Edexcel GCSE

Teacher's guide

Edexcel GCSE in Applied Information and Communication Technology (Double Award)

First examination 2003

October 2002

Edexcel

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Acknowledgements

This document has been produced by Edexcel on the basis of consultation with teachers, examiners, consultants and other interested parties. Edexcel recognises and values all those who contributed their time and expertise to the development of the qualification.

Authorised by Peter Goff

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Introduction

This Teachers' Guide accompanies the Edexcel GCSE specification for Applied Information and Communication Technology (qualification code 2331) and has been designed to help teachers plan teaching programmes and manage the assessment requirements. It should be used in conjunction with the specification.

A separate publication containing assessed items of student work with commentaries is planned. This will give further guidance on the application of the mark bands in the assessment grids for each of the internally assessed units, and provide a first indication of the standards expected.

Additional materials, including a 'Frequently Asked Questions' section, will be placed on the Edexcel website (www.edexcel.org.uk).

GCSEs in vocational subjects

A range of GCSE (Double Award) specifications in vocational subjects has been introduced to replace Part One GNVQ courses at levels 1 and 2 of the National Framework of Qualifications. They can be taken as two-year courses from September 2002 and one-year courses from September 2003 for first awarding in summer 2004.

The qualifications are Double Awards and can be awarded at grades A*A* – GG. Each unit outcome will be reported as a uniform mark. There will be unit certification.

Students taking Part One GNVQ ICT cannot transfer any unit achievement to the GCSE in Applied ICT. Existing portfolio work could, however, be reworked for assessment against the new criteria.

Students who change their course from Part One to GCSE cannot transfer their registration. They have to withdraw and then enter for the new course.

Edexcel GCSE in Applied ICT (Double Award)

The Edexcel GCSE in Applied ICT (Double Award) has been designed to provide a broad educational basis for further education, training, or employment within the ICT sector. Details of progression routes are provided in the specification on pages 3 and 4, along with information on recommended prior learning and forbidden combinations.

Specification structure

The specification consists of three compulsory units, which are equally weighted. Two units are internally assessed through the production of portfolios, and one is externally assessed by a computer-based examination. The first external assessment opportunity will be in June 2003. Thereafter, examinations will be available twice a year in January and June. The first moderation of internally assessed units will be in June 2004. Thereafter, a moderation opportunity will be offered each June.

Unit	Unit code	Unit content	Assessment
1	5331	**ICT Tools and Applications** A practical, skill-building unit that focuses on a range of ICT applications that must include word-processing, spreadsheets, databases, internet software and multimedia packages. The unit complements Units 2 and 3, providing an introduction to the business applications of ICT.	**Examination** A two and a half hour computer-based examination. Internet access is not required. Students should have worked through the Activity Booklet that sets the scenario for the examination.
2	5332	**ICT in Organisations** This unit focuses on the use of ICT systems in organisations, the components of ICT systems and the development of an ICT system to meet the needs of a user.	**Portfolio** A portfolio-based unit, internally assessed and externally moderated.
3	5333	**ICT and Society** This unit looks at the impact of ICT on individuals and groups, both in the student's own experience and in the wider community.	**Portfolio** A portfolio-based unit, internally assessed and externally moderated.

(Qualification code 2331. This code is needed for final 'cash-in')

The structure of each unit

About this unit

Each unit is introduced by a short section that 'sets the scene' for the student, summarising the content of the unit and indicating how it will be assessed.

What You Need to Learn (WYNTL)

This is the main part of the unit. It identifies the knowledge, skills and understanding that the student must acquire to meet the requirements of the unit. It is subdivided into sections describing particular topics.

Assessment evidence (Units 2 and 3 only)

This section details the portfolio evidence the student has to produce to achieve the unit. Above the marking grid is a section addressed to the student stating the evidence requirements for assessment. The grid then details how marks are awarded in relation to the tasks and the assessment objectives.

The assessment outcomes run vertically down the grid. Each assessment outcome is defined at three quality levels or mark bands. Each of the evidence requirements can be achieved at one of these 'levels'. A student might achieve the top 'level' of marks for some of the assessment outcomes and the bottom 'level' for others. It is even possible for a student to get no marks at all for one of the evidence requirements whilst still picking up marks for other aspects of the assessment in which s/he does better. The marks for each unit are added together to give a total mark out of 58.

Guidance for teachers

This section is designed to help teachers in their teaching and assessment and contains the subsections set out below.

