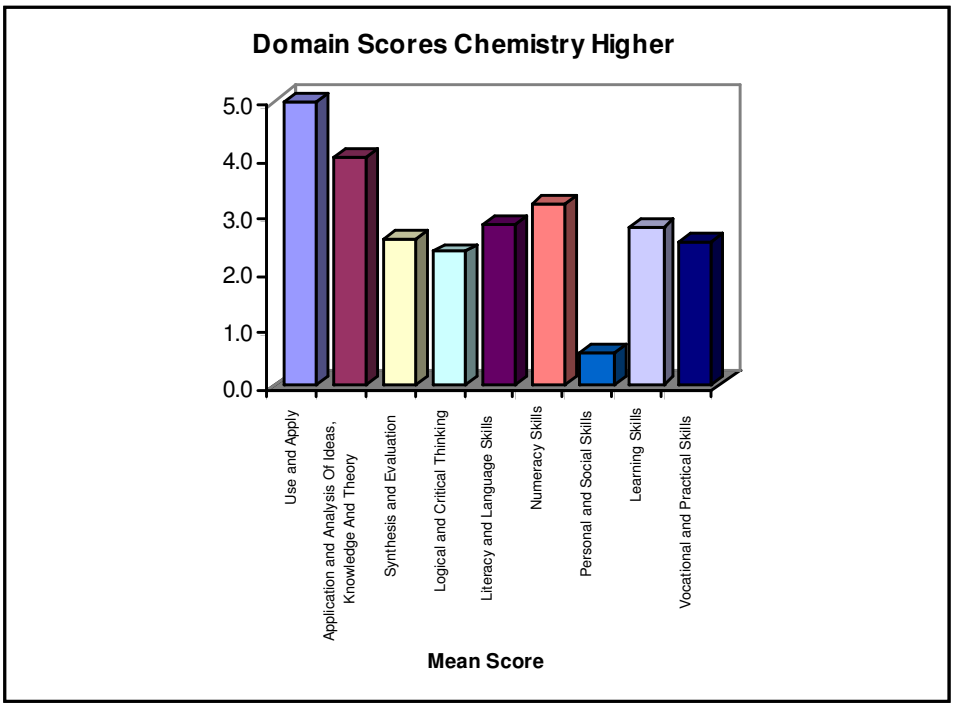


Figure 2: Domain scores - Chemistry Advanced Higher

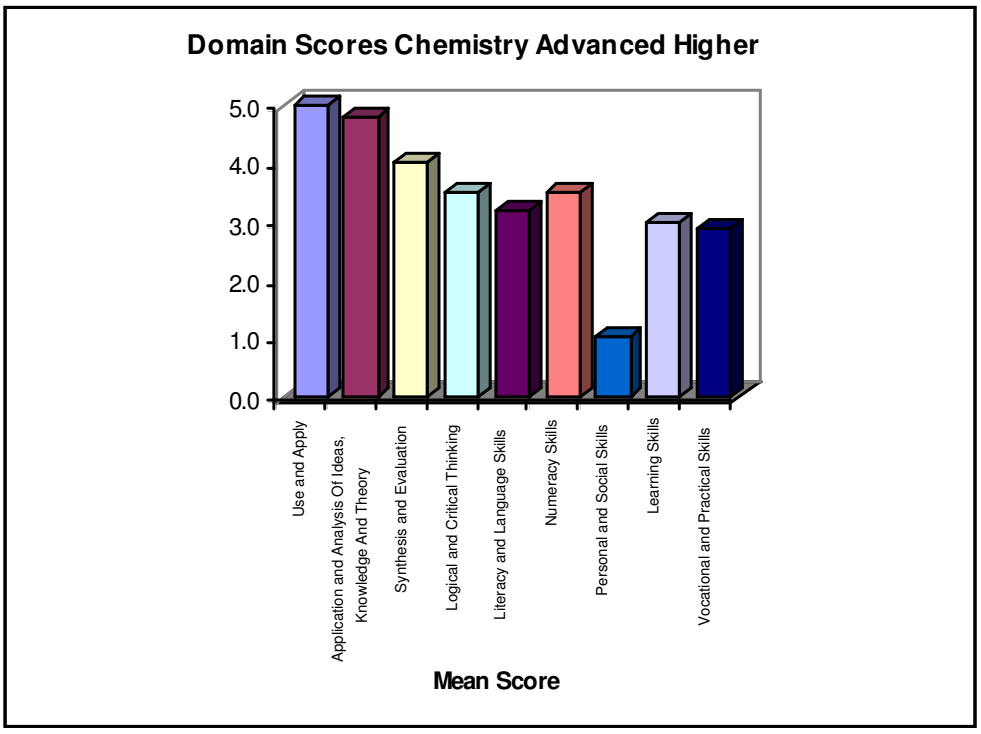
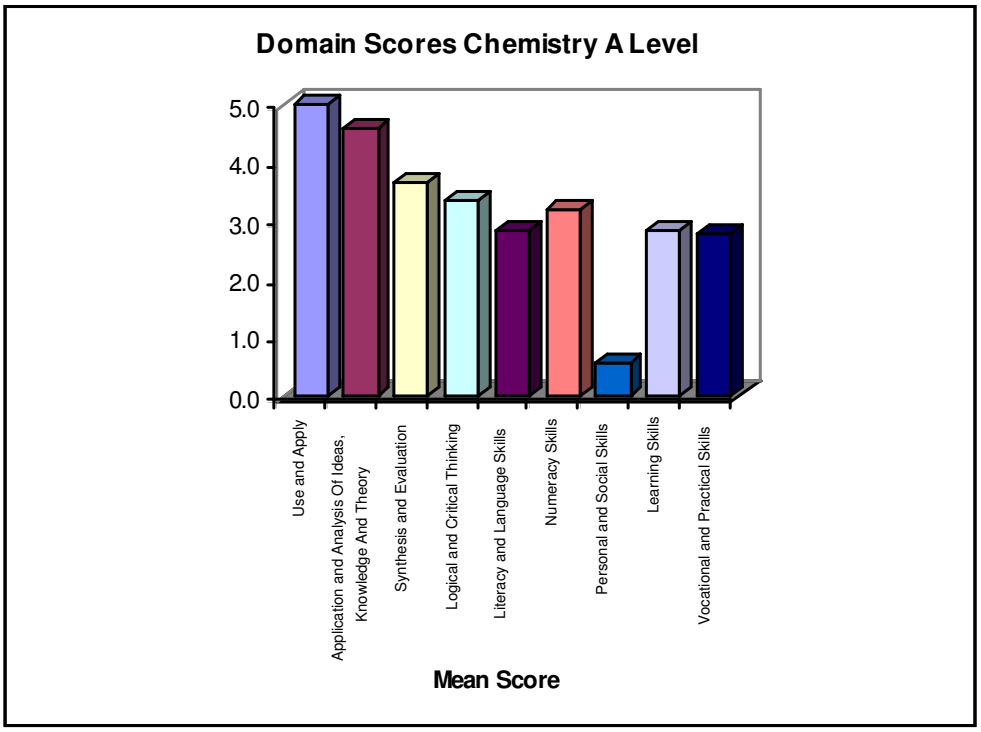


Figure 3: Domain scores - Chemistry GCE A level



The resultant averages were as follows:

- A level – 3.2
- Higher – 2.6
- Advanced Higher – 3.4

This relationship largely confirmed the Group's views of the relative values of the qualifications and provided support for its recommendations on Tariff point scores.

4A.10 Recommended allocation of UCAS Tariff points

The domain scoring suggested that Higher is weaker than A level in some areas which were judged crucial for supporting progression to HE. Higher was considered to be a smaller qualification than A level. Higher assesses a wider range of material than AS but at less depth than A level. The stretch and challenge in A level allows for the opportunity to develop additional skills, which the Higher does not. The Group concluded from the basis of the available evidence, including descriptors and assessment instruments, from the alignment of grades above and the domain scoring exercise, and from the exercise of professional judgement, that grade A at Higher should represent approximately two thirds of grade A at A level. This also reflected the relationship between the Guided Learning Hours for these qualifications.

It was agreed that grade A at Advanced Higher should receive a score slightly more than grade A at A level but less than the likely score for A*. This recommendation was made on the understanding that the Advanced Higher points score subsumed that for the equivalent Higher and that the scores should not be added together. One of the HE representatives valued the contribution of the chemical investigation while another valued the additional content – these factors both served to convince the Group that grade A in Advanced Higher was worth more than grade A at A level and the score of 130 was proposed without dissent as a collective judgment.

There was initially felt to be a big difference between the bottom of grade B for A level (70%) and for Higher/Advanced Higher (60%), but it was noted that grade B was regarded by Scottish universities as suitable for 2nd year entry. Given the judgments on larger content and the assessment demand, it was agreed that grade B in A level and Advanced Higher should be aligned at 100 points.

There was debate about the score for grade A in Higher, with different members favouring 75 and 80. The Group wished to align this slightly above grade C at Advanced Higher, and above grade A at AS, and therefore a score of 80 was agreed.

There was also debate about the score for grade D at Advanced Higher, which was raised from 40 to 50 on the grounds that that it was felt to be a little above the baseline for grade E at A level. It was noted that the existing score for grade D was 72, but the Group could not see a justification for raising the score beyond 50. It was felt that in Advanced Higher candidates obtaining a grade C or lower would be able to do so without demonstrating logical abilities. For Higher grade D a similar debate was held, resulting in a lifting of the score from an initial 25 to 30.

The scales for Scottish qualifications are non-linear. As Scottish qualifications use only grades A – D while A level uses A – E, an adjustment was necessary to retain a fair comparability.

It was agreed to recommend that the Tariff points scores for Higher and Advanced Higher should be as follows:

Grade	A level	Higher	Advanced Higher
A	120	80	130
B	100	60	100
C	80	45	70
D	60	30	50

This recommendation was tentative and it was essential that it should be reviewed when sufficient candidate evidence becomes available.

4B ENGLISH

4B.1 Prior to the meeting

Prior to this meeting some preliminary work was carried out. This included mapping of the Higher and Advanced Higher against the A level, reports from three HE representatives highlighting similarities and differences between the two qualifications and comparative studies from a representative from each awarding body. Pre-meeting papers were distributed, requiring members of the Group to compare aims, content, study hours, relative size and assessment models of the Scottish Higher and Advanced Higher and that of the English GCE A level.

4B.2 The Expert Group meeting

The Expert Group then met on one occasion for two days (24 and 25 April 2008) to examine and discuss the evidence listed in Appendix 2 and the preparatory work completed by Group members. This section contains an account of the deliberations of this meeting.

The opening session provided an opportunity for the AQA English Language and Literature Chief Examiner and the SQA Principal Assessor to present their qualifications and for Expert Group members to seek clarification about general issues in relation to the awards. Key features of each qualification are summarised in Table 24.

Table 24: Key features of English qualifications

A level	Higher	Advanced Higher
• Two year programme. • Four units. • Units 1-3 externally assessed through examination. • Unit 4 is entirely coursework. • Graded from A* to E. • 360 guided learning hours (based on QCA definition).	• One year programme. • Three units. • Must pass three mandatory units and external assessment (internally assessed) in order to be certificated for the course award. • External assessment of two papers: critical essay and close reading. • Graded A – D. • 240 hours of learning time (based on SCQF credit definition).	• Usually one year programme. • Must pass three mandatory units and external assessment (internally assessed) in order to be certificated for the course award. • Focus on independent learning through specialist study and a dissertation. • Graded A – D. • 320 hours of learning time (based on SCQF credit definition).

It is worth noting at this stage that Higher English is taken by a high proportion of students in S6 (sixth year of secondary schooling) typically as one of four or five subjects studied and is widely regarded as a *sine qua non* for higher education

courses in Scottish institutions. It is constituted in such a way that a pupil who passes the Higher English examination has demonstrated the ability to read and understand complex unseen passages of non-fiction, and to write coherent literary arguments to fulfil the requirements of the critical essay paper.

4B.3 Comparison of aims

The Group considered the aims and purposes of the each qualification. Whilst the A level specification outlines explicit aims, the aims of the Scottish qualifications needed to be drawn from the subject rationale within the specifications.

Table 25: Comparison of aims – English qualifications

A level	Higher	Advanced Higher
Encourages candidates to: • use integrated linguistic and literary approaches in their reading and interpretation of texts • engage creatively and independently with a wide range of spoken, written and multimodal texts, exploring the relationships between texts • undertake independent and sustained studies to develop their skills as producers and interpreters of language.	As a result of successfully completing the Higher course: • candidates will have a basis for progression to the next stage of the framework – Advanced Higher • candidates will gain an externally assessed award at A level specified as an entry qualification for various further education and higher education courses • candidates will gain a qualification which signals an ability to demonstrate a range of skills across a number of purposes • candidates who have undertaken an integrated Higher course will appreciate the interrelationship and transferability of skills acquired in individual units • candidates who have successfully completed Higher English will possess A level of linguistic competence which will enable them to access other areas of the curriculum at an appropriate level.	As a result of successfully completing the Advanced Higher course: Candidates will: • possess an externally assessed award at A level specified as an entry qualification for various higher education courses • gain a qualification which, for some further and higher education courses, carries a credit transfer rating allowing accelerated progression on those courses • gain a qualification which signals an ability to demonstrate a range of high order skills across a number of sophisticated purposes • possess A level of linguistic competence which will enable them to access other areas of the curriculum at an advanced level.

The Group identified the opportunity for candidates to understand the range of texts available, and the ways in which the meaning of the texts are communicated, to be a particular strength of the A level programme

By contrast, the Higher is a broader qualification that develops communication, understanding and skills for transactional purposes. The programme is considered to be less of a language specialism and more of a “societal development” opportunity

for candidates. It places less emphasis on the personal response to texts, instead focusing on a candidate's ability to analyse and evaluate writing techniques – especially in producing particular effects and exploring themes or characters.

Whilst the rationale for the Advanced Higher is very similar to that of the Higher, it provides more opportunities for specialism in English as a subject both in terms of language and literary study. Whilst the Higher uses texts that are from a variety of media, the Group agreed that the Advanced Higher introduces specified texts and authors with more academic bias. The personal study element encourages a high level of personalised learning skills.

4B.4 Determining size

4B.4.1 Comparison of Guided Learning Hours (GLH)

As with all GCE A levels, QCA have specified 360 Guided Learning Hours (GLH) for the AQA English Language and Literature A level, with an equal split between AS and A2 (180 each). Home-based study is not defined within the GLH.

SQA have set out notional learning time for Higher and Advanced Higher qualifications based on credit points through the Scottish Credit and Qualifications Framework (SCQF). Each qualification at Level 6 (Higher) is allocated 24 SCQF points. Advanced Higher (Level 7) has been allocated 32 SCQF points. Each credit point represents a notional 10 hours of learning time including assessment procedures – incorporating delivery time, teaching time plus the additional study time required.

The relative sizes of each qualification based on learning hours are summarised in Table 26:

Table 26: Comparison of notional learning hours – English

Qualification	A level	Higher	Advanced Higher
Contact time	360	160	160
Personalised learning	Not defined	80	160
Total hours	360	240	320
Hours as % of A level	100%	67%	89%

The Group expressed some surprise about the relative size of each qualification in terms of hours as this indicated that the Higher was roughly two thirds the size of an A level and an Advanced Higher less than 90 per cent of an A level. As a result, the Group determined that comparing the qualifications by this measure was not a particularly robust mechanism. There are inherent difficulties in quantifying hours for a subject so strongly skills-based as English – especially where personalised learning is required.

4B.4.2 Breadth and depth of content coverage

The representatives considered the extent to which content is common or unique to each qualification (Table 27). Discussion was structured around identifying areas of difference between the qualifications.

Table 27: Breadth and depth of coverage – English qualifications

Content areas	A level	Higher	Advanced Higher
Understanding of terminology	✓	✓	✓
Creative writing	✓	✓	✓
Literacy and linguistic analysis	✓	✓	✓
Awareness of context	✓	✓	✓
Comparability study	✓	✓	✓
Recasting	✓	✓ (if report option chosen)	✓
Minimum texts	6	3	4
Set texts	✓	×	×
Mandatory poetry	✓	×	×
Detailed analysis of speech/dialogue	✓	×	×
Cross-genre comparison	✓	×	×
Optional element	×	✓	✓
Use of frameworks for analysis	✓	×	×

The A level required candidates to study more set texts than the Higher and Advanced Higher, but it was noted that the figures included within Table 27 were a minimum requirement in all cases. A candidate studying only the minimum number of texts in the Scottish qualifications is unlikely to score highly in the assessment as they would be unlikely to provide and evidence appropriate comparisons between texts.

Whilst A level candidates must complete cross-genre comparisons within Unit 3, the Group noted that Advanced Higher candidates are advised against mixed genre studies for their specialist studies and dissertation topics, due to their intrinsic complexity, which SQA believe to be beyond this level of study - for example, comparing a poet with a dramatist. The optional element in the Higher and Advanced Higher qualifications constitutes a greater assessment of independent learning and presentation skills.

The A level includes a greater level of integration between literature and language skills than the Scottish qualifications, which have a slightly greater orientation towards current social contexts and topics. Within the Higher for example, texts are more often representative of varieties of media, eg journalistic writing or reports and also reflected a broader and more multicultural range in the choice of literary material.

The Group concluded that all three qualifications prepare candidates well for entry to Higher Education, although the Scottish Advanced Higher offered slightly more preparation for media/creative writing oriented English degree programmes.

4B.5 Estimating relative demand – comparing assessment models

The comparative assessment models for the three qualifications considered are summarised in Table 28:

Table 28: Summary of assessment models

Unit of assessment	Assessment	Level	Assessment method	Duration/ length	Weight
Scottish Higher					
Paper 1	Close Reading	Higher	External	1 hr 30 mins	50%
Paper 2	Critical Essay	Higher	External	1 hr 30 mins	50%
Scottish Advanced Higher					
Unit 1	English: Specialist Study - dissertation on candidates' chosen topic (mandatory)	AH	Coursework assessment	3,500-4,500 words	40%
Unit 2	English: Literary Study (mandatory)	AH	External	1 hr 30 mins	30%
Unit 3	Optional unit		external or coursework (for English: Creative Writing unit only)	1 hr 30 mins or folio of two pieces of creative writing in different genres	30%
GCE A level					
ELLA1	Integrated Analysis and Text Production	AS	External	1 hr 30 mins	25%
ELLA2	Analysing Speech and its Representation	AS	External	1 hr 30 mins	25%
ELLA3	Comparative Analysis and Text Adaptation	A2	External	2 hr 30 mins	30%
ELLA4	Comparative Analysis through Independent Study	A2	Coursework assessment		20%

The award of Higher English comes from a combination of internal and external assessment. In order to gain the award, candidates must achieve a pass in all the component units of the course as well as a pass in the external assessment. The external assessment draws upon the content of the units covered and provides the basis for grading attainment through one three hour external examination of two papers - Close Reading (50% weighting), Critical Essay (50%).

The Advanced Higher English award is also based on a combination of internal and external assessment. Candidates must pass three units internally assessed on a pass/fail basis and they must pass external course assessment related to these

units. External course assessment will provide the basis for grading attainment for the course award.

The A level award derives from performance in the externally assessed examination of three units and an assessment of coursework for Unit 4.

In comparing the assessment models, the Group outlined the following points:

- Scottish qualifications have more "hurdles" due to pass/fail internal assessments
- The Advanced Higher assessment model was considered strong and the Group noted that creative writing was a fast growing subject in HE. It was also thought that candidates would be well prepared for the pace of reading in HE
- Half the A level assessment is at AS level (ie not at full A level standard)
- HE representatives considered coursework/folio production to be extremely beneficial in helping to prepare students for the kind of study/assessment favoured in HE, encouraging a breadth of reading and independent study, presentational accuracy and attention to structure, bibliography and stylistic aspects of presentation. There is greater emphasis on these skills in the Advanced Higher assessment (40% minimum) than the A level (30%). Such skills do not contribute to the graded performance for Higher candidates.
- Higher and Advanced Higher has only one occasion of assessment per year, whereas the A level has examination opportunities in January and June over the two year delivery period
- Assessments for all qualifications will come from either character questions, thematic or technical questions with candidates given opportunities to apply their knowledge on one of these themes. The A level incorporates a mandatory poetry assessment which will be an incredibly technical question and arguably harder than a thematic question.

Use of Assessment Objectives

Whilst Assessment Objectives (AOs) are clearly in place for the A level (Section 3B.7), equivalencies for Highers and Advanced Highers need to be derived from Performance Criteria for each unit and external examinations. Despite the difference in terminology, both are used to inform characteristic candidate performance/ achievement.

The Group considered there to be a very high degree of comparison between the assessment criteria of each qualification, with similarities in terms of the following skills sets:

- communicating and understanding
- terminology and expression
- critical understanding
- relationships and context
- evaluation skills
- analysis of writing techniques
- language-handling skills

The discrete assessment of evidence against individual Assessment Objectives (AOs) is characteristic of the A level, although the assessment of coursework in Unit 4 uses a mark scale principle to record candidate achievement within a particular band of marks. The Group felt that the weightings allocated to AOs provide a clear and prioritised framework for marking candidate performance, whilst the Scottish qualifications have a less structured mark scheme for Performance Criteria. However, whilst this system makes for transparent marking processes, it was felt that Highers and Advanced Highers take a more holistic assessment of candidate work by taking into account evidence of achievement across all the corresponding Performance Criteria.

For example, in order to achieve a pass mark for each essay in the Higher Critical Essay paper all the Performance Criteria must be reached. Thereafter the assessment is holistic and can move the mark anywhere from the pass mark up to maximum marks. In the Close Reading Paper the spread of questions is deemed to have covered the Performance Criteria in an even way, so that an aggregate of the marks scored can be taken to be a measure of how well the Performance Criteria as a whole have been achieved.

There is differentiation in the Performance Criteria between Higher and Advanced Higher, whereby Advanced Higher evidences greater complexity, sophistication and level of achievement. By contract, there is no differentiation or stepping up of Assessment Objectives between AS and A2.

Synoptic Assessment

The broad array of skills generated by the Higher were considered by the Group to be suitable for progression to HE, and the elements of contextual analysis and the introduction of non-fiction based close reading were thought to add to the synoptic assessment.

Within the Advanced Higher the production of a dissertation reflected an evaluative understanding of the candidate's ability to engage in detailed study of several authors, genres and texts, and provided a tool for differentiation. The creative writing unit developed understanding and awareness, and the unseen textual analysis was thought to be more demanding than in the Higher.

The Group felt that the transfer of knowledge and skills from seen to unseen material can be construed as synoptic, along with the writing of an independently devised and researched dissertation.