Delivery strategies

This includes suggestions about the way in which particular parts of the unit could be taught or linked to other units.

Assessment guidance and evidence requirements

These two sections give specific details of how marks should be allocated.

Resources

This includes details of textbooks, websites and other information that may be useful for teaching purposes. A listing in this section should not be taken as a recommendation or as an endorsement of a product by Edexcel.

Planning a teaching programme

This Applied ICT qualification is designed to be delivered as a two-year programme alongside other GCSEs in years 10 and 11. However, it could also be delivered as a one-year programme for post-16 students. Since first certification of this course is not until August 2004, one-year courses should not commence before September 2003.

There are many links with the Edexcel GCSE in ICT and also with the Foundation and Intermediate GNVQs in ICT. Many of the resources and teaching strategies developed for these qualifications are also appropriate for the delivery of the GCSE in Applied ICT.

Students entering for the GCSE in Applied ICT may not, in the same examination series, be entered for GNVQ in ICT or GCSE in ICT. See page 4 of the specification for further information.

It is not expected that centres will deliver the units in a linear fashion ie Unit 1, then Unit 2 and finally Unit 3, as may have been the case for the GNVQ Part One in ICT. Although there is nothing to prevent a centre from delivering the units in that order, good practice would suggest the application of the ICT skills specified in Unit 1 to the evidence required for the assessment of Units 2 and 3. Students are likely to be better prepared, mentally and technically, for the systems design project (evidence requirements 2(c) and 2(d) of Unit 2) in the second year of their course.

The GCSE in Applied ICT is a vocational course and teachers should take every opportunity to relate classroom activities to the wider vocational context. Well-focused, well-timed visits to 'real' local or national organisations should be considered a priority when planning the course. These organisations will need to be well briefed beforehand so that they know what information students are likely to ask for eg examples of documents used (data capture/output), details of ICT used (number, storage capacity, etc). Work experience placements may give students the opportunity to interview a person in employment about their personal, professional or social use of ICT. Where real organisations cannot be used, case studies of real organisations are the next best alternative. These need to be made as realistic and interesting as possible. This might involve a visiting speaker from the organisation, as well as the provision of paper-based or ICT-based information on the company and its use of ICT. Where a case study is used, the centre must ensure that sufficient detail is provided to enable students to produce analytical and evaluative comments about the organisation's use of ICT. Case studies of fictional organisations are unlikely to be suitable.

Resources to aid the organisation and planning of visits and guest speakers will be provided on the Edexcel website.

When carrying out research activities and undertaking visits it is permissible for students to work in groups. However, the work they submit in their portfolios for assessment must be their own and will only be accepted if it has been properly authenticated. Edexcel will investigate any instances of suspected cheating. Candidates who are found to have cheated will have their marks annulled.

An Authentication Statement will be provided on the Edexcel website.

Induction

Induction is a very important starting point for the course. It should be as interactive as possible, introducing students to the learning styles of the GCSE in Applied ICT and providing practical experience of the vocational context.

The length of the induction period can be anything from one or two lessons participating in a joint activity with students on other applied GCSE courses, to one or two weeks undertaking a short assessed activity designed to grab students' attention and broaden their knowledge of ICT systems in the real world beyond the classroom.

However long or short the time allocated to induction, it should aim to:

- familiarise students with the terminology, structure and content of the course
- introduce students to the relevant vocational sector within the locality
- introduce students to assessment requirements and portfolio building
- encourage independent learning skills including planning, research, evaluation and prioritising
- enable teachers to make a preliminary assessment of students' practical skills.

Icebreakers, teambuilding exercises, activities involving a visit or a visiting speaker, combined with some practical ICT experience have proved to be key ingredients of successful induction programmes. It takes time for students to become independent in their learning. The study skills and portfolio-building skills introduced during induction will need to be reinforced throughout the course, so that students are supported in the organisation and completion of the portfolio units, management of their time and resources and prioritisation of tasks.

It is a good idea to issue students (and parents) with a course handbook (paper-based or electronic) providing information about the course, a programme plan giving key milestones such as assignment deadlines, the Unit 1 examination, work experience, visits, glossary of terms, etc.

Differentiation

The GCSE in Applied ICT is untiered. The specification has been designed to be accessible to the full A* – G ability range. Centres will need to develop schemes of work and assignments which allow for differentiation. Guidance on building in differentiation is given in later sections of this Guide.