Within the A level, synoptic assessment comes from the A2 units, which is evidenced by candidates' abilities to use accurate, written expression to demonstrate critical understanding in their analysis of the relationships between texts, and in their ability

to demonstrate creativity in using language appropriately for audience and purpose. This is essential in Unit 3 "Comparative Analysis and Text Adaptation" but also evident through Unit 4 "Comparative Analysis through Independent Study"

Whilst the A level coursework goes some way to developing a capacity for independent work the Group considered its scope to be more closely prescribed than in the Advanced Higher. All aspects of assessment at Advanced Higher level may be described (to a greater or lesser extent) as synoptic in that they require candidates to compare and contrast, to demonstrate awareness of genre and period and to deploy in any one assessment skills that have been developed throughout the course.

Grade Descriptors

In considering the grade descriptors all members of the Group agreed that they were an effective tool for judging the quality of candidates' work. It was felt that the grade descriptors for the qualifications were very similar and that the real difference was in the terminology used. These descriptors can be found in Table 29 to 26.

Table 29: Performance descriptions for A level English Language and Literature

	Assessment Objective 1	**Assessment Objective 2**	**Assessment Objective 3**	**Assessment Objective 4**
Assessment Objectives	Select and apply relevant concepts and approaches from integrated linguistic and literary study, using appropriate terminology and accurate, coherent written expression.	Demonstrate detailed critical understanding in analysing the ways in which structure, form and language shape meanings in a range of spoken and written texts.	Use integrated approaches to explore relationships between texts, analysing and evaluating the significance of contextual factors in their production and reception.	Demonstrate expertise and creativity in using language appropriately for a variety of purposes and audiences, drawing on insights from linguistic and literary studies.
AS level				
A/B boundary performance descriptions	Candidates characteristically: a) communicate wide knowledge and understanding of linguistic and literary texts b) present relevant responses, using appropriate terminology to support informed interpretations c) structure and organise their writing well d) communicate content and meaning through expressive and accurate writing.	Candidates characteristically: a) identify relevant aspects of linguistic approach, structure, form and language in literary texts b) explore, through critical analysis, how writers use specific aspects to shape meaning c) generally use specific references to texts to support their responses.	Candidates characteristically: a) explore connections and points of comparison between texts and the contexts that have shaped them b) communicate clear understanding of the views expressed in different interpretations or readings c) communicate a clear understanding of issues and concepts relating to language in use.	Candidates characteristically: a) write effectively in a form and style matched to audience, purpose and genre b) select and order relevant content in creative ways c) identify where and suggest how linguistic and literary features are used in their writing to create specific effects.
E/U boundary performance	Candidates characteristically: a) communicate	Candidates characteristically: a) identify some	Candidates characteristically: a) identify some	Candidates characteristically: a) demonstrate some

descriptions	some knowledge and understanding of linguistic and literary texts b) make some use of appropriate terminology or examples to support interpretations c) communicate meaning using straightforward language.	aspects of linguistic approach, structure, form, or language b) describe some aspects with reference to how they shape meaning c) make some related references to texts to support their responses.	connections and points of comparison between texts and the contexts that have shaped them b) show some appreciation of the views expressed in other interpretations of texts c) reflect some understanding of issues relating to language in use.	ability to write in a form or style matched to audience or purpose b) order content in creative ways c) identify where some linguistic and literary features are used in their writing to create effects.
A2 Level				
A/B boundary performance descriptions	Candidates characteristically: a) communicate extensive knowledge and understanding of linguistic and literary texts b) create and sustain well-organised and coherent arguments, using appropriate terminology to support informed interpretations c) structure and organise their writing using an appropriate register d) communicate content and meaning through expressive and accurate writing.	Candidates characteristically: a) communicate relevant understanding of linguistic approaches, structure, form and language in a range of spoken and written texts b) explore, through detailed analysis, how writers use these aspects to create meaning c) consistently make reference to texts and sources to support their responses.	Candidates characteristically: a) analyse and evaluate connections or points of comparison between texts and the contexts that have shaped them b) engage sensitively and with understanding with different readings and interpretations of texts c) communicate an informed understanding of issues and concepts relating to language in use.	Candidates characteristically: a) write effectively in a form and style matched to audience and purpose b) manipulate complex relevant content in creative ways c) identify where and explain how key linguistic and literary features are used in their writing to create specific effects.
E/U boundary performance descriptions	Candidates characteristically: a) communicate knowledge and some understanding of linguistic and literary texts b) present responses making some use of appropriate terminology and examples to support interpretations c) communicate content and meaning using straightforward language accurately.	Candidates characteristically: a) communicate some understanding of linguistic approaches or of structure, form and language in spoken and written texts b) comment on specific aspects with reference to how they shape meaning c) make some reference to authorities, texts or sources to support their responses.	Candidates characteristically: a) make connections between texts and the contexts that have shaped them b) communicate understanding of the views expressed in other interpretations or readings of texts c) communicate an understanding of issues relating to language in use.	Candidates characteristically: a) demonstrate some ability to write in a form and style matched to audience or purpose b) manipulate relevant content in creative ways c) identify where key linguistic and literary features are used in their writing to create specific effects.

Table 30: Performance criteria for Scottish Higher English

	Close Reading		**Critical Essay**	
Performance Criteria	**Grade C**	**Grade A**	**Grade C**	**Grade A (Three+ elements from two or more categories)**
Understanding	Responses demonstrate understanding of significant ideas/information and supporting details, provide full explanation of their relationships and summarise adequately the main concerns of the text(s) (or part of the text(s)).	Responses demonstrate clear understanding of and insight into significant ideas/ information, supporting details and their relationships. The main concerns of the text(s) are summarised in a concise yet comprehensive way.	As appropriate to task, the response demonstrates secure understanding of key elements, central concerns and significant details of the text(s).	The response reveals insight into key elements and central concerns of the text(s). Explanation of how these are presented and developed is detailed and thorough.
Analysis	Responses explain accurately and in detail ways in which aspects of structure/style/ language contribute to leaning/effect/impact.	Explanation of ways in which aspects of structure/style/language contribute to meaning/effect/impact is perceptive.	The response explains accurately and in detail ways in which relevant aspects of structure/style/language contribute to meaning/ effect/impact.	The response reveals insight into the writer's use of literary/linguistic technique.
Evaluation	An evaluation is made of the effectiveness of the text(s) which takes into account the purpose(s) and stance(s) of the writer(s), makes appropriate use of critical terminology and is substantiated by detailed and relevant evidence from the text(s).	Evaluation of the effectiveness of the text(s) shows full appreciation of the purpose(s) and stance(s) of the writer(s) and uses critical terminology accurately and is substantiated convincingly by evidence from the text(s).	The response reveals clear engagement with the text(s) or aspects of the text(s) and stated or implied evaluation of effectiveness, substantiated by detailed and relevant evidence from the text(s).	Evaluation is perceptive and reveals appreciative engagement with the text(s). Critical stance is established and sustained through skilful use of textual evidence.
Comparison	The main concerns and/or styles and/or stances of two thematically linked texts are compared with accurate indication of similarities and/or differences.	The main concerns and/or styles and/or stances of two thematically linked texts are compared skilfully in a succinct yet comprehensive way.	n/a	n/a
Expression	n/a	n/a	Structure, style and language, including use of appropriate critical terminology, are deployed to communicate meaning clearly and develop a line of thought which is sustainedly relevant to purpose; spelling, grammar and punctuation are sufficiently accurate.	Expression, including use of critical terminology, is consistently accurate and effective in developing a cogent argument.

	The Close Reading marking scheme will be designed so that attainment of a 'pass mark' or 'cut-off score' guarantees achievement of the performance criteria for Grade C.	The Close Reading marking scheme will be designed so that 'cut-off scores' for grades B and A guarantee the presence in responses of an appropriate range and quality of the indicators of excellence.		

Table 31: Performance criteria for Advanced Higher English (mandatory units)

	Specialist Study		**Literature Study**	
Performance Criteria	**GRADE C**	**GRADE A (At least 4 elements from at least two categories)**	**GRADE C**	**GRADE A**
Understanding	The dissertation takes a relevant and thoughtful approach to the stated topic and demonstrates secure understanding of key elements, central concerns and significant details of the texts or of the linguistic or media field of study.	A thorough exploration is made of the implications of the stated topic. Sustained insight is revealed into key elements, central concerns and significant details of the texts or of the linguistic or media field of study.	The response takes a relevant and thoughtful approach to the prescribed task and demonstrates secure understanding of key elements, central concerns and significant details of the text(s).	A thorough exploration is made of the implications of the prescribed task. Sustained insight is revealed into key elements, central concerns and significant details of the text(s).
Analysis	The dissertation makes relevant and thoughtful critical/analytical comment and demonstrates secure handling of literary, linguistic or media concepts, techniques, forms, usages.	A full and satisfying range of critical/analytical comment is offered. Literary, linguistic or media concepts, techniques, forms, usages are handled with skill and precision.	The response makes relevant and thoughtful critical comment and demonstrates secure handling of literary/linguistic concepts, techniques, forms.	A full and satisfying range of critical comment is offered. Literary/linguistic concepts, techniques, forms are handled with skill and precision.
Evaluation	Judgements made are relevant, thoughtful and securely based on detailed evidence drawn from primary and, where appropriate, secondary sources.	Perceptive and incisive judgements are made. Deployment of evidence drawn from primary and, where appropriate, secondary sources is skilful and precise.	Judgements made are relevant, thoughtful and securely based on detailed evidence drawn from the text(s).	Perceptive and incisive judgements are made. Deployment of evidence drawn from the text(s) is skilful and precise.
Expression	Structure, style and language, including the use of appropriate critical/analytical terminology, are consistently accurate and effective in developing a relevant argument	Structure, style and language, including the use of appropriate critical/ analytical terminology, are skilfully deployed to develop a pertinent and sharply focused argument.	Structure, style and language, including the use of appropriate critical terminology, are consistently accurate and effective in developing a relevant argument.	Structure, style and language, including the use of appropriate critical terminology, are skilfully deployed to develop a pertinent and sharply focused argument.

A comparison of grade descriptors led the Group to conclude that the Advanced Higher explicitly represents an increase in complexity, sophistication and consequently demand compared with the Higher. This step-up in demand between Higher and Advanced Higher is greater than that between the AS and A2 units in the A level. It was also discussed that potentially the Scottish qualifications could be slightly more rigorous than the A level, but that this was difficult to prove without considering candidate evidence.

4B.6 Estimating relative demand – comparing assessment requirements

In comparing the structure, length and amount of candidate support in the examination papers, and marking schemes, the Group noted that:

- the Scottish Higher exam time is the same as the two AS units of the A level - total 3 hours. The third A level unit examined constitutes a further 2 hours 30 minutes
- Higher exams involve 50% “long answers” and 50% short response close reading
- 20% of the A level assessment comes from coursework assessment (Unit 4) of two approved texts which must be 2,000 – 2,500 words in length. The specialist study of the Advanced Higher is roughly twice this length (max. 4,500 words)
- consideration of poetry is an A level requirement (as part of Unit 4), but not for Highers or Advanced Highers
- Advanced Higher assessment consists entirely of extended writing
- more independent study in Higher and Advanced Higher than in A level – as coursework for A level Unit 4 is quite closely prescribed
- more opportunity to write discursive essays in Advanced Higher than in other two qualifications
- assessment of interpreting previously unseen texts represents 40% of A level performance, compared to 25% of Higher and 0% of Advanced Higher
- in terms of marking, the qualifications followed a uniform outcome albeit with a different approach. The Higher close reading was noted to have a strict marking mechanism and was considered less holistic.

The Higher assessment requirements were considered less demanding than the A level as they involved less exam time and did not provide the same opportunities for extended writing. Whilst candidates were not able to take books into the exam room (as is the case for A level Unit 1), a greater proportion of the performance comes from seen text (75 per cent compared to 60 per cent). Despite the fact that candidates need to reach a minimum achievement in each performance criterion, questions are less demanding than A levels as they tend to be posed in smaller sub-sections, thus reducing the opportunity for discursive rambles and keeping candidates on track for maximising their score.

The need to pass all Performance Criteria for the Advanced Higher puts greater responsibility upon candidates to ensure that their essays are appropriately structured to meet the demands of the question. Achievement comes entirely from

extended writing, yet the system means that an extremely well written essay could be marked down if, for example, “relevance” or “technical accuracy” is not met.

4B.7 Estimating relative demand – comparison of candidate work

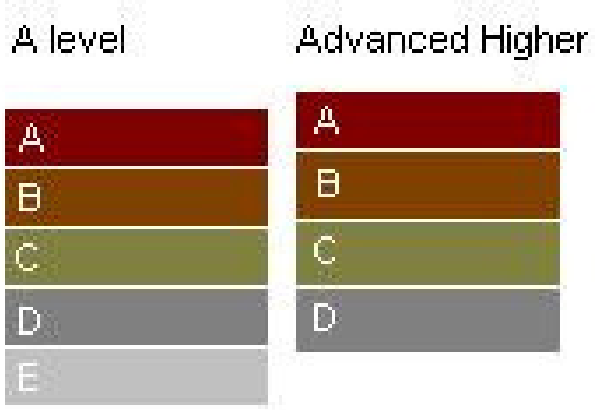
As a new specification for A level is being introduced from this year there was no candidate evidence available following the benchmarked specification. However the Group did consider an A level paper which had scored top marks in the previous specification and that AQA considered would also achieve top marks under the new specification.

As a top level conclusion the Group determined that there was a greater depth of analysis in the Advanced Higher and that the accompanying example papers may be very slightly ahead of the A level.

4B.8 Aligning the grades

A pictorial representation was drawn up of how the Group considered the grades for the qualifications to be aligned as shown below. Due to time constraints it was not possible to carry out this exercise for the Higher. The difficulty of this task was also exacerbated by the lack of candidate evidence.

Figure 4: Proposed Grade alignment - English



4B.9 Domain scoring

The Group looked at scoring each qualification against a set of “domains” defining the shape and content of each programme. Consensus was reached easily and quickly on most points, although there was some discussion about the vagaries of intellectual risk taking and how this may affect the work of a candidate.

In producing their scores the Group considered the merits of the qualification as a whole and tried to interpret the terminology used in the strands in a subjective context, rather than in a scientific way as they perhaps seemed at first sight.

The Group discounted the numeracy domain altogether noting that this would not have an effect on the overall scoring methodology. The final charts showing the average scores potted on a bar chart showed that the shape of the qualifications was largely the same. The main difference being that there was less opportunity within the Advanced Higher for interpreting and translating from one form into another.

There were increased opportunities for personal and social skills and learning skills within the Advanced Higher and the A level. All qualifications showed clear utility for progression to higher education and the similarities are perhaps to be expected given the nature of the subject being scored.

Graphical representations of the three qualifications considered follow:

Figure 5: Domain scores – English Advanced Higher

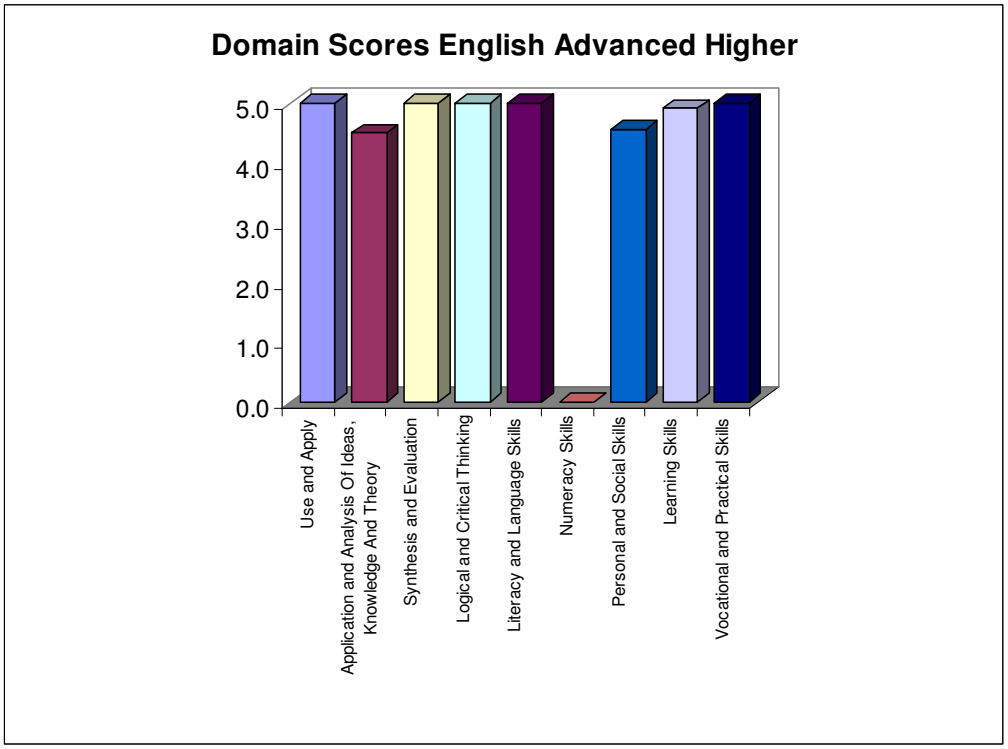


Figure 6: Domain scores – English Higher

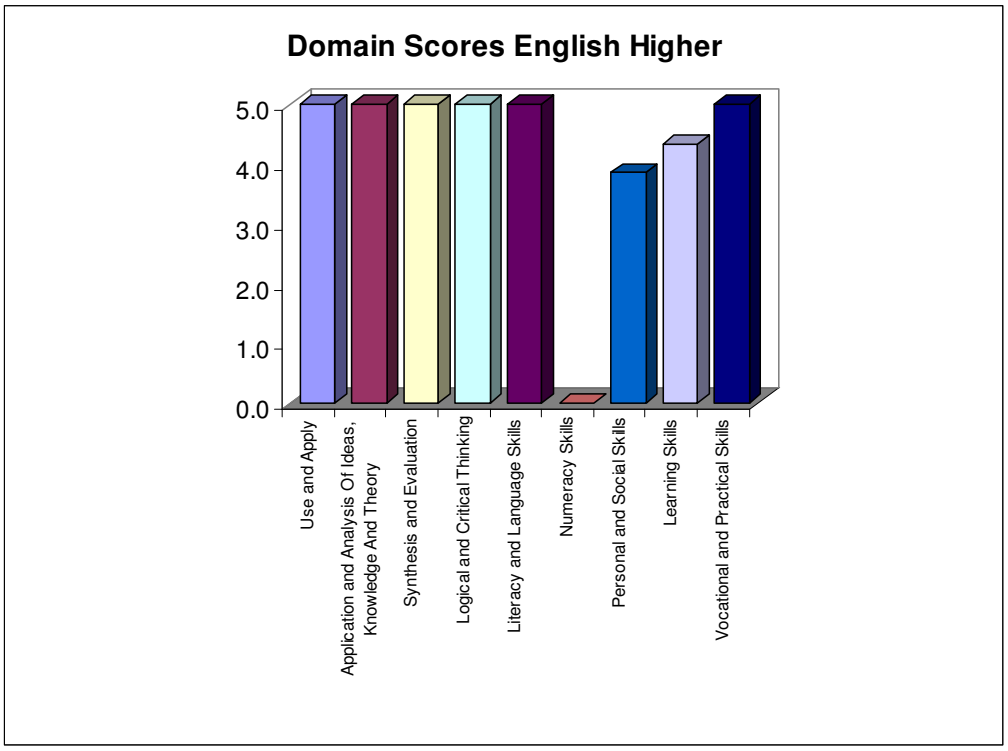
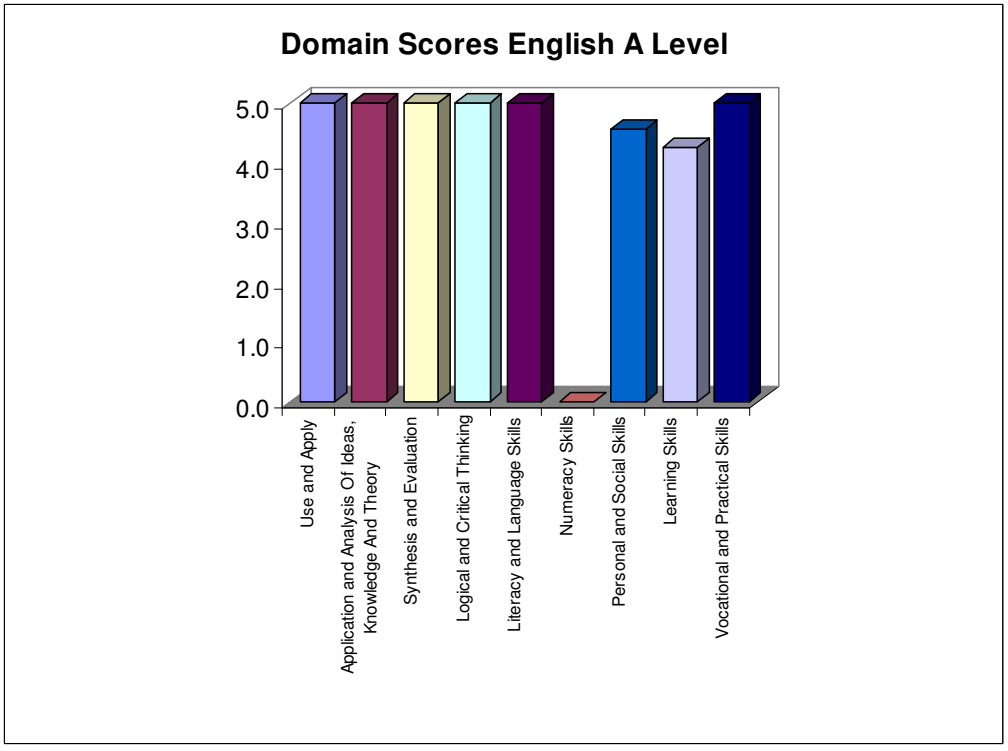


Figure 7: Domain scores – English GCE A level



4B.10 Recommended allocation of UCAS Tariff points

Finally the Group considered their recommendations for Tariff points for the Higher and Advanced Higher.

The Group questioned whether they should be thinking in terms of the qualifications preparing a candidate for entry into an English higher education qualification or higher education generally. It was stressed to the Group that their aim was to assess the qualifications for general entry to HE.

As a result of a comparison of grade descriptors, the Group felt that Highers and Advanced Highers were currently undervalued in terms of UCAS Tariff points.