Developing assignments

When designing assignments for Units 2 and 3, course teams should ensure that the activities proposed will generate evidence which meets the requirements of the assessment evidence grid and will allow students to achieve at different levels.

The level of performance required for each mark band is clearly differentiated in the assessment evidence grid and further clarification is provided in the *Guidance for teachers* section of each unit. Progression across the mark bands is characterised by:

- increasing breadth and depth of understanding
- increasing coherence, evaluation and analysis
- increasing independence and originality.

An assignment should be broken down into a series of small sub-tasks requiring short spans of activity. This approach will allow students performing at level 1 to access the assignment. At the same time, the assignment must provide scope for those performing at the higher levels to evidence and demonstrate their level of performance, as indicated at mark band 3 of the assessment grid. Students will require support and guidance in order to maximise their achievement.

Models of delivery

There is no single 'best' or recommended method of delivery. Teachers need to develop a scheme of work which is appropriate for their students, makes best use of the resources available to them (eg business/industrial expertise and vocational placements) and takes account of the constraints imposed by staffing, timetabling and resources.

In most schools, GCSE courses are taught over a period of five terms of varying numbers of weeks. Planning a scheme for delivery around this structure will be the most appropriate method for many centres. Since the qualification has the same value as two GCSEs, an equivalent amount of curriculum time must be allocated to the programme. Experience has shown that programmes that require students to devote large amounts of extra-curricular, non-contact time eg after school or at lunchtime rarely succeed.

The models of delivery outlined below illustrate the range of possible approaches and the flexibility inherent in the specification. They are neither prescriptive nor exhaustive and are intended only as a starting point for programme planning. Programme teams must plan and map the course for themselves, taking account of their own circumstances. This is by far the best way of ensuring that all those involved fully understand the requirements of the course.

When planning their model of delivery, programme teams might like to utilise the planning sheets provided in *Appendices A* and *B*. These sheets outline the WYNTL and assessment evidence requirements for each unit and provide space for staff to determine the order of delivery, the amount of time to be allocated to particular topics etc.

The continual reinforcement of practical ICT skills through their application in vocational contexts is a key success factor for a qualification of this type. Therefore all of the models given below integrate Unit 1 with either Unit 2 or Unit 3 (or both in the case of model 4).

Students who have benefited from a very good Key Stage 3 ICT programme may already have achieved a good level of competence in the practical skills required for Unit 1. If this is the case, they need only to practice applying these skills – in the presentation of their coursework and under examination conditions – in order to meet the assessment requirements of Unit 1. In most cases, however, students will need time to learn and practise new ICT skills before being able to tackle the Unit 1 examination. All students will need to develop strategies to help them maximise their achievement in the computer-based examination.

Model 1

This model assumes that students start the course with very good practical ICT skills. Units 1 and 3 are delivered together in the first two terms of year 10, allowing students to develop and use their ICT skills in the assignments required for Unit 3. They sit the Unit 1 examination at the end of the first year of their course. Time is allocated at the end of the spring term/start of the summer term for students to work through the Activity Booklet so as to familiarise themselves with the scenario for the examination. They also use this time to develop and practise strategies for maximising their achievement in the computer-based examination.

For those who want to, there would be an opportunity to re-sit the examination in either January or June of year 11. The drawback is that (after 2004) they would need to familiarise themselves with a new scenario for the examination. However, they may not need to work through all the tasks in the Activity Booklet associated with this new scenario.

By leaving Unit 2 until year 11, students will be well placed to select appropriate software and apply their practical skills to design and implement a realistic ICT system (Parts 2(c) and 2(d) of Unit 2).

Model 1

<table>
<tr><th></th><th colspan="2">Autumn term</th><th>Spring term</th><th></th><th colspan="3">Summer term</th></tr>
<tr><td rowspan="2">Yr 10</td><td rowspan="2">Induction</td><td>Unit 3</td><td>Unit 3</td><td rowspan="2">Unit 1 practice tasks</td><td rowspan="2">Unit 1 practice tasks</td><td rowspan="2">Unit 1 exam</td><td rowspan="2">Unit 2</td></tr>
<tr><td>Unit 1</td><td>Unit 1</td></tr>
<tr><td>Yr 11</td><td colspan="2">Unit 2</td><td>Unit 2</td><td>Portfolio building</td><td colspan="3"></td></tr>
</table>

Model 2

This model assumes that students do not at the outset have all the practical ICT skills required for Unit 1 and need plenty of time to learn and practise these skills before attempting the examination.

Unit 3 is delivered alongside Unit 1 in the first two terms of year 10. In the summer term, students continue with Unit 1 whilst studying an organisation's use of ICT (Parts 2(a) and 2(b) of Unit 2). In an ideal world, this will fortuitously coincide with their work experience placement.

In the autumn term of year 11, students tackle the systems design project (Parts 2(c) and 2(d) of Unit 2). At the same time, they familiarise themselves with the scenario for the Unit 1 examination – which they sit in January of year 11 – by working through the Activity Booklet. They also spend time developing and practising strategies for maximising their achievement in the computer-based examination.

There is a re-sit opportunity for those who want it based on the same scenario in June.

Model 2

<table>
<tr><th></th><th colspan="3">Autumn term</th><th colspan="3">Spring term</th><th>Summer term</th></tr>
<tr><td>Yr 10</td><td rowspan="2">Induction</td><td colspan="2">Unit 3</td><td colspan="3">Unit 3</td><td>Unit 2
(a) and (b)</td></tr>
<tr><td colspan="2">Unit 1</td><td colspan="3">Unit 1</td><td>Unit 1</td></tr>
<tr><td rowspan="2">Yr 11</td><td colspan="2">Unit 2
(c) and (d)</td><td rowspan="2">Unit 1 practice tasks</td><td rowspan="2">Unit 1 exam</td><td rowspan="2">Unit 2
(c) and (d)</td><td rowspan="2">Portfolio building</td><td rowspan="2"></td></tr>
<tr><td colspan="2">Unit 1</td></tr>
</table>

Model 3

In this model, Unit 2 is split into two discrete blocks. Students start off by looking at ICT systems in use in business organisations (Parts 2(a) and 2(b) of Unit 2). The ICT skill building (Unit 1) during this first term focuses on the applications students need to produce their report ie word-processing/presentation software. The rest of Unit 2: Parts 2(c) and 2(d) are delivered at the end of the course. By that stage, students will have had the opportunity to learn and practise using a wide range of applications software and to see lots of ICT systems in use for different purposes. This will give them a very good 'feel' for what comprises an effective ICT system.

Units 3 is delivered in the second and third terms of year 10 alongside Unit 1. In the first term of year 11, students learn and practice spreadsheet and database skills. At the same time, they familiarise themselves with the scenario for the Unit 1 examination by working through the Activity Booklet and work on strategies for maximising their achievement in the computer-based examination, which they sit in January of year 11.

There is a re-sit opportunity for those who want/need it based on the same scenario in June.

Model 3

<table>
<tr><th></th><th colspan="2">Autumn term</th><th colspan="2">Spring term</th><th>Summer term</th></tr>
<tr><td rowspan="2">Yr 10</td><td rowspan="2">Induction</td><td>Unit 2
(a) and (b)</td><td colspan="2" rowspan="2">Unit 3</td><td rowspan="2">Unit 3</td></tr>
<tr><td>Unit 1</td></tr>
<tr><td>Yr 11</td><td colspan="2">Unit 1 practice tasks.
Focus on examination technique (including mock examination)</td><td>Unit 1 exam</td><td>Unit 2
(c) and (d)</td><td></td></tr>
</table>

Model 4

This is an essentially linear model with terminal assessment. Students sit the Unit 1 examination at the end of their course. They therefore have no re-sit opportunity, unless they are prepared to take the examination again in the January following the completion of their course. Similarly, the assessment of all the portfolio work is concentrated at the end of the programme, putting pressure on teachers' workloads and limiting opportunities for 'gap-filling' and/or making improvements.

Centres may well adopt this model if – for example – the teaching team possesses different vocational skills and different teachers teach different units or if the course is being delivered in one year (not before September 2003).

The model assumes that the timing of the delivery of the content of Unit 1 is such that students are able to apply their practical skills as they acquire them to the work they are doing on Units 2 and 3. There is time built in the final term for students to work on the Activity Booklet and practise their examination technique.