It was felt that a grade A in the Higher was equivalent to a GCE A level grade C and the Tariff score should be increased from the current 72 points to 80 points. This proposed increase was justified on the basis of comparison of the grade descriptors, reading candidate work and by the greater emphasis on independent thinking and distribution of all Assessment Objectives across the range of assessed work.

Consideration of relative size (number of units, range of texts) and relative demand (study of an author as opposed to study of an individual text, scale of coursework, question demands, assessment standards) led the Group also to recommend that Tariff points for the A graded Advanced Higher increase from the current 120 points to 130.

The extra Tariff points were considered to reflect the challenging nature of the personal study element which requires more advanced levels of expression, and the greater opportunity for independent study. Whilst the opportunity for independent study also exists in the A level, the Group felt that this was less directed and therefore requires more independent planning, choice and selection of themes and texts.

The points increase represented a “shift” upwards rather than a whole grade when compared with the A level Tariff points.

Otherwise, the qualifications were considered to be relatively similar in terms of the skills that the candidate is equipped with. After some discussion it was decided to recommend that the D grade for the Higher and Advanced Higher be maintained within the Tariff.

The status of a D in Highers was considered somewhat ambiguous, but given the evidence considered throughout this process, the Group concluded than points should be allocated to reflect their consideration that it provided less utility for

progression to HE than an A level Grade E. Hence a score of 30 UCAS Tariff points is recommended.

The Group did not discuss in detail the allocation of points for B and C grades for Highers and Advanced Highers, but envisaged an even interpolation of grades between the points already established. The following table summarises the Group's recommendation for allocation of Tariff points:

Table 32: Proposed UCAS Tariff points scores – English

Tariff points	A level	Higher	Advanced Higher
130			A
120	A		
110			
100	B		
90			
80	C	A	
72			D
60	D		
50			
40	E		
30		D	
20			

4C GEOGRAPHY

4C.1 Prior to the meeting

Prior to this meeting some preliminary work was carried out. This included a detailed mapping of the Scottish Higher and Advanced Higher in Geography against the OCR GCE Geography A level, reports from three HE representatives highlighting similarities and differences between the two qualifications and comparative studies from a representative from each awarding body. Pre-meeting papers were distributed, requiring members of the Group to compare aims, content, study hours, relative size and assessment models of the Scottish Higher and Advanced Higher in Geography with those for the OCR GCE Geography A level.

4C.2 The Expert Group meeting

The Expert Group then met on one occasion for two days (24 and 25 April 2008) to examine and discuss the evidence listed in Appendix 2 and the preparatory work completed by Group members. This section contains an account of the deliberations of this meeting.

The opening session provided an opportunity for the SQA Principal Assessor and the OCR Geography A level Chief Examiner to present their qualifications and for Expert Group members to seek clarification about general issues in relation to the awards.

Table 33: Comparative qualification design – geography

A level	Higher	Advanced Higher
Modular qualification taken over two years. Must complete 4 mandatory units – 2 in each year of study. 360 GLH. 3 Assessment Objectives. Focus on thinking skills and application. Coursework is not compulsory. Any coursework undertaken is internally assessed and does not contribute to the overall grade for the qualification. Final grade from four external assessments (one per unit). Graded A* - E. Can retake unit exams. Units taken in the second year have a large synoptic component. Clear, prescribed content with opportunity for independent learning. AS is subsumed into A level. Does not specify “type of place”.	Modular qualification taken over one year. Must pass 3 mandatory units and external assessment (internally assessed) in order to be certificated for the course award. 240 GLH (credit points system). Focus on knowledge and understanding of content. Units internally assessed, but do not form part of final grade. Final grade from two externally assessed question papers. Graded A – D. Cannot retake final exam in the same academic year. External assessment provides limited synopticity. Clear, prescribed content. Volume and quantity of Higher’s content is similar to AS. Clearly defines actual “place” in terms of content.	Modular qualification taken over one year. Must pass 3 mandatory units and external assessment (internally assessed) in order to be certificated for the course award. 320 GLH (credit points system) Emphasis on skills. Units internally assessed, but do not form part of final grade. Final grade from two externally assessed question papers. Graded A – D. Cannot retake final exam. External course assessment has large synoptic component. Core skills embedded. Less prescribed content. Essential to be independent learners. Higher is not subsumed into AH, nor a prerequisite for progression but knowledge of Higher content would aid progression. Context in which this course is taught is areal free.

4C.3 Comparison of aims

The Group felt that the aims and purpose of the three qualifications were all very similar with commonality over the words used in the rationales for each specification. Common terminology includes reference to skills, independent study, understanding processes and subject specific topics.

It was agreed that the physical geography aims are almost identical between the A level and Higher, with A level Unit F761 mapping closely with Scottish Higher Unit 1 (and some of Unit 3). Likewise, the aims and purposes of A level Unit F762 regarding human geography ally closely with those of Scottish Higher Unit 2 (and some of Unit 3).The aims of A level Unit F764 on Geographical Skills are also closely aligned with the aims of Geographical Methods & Techniques within the Advanced Higher.

However, it was noted that the issue of sustainability, which is a key issue for HE geography, was an integral component for the A level, but was not explicitly referred to in the aims of either of the Scottish qualifications' documents. SQA representatives stated that sustainability has become much more of an issue since the higher specification was last updated. A guidance note has been issued to centres noting the relevance and importance of sustainability within the Higher course and it provides guidance indicating how it can be integrated into the course delivery

With the exception of the sustainability omission from the Scottish qualifications, all three qualifications were considered to have comprehensive and appropriate aims with no major discernable weaknesses or omissions identified. The opportunities for progression exist within the qualifications and the extent to which a learner will succeed depends upon their level of competence within the subject and their ability to apply their skills and knowledge across a wide range of geographical issues in a synoptic manner.

In terms of supporting progression to higher education it was noted that each of the qualifications being considered presented similar learning opportunities in terms of topics covered and thus provided similar utility for progression. However, it was clear that depth of coverage and learning methods vary considerably. For example, the Advanced Higher relied heavily on independent learning, which was considered by the Group to be a great strength of the qualification and its utility to HE.

4C.4 Determining size

4C.4.1 Comparison of Guided Learning Hours

As with all A levels, Guided Learning Hours (GLH) for the OCR GCE Geography A level are 360, with an equal split between AS and A2 (180 each).

The Scottish system for reporting GLH is somewhat different. Within the specifications, the notional design length for each unit within both the Higher and Advanced Higher qualification is 40 hours. However, SCQF points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification is allocated a number of SCQF credit points at an appropriate level; with the Higher course in Geography allocated 24 SCQF points at level 6, and the Advanced Higher allocated 32 SCQF points at SCQF level 7.

In common with other credit systems, the SCQF works on the basis that one credit point represents the amount of learning achieved through a notional 10 hours of learning time which includes everything a learner has to do to achieve the outcomes in a qualification, including the assessment procedures – incorporating guided and personalised learning time. Therefore, an assumption can be made that, according to the SCQF, a Higher equates to 240 study hours, whilst an Advanced Higher would require 320 study hours. In total the guided plus personalised learning time for the two qualifications would be 580 hours.

There is a clear discrepancy between these two published methods for appraising the size of the Scottish qualifications, which made it difficult for the Group to consider comparative sizes. It was discovered that the hours within the specification refer to teacher-led activity, but that the qualifications themselves required additional independent study that was included within the SCQF time allocation. All Scottish National courses include 40 hours over and above the 120 hours for the component units – to be used for induction, extending the range of learning and teaching approaches, support, consolidation, integration of learning and preparation for external assessment. Therefore, a notional GLH for each qualification would be 3 units x 40 hours (+40 hours) = 160 hours.

The vast majority of these GLH are to be undertaken in school within teacher-led lessons, with a small allocation for private study time. Whilst additional home-based study would be expected; this is not defined.

Whilst certain home-based tasks tend to be included in Highers and Advanced Highers, these would be excluded from the GLH for A level. However, additional home-based learning would be required for GCE A level although this is not defined. Based on the experience of examiners, the Group considered a total of 540 hours of teaching time, plus additional personalised learning time, would be an appropriate approximation for the A level.

Table 34: Comparative sizes by learning hours – geography

Qualification	A level	Higher	Advanced Higher
Contact time	360	160	160
Personalised learning	180	80	160
Total hours	540	240	320
Hours as % of A level	100%	44%	60%

Considering size of qualification in terms of the number of hours required to complete the qualification, it would appear that Higher Geography would be 44 per cent of an A level, whereas an Advanced Higher would represent 60 percent of an A level.

It was noted that this was an extremely crude mechanism for determining relative sizes of the qualifications and should be used as a basic proxy measure. The Group moved onto a comparative assessment of quality of learning - as indicated by content, breadth and depth of coverage, etc. in order to consider their utility for HE.

4C.4.2 Determining size – breadth and depth of content coverage

Given the difficulties in appraising relative size by considering learning hours, the Group also looked at the breadth and depth of content coverage in order to determine size.

This again proved difficult in that the Group did not feel comfortable in providing an overview of what content should be incorporated into the qualifications. It is not possible to define a body of knowledge that is geography. Thus, whilst key themes are considered for each specification, it was considered unhelpful to identify content specificity.

Extensive discussion as to what geography is resulted in general agreement that qualifications leading to HE should incorporate six general themes.

- Physical geography.
- Human geography.
- Environmental interactions.
- Skills.
- Synopticity.
- Spatial awareness.

These themes hide differences in content, but the Expert Group concluded that such differences do not matter so long as it provides a basic level of knowledge upon which to build. Geography is a subject which puts an emphasis on process, systems and interrelationships within the environment. As such, it cannot be defined purely in terms of topics, so actual content studied was not considered as important for progression to HE as the development of research and investigative skills. Physical and human geography are considered to be building blocks within all three qualifications that provide appropriate content knowledge from which to address the additional themes.

4C.5 Estimating relative demand – comparing assessment models

To achieve the Higher and/or Advanced Higher course awards, the candidate must pass the units as well as the course assessment. The candidate's grade is based solely on the external course assessment.

In the Higher qualification, external assessment is made up of two papers (see Table 19). Paper 1 uses short answer questions to examine a wide range of the content and skills taught within the first two units, whilst Paper 2 provides the opportunity to assess the higher level skills. (eg descriptions and explanation of physical features and human activities relating to an environmental interaction, interpretation and analysis of complex geographical information and evaluating possible strategies for environmental management).

Table 35: Higher assessment model – geography

	Contribution to final grade	Assessment duration
Paper 1 - Physical and Human Environments		
Physical and Human Environments— four compulsory questions	36%	1.5 hrs
Physical Environment	7%	
Human Environments	7%	
Paper 2 - Environmental Interactions		
Group 1 Interactions - Rural land resources/ Rural land degradation/ River basin management	25%	1.25 hrs
Group 2 Interactions - Urban change and management/ European regional inequalities/ Development & health	25%	

The Advanced Higher course assessment is outlined in Table 36.

Table 36: Advanced Higher assessment model – geography

Unit	Contribution to final grade	Assessment duration
Geographical Methods and Techniques examination.	30%	2 hrs
A folio of course work which consists of two key pieces of work:		
Geographical Study — a report on geographical research	40%	3000 word report
Geographical Issues — an essay which critically evaluates an issue from a geographical perspective	30%	1500-2000 words

Table 37: GCE A level assessment model – geography

Unit	Contribution to final grade	Assessment duration
Managing Physical Environments	25%	1.5 hrs
Managing Change in Human Environments	25%	1.5 hrs
Global Issues – Environmental and Economic	30%	2.5 hrs
Geographical Skills – based on fieldwork	20%	1.5 hrs

Grading for the Scottish qualifications comes entirely from external assessment (as per A levels) and although the course assessment can be taken and credited, the

candidate can only receive a graded award if the units have been successfully completed. Thus, whilst these internal assessments do not contribute to the final grade, they are an integral component of the course structure.

Seventy per cent of Advanced Higher grades comes from the folio of coursework which is externally assessed. The GCE A level specification for first teaching from 2008 has been changed in accordance with QCA guidance to remove all internal assessments, with the final grade coming entirely from external assessment of four unit papers. As a result, whilst centres generally expect learners to do coursework, performance in coursework does not contribute to the final award (although the Geographical Skills paper does rely on candidates drawing upon fieldwork experiences from the course). The qualification grade comes entirely from external assessments through a mixture of assessment types (data response, short answer, extended answers, issues, essays and data handling).

Use of Assessment Objectives

Table 38: GCE A level Assessment Objectives – geography

		Weighting
AO1	Demonstrate knowledge and understanding of the content, concepts and processes;	40%
AO2	Analyse, interpret and evaluate geographical information, issues and view points and apply understanding in unfamiliar contexts;	30%
AO3	Investigate, conclude and communicate: select and use a variety of methods, skills and techniques (including the use of new technologies) to investigate questions and issues, reach conclusions and communicate findings.	30%

Table 39: Higher Assessment Objectives – geography

1	An understanding of the ways in which people and the environment interact in response to physical and human processes at local, national and international scales
2	An awareness of spatial relationships and an understanding of the changing world in a balanced and critical way
3	General skills of research, analysis and evaluation
4	Techniques and terminology to extract, analyse, interpret and explain geographical phenomena
5	Expertise in the use of a range of maps, diagrams, statistical techniques and, where appropriate new technology, to process and communicate information

The Higher specification did not clearly identify Assessment Objectives so the five areas stated in Table 39 were drawn out by the Group as a result of discussion following a review of the specification.

Table 40: Advanced Higher Assessment Objectives – geography

1	Knowledge of a wide range of geographical skills and the different contexts in which these ought to be used.
2	Ability to undertake a structured study of a geographical nature which uses primary/secondary sources and which relies on a variety of presentation skills to report the findings.
3	Ability to carry out a critical evaluation of a geographical issue by identifying different viewpoints, from at least three sources, about the issue and writing an essay which synthesises these viewpoints in a way that allows a valid conclusion to be drawn.

Weighting of Assessment Objectives

As can be seen above, the Assessment Objectives for GCE A level are weighted 40:30:30. However, there is no such weighting in place for the external assessment of the Scottish Higher and Advanced Higher qualifications. The Scottish approach to course assessment provides weightings for each unit in contrast to the GCE A level whereby examination questions are set by Assessment Objectives to ensure appropriate weighting.

Although there is no defined weighting for each Assessment Objective, the level of demand of external assessments is considered within SQA's grade boundary meetings to ensure that AOs are covered within an acceptable range.

The Group felt that this was problematic in terms of comparability between learners from different years. As a result, Higher Education Institutions will have an understanding of Scottish applicants' knowledge base but not the proportion that relates to each Assessment Objective.

Synoptic assessment

All grades for each qualification are generated entirely from external assessments.

Internally assessed coursework has been removed from the A level from 2008. However, whilst coursework is not specified there is an expectation the candidates will have undertaken investigations at AS & A2 levels to gain the skills required in order to achieve success in the final assessment.

Achieving the Scottish Higher course award requires a unit pass in each of the three units and also a pass in the external assessment, although the unit assessments do not contribute directly to the final grade.

Along with an externally assessed examination worth 30%, the Advanced Higher requires a folio of work through a Geographical Study (40%) and a Geographical Issues essay (30%). The folio work requires the learner to report on actual fieldwork activities or on secondary data which is therefore sourced from previous work and represents an additional demand on learners to undertake extensive independent learning. .

Whilst AS/A2 assessments can be taken as often as required until success is achieved, only two attempts are possible for Higher and Advanced Higher unit assessments. Such reassessments can be on the same topics or on a combination of topics within the unit. This limitation provides an increased demand for the Scottish Higher and Advanced Higher qualifications.

Grade descriptors

The grade descriptors for all three qualifications were considered under three headings:

- knowledge and understanding
- evaluation
- geographical methods and techniques.

Given that there are no overall A level grade descriptors, the A2 descriptions have been considered as a proxy measure for the whole qualification.

Table 41: Grade descriptors – geography

	Advanced Higher		**Higher**		**A2**	
Knowledge and understanding	A / B	The candidate should be able to show a wide knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena.	A / B	The candidate should be able to show a wide knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena.	A / B	Candidates characteristically: a) demonstrate knowledge and understanding of a wide range of concepts and processes b) show thorough knowledge and understanding of subject -specific material.
	C / D	The candidate should be able to show a knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena.	C / D	The candidate should be able to show knowledge and understanding of terminology, ideas and systems, make use of complex information, explain a range of geographical phenomena.	E / U	Candidates characteristically: a) demonstrate some knowledge and understanding of the main concepts and processes b) show some understanding of subject specific material.
Evaluating	A / B	The candidate should be able to analyse in depth and detail a wide range of complex geographical evidence, reach well justified, realistic and detailed conclusions and offer detailed and reasoned explanations for these, taking into account a wide range of viewpoints.	A / B	The candidate should be able to analyse in detail a range of complex geographical evidence, reach realistic and detailed conclusions and offer detailed and reasoned explanations for these, taking relationships into account.	A / B	Candidates characteristically: a) accurately and competently analyse and interpret geographical information, issues and viewpoints b) offer a thorough evaluation of geographical information, issues and viewpoints in relation to specific geographical concepts c) demonstrate the ability to apply accurate and appropriate geographical understanding to unfamiliar contexts with precision at a range of scales.

	C / D	The candidate should be able to analyse a range of complex geographical evidence, reach realistic and detailed conclusions and offer detailed and reasoned explanations for these, taking into account a wide range of viewpoints.	C / D	The candidate should be able to analyse a range of complex geographical evidence, reach realistic conclusions and offer explanations for these, taking relationships into account.	E / U	Candidates characteristically: a) show some attempts to analyse and interpret geographical information, issues and viewpoints with varying degrees of success b) offer some evaluation of geographical information, issues and viewpoints with variable success c) show some ability to apply geographical understanding to unfamiliar contexts with some degree of accuracy.
Geographical methods and techniques	A / B	The candidate should be able to use a wide range of appropriate geographical methods and techniques to give detailed interpretations and detailed analysis of geographical phenomena.	A / B	The candidate should be able to apply appropriate methods and techniques and will use a range of geographical methods and techniques to give detailed interpretations and detailed analysis of the geographical phenomena.	A / B	Candidates characteristically: a) select and use appropriately and accurately a wide range of methods, skills and techniques (including new technologies) when thoroughly investigating questions and issues b) reach substantiated and valid conclusions c) communicate findings accurately and appropriately to the task.
	C / D	The candidate should be able to use a range of appropriate geographical methods and techniques to interpret and analyse geographical phenomena.	C / D	The candidate should be able to apply appropriate methods and techniques and will use a range of geographical methods and techniques to interpret and analyse geographical phenomena.	E / U	Candidates characteristically: a) use a range of methods, skills and techniques (which include new technologies) to investigate questions and issues with varying degrees of success b) draw some straightforward conclusions c) communicate findings broadly appropriate to the task.

On considering the grade descriptions against each of these objectives it was felt that an Advanced Higher A grade performance would be more or less identical to an A grade at GCE A level. Whilst some of the words within the grade descriptors were different, this was merely semantics.

Grade C at Advanced Higher was appraised against A level grade E. The Group felt that the difference in performance outlined between grade A and E at A level was wider than that between grades A and C for Advanced Higher. Thus, whilst the top grades were comparable, a grade C for Advanced Higher reflected a higher level of performance than an E grade A level. To obtain a grade C in the Advanced Higher candidates are required to consider wide ranges of complex geographical information, whereas repeated reference to "some" in the A level description for grade E suggests gaps in knowledge are acceptable.

A level E grade reflects a very limited command of knowledge and understanding as well as skills. The Advanced Higher grade C descriptors in each category are much more sophisticated and substantive than E/U at A level. This enabled the Group to conclude that an Advanced Higher C grade requires a higher level of performance than an E grade A level.

The performance description for an A grade A level incorporates a depth of understanding that is not required for a Higher grade A, although the breadth of knowledge is similar. Evaluation skills differ in that the A level requires learners to apply understanding in unfamiliar contexts, which is not required for Highers.

At the lower end of performance, the Higher grade C assumes general, basic coverage across all three Assessment Objectives, whilst the word "some" in the A level grade E descriptor suggests gaps in knowledge are acceptable. The Group concluded that a C grade Scottish Higher provided more utility to progression to HE than an A level grade E – especially in the use of complex information, the ability to reach conclusions and use geographical methods to interpret and analyse.

4C.6 Estimating relative demand – comparing examination requirements

The assessment models for Scottish Highers and Advanced Highers differ greatly from A level assessment.

Highers and Advanced Highers both comprise three units and an external assessment. Units are internally assessed with a pass or fail grade. Candidates can only receive a graded award if the units have been successfully completed. Performance in the unit assessments does not contribute to a candidate's final grade, which is based entirely on their performance in the external assessment. Only two attempts are possible for Higher and Advanced Higher unit assessments. Such reassessments can be on the same topics or on a combination of topics within the unit.

Performance for A level Geography comes entirely from the external assessment of four mandatory unit examinations and there is no requirement to pass "hurdles" en route to the external assessments. There are no restrictions on the amount of times a candidate may resit each unit before entering for A level certification. Candidates may enter for full qualifications an unlimited number of times.

The Expert Group members felt that re-sit opportunities gave A level candidates the potential to improve their performance without extending the duration of the course. Because the grading was based on external assessment at the end of the course rather than unit achievement, Higher and Advanced Higher do not provide this flexibility and as such represents an increased demand.

The largest single contributor to Advanced Higher performance is the geographical folio, which demonstrates candidates' ability to demonstrate their understanding and evaluation of geographical contexts and concepts through extended writing and essays. The folio is externally assessed. A level candidates will complete coursework during the programme of study, but this is not externally assessed – A level grades are derived entirely from examination performance. The Group felt that the Advanced Higher folio provided more opportunities for extended writing and to develop independent research and study skills than the A level – reflecting a higher level of utility for progression to HE.

4C.7 Estimating relative demand – comparison of candidate work

Due to the fact that the A level specification is new for first teaching in 2008, there were no candidate scripts to consider for the A level. Whilst the Group considered work from candidates achieving a range of grades at Highers and Advanced Highers, the absence of comparable materials for A level meant that the overall evidence was not sufficiently comprehensive and robust in which to make an estimate of relative demand.

4C.8 Aligning the grades

Given that there was no candidate evidence available for the GCE A level, the Group found it difficult to align grades. The following factors were considered in helping to align the grades:

- Grade boundaries as shown above
- Types of question in external assessments
- Proportion of internal/ external assessment contribution to the final grade
- The inclusion (or exclusion) of coursework as part of the final grade
- The single sitting exam system in Higher and Advanced Higher, without resits, is more demanding than A level

The Group felt that the Higher did not provide sufficient scope in comparison to Advanced Higher and A levels. Whilst Higher candidates achieving an A grade had

performed well against the grading criteria, the assessments were limited so the qualification did not provide sufficient opportunities to reward higher skills. In order to achieve a grade D at Advanced Higher learners must show a greater ability to interpret and evaluate – especially with map questions.

Based on the assessment papers considered, the Group's view of the Higher was of a mechanistic assessment with little opportunity to interpret information and express viewpoints. The rigour and demand of the A level is considered greater than the Highers with the Group recognising the Higher A/B boundary as being equivalent to the A level B/C boundary, and Higher grades B and C generally reflecting similar demand to the A level grade B.

The main difference between the assessment of A levels and Advanced Highers is the folio of coursework required in the Scottish qualification. The folio requires that learners put together a thoughtful, considered piece of work over a period of time rather than basing final grades on examination performance at the end of the unit/course – thus placing significant and sustained demands on students throughout the duration of the course. The Advanced Higher is more formative in nature as opposed to the summative nature of A level assessment.

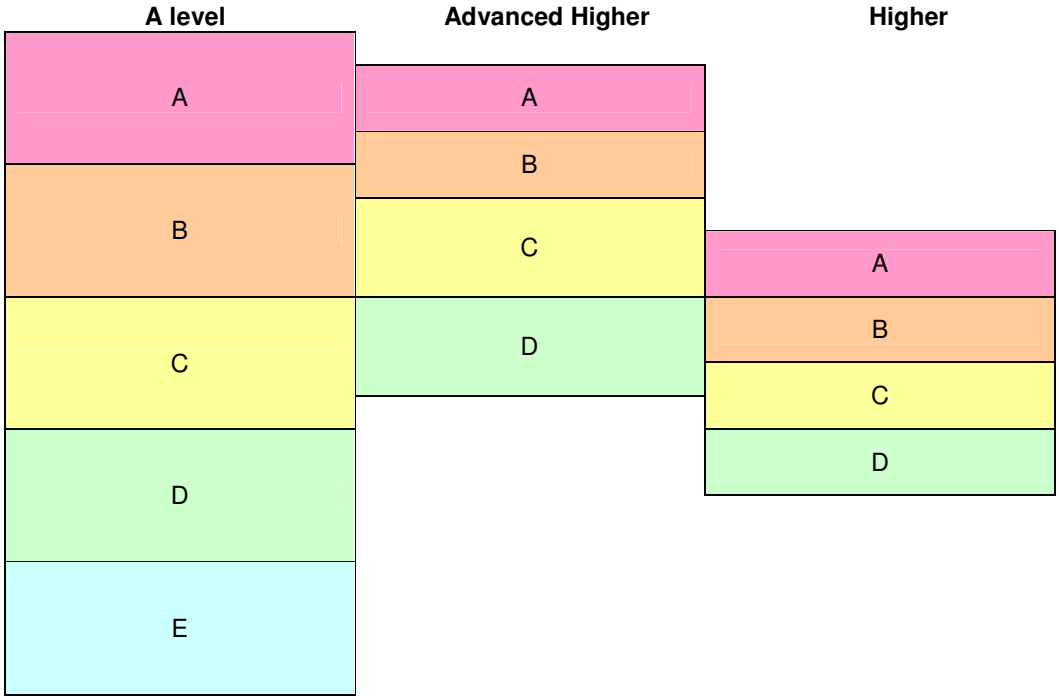
As an assessment mechanism, it was felt that the A level system based wholly on examination papers was more demanding than the Scottish qualifications, in that students need to be able to engage with new material in a limited period of time and write coherently and intelligently about it. Whilst examination papers do form part of the Advanced Higher marking, the A level requires a greater depth of knowledge and ability to respond in a synoptic manner.

Furthermore, it was made evident that the vast majority of Advanced Higher learners had first completed Geography Higher qualifications. As a result, it was difficult to accurately appraise additional utility provided by the Advanced Higher without also recognising the skills, knowledge and understanding obtained through the Higher.

On the basis of all materials considered, A graded A levels and Advanced Highers were thought to be relatively equitable in providing utility for HE. Given that the increased demand for synopticity in the A level examinations the Group felt that top end A level candidates will show greater utility to HE than high performing Advanced Higher students. However, at the A/B boundary where the Tariff boundary exists, the Advanced Higher is greater than the A level as it gives greater opportunity for independent study skills development, which is seen as a big advantage for entry to HE.

Extensive debate benefiting from the professional judgement of the OCR and SQA examiners helped to produce the following representation of grade equivalencies:

Figure 8: Proposed grade alignment – geography



4C.9 Domain scoring

The Group scored each qualification against the Tariff domains appraising the shape and content of each programme. Whilst consensus was generally reached on most points, there were discussions around the individuals' interpretation of terminology in the scoring criteria (for example the differences between "significant" and "reasonable" opportunities).

The exercise provoked many interesting discussions about geographical content and appraisal mechanisms and generated three hours of discussion. At the end of this dialogue, a score was agreed for all scoring strands, except for a limited number that were not considered appropriate for geography.

The following domain charts portray the outcomes of these deliberations:

Figure 9: Domain scores – Geography Advanced Higher

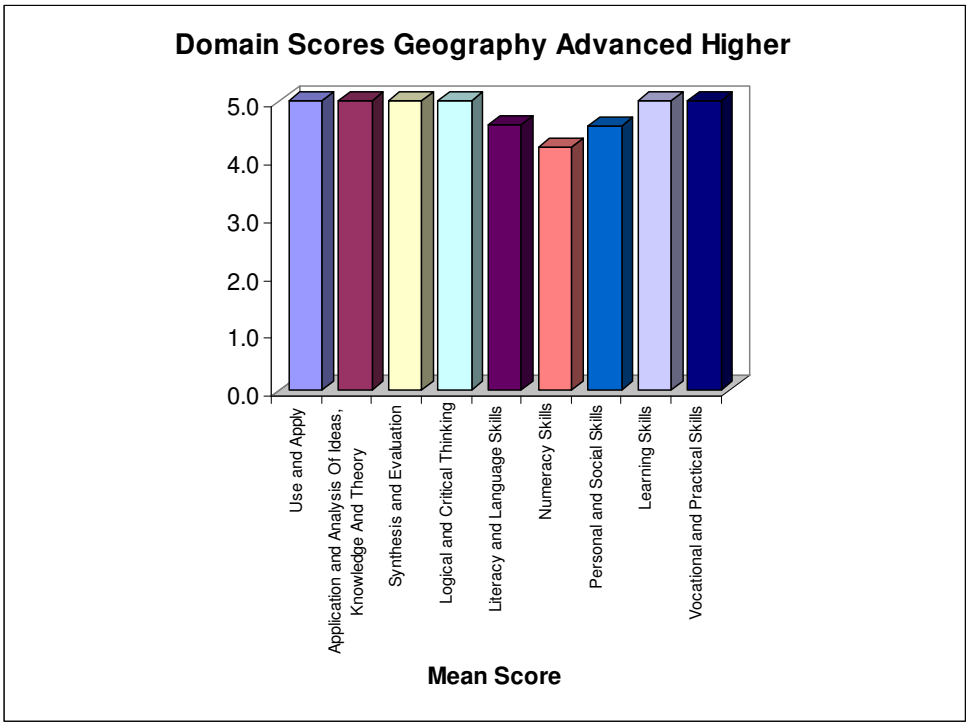


Figure 10: Domain scores – Geography Higher

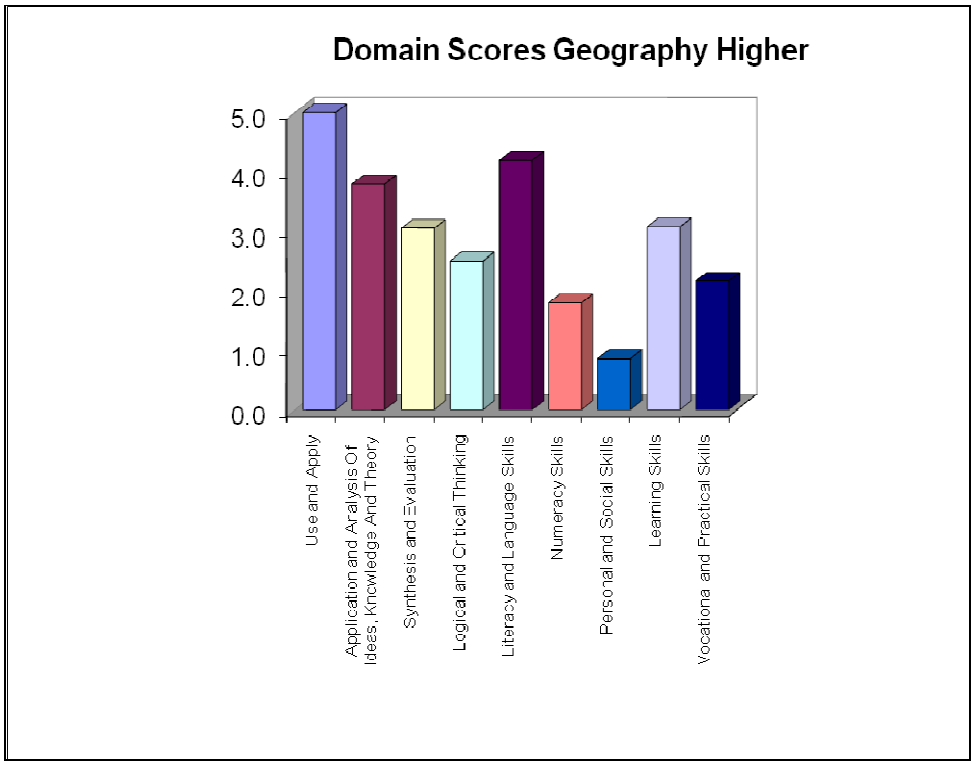
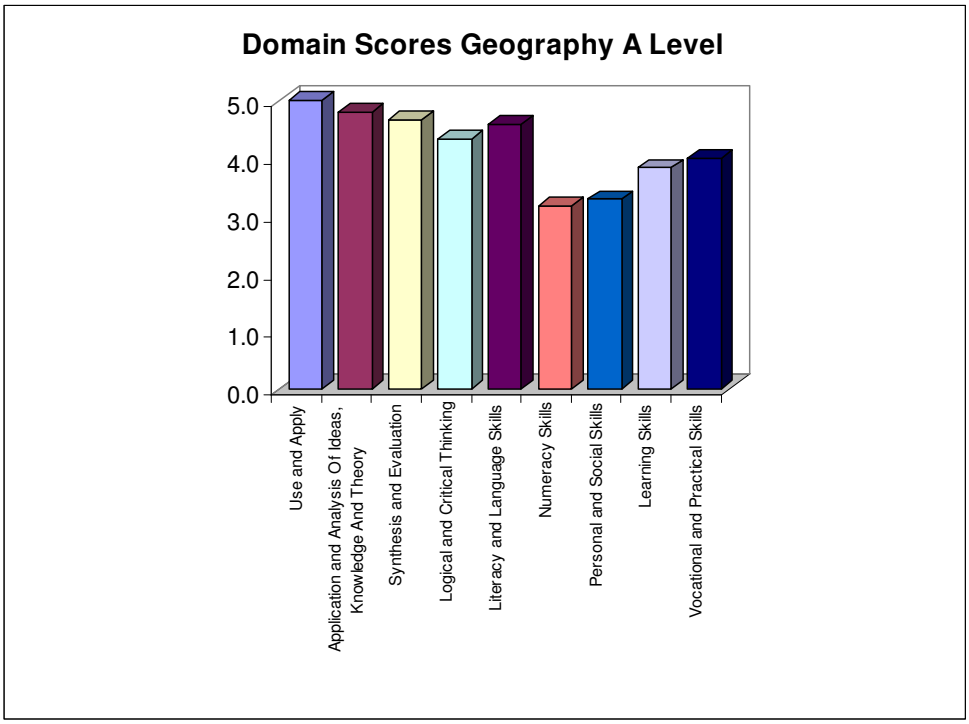


Figure 11: Domain scores – Geography GCE A level



The group considered all three qualifications to provide high levels of utility for use and apply with scores of 5 across the board. The Advanced Higher had more evidence of numeracy skills, personal and social skills, learning skills and vocational and practical skills than the A level. Higher geography had far less evidence than the gce a level for application and analysis of ideas, knowledge and theory, synthesis and evaluation, logical and critical thinking, personal and social skills and vocational and practical skills.

The process led the Group to conclude that that the Advanced Higher provided more utility for progression to HE than the A level, but that the Higher provided much less utility.

4C.10 Recommended allocation of UCAS Tariff points

The Group noted that UCAS Tariff points were allocated at the bottom of each grade. Following the discussions summarised earlier, the Group felt that an A grade at Advanced Higher provided a greater utility for progression to HE than an A level grade A. The Group therefore suggested a Tariff score of 140 for A grade Advanced Higher. Using a utilitarian viewpoint, the ability to pick up a wider range of higher level skills through the Advanced Higher makes the qualification better and higher than the A level. The Group recognised this with an allocation of 120 points for grade B (aligned to A grade A level) and 100 for grade C.

Given that many HEIs are unwilling to accept an Advanced Higher grade D as suitable for entry onto an HE course of study, the Group felt that D had limited utility for progression. As a result of the Group's deliberations a non-linear approach was adopted giving a Tariff points score of 60 for a D grade. This equates to a D grade at A level and was considered to signal that a D grade at Higher is still an acceptable entry to HE, but only attracting a minimal score.

The non-linearity of Tariff points highlights the vast difference in utility to progression that a D grade presents in comparison to a C grade at Advanced Higher.

Following consideration of examination papers, the Scottish Higher Grade A was considered similar to an Advanced Higher grade C. At Advanced Higher the emphasis is on skills development and a high achieving student will show these skills to a high level as well as relying on the knowledge gained form Higher level. A weak candidate at Advanced Higher level would still require this knowledge but their skills development would be less. A high performing candidate at Higher level must show a wide knowledge of the subject, but the breadth and depth of skills demonstrated is not so great.

Without A level scripts available, it was impossible for us to compare candidates' abilities. Based on a consideration of sample assessment materials, aided by the experience and knowledge of examiners and HE representatives, the Group considered that an A grade Higher candidate would be performing at similar level to a B or C grade A level candidate.

In considering the comparative nature of the qualifications, it is clear that there is a compression of achievement in the Higher. Learners who have completed the more mechanistic Higher are able to develop their knowledge and interpretation skills in the Advanced Higher, but taken on its own, it does not provide candidates with the stretch and challenge opportunities available in the other two qualifications. As a result the A, B and C grades were allocated at 100, 90 and 80 respectively. Taking account of the limited utility coming from D grades in the Scottish system, the same approach was taken for the Higher as for the Advanced Higher and 40 points allocated – aligning a Higher grade D to an A level E.

The Group felt that, whilst the Higher provided subject coverage and skills acceptable for HE, the qualification does not provide the stretch and challenge opportunities available in the A level and Advanced Higher. There is more compression of grades within the Higher.

After nominally allocating Tariff points for the two Scottish qualifications, the Group felt that the 100 points suggested for an Advanced Higher C grade did not

adequately reflect the interpretation and research skills gained. Given that 99% of Advanced Higher students complete a Scottish Higher prior to embarking on their Advanced course, the Group felt that an extra year's study of contexts and geographical methods and techniques provided greater utility than an A graded Higher qualification would. While the actual knowledge and skill level associated with Advanced Higher grade C compared with Higher grade A is very similar the additional learning associated with the further year's study at Advanced Higher level means that students should have derived some additional utility, eg through the requirement for more independent study and additional research skills. Therefore, in order to recognise these additional research and synoptic skills a grade C for Advanced Higher was nominally allocated 105 points.

Table 42: Proposed Tariff points scores – geography

UCAS Tariff points	A level	Advanced Higher	Higher
140		A	
120	A	B	
105		C	
100	B		A
90			B
80	C		C
60	D	D	
40	E		D

The Group highlighted a major caveat to be considered regarding these proposed Tariff points. It was felt that achievement at a lower level should be subsumed into the higher level. Whilst AS points are subsumed into the A level points for the same subject, the same mechanism is not currently in place for Scottish Highers and Advanced Highers. It was a strong recommendation of the Group that Highers points become subsumed into Advanced Higher points.

The Tariff points allocated in Table 42 are based on the assumption that Highers points be subsumed into Advanced Higher points. Thus, if a student achieves an A at Higher, followed by another A at Advanced Higher, the total UCAS Tariff points for geography would be 140, not 240.

4D MATHEMATICS

4D.1 Prior to the meeting

Prior to this meeting some preliminary work was carried out. This included a detailed mapping of the Scottish Higher and Advanced Higher against the GCE A level, reports from three HE representatives highlighting similarities and differences between the two qualifications and comparative studies from a representative from each awarding body. Pre-meeting papers were distributed, requiring members of the Group to compare aims, content, study hours, relative size and assessment models of the Scottish Higher and Advanced Higher and that of the GCE A level.

4D.2 The Expert Group meeting

The Expert Group then met on one occasion for two days on 24 and 25 April 2008 to examine and discuss the evidence listed in Appendix 2 and the preparatory work completed by Group members. This section contains an account of the deliberations of this meeting.

The opening session provided an opportunity for the SQA representative (Elaine Riley) and the GCE A level Chief Examiner (Greg Attwood) to present their qualifications and for Expert Group members to seek clarification about general issues in relation to the awards. The key points from these presentations were as follows:

Higher and Advanced Higher (Elaine Riley)

- Higher is gold standard for entry to HE
- Aimed at 16 plus
- Students take 4 or 5 Highers in fifth year (S5); 4 is normally sufficient for HE entry; students that stay on for a 6th Year (S6) may take more Highers, Advanced Highers, or a mixture of qualifications depending upon their aspirations
- Purpose to provide certification for broad general education
- Normally in Scotland duration of degrees is 3 years for ordinary degree; 4 for honours, with the last two years looked upon as the honours years (SCQF requires an ordinary degree to contain 60 credits of honours level material)
- The aim of the Advanced Higher is to develop independent learning
- Institutions sometimes offer Advanced Higher applicants exemption to first degree year or exemption from certain modules
- Course rationale: aim to build on and extend candidates' mathematical skills, knowledge and understanding, particularly to integrate problem solving aspects
- Grade descriptions include independent thinking and decision making
- Recommended entry for Higher: credit at standard grade or Intermediate 2 course
- Entry for Advanced Higher: normally Higher or equivalent; at discretion of centres
- Structure – 3 units and external assessment

- Learning time rated against SCQF. Assessed on level and time - level 6/7 on the SCQF
- Higher amounts to 24 points at level 6, equivalent to 240 hours, compared with 320 hours for the Advanced Higher
- Both Higher and Advanced Higher have 3 component units
- Five core skills included in course - looked at as an audit and validation of core skills
- Assessment: internal pass/fail for units; external overall assessment graded A – D
- Externally assessed exam is 2hrs 40 minutes for Higher, 3 hrs for Advanced Higher
- Grade descriptions show where external assessment has added value
- Grades A-D, D is usually regarded by HE as a fail. Notional grade boundaries on the external assessment. 50%=C 70%=A, but these can be amended. Certain topics involve greater depth which would make it a harder question.

A level (Greg Attwood)

- Year 12 study 3/4/5 AS subjects; Year 13 extend 3 of these.
- Modular exams, with resits possible.
- Resit factor has effect on final grade (i.e. resits can be carried out to improve this).
- Tariff - gave explanation of points to A level grades.
- AS 3 units core: C1 C2 + 1 other unit.
- A level 3 more units: 2 more core + one other.
- Further maths AS = 3 units: FP1 + 2 others.
- A level = AS plus 3 units: FP2 or FP3 + others.
- Each unit 60 GLH approx.
- Assessment by unit, which is graded.
- Assessed by 90 min exam, out of 75.
- Short questions moving to longer questions.
- Comparison with Highers:
  - Target for A = 80% on UMS
  - Target for E = 40% on UMS

After a brief discussion, the following main points of similarity or difference emerged from the comparison:

Table 43: Comparative qualification design – mathematics

Characteristic	Higher	Advanced Higher	GCE A level
Normal Duration (years)	1	2	2
Modular?	Unit assessment modular (Internal - pass/fail). Final (external-graded) assessment non-modular	Unit assessment modular (Internal - pass/fail). Final (external -graded) assessment non-modular	All units assessed separately.
No. compulsory units	3/3	3/3	4/6
No. optional units	0/3	0/3	2/6
Multiple choice assessment?	Yes	No	No
Specific answers required?	Yes	Yes	Yes
Written assignment?	No	No	No
Resits allowed?	One resit only usually	One resit only usually	Yes

Characteristic	Higher	Advanced Higher	GCE A level
	allowed in each unit assessment during same academic year. External assessment can only be retaken in a new academic year and candidate would need to be registered again	allowed in each unit assessment during same academic year. External assessment can only be retaken in a new academic year and candidate would need to be registered again	
End of award assessment?	Yes	Yes	No
Synoptic assessment?	Yes	Yes	Yes

The main differences emerging related to the differing methods of assessment, particularly the multiple choice element in the Higher, the greater opportunity for re-sits in the A level and the associated dependence of Higher and Advanced Higher grades on a single external assessment. These were covered in more detail during the discussion of grades, as was the level of synopticity in assessment.

While in the view of the HE admissions tutors, all qualifications considered served as a main route to HE, this was stated more explicitly in the case of the Higher and Advanced Higher. In the case of the A level, it was not in the list of the 18 aims, but in practice was well known to be a main route to HE.

4D.3 Comparison of aims

Discussion on the general comparison of aims concentrated on the main focus of the aims as listed, the degree to which teaching guidance was offered by the awarding body, evidence in aims for synopticity and the extent to which progression to higher education was made explicit. An important difference between the Scottish and English systems was the nature of the awarding body. This was a single organisation (the SQA) in Scotland compared with a group of private organisations in England. SQA was a national board responsible for assessment and would have a national approach. English examining boards would generate their own teaching approaches, but would not necessarily include these as part of the specification. The discussion produced the following summary:

Table 44: Comparative qualification aims – mathematics

Higher (H)	Advanced Higher (AH)	GCE A level (A)
Aims		
Aims were focussed on the study of and development of skill in advanced maths.	There was greater emphasis on improving problem solving and increasing independent thinking.	Emphasis was on the development of understanding of maths and maths processes. Aims were listed together and were less scattered than for H and AH.
Strengths		
There was possibly more practical emphasis given in teaching guidance as 'helpful hints'		However, there was said to be some guidance in A level.

Higher (H)	Advanced Higher (AH)	GCE A level (A)
End of course assessment was perhaps less likely to encourage compartmentalism.		However, unit C2 assumed knowledge of C1, as did C4 of C3, C2 and C1.
Synopticity achieved by a final assessment over the whole subject matter.		Synopticity built in to the assessments for the A2 components.
Weaknesses		
		Could be seen as highly fragmented compared with 1st HE year, but some linkages: e.g.C2 to C1; C4 to C3 and C1&2 to C3&4.
Support for HE progression		
Explicit in aims and supported by use in offer-making. Highers are the standard currency for entry to all Scottish universities. They may be used alone by some non-Scottish universities.	Explicit in aims and supported by use in offer-making. Advanced Highers may be used as entry qualifications for direct entry to second year of selected programmes in Scotland or when an applicant offers insufficient Highers. They are usually treated as equivalent to A level by non-Scottish universities.	Implicit in aims and well established by practice.

4D.4 Determining size

Initial discussion was about comparative Guided Learning Hours (GLH). While this was of some value, it encountered the following problem.

The concept of GLH differs across the awards. In particular, certain home-based work tends to be included in Highers and Advanced Highers, which discussion between examiners indicated would be excluded from the A level calculation of GLH though each school or college would probably recommend a similar level of home-based work.

Despite this problem, the comparison is included below, as it may be possible to work towards a rationalisation based on knowledge of the assumptions inherent in each system.

A more valuable approach depended on a very useful prior analysis of the coverage, in the Higher and Advanced Higher, of the content of A level Core maths and Further Pure maths modules. By working on the proportion covered, it was possible to provide estimates of the relative size of the Higher and Advanced Higher for discussion by the Group. This produced an estimate that the Higher was about 80% of the volume of the AS and that the Higher and Advanced Higher together were broadly equivalent in volume to an A level. This was accepted as a first approximation by the HE representatives, though there was some concern that this did not fully take into account topics that might be covered in Advanced Higher but

not in A level; and that Higher could be used on its own for entry to Higher Education, whereas AS could not.

4D.4.1 Comparison of Guided Learning Hours

Table 45: Comparison of GLH – mathematics

	Higher	Advanced Higher	GCE A level
School based	160	160	360
Home based	80	160	Not defined
Total	240	320	360

It was pointed out that the Advanced Higher normally followed the Higher, and that the total GLH, according to the SQA definition, would therefore, over a two-year maths programme, be 560. However, there seems to be a different concept of Guided Learning Hours in the two systems.

4D.5 Estimating relative demand – comparing assessment models

It was pointed out that while for AS and A level, the Assessment Objectives are explicitly stated within the subject specification, for Higher and Advanced Higher these are not explicitly stated within the arrangement documents but can be inferred from various sections within the documentation. A separate assessment information booklet contains the necessary information.

Despite the different location of information, there was general agreement that the Assessment Objectives were broadly similar in terms of utility for progression to higher education and that in their different ways (see below) all awards offered the opportunity for synoptic assessment. It was considered difficult to distinguish between Assessment Objectives, and though Advanced Higher perhaps had more guidance regarding independent learning and developing problem solving skills, it was thought that in practice there was no significant difference.

Though generally similar, there were some differences in detail:

- The use of multiple choice questions in the Higher only. These were said to be able to produce a 2-3% increase in marks as a result of a random choice of correct answers.
- The use of a single critical end-of-year assessment in the Higher and Advanced Higher, which placed greater demands on candidates than modular assessment.

Apart from these differences, the general agreement of similarity of objectives is supported by the analysis prior to the meeting by the external examiners. However, this was not discussed during the meeting.

Analysis of assessment models

Discussion by the Group of assessment models produced the following summary:

Table 46: Assessment models – mathematics

Award	Unit	Content	Mode	Duration	Weighting
Scottish Higher	1	4 Outcomes	Internal	45 minutes	Must pass
	2	4 Outcomes	Internal	45 minutes	Must pass
	3	4 Outcomes	Internal	45 minutes	Must pass
	(External assessment)	All 3 units	External	2 hours 40 minutes	100%
Scottish Advanced Higher	1	Unit 1	Internal	45 minutes	Must pass
	2	Unit 2	Internal	45 minutes	Must pass
	3	Unit 3	Internal	45 minutes	Must pass
	(External assessment)	All 3 units	External	3 hours	100%
A level	1-6	All 6 units	External	1 hour 30 minutes each	100%

Synoptic assessment

The issue of synoptic assessment was specifically addressed by the Group. For the Higher and Advanced Higher, synoptic assessment was important and was included in design of the papers of the final assessment. This was more than a replication of the internal assessment. For A level, the units C1-C4 were designed so that each unit specified that knowledge of material in previous units was assumed and tested, and they therefore built on information that had been taught previously.

This similarity in synopticity was consistent with prior reports from examiners. These had indicated that all awards offered the opportunity for synoptic assessment. In the Higher and Advanced Higher, this was included in the design of the final examination paper and verified by quality assurance procedures. In the case of the A level, this was achieved by relationships between the units and the way in which certain units were designed to assume knowledge of previous ones, for example, C2 of C1; C4 of C3.

4D.6 Estimating relative demand – comparing examination requirements

Analysis of assessment materials

The Group spent some time looking at the various papers and accessed the SQA and Edexcel websites to provide information on raw marks. There was some discussion of how papers might vary from year to year, with the general conclusion that some variation was inevitable in practice, but would not be significantly different between the awards. Results of the analysis of assessment materials were entered into the following table, with scoring according to the following categories:

A = Essay; B= Document question; C=Short answer; D=Comparison; E = Comprehension; F = Knowledge; G = Application; H = Evaluation

It was agreed that all assessments offered the opportunity for assessment in categories E, F, G and H.

Table 47: Analysis of assessment materials – mathematics

Paper title	Duration	Question yype	Proportion of marks	Comments
Higher				
1	90 mins	Mixture of multiple choice and written response. EFGH	54%	No calculator
2	70 mins	All written response EFGH	46%	Calculator allowed
Advanced Higher				
1	3 hours	Written – short, Written – long EFGH	60% 40%	Calculator allowed
A level				
C1	90 mins	EFGH	17%	No calculator
C2	90 mins	EFGH	17%	Calculator allowed
C3	90 mins	EFGH	17%	Calculator allowed
C4	90 mins	EFGH	17%	Calculator allowed
FP1	90 mins	EFGH	17%	Calculator allowed
FP2/3	90 mins	EFGH	17%	Calculator allowed

4D.7 Estimating relative demand – comparison of candidate work

In order to determine the relative demand of the two examinations, the Group examined candidate examination scripts in Higher and Advanced Higher. The absence of candidate scripts in A level was noted. In general, these were not available as a result of A level redesign, though this had not, in fact, occurred for maths A level.

4D.8 Aligning the grades

The utility of D grade at Higher for progression to higher education was discussed by the Group given that some of the traditional universities consider it to be a fail. However, it was pointed out that the grade D award reflects the candidate's performance more accurately than the previous arrangements (a grade A at the level below) and that for candidates to gain the grade D award, they have to successfully complete the units of the course.

The Group concluded that this might be accepted as a supporting qualification for a degree in a subject other than maths, but not where some facility with numbers or data handling was desirable.

Typical grade boundaries for the three awards were discussed, producing the table below.

Table 48: Grade alignment – mathematics

Award	Grade	Percentage mark[2]
Higher	A	78
	B	64
	C	50
	D	43
Advanced Higher	A	72
	B	60
	C	48
	D	42
A level	A	80
	B	70
	C	60
	D	50
	E	40

Following an initial review of candidate evidence for Highers and Advanced Highers, comments from the Group suggested that at the top level, well-taught Scottish students should be better able to present proofs and understand the process of a mathematical proof, but in the external examination would not have demonstrated as much understanding of numerical methods of applications of mathematics as A level counterparts. Applications of mathematics are covered in the completely separate Advanced Higher Applied Mathematics qualification which attracts relatively few candidates. The Advanced Higher in Applied Mathematics was not considered by the Group.

Based on analysis of grade boundaries alone, at C grade mastery of the material in Advanced Higher would be lower than for the equivalent grade at A level. However this would not be the case at Higher A grade. Comments received after the meeting indicated a lack of consensus on conclusions to be drawn from grade boundary analysis – only examination of comparative scripts at grade boundaries would confirm or deny these suggestions.

In the opinion of one HE representative with experience of both A level and Scottish Higher/Advanced Higher candidates, an 'A' Grade student at Advanced Higher was a good student with potential; whereas, while an 'A' Grade A level student could be as good as or better than their Scottish equivalent, some such students would be no better than a B grade Advanced Higher candidate. This was stated to be because the gaining of an A in A level was thought to be influenced by the re-sitting of modules to

2 Typical Higher and Advanced Higher marks as given during group discussion. These are "raw" marks. A level marks are the minimum "percentage" on the uniform mark scale to achieve each grade and are derived from "raw" marks out of 75. The process of arriving at grades is significantly different in the two qualifications.

improve unit grades and the "least best" concept employed by the A level examination boards. There was no consensus on this view, however.

In Group discussion on aligning grades, the following points were taken into account:

- Grade boundaries as shown above.
- Less fragmentation in Higher and Advanced Higher assessment.
- Multiple choice questions in Higher only.
- The single sitting exam system in Higher and Advanced Higher, without resits, was more demanding than A level.
- The candidates for the Highers did not have access to a formula sheet.

Examination of scripts suggested that at the top to middle of the grading range, grades were similar, so that an A or a C grade would be equivalent across all qualifications. However, a D grade in Higher or Advanced Higher would be higher than an E grade at A level in terms of value for progression to higher education. Subsequent discussion suggested that both A and B grades were somewhat higher in the Higher and Advanced Higher than in A level, and that C and D grades were roughly equivalent. There was therefore no equivalent grade in the Scottish qualifications to the A level grade E.

4D.9 Domain scoring

Some scepticism was expressed about the significance of the domain scoring system to the subject of maths. The exercise generated over 3 hours of discussion, which resulted in allocation of scores to around 66% of strands. In most cases, however, scores were similar or identical for all the maths awards. The summary charts, showing average scores for all strands in a section, are shown below. The only, very minor, difference was:

Synthesis and evaluation: Higher score of 2.6 compared with Advanced Higher and A level scores of 2.7.

On the basis of domain scoring, therefore, the Group found no significant difference between awards.

Figure 12: Domain scores – Maths Advanced Higher

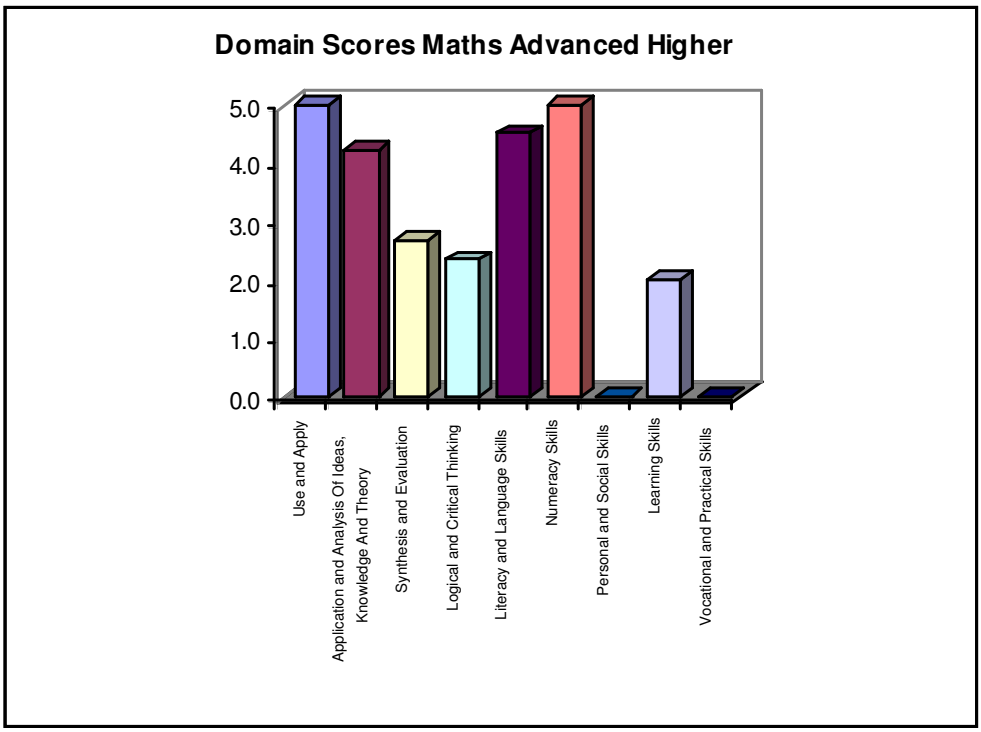


Figure 13: Domain scores – Maths Higher

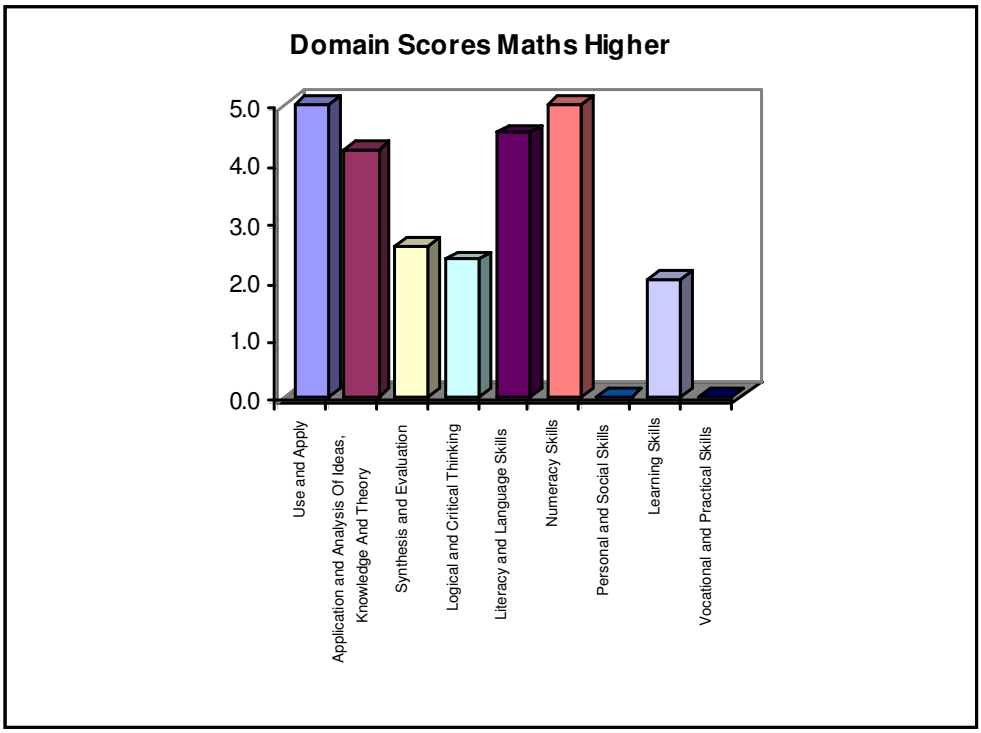
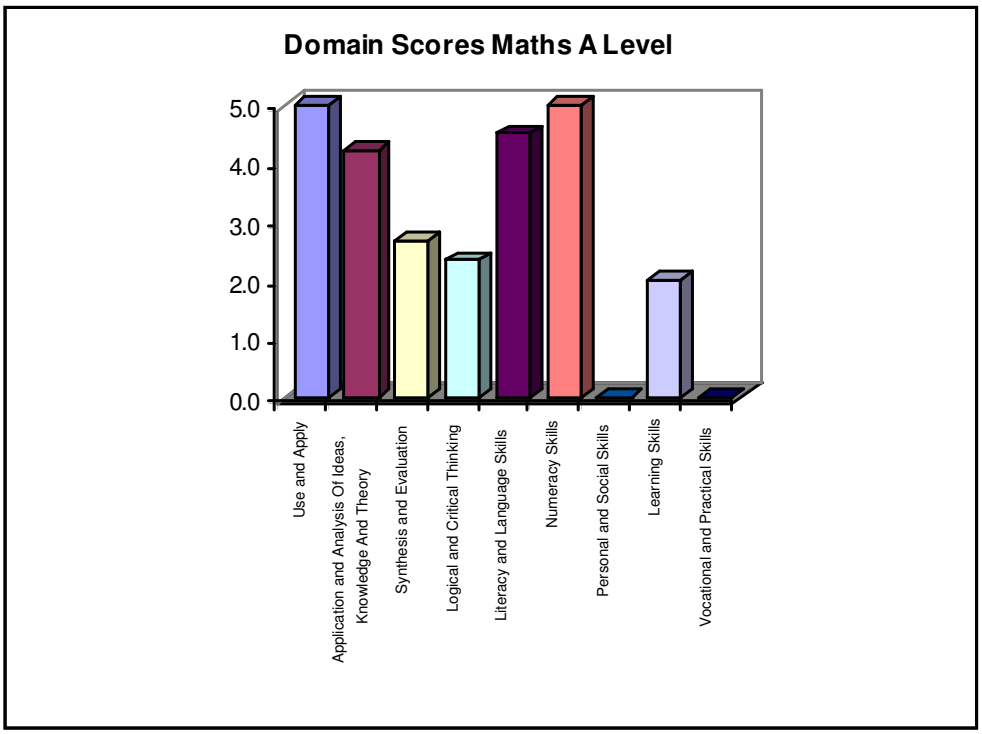


Figure 14: Domain scores – Maths A level



4D.10 Recommended allocation of UCAS Tariff points

The following previous findings were taken into account in allocation of Tariff points by the Group, shown in the table below:

- The Higher was about 80% of the volume of the AS and that the Higher and Advanced Higher together were broadly equivalent in volume to an A
- All awards offered the opportunity for synoptic assessment
- In terms of assessment demand, both A and B grades were somewhat higher in the Higher and Advanced Higher than in A level, and that C and D grades were roughly equivalent
- Domain scores were essentially the same across all awards.

Given the above, starting with the Advanced Higher, the A and B grades were given Tariff points somewhat higher than the A level at 130 and 110 points respectively. This assumes that, as for the AS and A level, Tariff points allocated to the Higher are subsumed within the Advanced Higher, when the latter follows the former. However, given that the Group considered the Higher to represent only about 80% of the volume of the AS, Tariff points were adjusted downwards to be fewer than half the equivalent Advanced Higher scores, producing 60 and 50 points for A and B respectively.

Scores were then moderated to ensure reasonable conformity between the intervals on the Tariff scale and the intervals between grade boundaries, for the Higher and

Advanced Higher. This is illustrated in Figure 15 below, which shows a broadly linear relationship between the percentage marks associates with grade boundaries and the Tariff scores associated with the same grades. This gave the Tariff values shown in the table below.

Figure 15: Linearity of maths Higher and Advanced Higher marks

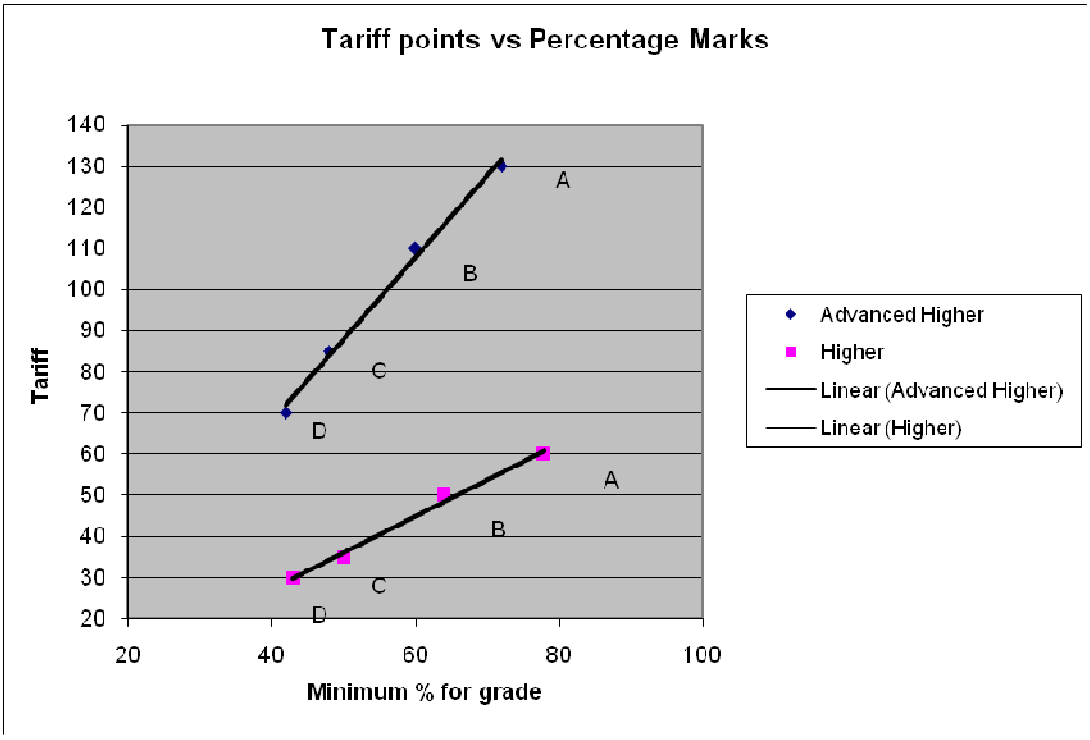


Table 49: Proposed Tariff points – maths

Grade	Tariff points		
	Higher	Advanced Higher (subsuming Higher)	A level
A	60	130	120
B	50	110	100
C	35	85	80
D	30	70	60
E	N/A	N/A	40

4E HEALTH AND SOCIAL CARE

4E.1 Prior to the meeting

Prior to this meeting some preliminary work was carried out. Pre-meeting papers were distributed, requiring members of the Group to compare aims, content, study hours, relative size and assessment models of the Higher in Health and Social Care in comparison with the GCE A level in Health and Social Care, and aligning the grading systems. Further Expert Group members were asked to undertake a preliminary scoring of the qualifications against the UCAS Tariff domains.

4E.2 The Expert Group meeting

The session started with the examiners for both the Higher and the A level providing an overview of their respective qualifications. Of particular relevance was the report that this was a Higher with a difference as it formed part of a Scottish Government initiated programme named 'Skills for Work' (SfW). In terms of this specific subject area, it had been the intention to create a Higher which would be accepted by Scottish HEIs as an entry qualification for Nursing (and related subjects) degrees, but one which could also be used for entry into employment. Highers in the SfW suite are required to cover national standards and employability skills, and unlike examination-based Highers are pass/fail only. All units are internally assessed and moderated, and all have to be achieved; nonetheless the depth of content is equal to an examination-based Higher subject. Although this is an un-graded qualification, in practice candidates are awarded a Higher at grade C, ie achievement is at C grade or nothing.

As far as the A level was concerned, it was explained that, although the Higher was being benchmarked against the six-unit A level award, also available was a twelve-unit double A level award, a three-unit AS award, and a six-unit double AS award. Like the Higher, this particular subject was part of a suite of Applied A levels, such A levels having previously been designated as Advanced Vocational Certificates in Education (AVCEs).

Initial questioning focused in particular on the way the two qualifications were delivered, the structure of the qualifications and the assessment models, and the differences with more traditional counterparts. There was a perception at this stage on the part of the HE representatives that the A level was more theoretical; however, it was pointed out that, although the Higher focused on understanding of the workplace, and a concentration on experiential teamwork, it also teased out from case studies how theory worked in practice.

Both qualifications therefore were not the same as more traditional Highers and A levels, and this factor inevitably influenced some of the subsequent discussion and the final outcome of the proceedings.

Following extensive discussion, the Group agreed that there were differences and similarities in design between the Higher and the A level – as shown in Table 50.

Table 50: Qualification – health and social care

Higher	**A level**
Differences	
4 units	6 units
1 year	2 years
Achieve/not achieve	Graded
Mastery	Compensatory
All units internally assessed	Two thirds/one third internal/external assessment
Delivered in colleges (although taken by school students)	Delivered in both schools and colleges
Designed for 'different type of learner', i.e. one that wished to learn a subject of direct relevance for the world of work and which for some employment opportunities would provide a licence to practise	Offers both theoretical and vocational knowledge
Similarities	
Central/standard verification	
Taken alongside other subjects	
Both intended to prepare students for entry to HE	

4E.3 Comparison of aims

Consideration of the aims and objectives for both qualifications was undertaken in detail. Table 51 shows the agreed differences and similarities following consideration of the preparatory work and discussion by the Group.

Table 51: Comparison of aims – health and social care

Differences	
Higher	**A level**
• No numeracy • On its own does not expose students to what is needed for coping with demands of HE, i.e. it is intended that this Higher subject should be combined with others in order to form a programme of study which is appropriate preparation for entry to HE • Emphasis on Group tasks (requirement) • Clear emphasis on development of self-awareness (i.e. recognition by and use of personal learning and thinking skills on the part of the student)	• Opportunities to evidence numeracy • Better preparation for academic study at next level as it is a larger qualification and therefore contains more knowledge, understanding and skills. However, this qualification too would be combined with other subjects in order to form a coherent pre-HE programme of study • Opportunity for Group tasks (not requirement) • Less explicit development of self-awareness
Similarities	
• Academic knowledge plus application to practical situations • Transferable skills • Critical thinking skills • Relevance for entry to HE	

Despite recognition of the differences as shown above, and the early point in the discussion, it was still considered that broadly the two qualifications had the same aims and objectives, and importantly, that on the basis of these, both qualifications had relevance for progression to HE.

4E.4 Determining size

4E.4.1 Comparison of Guided Learning Hours (GLH)

The Expert Group considered GLH whilst recognising potential shortcomings of relying on this measure alone for determination of size of the two awards under consideration. With regard to the A level, it was reported that GLH were normally reported as 360. However, the examiner also confirmed that a figure of 540 hours is being proposed as notional learning hours in conjunction with work on credit, although this value was not yet in the public domain. For the Higher (where learning hours are automatically linked to A level within the Scottish Credit and Qualifications Framework), a figure of 240 notional learning time was reported, although it was indicated that 160 hours were most likely for direct contact time between teacher and learner.

On this basis, it initially appeared that the Higher was 45% of the size of the A level, although at this stage, no member of the Expert Group was prepared to commit definitively to this estimate.

4E.4.2 Determining size – breadth and depth of content coverage

The Group therefore considered the amount of content present in each specification. At face value there are four units in the Higher and six in the A level, but because the Higher is specified as outcomes and the A level as topics to be covered, it was not possible to make a direct comparison between the two. There was discussion about the way in which all outcomes were required to be evidenced in order to achieve the Higher whilst assessment of the A level did not cover all the topics specified. The skills-based nature of both qualifications also made it challenging to make direct comparisons in terms of amount of content, particularly because there were differences in terms of the amount of skills-based content. There was also the issue of content being more explicit in the A level, and less so in the Higher, and a difference in approaches to depth and breadth. At times the examiner and representative for the Higher described what would take place in the classroom or in the work experience component, but the HE representatives felt that they had to take what was specifically stated within the Higher specification at face value and it could not be guaranteed that what was being described would definitely happen in all learning environments. At points it was impossible for the Group to separate size, purely in terms of content, from demand, which it was considered inevitably affected determination of size. A further challenge was that there is a difference between what needs to be covered in order to achieve the lowest pass in the A level (the E grade)

and that which would have to be evidenced in order to achieve grade A – this complicated some of the discussion.

At one stage in the discussion it was indicated that the Higher had less content and more skills than the A level, and the A level more content and less skills than the Higher. This was considered important, but could not be used to achieve complete agreement about size. Notwithstanding that the Group considered that it was not possible to be clear cut at this point in the proceedings about the relationship between the two qualifications in terms of size, it was possible to arrive at agreement that the Higher was somewhere between 45% and 60% of the A level. The HE representatives all agreed that the Higher was larger than AS, and around 50% to 55% of A level, as did the A level Chief Examiner. However, the SQA representatives considered that it was between 55% and 60% of A level. At this stage it was agreed to return to the size issue at a later point.

The Group then considered the structure of the respective qualifications in a little more detail. As had already been confirmed, the Higher has four units whilst the A level has six. The A level was one of a suite of separate, but firmly connected, qualifications comprising single AS, double AS, single A level and double A level. As with other A levels, AS is an integral part of the full A level award. Assessments for the Higher can be taken at any time (with tasks downloaded from the National Assessment Bank); the same is the case for the internally-assessed A level units, although the externally-assessed units can only be taken in January or June.

This additional consideration enabled the Group to confirm once again that, at this stage, it looked as though it was not considering substantially different qualifications.

4E.5 Estimating relative demand – comparing assessment models

The aspect of the work of the Expert Group commenced with consideration of Assessment Objectives. Right at the start the difference in approach to reporting achievement in the respective qualifications became an issue, with the Higher having a ‘one size fits all’ grade, ie a C grade, and the A level being reported at a range of different grades. Again, there were challenges because the specification of the Higher did not make Assessment Objectives as explicit as the A level, and the Group was required to infer these from the outcomes. Nonetheless, it was understood that in order to achieve the Higher all criteria needed to be met, whereas in the A level the assessment process operated on a basis of sampling (although the candidate would be required to know the whole of the specification or risk the ‘right’ questions not coming up). The difference in philosophy between the two qualifications was also a barrier to confirming the exact position easily, with the Higher adopting a competence-based approach and the A level requiring assessment based on

understanding of the broad vocational area. In addition, the Higher was only in the first year of delivery, whereas the A level had been established for some years.

Notwithstanding these challenges the Group expertly found its way through these and was able to agree the following. Four Assessment Objectives were broadly common to both qualifications:

- Application
- Knowledge and understanding
- Investigation, analysis and presentation skills
- Evaluation.

The Higher had an additional assessment objective covering employability skills. As had been the case in considering other aspects of these qualifications, there was more explicit information in the A level specification and details had to be inferred from the Higher. All agreed too that if candidate evidence had been available the process would have been easier to undertake.

Discussion then turned to the relative assessment weightings given to the two qualifications under consideration. At this point the structure of the A level with the AS/A2 arrangement complicated the debate. Again the issue of whether or not there was explicit identification of a position emerged with the A level clearly stating the assessment weightings for AS and A2, and weightings needing to be inferred for the Higher. The clear position for the A level is outlined in Table 52:

Table 52: A level assessment weighting

		Weighting		
Assessment Objectives		**AS**	**A2**	**AS and A GCE (Double Award)**
AO1	Knowledge, understanding and skills	30-40%	10-30%	20-35%
AO2	Application of knowledge, understanding and skills	20-30%	30-30%	20-30%
AO3	Research and analysis	15-25%	25-35%	20-30%
AO4	Evaluation	15-25%	25-35%	20-30%

Examination questions are directly linked to the Assessment Objectives; also the portfolio units. In respect of the Higher, the best estimate was:

Knowledge and understanding	50%
Evaluation	10%
Application and investigation	40%

The issue of how markers would know to weight the (implied) Assessment Objectives for the Higher was raised, although in a few instances this was clearly identified in the outcomes to be achieved. Again the problem of comparing a competence-based approach based on achievement of specific outcomes with clear specification of Assessment Objectives was raised, but the analysis did provide a consensus that

there was more emphasis on knowledge and understanding in the Higher, and more on research, analysis and evaluation in the A level, particularly for the A2 units. At initial consideration, therefore, it appeared that there was more assessment of higher order skills in the A2 units of the A level than the Higher.

4E.6 Estimating relative demand – comparing examination requirements

The next stage in the proceedings was to consider assessment models. The Group was reminded that the Higher adopted a mastery approach and the A level a compensatory approach to evidencing the various Assessment Objectives. The following features were identified for each of the two qualifications under consideration:

Table 53: Comparative assessment models – health and social care

Higher	**A level**
• All units internally assessed • All outcomes must be achieved (mastery) • Each unit allows one remediation, e.g. the opportunity to re-do part of unit where outcome has not been met • If competences are met, these do not need to be repeated • Assessments can be drawn from National Bank at any time • Annual update meeting of External Verifiers • Benchmarked against Higher in Care.	• Two thirds/one third internal/external assessment • High grade can be achieved on e.g. one unit, a low grade in another, and the outcome will be a middle grade (compensatory) • Can fail a unit and still achieve a pass grade • Re-sits allowed for any unit, but whole unit has to be repeated or re-submitted • Two assessment points in January and June, mean limited opportunities for re-sits operate in practice • Portfolios can be re-submitted having done extra work • Results analysis using statistics • Chief Examiners' Committee benchmarks against other subjects
Both qualifications are subject to internal and external verification	

Consideration of this list enabled the Group to confirm that, although the two qualifications had different assessment models, there was sufficient similarity to confirm a consensus that demand was broadly the same. The rationale for this was that although there were differences, for instance in the balance between internal and external assessment, both assessments were subject to nationally-agreed procedures and processes conducted by Chief Examiners or equivalents. Despite the differences in what had to be achieved, ie mastery versus compensation, it was recognised that the Higher student knew that all outcomes had to be achieved, whilst there was more risk for the A level student in that they did not know what would be examined. In terms of resits, although there were some differences in theory, in practice the situation was similar for the two qualifications. This overall conclusion was reached through a great deal of debate about whether or not there was a similar level of demand despite the differences between the two qualifications. The Group was concerned that students would not be disadvantaged by any agreement reached which would have a subsequent bearing on UCAS Tariff points to be allocated.

4E.7 Relative demand – candidate evidence

Whilst candidate evidence was available for the A level, evidence was not available for the Higher. Accordingly, valid comparison based on candidate evidence was not possible.

4E.8 Estimating relative demand – aligning grades

The Group then considered demand associated with assessment in yet more detail. Again, without candidate evidence it was necessary to limit consideration to the materials available and this hindered progress at times. Notwithstanding this, it was possible to confirm the following features for both qualifications associated with assessment demand.

Table 54: Grade alignment – health and social care

Higher	**A level**
Pass/fail	Assessment Objectives operate across all units leading through grading to different levels of performance.
Competence and criterion-based. Assessment Objectives permeate types of assessment through approach of learn knowledge, apply, evaluation. Marking guide provided referring to outcomes.	Marking grid which clearly shows at topic level what needs to be achieved at each band for each Assessment Objective (internally assessed units). Provision of Teachers' Guide.
National Assessment Bank packs provided to centres containing: • General information (timing etc). • Scope. • Materials to be provided to External Verifiers. • Performance criteria to be covered. • Detailed marking scheme. • Assessment instruments.	• Marking scheme (externally assessed units); mark of paper determines grade awarded. All questions have to be answered, and questions cover all parts of the specification. • Clear emphasis on quality as opposed to quantity. Focus on use of materials and synthesis.
SQA feeds centres from assessment bank (centres are allowed to choose from a small range of assessments).	For internally-assessed units what is done is determined by the centre, but has to relate to the marking grid.
Six different types of assessment. • Closed-book case study. • Investigation. • Folio. • Presentation. • Interview/CV/reflectiveness. • Risk assessment.	Mixture of different approaches to assessment: portfolio, different style questions in externally assessed component.
Explicit identification of range of assessment approaches.	Implicit identification. Full range will only be evidenced at higher grades.
HE will know that all candidates have achieved at the set standard.	Distinct differences depending on grade achieved. Raw marks converted through examinations process to UMS scores and then to grades. UMS 80 – Grade A 70 – Grade B 60 – Grade C 50 – Grade D 40 – Grade E
Gradation of difficulty.	Clear progression from AS to A2 units reflected by weighting of Assessment Objectives
Learn one theory at a time and then apply (one example only in early units). Other units require choice of theory.	Choose appropriate theory and apply, explaining reason for choice (critique). More in A2 units.

More narrow focus; students do not need to know as much.	Need to know more.
Need for higher level of detail on narrow range of situations, eg stress and aggression.	Wider range of situations, e.g. stress, diversity, discrimination, aggression.
Less risk.	More risk.

The above were confirmed through long discussion and debate with frequent input from the examiners to confirm a situation. Having arrived at this list it was possible to confirm that, again broadly speaking, both qualifications had equally demanding assessment. However, the following points were made:

- The A level is a two-year course as opposed to the one-year course for the Higher, so in a longer course of study there would be more opportunity to evidence demand associated with successful progression to HE
- All outcomes had to be evidenced by a candidate in the Higher versus some in the A level

Portfolios are marked against the four Assessment Objectives. The specification has clear assessment grids, Grouped into three mark bands, (mark band 1 being the lowest mark band and mark band 3 being the highest mark band). There are clear descriptors for each assessment objective enabling the assessor to award the most appropriate mark. The Group view was that there was more demand in the Higher than required in band 1 in the marking grid for A level; similar demand across both qualifications in respect of band 2; more demand in the A level at band 3.

Taking all the above into account, recognising that in practice 'apples and pears' were being compared, and working on the basis that this was the 'best' that could be confirmed without the presence of candidate evidence, it was agreed that grade C in the Higher (the reporting grade for achieving the award) aligned with grade mark band 2 in the A level. This was mainly derived from the agreement that the greater level of demand in the Higher as compared with band 1 of the A level was cancelled out by the greater demand in the A level at band 3, and therefore that the middle grade, ie C, in the A level aligned with the pass in the Higher because of the confirmation of similar demand with band 2.

However, this confirmation also took into account the difference between the mastery and compensatory models, the similarities and differences of the assessment models, and the presence of grading for the A level and because of this the presence of more opportunity to evidence demand at the higher level at the top grades.

4E.9 Scoring the qualifications using the Tariff domains

This part of the exercise was preceded by discussion as to whether scoring should be undertaken on the basis of opportunity to evidence the Tariff domain strands or direct evidence within the qualifications. It was agreed at this point in time that it was as much about opportunity as firm evidence. As the process was conducted it was

proved that this tended to be translated into what was effectively speculation about what would happen as part of the teaching and learning process as opposed to the opportunities provided by the assessment models of the respective qualifications.

A great deal of time was spent on this aspect of the methodology. In the first instance the outcomes of the preparatory work were recorded on the flip chart. The Expert Group members considered in detail and critically reviewed the opportunities as evidenced in the various units of the two qualifications. Frequently, the discussion revolved around the understanding of the evidence descriptors and what constituted, for example, significant opportunities as opposed to reasonable opportunities. When this had been done, a process of securing agreement as to the overall scores which should be fed into the 'Manhattan' charts was undertaken. This involved the HE representatives listening to the justifications of the respective examiners and adjusting the original scores where necessary. Perhaps inevitably there was also discussion about what was meant by individual words within some of the strands, and consideration of some overlap between and within strands in the various domains. It was also necessary to confirm that the domain scoring could only be based on the evidence in front of the Expert Group, ie the opportunities for evidencing the various strands based on those explicitly stated in the specifications and in the assessment materials. Generally, it was considered that it was easier to determine the evidence in the A level than the Higher, where for the latter more reliance had to be placed on explanations from the SQA representatives of what would happen in practice. Where there was not complete consensus across all members of the Group, the HE representatives were asked to arbitrate; in almost all cases there was agreement across the HE contingent.

The final position in respect of values was as follows.

Table 55: Domain scoring detail – health and social care

Domain strand	Higher	A level
1.1	5	5
1.2	5	5
1.3	5	5
2.1	4	5
2.2	4	5
2.3	2	2
2.4	1	1
2.5	4	4
3.1	3	4
3.2	3	4
3.3	3	4
3.4	3	4
3.5	3	3
3.6	2	2
3.7	1	2
3.8	2	2
3.9	2	3
4.1	3	3
4.2	3	4
4.3	2	2
4.4	2	3
4.5	3	3
4.6	2	2
5.1	3	3
5.2	4	4
5.3	4	4
5.4	3	2
5.5	3	3
6.1	0	1
6.2	1	1
6.3	0	0

Domain strand	Higher	A level
6.4	0	0
6.5	0	0
6.6	1	1
7.1	5	4
7.2	5	5
7.3	4	3
7.4	4	4
7.5	4	3
7.6	3	2
7.7	3	2
8.1	3	3
8.2	3	3
8.3	4	4
8.4	4	4
8.5	4	4
8.6	3	3
8.7	4	4
8.8	2	3
8.9	3	3
8.10	3	2
8.11	3	3
8.12	3	3
9.1	4	4
9.2	3	3
9.3	3	3
9.4	3	3
9.5	3	2
9.6	2	3
9.7	2	3
9.8	4	3

Figure 16: Domain scores – Health and Social Care Higher

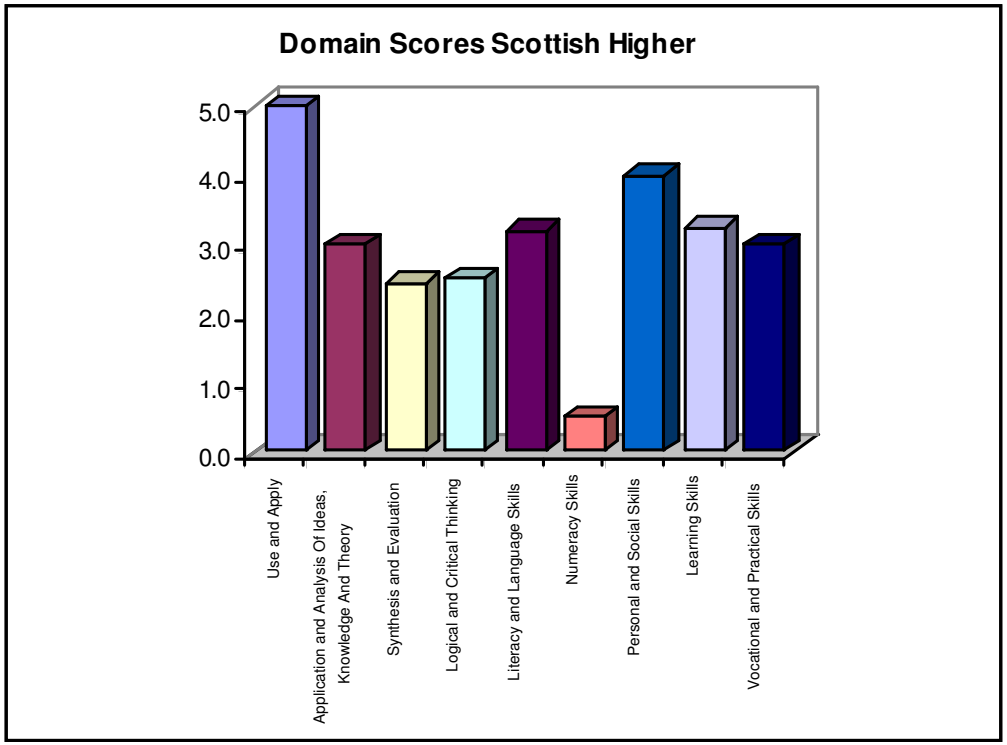
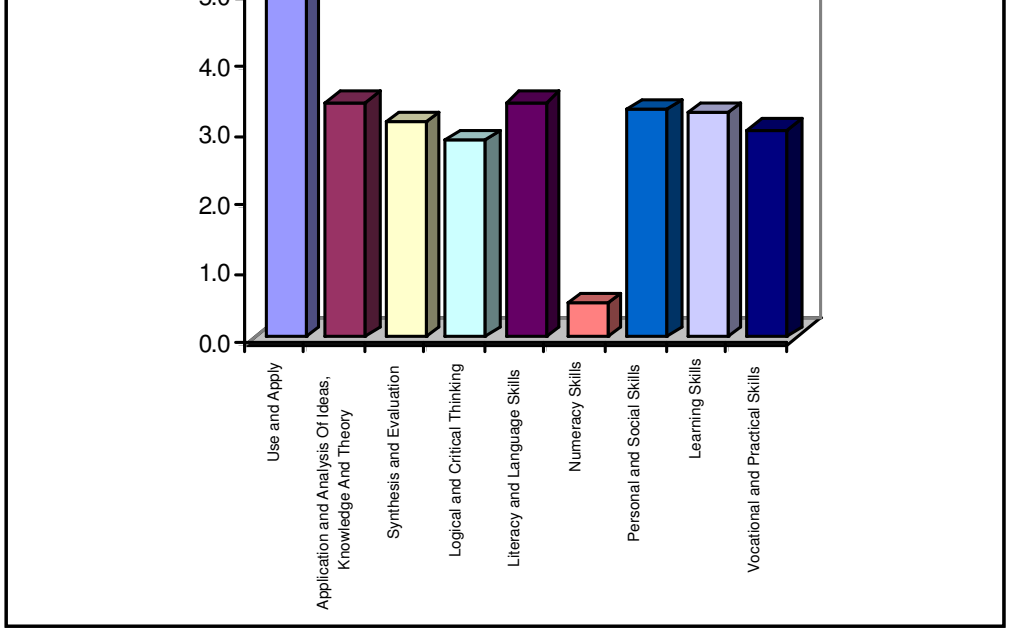


Figure 17: Domain scores – Health and Social Care A level



The results of domain scoring process indicated that the two qualifications were broadly similar. The A level had a little more evidence of application and analysis, and synthesis and evaluation whilst the higher had quite a bit more evidence of personal and social skills and a little more in the form of learning skills. Nonetheless, the process served to confirm once again the utility of both qualifications for progression to HE.

4E.10 Recommended allocation of UCAS Tariff points

In order to allocate Tariff points to the Higher, at this point it was necessary to return to the issue of size. Following agreement that the best possible estimate without candidate evidence was that demand in the A level aligned with the only grade to be awarded in the Higher, this provided confirmation that the points to be allocated would be a proportion of those available for the A level Grade C. Throughout the proceedings of the Expert Group, it was recognised on one hand that because of the mastery approach a Higher student would evidence all of the outcomes, whilst an A level student (particularly those who achieved low grades) would only evidence a proportion of the topics and Assessment Objectives associated with that specification. Furthermore, a student taking the Higher might evidence higher order skills in the outputs associated with the qualification, but because of the grading structure this could not be confirmed to HE (or indeed employers). It was also recognised that in practice students taking both qualifications may well be studying additional subjects and/or qualifications.

Notwithstanding the above, it was irrefutable that a one-year qualification was being compared with

It was recalled that the size for the Higher had been 'parked' at somewhere between 45% and 60% of the A level, when size alone was being considered. Neither the examiner for the A level nor the HE representatives were prepared to agree that the Higher should be any more than 55% of the A level, although the SQA representatives disagreed. On the basis of the A level examiner and HE perspectives, a figure of 44 points for the Higher emerged; on the basis of the SQA representatives' perspective the figure would be 48 points, ie 60% of 80. It was pointed out that this was the value currently given to Highers in the Tariff.

However, the issue of lack of candidate evidence returned and also that of the Higher in Health and Social Care being delivered for the first time this academic year, so despite assurances from the SQA representatives that the Higher had already been benchmarked against existing Highers, the HE representatives were not prepared to agree that the points allocation at this stage should be any greater than 44, ie 55% of 80. The A level examiner agreed with the HE representatives.

Considerable further discussion ensued but it was not possible to agree a different outcome than that identified above.

APPENDIX 1 SCORING AGAINST THE DOMAINS

Readers wishing to receive further information on the following appendix are invited to contact UCAS who will be happy to provide it.

1. Use and apply

Strands associated with domain/ Components of qualification	Units	External assessment	Rationale for/comments on allocated scores
1.1 Recognise, recall and show understanding of a mixture of simple and complex facts, terminology, principles, concepts			
1.2 Select, organise and present relevant information clearly and logically, using specialist vocabulary where appropriate			
1.3 Respond to questions with knowledge and understanding			

2. Application and Analysis of ideas, knowledge and theory

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
2.1 Describe, explain and interpret phenomena and effects in terms of subject principles and concepts			
2.2 Present arguments and ideas clearly and logically using specialist vocabulary where appropriate			
2.3 Interpret and translate from one form into another, information presented as continuous prose or in tables, diagrams and graphs			
2.4 Carry out relevant calculation			
2.5 Mainly apply subject principles and concepts to unfamiliar situations			

3. Synthesis and Evaluation, for example developing models, approaches, ideas

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
3.1 Assess the validity of information, experiments, inferences and statements			
3.2 Bring together knowledge, principles and concepts from different areas of the subject and apply them in a particular context			
3.4 Use skills in contexts which bring together different areas of the subject			
3.5 Evaluate arguments and evidence and make informed judgement			
3.6 Logical thinking for example analysing problems, understanding relationships between cause and effect			
3.7 Critical thinking for example by judging the validity of information and arguments			
3.8 Construct rigorous arguments and proofs through use of precise statements, logical deduction and inference			
3.9 Construct extended arguments for handling substantial problems presented in unstructured form			
3.10 Articulate independent opinions and judgements, informed by different interpretations of text or data			

4. Logical and critical thinking e.g. analysing problems, understanding relationships between cause and effect

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
4.1 Analyse problems, understanding relationships between cause and effect			
4.2 Judge the validity of information and arguments			
4.3 Construct rigorous arguments and proofs through use of precise statements, logical deduction and inference			
4.4 Construct extended arguments for handling substantial problems presented in unstructured form			
4.5 Use the results of analysis to make predictions or comment on the context			
4.6 Read critically and comprehend longer arguments or examples of applications			

5. Literacy and language skills

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
5.1 Select and use a form and style of writing appropriate to purpose and complex subject matter			
5.2 Organise relevant information clearly and coherently, using specialist vocabulary where appropriate and accurate and coherent written expression			
5.3 Ensure that text is legible and spelling, grammar and punctuation are accurate so that meaning is clear			
5.4 Giving presentations			
5.5 Essay or other forms of extended writing			

6. Numeracy skills

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
6.1 Apply principles of arithmetic			
6.2 Make relevant estimates			
6.3 Apply principles relating to algebraic manipulation			
6.4 Trigonometry and geometry evidence			
Fluency in core mathematical techniques			
6.6 Use calculators and other sources (such as formulae booklets or statistical tables) accurately and efficiently; understand when not to use such technology and its limitations			

7. Personal and social skills

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
7.1 Self-awareness			
7.2 Perception of other people's feeling (appropriate to context)			
7.3 Plan complex work with others (as appropriate to task in hand)			

agreeing objectives, responsibilities and working arrangements			
7.4 Carry out tasks to meet responsibilities			
7.5 Planning complex tasks with others (appropriate to task in hand)			
7.6 Maintain cooperative working relationships over an extended period			
7.7 Review work with others (as appropriate to task in hand) and agree ways of improving collaboration in the future			

8. Learning skills

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
8.1 Problem solving skills			
8.2 IT skills			
8.3 Independence and self-direction in learning			
8.4 Persistence e.g. looking for answers to questions rather than being spoon fed			
8.5 Finding information			
8.6 Bibliographic skills (citation and accurate referencing)			
8.7 Commitment to study			
8.8 Intellectual risk taking (eg opportunities for presentation of arguments using an approach which is more associated with a different context or level of learning)			
8.9 Identify progress and ways of improving work			
8.10 Agree targets and plans and how these will be met over an extended period of time, using support from appropriate people			
8.11 Take responsibility for learning using plans, seeking feedback and support from relevant sources to meet targets			
8.12 Review progress and establish evidence of achievement			

9. Vocational and Practical skills

Strands associated with domain/ Components of qualification	Units	External Assessment	Rationale for/comments on allocated scores
9.1 Developing vocational knowledge and skills to national occupational standards			
9.2 Developing knowledge and experience of work			
9.3 Developing relevant work-related attitudes			
9.4 Devise and plan practical and investigative activities			
9.5 Demonstrate safe and skilful practical techniques			
9.6 Make observations and measurements with appropriate precision and record these methodically			
9.7 Interpret, explain, evaluate and communicate the results of experimental and investigative activities			
9.8 Identify hazards and appropriate health & safety issues			

Evidence descriptors

0	There is no evidence present in this qualification
1	The qualification achieved at this grade provides practically no opportunity for a candidate to develop and evidence the skills/tasks associated with the strand in question
2	The qualification provides little opportunity for a candidate to develop and evidence the skills/tasks associated with the strand in question
3	The qualification provides reasonable opportunity for a candidate to develop and evidence the skills/tasks associated with the strand in question
4	The qualification provides a number of different opportunities for a candidate to develop and evidence the skills/tasks associated with the strand in question
5	The qualification provides a number of significant opportunities for a candidate to develop and evidence the skills/tasks associated with the strand in question

APPENDIX 2 BIOGRAPHIES OF THE EXPERT GROUP MEMBERS

A2A Chemistry

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Douglas Buchanan**

Current Position: Lecturer in Chemistry

Organisation: Moray House School of Education, University of Edinburgh

Qualifications: B.Sc. (Hons), Ph.D, Dip. Ed.

Brief Biography

Career
1973-75 Assistant Teacher, Cathkin High School, Glasgow
1975-79 Assistant Principal Teacher of Chemistry, Cathkin High School, Glasgow
1979-86 Principal Teacher of chemistry, Penilee Secondary, Glasgow
1986-88 Seconded to the now Scottish Executive Education Department (SEED) as National Development Officer for Standard Grade Chemistry
1988- Lecturer, Moray House School of Education
1988-91 Part-time National Development Officer with SEED for revised Higher Grade Chemistry
1991-92 Part-time National Development Officer with SEED for Environmental Studies

1994-99 Part-time National Development Officer with SEED for Chemistry within the Higher Still Development Programme

Mainly engaged with Initial Teacher Education within the university.

Outwith the university:
Worked with SQA for the past 20 years, including serving as PA for Higher Chemistry since 1991 and Standard Grade Chemistry from 1990 to 1994. This has led to a wide variety of consultancy work at home and beyond.
Significant involvement with a very extensive range of CPD activities across Scotland and abroad.
Author of a range of textbooks, newspaper and bulletin articles and conference papers.
Served on various national committees.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Archie Gibb**

Current Position: Principal Teacher of Chemistry, Lochaber High School;
Principal Assessor, Advanced Higher Chemistry

Organisation: SQA

Qualifications: B.Sc (Hons), Dip.Ed

Brief Biography

Education:
1968 - 1972 University of Dundee
1972 - 1973 University of Dundee/Dundee College of Education

Teaching Service:
August 1973 to December 1978, Craigie High School, Dundee,Teacher of Chemistry and General Science
January 1979 to December 1981, Elgin Academy, Assistant Principal Teacher of Chemistry
January 1982 to Present, Lochaber High School, Principal Teacher of Chemistry
Also national on-line Scholar tutor in Scotland for Higher & Advanced Higher Chemistry.

Other Educational Involvement at National Level includes:
SEB/SQA
Marker at O and H Grade from 1982
Setter of O-Grade Chemistry exam in 1991; Co-setter of H-Grade exam 1992 & 1993
Marker of CSYS Chemistry since 1994; Co-setter of CSYS Chemistry exam in 1998
Previously Principal Examiner for CSYS Chemistry, currently Principal Assessor for Advanced Higher Chemistry.
Scotvec/SQA
External verifier from 1991- 1999. I was also responsible for writing module descriptors for Chemistry and science modules at different levels and had assessment materials for these modules published nationally.
Higher Still
During the development of the Higher Still programme a member of both the Chemistry/Geology Specialist and Reference Groups. Involved in the preparation of national teaching and assessment materials at different levels of presentation. Co-author of four books published by “Learning and Teaching, Scotland” covering the different units of work in Advanced Higher Chemistry. I am also the co-author of books on Standard Grade and Intermediate 2 Chemistry, published by Leckie and Leckie.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Stephen Roser**

Current Position: Senior Lecturer, Director of Admissions

Organisation: Dept of Chemistry, University of Bath

Qualifications: MA DPhil

Brief Biography
(include responsibilities, career development, relevant research, industrial experience etc.)

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Dr. S.J. Roser has been a lecturer in the Dept of Chemistry at Bath University since 1989, and was promoted to Senior Lecturer in 2003. He runs the admissions procedures for the University Chemistry Department, and is involved in curriculum development, school liaison and widening particpation for the University. His research work has focussed on the development of reflection techniques for the study of wet interfaces. Past work has included innovative use of neutron reflection for the study of insoluble monolayers on water and Langmuir-Blodgett films, and the first measurements using energy dispersive X-ray reflection to measure the properties of liquid/liquid interfaces. His recent research portfolio includes major EPSRC and BBSRC grants to study electrochemically gated transmembrane peptides in model bilayers, using monolayer and neutron reflection techniques, and study secondary templating and crystallisation of mesoporous silica at the air/water interface, using synchrotron radiation and Brewster Angle microscopy. A Royal Society grant has funding collaboration with the University of Palermo to study the growth of nanoparticles in restricted environments. He is currently collaborating with a Group from Institute of Nuclear Research in Havana, Cuba on the relationship of solution and surface behaviour of polymer surfactant composites, funded by the Royal Society. Current work in his Group includes the production of high quality and diverse biomembrane mimics using Langmuir-Blodgett techniques, a £0.5M EPSRC platform grant to research potential polymer based nanomedicines, a collaboration with the Ecole Polytechnique, France studying DNA binding to surfaces and the fundamentals of the growth of conducting polymer films and porous silica on silicon electrodes using neutron and energy dispersive X-ray reflection.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Hugh Cartwright**

Current Position:
(1) Laboratory Officer, Physical and Theoretical Chemistry Laboratory, Oxford University
(2) Supernumerary Fellow in Physical Chemistry, St Anne's College, Oxford
(3) Lecturer in Physical Chemistry, Oriel College, Oxford

Organisation: Oxford University, U.K.

Qualifications:
10 'O'-levels, 4 'A'-levels in Chemistry, Physics, Mathematics, Further Mathematics; S-level Physics.
BSc (1969), PhD (Quantum Chemistry, East Anglia, 1972).

Brief Biography
(include responsibilities, career development, relevant research, industrial experience etc.)

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Address:
Chemistry Department
Physical and Theoretical Chemistry Laboratory
Oxford University
South Parks Road
Oxford, OX1 3QZ
Hugh.Cartwright@chem.ox.ac.uk
http://ptcl.chem.ox.ac.uk/~hmc/

Previous positions (1973-1984): (1) Postdoctoral Fellow, (2) Senior Laboratory Instructor, (3) Sessional Assistant Professor; Chemistry Department, University of Victoria, British Columbia, Canada.

Relevant Experience:
Twenty years experience as an admissions interviewer and Tutor at Oxford University.
Extensive experience in providing advice to students contemplating moving into Higher Education.
Member of previous UCAS Expert Groups on comparability of (a) Singaporean A level and (b) AP qualifications, with UK A levels.

Scientific background
Substantial, internationally-recognised, research record in the application of Artificial Intelligence methods to the solution of scientific problems
Author of numerous scientific papers and several books.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **John Older**

Current Position: Principal Examiner

Organisation: OCR

Qualifications: PGCE University of Sussex, BSc (Hons) University of Sussex, S' levels: Chemistry, Mathematics for Science, A' levels: Pure Mathematics, Applied Mathematics, Chemistry, Physics

Brief Biography
(include responsibilities, career development, relevant research, industrial experience etc.)

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University College School, London - Vice Master 1997 – 2004
University College School, London - Assistant Master - Head of Chemistry - Housemaster - Director of Studies (1967 - 2004)

Syllabus Advisor UCLES (Cambridge Assessment) (1975 - present)
Principal Examiner and currently Principal Moderator (1979 - present)
Reviser for AS Chemistry (2004 - present)
Wrote specification for the Environmental Chemistry option and the supporting guidance booklet (1996). Reviser for Environmental Chemistry
Member of panel producing the new AS and A2 specifications for 2008
Co-author of textbooks covering the new specification to be published by Hodder Headlines in 2008 and 2009

Member of the Royal Institution and the Association for Science Education

A2B English

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Andy Archibald**

Current Position: Principal Examiner English Lang. & Lit. A

Organisation: AQA

Qualifications: MA,MA, BA, B.Ed.

Brief Biography

Examining:
2009 - Pnicipal Examiner (ELLA 4) AQA GCE English Lang. & Lit. Spec A.
2002 - Principal Examiner: AQA GCE English Lang. & Lit. Spec A. Unit 2 (Poetry)
2003- Grade Awards Panel Eng. Lang. & Lit. Spec. B.
2004- UCAS Tariff Allocation Committee: Expert Group
Irish Leaving Certificate (2004); International Baccalaureate (2005);
U.S.A. Advanced Placement Program (2005); Singapore CIE A level (2007)
1996-02 Assistant Examiner / Team Leader: AQA Eng. Lang & Lit. (0623)
2001-05 Assistant Examiner: CIE English Language (O level)
2002- Assistant Examiner: CIE Literature in English (A level)
2004- Assistant Examiner: IBO Extended Essay
Training and Support: 2002- AQA Teacher Support; 2003- Philip Allan Updates
2004 Sovereign Education 2007 Keynote Educational
Publications:
2006 Student Unit Guide to AS English Language & Literature Spec. A.
Module 2: Poetic Study (Hodder /Philip Allan Updates)
2008 Coursework Guide:A2 English Language & Literature Spec. A. (Nelson Thornes)
Teaching:
2000-01 Royal Russell School, Croydon: English to A level.
1993-99 Trinity School, Croydon: English to A level.
1991-92 University of Houston: English (BA classes).
1978-91 Dulwich College, London: Director of Drama/ English to A level.
1974-77 Whitgift School, Croydon: English to A level.
Education:
2004-07 SOAS, London University: B.A. Southeast Asian Studies.
1999-00 University College, London: M.A. Phonetics.
1992-93 University of Sussex: M.A. English Lit.
1991-92 University of Houston: M.A. studies Eng.Lit./ C.Writing
1969-73 Loughborough University B.Ed. Eng. Lit / PE/ Education

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Ann Bridges**

Current Position: Joint Setter Higher, Intermediate 2 and Intermediate 1 English

Organisation: Appointee of SQA

Qualifications: MA Hons English Language and Literature

Brief Biography

33 Years Teaching English at all levels.
National Trainer for English 1998 - 2001
Marker for English Intermediate 1, Intermediate 2, Higher and Advanced Higher
Consultant on various research projects including calibration of Higher and Advanced Higher with exams in New South Wales
Author of Understanding Standards web site support
Joint setter and examiner for, principally, Higher English since 1988.
Publications include "How to Pass Higher English" and "Higher English Close Reading" (joint author)

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **D C Cassidy**

Current Position: Principal Assessor Advanced Higher English

Organisation: SQA

Qualifications: MA (Hons), Dip. Ed.

Brief Biography

Retired Principal Teacher of English

Formerly, Member of the Scottish Central Committee on English and Principal Development Officer and National Trainer for English on the Higher Still Development Programme

Research Work for SQA and QCA on Comparability of Scottish and English Qualifications in English

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **John Coyle**

Current Position: Head of Department of English Literature

Organisation: University of Glasgow

Qualifications: M.A., Ph.D.,

Brief Biography
(include responsibilities, career development, relevant research, industrial experience etc.)

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Department
2007- Head of Department
2005-2007 Postgraduate Convener
2004-2006 JYA Convener
2000-2004 Convener, Level 2
1994-1998 Convener, Level 1

Faculty
1991-1999 Adviser of Studies
2002- Adviser to North American Students
2002- Undergraduate Studies Committee
2007- Faculty Management Group

University
2007- Senate
2007- Senate Disciplinary Committee
1994-2004 Head Warden, Queen Margaret Hall
1994-2004 Accommodation Users' Committee

Previous Employment
1985-88 Lecturer in English and Communications, City and East London College
Course Co-ordinator, University Preparation Access Course
A-Level Examiner

External Examining
2007- External Examiner, Undergraduate Programmes, Anglia Ruskin University
2005 External Examiner, Ph.D., Strathclyde University
2004 External Examiner, Ph.D., Sheffield University
2003 Assessor for the Government of Ireland Post-Doctoral Fellowship Scheme.
1997 External Examiner PhD, Birkbeck College, London

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Pat Waugh**

Current Position: Head of Department of English Studies

Organisation: Durham University

Qualifications: B.A. first class; PhD

Brief Biography
(include responsibilities, career development, relevant research, industrial experience etc.)

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Joined Durham University in 1989 from University of Sunderland where she taught from 1980-89 and has been a professor since 1997. She has been Director of Learning and Teaching and Admissions Officer since 2004 and has served on numerous university committees. Teaches widely in nineteenth and twentieth-century literature and literary theory and criticism.

Has published articles on numerous themes including: modern fiction, aesthetics, literary theory, science and literature, women's writing and feminist theory, utopianism, modernism and postmodernism, including a chapter on Postmodernism in the Cambridge History of Criticism and a chapter on women's writing in the Cambridge History of Literature in the Twentieth Century.

Numerous public lectures and international conference papers in many countries in Europe, North America and North Africa. Co-organiser of a public lecture series on The Arts and Sciences of Criticism and on The Cultural Legacies of Darwinism. Interested in contemporary creative writing and has been a member of the North East Arts Literature Panel (now North-East Arts) since 1979 and is a founding fellow of the English Association. Member of the panel for RAE 2008. Experience working with UCAS Singapore Tariff in 2007.

Successfully supervised 14 doctoral dissertations and is currently supervising 10 PhD students. Extensive External examining experience (over 40 PhDs) and undergraduate examiner at Cardiff, Birmingham, Leeds, Glasgow, Edinburgh, TCD, Bristol, Open University, Brunel, Leeds Met and taught MA programmes at Lancaster, Goldsmith's, Warwick, Bristol and Newcastle.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Diana Whaley**

Current Position: Professor of Early Medieval Studies

Organisation: Newcastle University

Qualifications: B.A., Bacc.Phil.Isl., DPhil.

Brief Biography

APPOINTMENTS
University of Newcastle upon Tyne, 1978 to present.
Randall-McIver Junior Research Fellow, St Hilda's College, Oxford, 1977-78; part-time tutor, Faculty of English, Oxford University.

CURRENT RESPONSIBILITIES INCLUDE:
(Outgoing) Chief UG Selector, School of English, Newcastle University; (Incoming) Degree Programme Director, School of English; University Teaching & Learning panel; Arts & Humanities Research Council Peer Review College; Council of English Place-Name Society.

SUMMARY OF PUBLICATIONS

A. BOOKS
(2006) A Dictionary of Lake District Place-Names. English Place-Name Society Regional Series 1. Nottingham: English Place-Name Society. lx + 423 pp. ISBN 0904889 72.
(2002) Sagas of Warrior-Poets, with an introduction and notes by Diana Whaley. London: Penguin Classics. liv + 346 pp. ISBN 0-14-044771-7.
(2002) Skaldic Poetry of the Scandinavian Middle Ages. Editors' Manual. Second revised edition. Ed. Diana Whaley, Margaret Clunies Ross, Kari Gade, Edith Marold, Gudrún Nordal and Tarrin Wills. 106 pp. ISBN 1 86487 511 9.
(1998) The Poetry of Arnórr jarlaskáld : An Edition and Study. Westfield Publications in Medieval Studies 8. Turnhout: Brepols. 367 pp. ISBN 2-503-50663-1.
(1991) Heimskringla: An Introduction. London: Viking Society for Northern Research. 167 pp. ISBN 0 903521 23 7.

B. ARTICLES: Over 45 articles or Groups of encyclopedia entries on Old Norse-Icelandic literature, medieval English literature and English place-names.

A2C Geography

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Jack Bairner**

Current Position: Deputy Headteacher, Bannockburn High School, Stirling
Principal Assessor, Higher Geography

Organisation: SQA

Qualifications: MA (Hons), Dip. Ed.

Brief Biography

Graduated from Dundee University in 1973 with an honours degree in Geography and then in 1974 with a Diploma in Education. Began teaching at Denny High School in Stirlingshire in 1974, moved to Queen Anne High in Dunfermline as Assistant Principal Teacher in 1980 before moving to Bannockburn High in Stirling in 1981, initially as Principal Teacher of Geography but from 2004 as Faculty Head for the Social Subjects and Modern Languages and eventually Depute Head in 2005.
Have held a number of posts in the Scottish Association of Geography Teachers – Regional Representative (1978), Excursion/Conference Convener/Pupil Conference Convener/General Secretary 1995 – 2000 and eventually President 2002 – 2003.
Involved with the SQA since 1981 as a Marker then Examiner for 'O' Grade Geography (1984), Setter for Higher (1990) and eventually Principal Assessor for Higher since 2006.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Gordon Dickinson**

Current Position: Principal Assessor Advanced Higher Geography/ Senior Lecturer in Geography and Senior Adviser of Studies, Science Faculties.

Organisation: SQA/ University of Glasgow

Qualifications: B.Sc. (Hons.) Geography, Ph.D.

Brief Biography

Employment:

Department of Geographical and Earth, Sciences, University of Glasgow 1970 – present; Current posts: Senior Lecturer in Geography and Senior Adviser of Studies, Science Faculties.

Scottish Qualifications Authority; Setter, Certificate of Sixth Year Studies, Geography 1993 –2000; Principal Assessor Advanced Higher Geography 2001 – present

Relevant examining and other relevant educational experience:

Overall responsibility for assessment of L1 Geography, University of Glasgow. This course has an enrolment of 310 for 2007/8. L1 Geography has been benchmarked by the University as being equivalent to an A grade pass at AH or A level. I have had this role for 15 years, in which time there have been major changes to both the course and its assessment.

Nearly 20 years experience in University of Glasgow undergraduate recruitment and admissions for all Faculties throughout the U.K.

Overall responsibility for external assessment of SQA AH Geography

Extensive experience as external examiner at both undergraduate and postgraduate levels in U.K. Universities.

Validation of SAC undergraduate degrees on behalf of the University of Glasgow.

Editor, Journal of the Scottish Association of Geography Teachers

Extensive academic publications including the co-authorship of year1/2 undergraduate textbook.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **CHRIS MARTIN**

Current Position: CHIEF EXAMINER GCE GEOGRAPHY

Organisation: OCR

Qualifications: MSc, PGCE, BA hons, DMS (ED man)

Brief Biography

Retired (3 years ago) Headteacher of a large comprehensive in Essex, Spent 34 years teaching Geography in all types of state school, Secondary advisor for 3 years in a small unitary LEA, Also worked as a Geography Inspector for Ofsted and a SIP,

I have spent nearly 30 years in examination work as moderator, examiner, reviser, subject officer and Chief Examiner. I was Chief Examiner for EDEXCEL Spec A GCE Geography for 10 years until 1998. Currently I am Chief examiner for OCR GCE Geography Spec A and the new OCR Spec as well as Principle Examiner on OCR GCE Geography Spec B

I am also a HTLA assessor for the Eastern region, GTP assessor for STTP, and a PGCE Geog assessor for the OU in the Eastern region

Currently I am also involved with training teachers for the new Geography Spec and authoring various support materials.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Gill Miller**

Current Position: Senior Lecturer

Organisation: University of Chester

Qualifications: MA , PGCE, B.Sc

Brief Biography

Gill Miller is Programme Leader for International Development Studies at the University of Chester and teaches on undergraduate programmes in the Department of Geography and Development Studies. Her research interests are in Fair Trade and the effectiveness of aid and NGOs.

Gill is involved in post -16 and A level work in a number of ways: as Chief Examiner for A level World Development (WJEC); Principal Examiner for A level Geography (Edexcel); examiner of the Geography AEA; external adviser for International Baccalaureate; and member of Geographical Association Post 16 committee. She collaborated on writing the performance descriptors for A level World Development and contributed to the 2002 QCA A level comparison exercise for geography following the first cohort of Curriculum 2000 examinations.

Gill taught A level Geography for over 25 years and worked as a free-lance Geographer publishing a number of A level texts.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Barbara Rumsby**

Current Position: Senior Lecturer

Organisation: The University of Hull

Qualifications: BSc Geography (Wales), PhD Physical Geography (Newcastle)

Brief Biography

Responsibilities
Teaching and research in physical geography. Administrative responsibilities include: Admissions Tutor & Chair Admissions & Recruitment Committee (1997-2001 & 2005 -), Director of Teaching & Learning (2002-2004), Deputy Head of Department (2003-2005). External responsibilities include: member of NERC Peer Review College, Editorial Board Member Transactions of the Institute of British Geographers, President of Hull & District Branch of the Geographical Association, Fellow Royal Geographical Society.

Career development
1995 - date: Lecturer & Senior Lecturer in Physical Geography, The University of Hull
1992 - 1995: Lecturer in Physical Geography, University of Sussex
1990 - 1992: Research Associate, University of Newcastle upon Tyne
1991 PhD: University of Newcastle upon Tyne. Flood frequency and magnitude estimates based on valley floor morphology and floodplain sedimentary sequences.

Research
Focuses on contemporary and Quaternary river systems, with specific interests in:
Flood morphology and sedimentology
Fluvial response to environmental change, especially late Quaternary climatic variations
Impacts of sediment-borne contaminants on fluvial systems
Monitoring upland river dynamics, including application of airborne remote sensing techniques
Also published on the use of C&IT to support teaching and learning in fieldwork.

Example Recent Publication
Rumsby, B.T., Brasington, J., Langham, J.A., McLelland, S.J., Middleton, R. and Rollinson, G. 2008. Monitoring and modelling morphological change in fluvial systems: applications and challenges. Geomorphology, 93, 40-54.

Modules Taught
Dangerous Planet - Core Skills in Physical Geography - Field Study (Tenerife) - Quaternary Environments - Rivers & Estuaries - Applied Environmental Change

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Joanne Sharp**

Current Position: Senior Lecturer, Director of Learning, Teaching and Assessment, Deputy Head of Department

Organisation: Geographical and Earth Sciences, University of Glasgow

Qualifications: BA, MA, PhD

Brief Biography

EMPLOYMENT
Jan 1995 – present: Lecturer then Senior Lecturer (2002), Department of Geographical and Earth Sciences (formerly Geography and Topographic Science), University of Glasgow.

POSTGRADUATE SUPERVISION AND EXAMINATION
2006 - present: Board of Examiners, Economic and Social Resrach Council (ESRC) Studentship Competition;
2005 - present: Member of Geography Subject Area Panel for ESRC major recognition exercise for "1+3" postgraduate funding;
2004 – 2007: External examiner for Masters in Geography, Institute of Geography, University of Edinburgh;
I have supervised three PhDs to completion;
I have been internal examiner for four PhDs and external for a further three.

EXTERNAL UNDERGRADUATE EXAMINATION
2006 - 2009: External examiner for the MA/BSc Geography at the University of Dundee

UNIVERSITY OF GLASGOW RESPONSIBILITIES
2003 - present: Member of Senate Appeals committee
2003 - present: Elected member of Senate
2006 - present: Member of Physical Science Faculty Learning & Teaching Committee
2005 - present: Member of Science Faculties Undergraduate Studies Committee
2005 - present: Director of Department Teaching, Learning and Assessment Committee
1999-2002: Advisor of studies

RESEARCH
I have a three main areas of research interest:
(a) The role of indigenous knowledge in sustainable development
(b) Critical approaches to geopolitics
(c) Community-based urban regeneration

A2D Mathematics

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Greg Attwood**

Current Position: Chief Examiner

Organisation: Edexcel & Repton School

Qualifications: BA, MSc ,CMath, FIMA

Brief Biography

Currently a full time teacher of Mathematics and Examinations Officer at Repton School.
Have taught at Repton School for 30 years, having been Head of Mathematics and Housemaster .
Became a Chief/Principal examiner for A level Mathematics in 1991. Involved in all aspects of AS and A level Mathematics setting papers in Pure maths, Mechanics and Statistics. Currently also Chief Examiner for Statistics.
Has been in charge of AEA qualification since original pilots and was part of the UCAS Tariff meeting for AEA.
Have been part of various other QCA projects, scrutinies, Alevel vs IB comparability studies and Tomlinson phase 2 including the production of exemplary materials.
Currently part of the Chartered Educational Assessor pilot project being run by IEA.
He is co-author of a number of textbooks for A level Mathematics.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Sally Barton**

Current Position: Teaching Officer

Organisation: The University of Nottingham

Qualifications: PhD, PGCE, Diploma in Counselling

Brief Biography

Nine years spent at Nottingham University including PhD in Mathematical Logic and 2 years Post Doc with the Statistics Group.
1983 – 1987 Open University Mathematics Tutor (M381-6)

Three years as a Systems Analyst with London Transport followed by ten years in Africa including administering 4 health centres.

1999-2003 Research Fellow in the Pathology Dept at QMC Nottingham responsible for datahandling and statistics.

PGCE 2003 followed by teaching in 2 secondary schools and since 2004 at Regent 6th form College Leicester. In 2006-7 member of ESRC & BERA funded seminar series looking at Mathematical Relationships, Identities and Participation.

Appointed as Teaching Officer at Nottingham in 2007.

Currently Vice Chair of NANAMIC (National association of Numeracy and Mathematics in Colleges)
Member of the Joint Mathematics Council, JMC, and the QCA 14-19 advisory Group.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Graham E Bell**

Current Position: Director of Teaching

Organisation: School of Mathematics & Statistics, University of St Andrews

Qualifications: Ph. D.

Brief Biography

Dr Graham E Bell has been a University Teacher for 35 years and is a Senior Lecturer in Applied Mathematics at St Andrews University. He is Director of Teaching for the School of Mathematics and Statistics at St Andrews with responsibility for all day-to-day undergraduate matters and student related issues. For the past 14 years Graham has also been the Admissions Tutor for the School dealing with all ucas applications and enquiries relating to Mathematics and Statistics. During his career at St Andrews, Graham has been an Adviser of Studies, Pro Dean for Postgraduate Studies and Director of Academic Audit for the University. He is currently also a SQA marker for Advanced Higher Mathematics.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Niall MacKay**

Current Position: Senior Lecturer

Organisation: University of York

Qualifications: BA (Cambridge), PhD (Durham)

Brief Biography

I am a Senior Lecturer in the Department of Mathematics at the University of York. Alongside a full range of teaching, I conduct research in mathematical physics - I have written around 30 papers in refereed journals, and have organized various research activities including a programme for the Isaac Newton Institute, Cambridge, and BUSSTEPP, the UK's graduate summer school in theoretical particle physics. I am a member of the EPSRC Review College.

I am Admissions Tutor for the department. In the past I have worked at the Universities of Sheffield, Kyoto and Cambridge, where I was a Director of Studies for Pembroke College, conducted admissions interviews for Queens' and Pembroke Colleges, and was an examiner for STEP Mathematics and for Natural Sciences Tripos Mathematics papers. I also serve on the NAA's Review Group for Key Stage 3 Mathematics tests.

I am on the University of York Senate, Academic Promotions Committee and Research Promotions Committee. I am also on the Education Committee and Board of Editorial Advisers of the London Mathematical Society (the UK's learned society for Mathematics). I am a past (elected) member of the Councils of the ILTHE and HEA.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **James G C Reid**

Current Position: Principal Teacher of Mathematics

Organisation: Bishopbriggs Academy

Qualifications: B.Sc. Mathematics
and PGCE (Secondary) Mathematics and Computing

Brief Biography

Current Position
Principal Teacher of Mathematics Bishopbriggs Academy
Responsible for the day to day running of the Mathematics DEpartment at a 1400 pupil school with 15 members of staff withint he department.

Most recent previous Post
Mathematics Lecturer University of Strathclyde
Department of Education
I was Mathematics coordiantor in the Department having specific responsibility for PGCE Mathematics course, in-service training and research and development.

SQA Experience
Marker at all levels from Standard Grade and currently a marker at Higher and Advanced Higher Levels
Senior Examiner on the Higher Mathematics Team. Setting questions and deputising for the Principal Assessor.
Senior Verifier, Mathematics and Statistics
I am responsible for overseeing the verification (moderation) of all National Qualification Mathematics and Statistics Units

I have been involved in several research projects in conjunction with SQA from comparing Standards at Higher Mathematics Level, comparing standards between different examining boards, e.g. New South Wales Mathematics qualifications compared to Higher/Advanced Higher Mathematics.

Publications
I have had a number of texts published including a revision guide to Higher Mathematics, Model Examination papers and use of technology in Mathematics.

I have given several talks at the yearly Scottish Mathematics Couuncil's Mathematics Conference on Quality and Standards in Higher Mathematics.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Bill Richardson**

Current Position: Principal Assessor for Advanced Higher maths

Organisation: SQA

Qualifications: BSc honours maths; MSc maths; PGCE

Brief Biography

Professional Qualifications and Career
1963 - 1968: Manchester University: BSc honours maths; MSc maths; PGCE.
1968 - 1973: Teacher at William Hulme's Grammar School, Manchester.
1973 - 2000: Principal Teacher of Mathematics, Elgin Academy.

SQA involvement
1977 - 1983: Member of Mathematics subject panel.
This led to:
Member of: Standard Grade Working Party; Higher Still Working Party
Higher Grade maths Examining team
CSYS maths: various duties.
Currently Principal Assessor for Advanced Higher maths (and prior to that for some years as PA CSYS maths).

Other Mathematics Activities
The Mathematical Association: active since 1985; President 1996-1997; currently Secretary.
UK Mathematics Trust: member of Council since 1997; currently Chair of the Challenges Sub-trust.
Scottish Mathematical Council: member of the Council for many years; currently Chair of the Mathematical Challenges National Committee.
UK Joint Mathematical Council: UKMT representative.
International conferences and events: ICME - 1996 (Seville); 2000 (Tokyo); 2004 (Copenhagen): WFMNC - 1998 (Zhong Chan, China); 2002 (Melbourne); 2006 (Cambridge): IMO - 2001 (Washington DC, USA); 2002 (Glasgow).
Oxford University Mathematics Department: member of the external advisory panel.
Awarded an MBE in 1998 for services to mathematics education.

A2E Health and Social Care

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Jacqui Gladwin**

Current Position: Senior Lecturer Adult Nursing

Organisation: Manchester Metropolitan University

Qualifications: Dip Nursing (RN) (NT) MA,PGCE

Brief Biography

Employment history since 1997

Sister, G Grade, A&E Central Manchester Health Care Trust

Acting Senior Nurse, H Grade A&E Central Manchester Health Care Trust

Senior Lecturer/ Admissions Tutor: Adult Nursing MMU since March 2002

Committee and Professional Body Membership
Member of Royal College of Nursing & Fellow of Higher Education Academy

Experience: Developed and ran Emergency Care Practitioner Programme within Greater Manchester, Involved with national evaluation of ECP programme, experienced admissions tutor working in partnership with external agencies and colleges within Manchester advising on curriculum content etc
Recent publications:
Walker J, Newton M (2004) Acute Quadriceps Injury: A case study' Emergency Nurse V12,8 24-29
Gladwin. J (2007)'Giving patients open access to medical records would help nurses improve care' Nursing Times v103, n25

Research interests: partnership working with patients andd occupational stress and its effects on long term health

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Jill Jepson**
Current Position: Course Director BSc (hons) Occupational Therapy

Organisation: University of East Anglia

Qualifications: BEd(hons) Dip COT

Brief Biography

EMPLOYMENT

1977-78 Occupational Therapist, University College Hospital, London.
1978-79 Community Occupational Therapist, London Borough of Merton.
1979-82 Occupational Therapist, Adult Learning Difficulties, Kings Lynn, Norfolk.
1982-84 Community Occupational Therapist, Cambridgeshire Social Services,
1984-87 Head Occupational Therapist, Queen Elizabeth Hospital, Kings Lynn, Norfolk.
1988-90 Occupational Therapist, Outpatient Services, Queen Elizabeth Hospital, Kings Lynn, Norfolk.
1998-99 Occupational Therapist, Royal United Hospital, Bath - seconded to the department to establish a new community based service for people with Parkinson's Disease.
1990-00 Research Occupational Therapist, Bath Institute of Medical Engineering, Royal United Hospital, Bath
2000-2001 Lecturer practitioner/research assistant, School of Allied Health Professions, University of East Anglia, Norwich
2001- 2005 Lecturer in Occupational Therapy, School of AHP, UEA
2005 Undergraduate course director for OT , School of AHP, UEA

STATEMENT OF DUTIES

TEACHING

- Course Director for BScOT programme
- Senior advisor for School

Undergraduate Teaching (BSc Hons in Occupational Therapy and Physiotherapy)

- Anatomy,
- Clinical sciences for occupational therapists,
- Activity analysis for occupational therapists
- Assistive Technology
- Work rehabilitation
- Interprofessional learning facilitator with the Centre for Interprofessional Practice
- Visiting tutor for practice placements
- Marking and moderation of assignments
- Dissertation supervision

Postgraduate Teaching (MSc in Occupational Therapy and Physiotherapy):

- Anatomy
- Locality tutor for practice placements

RESEARCH ACTIVITY

Evaluations of assistive technologies for disabled / elderly frail people

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Dr Alison J Thomson**

Current Position: Principal Examiner GCE Health and Social Care

Organisation: Edexcel

Qualifications: B.Sc, MA (Ed), PhD

Brief Biography

I have taught science in a school setting, in further education and in higher education for over 20 years.

I have been self-employed since September 2004. My current work involves consultancy, school inspection, writing examination papers and overseeing the examination process, as well as textbook writing and work with the Open University. I currently work for Prospects and CfBT inspecting on a part-time basis. I now lead inspections. I am also seconded to HMI to do science scrutiny work.

I have extensive experience as an examiner. I am Edexcel's Chief Examiner for Vocational Science. I am also Principal Examiner for GCSE Biology with Edexcel International, Principal Examiner for GCE Health and Social Care and Principal Moderator for GCSE 360 Science. I have just finished working as PE for A level Biology with AQA. I am experienced in giving feedback and advice to schools both at home and abroad. Over this last year, I have visited schools in Kenya, Dubai, Cyprus and Sri Lanka.

I also work as an Associate Lecturer for the Open University. I have taught on their first level science course and currently teach on second level courses in biology and in health and disease. Many of my students do not have English as their first language.

Before entering teaching I worked as a research scientist and am the author or the joint author of some 12 published research papers

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Jennifer Tollemache**

Current Position: Lecturer

Organisation: Glasgow Caledonian University

Qualifications: MSc; BA Hons; RGN; SCM; HV; DN.

Brief Biography

Current responsibilities are within a project working with asylum seekers, refugees and overseas health professionals who wish to achieve registration within the UK. I work within the pre-registration division of Nursing Midwifery and Community Health and am involved in the design, delivery and quality assurance of the Overseas Nurse Programme. Associated research within the project is focused on the learner experience and aspects of mentoring. I am a member of the National Stakeholder Group for Overseas Nurses under the auspices of N H S Education Scotland. I presented at the National Conference for Overseas Nursing Providers in March 07 and am due to present a paper at an International Conference in June entitled 'Insights into using reflective writing to assess Internationally Qualified Nurses (IQN's) completing an overseas nurse programme'

Prior to my current role I worked as a Senior Lecturer in Health Care at Forth Valley College. Within this role I was responsible for the provision of a range of National and Higher National Qualifications in Care. I participated in the development of new National and Higher National Qualifications and worked with SQA as a Qualifications Design Specialist. My involvement with SQA continues in the role of External Verifier for these awards. I completed an MSc in Post School Education at this time and carried out research into 'Learning Styles and Teaching Methods in Post School Education: The Learner Experience.'

Industrial Experience includes working as a nurse and midwife in both hospital and community settings. I worked for 3 years in a rural area as a 'triple duty nurse' involving nursing, midwifery and health visiting duties. I also have several years experience of working as a health visitor. I completed A BSc Hons in Psychology and was involved in practice education, having responsibility for mentoring students completing community placement experience. I am registered with the Nursing and Midwifery Council.

UCAS COMPARABILITY STUDY

Outline Biography of Expert Group Member

Name: **Stephen P. Townsend**

Current Position: Director of Studies (Admissions) Science, and Senior Lecturer in Computing Science

Organisation: University of Aberdeen

Qualifications: BSc, MSc, DPhil, CMath, FIMA

Brief Biography

Director of Studies (Admissions) Science, Student Recruitment & Admissions Service, 75% secondment (50% from 1/9/95 to 31/3/99), 1/9/95 to date
Senior Lecturer, Department of Computing Science, 25% appointment, 1/10/02 to date
Lecturer, Department of Computing Science 25% appointment since 1/4/99, 1/9/82 to 30/9/02
Lecturer, University College of Botswana Department of Mathematics, 1/9/80 to 31/8/82
Lecturer, University of Aberdeen Department of Mathematics, 1/9/74 to 31/8/80
Governor, Robert Gordon's College, 2006/7 to date
Chair of Science Colleges Widening Access Sub-committee, 2004/5 to date
Governor, County of Banff Bursary Fund (Senate representative), 2004/5 to date
College of Physical Sciences Senior Adviser 2004/5 to date
Trustee, Aberdeen Endowments Trust (Senate representative), 2002/3 to date
Elected member of Senate, 1990/91 to date
Quality Assurance Agency for Higher Education, Subject Specialist Reviewer, 1/10/00 to date
Scottish Qualifications Authority, joint setter for Advanced Higher Computing, 1999/2000 to 2000/01
Northern College, External Examiner for P/G Diploma Courses, IT and Computing, 1995/96 to 98/99
SHEFC Quality Assessor, 1993/94 Session
St Andrew's College, Glasgow, External Examiner for P/G Diploma courses, IT and Computing, 1992/93 to 1995/96
SEB Examiner and Assessor, 1990/91 to 1996/97
SEB/SCCC Joint Working Party on CSYS Computing Studies, 1990/91

APPENDIX 3THE EVIDENCE CONSIDERED

Scottish Highers and Advanced Highers

(chemistry, English, geography and mathematics)

- Arrangements Document
- Unit Specifications
- Marking Instructions
- Specimen Question Papers
- Principal Assessor Reports

Health and Social Care Skills For Work Higher

- Arrangements Document
- Unit Specifications

OCR A level Chemistry

- Specification
- Sample Assessment Materials and Marking Scheme

AQA GCE A level English Literature and Language

- Specification
- Sample Assessment Materials
- Marking Schemes
- Grading System
-

OCR A level Geography

- Specification
- Sample Assessment Materials and Marking Scheme

Edexcel A level maths

- Specification
- Sample Assessment Materials
- Marking Schemes

Edexcel GCE A level Health and Social Care

- Specification
- Sample Assessment Materials and Marking Schemes
- Principal Assessor Report