Model 4

<table>
<tr><th></th><th colspan="2">Autumn term</th><th colspan="2">Spring term</th><th colspan="2">Summer term</th></tr>
<tr><td rowspan="3">Yr 10</td><td rowspan="3">Induction</td><td>Unit 1</td><td colspan="2">Unit 1</td><td colspan="2">Unit 1</td></tr>
<tr><td>Unit 2</td><td colspan="2">Unit 2</td><td colspan="2">Unit 2</td></tr>
<tr><td>Unit 3</td><td colspan="2">Unit 3</td><td colspan="2">Unit 3</td></tr>
<tr><td rowspan="3">Yr 11</td><td colspan="2">Unit 1</td><td>Unit 1</td><td rowspan="3">Unit 1 practice tasks.
Focus on examination technique (including mock examination)</td><td rowspan="3"></td><td rowspan="3">Unit 1 exam</td></tr>
<tr><td colspan="2">Unit 2</td><td>Unit 2</td></tr>
<tr><td colspan="2">Unit 3</td><td>Unit 3</td></tr>
</table>

Internal assessment procedures

Supervision of students and authentication of work submitted

Students must submit a portfolio of work for each of the two internally assessed units. Teachers are expected to guide and advise students in the production of their portfolios. Teachers should monitor progress to ensure that the work is appropriate and meets the requirements of the specification.

The GCSE, GCE, VCE and GNVQ Code of Practice requires that assessors record full details of the nature of any assistance given to individual candidates that is beyond that of the teaching group as a whole, but within the parameters laid down in this specification. The level of assistance should be taken into account when assessing students' work, as indicated in the guidance section that accompanies each internally assessed unit in the specification. In addition, sufficient work must take place under direct supervision to allow the teacher marking the work to authenticate each student's work with confidence.

If students' practical skills are being assessed, it is important that assessors complete observation records to authenticate student work and provide evidence that students have achieved the level of performance required in the assessment grid.

Assessment

The work of each student must be assessed using the assessment evidence grids, which contain criteria statements and bands of response. The teacher must record each student's achievement on a mark record sheet. A mark for each component as well as the total marks for each unit (maximum of 58) should be recorded. Mark record sheets for Units 2 and 3 are contained in *Appendix E* at the back of this document and should be photocopied and attached to each student's portfolio.

Annotation

Annotation is a mandatory requirement for internally assessed work and is used to:

- help the moderator to understand how and where marks for each assessment criteria have been awarded
- describe where students have received help beyond normal learning support or where students have been rewarded for initiatives that are not immediately apparent from the evidence presented
- explain any other features of a student's work that will assist the moderator in understanding how a particular assessment was arrived at.

The minimum requirement for annotation is to complete the annotation column on the mark record sheet by listing the portfolio page number(s) where evidence can be found for each of the assessment criteria. However, moderators do find more detailed annotation helpful.

Standardisation within the centre

It is the centre's responsibility to ensure that where more than one teacher has marked the work, internal standardisation has been carried out. This procedure ensures that the work of all students at the centre is marked to the same standards and that an accurate rank order is established.

External moderation

Following assessment, all portfolios must be available for inspection by Edexcel. First moderation will be in June 2004 and each June thereafter. In subsequent years centres may have work moderated at the end of the first year of the course if they so wish – re moderation of that work will incur an additional fee.

Each student's portfolio should contain only the work used for awarding marks for the assessment. Portfolios must have a title page with the relevant specification name and number, candidate name, candidate number, centre name, centre number, and date. The first page of the portfolio should be a contents list and pages should be numbered throughout the portfolio. The portfolio should also contain the mark record sheet for the relevant unit and an authentication statement. The authentication statement must be dated and signed by both the student and the assessor to verify that the portfolio is the student's own work.

A sample of the work will be requested and must be sent to Edexcel to arrive no later than 15 May in the year of the examination. No practical work is to be submitted to Edexcel unless specifically requested.

The moderated coursework will be returned to centres in the autumn term in the year of the examination. Edexcel reserves the right to retain examples of folders for archive, grading or training purposes.

Grading the work

There are no pre-determined grade boundaries, and the marking grids published in the specifications give no more than an indication of how marks may relate to the final grades.

After the moderation period is over, Edexcel will convene an awarding meeting. At the meeting the committee recommends the minimum mark (out of 58 marks available for each portfolio) that is acceptable for work at the F, C and A boundaries for the unit. The other grade boundaries are then set arithmetically using the marks agreed for these judgmental boundaries.

In order to combine the results from the three units into a final subject grade, a uniform mark scale (UMS) is used. The UMS for these GCSE units runs from 0 to 100 marks and is shown on page 9 of the specification and is reproduced in *Table 1*.

The raw grade boundary mark at each of the grades, as recommended by the awarding committee, is converted to the equivalent UMS boundary mark. All raw marks can then be converted to uniform marks.

Students' result slips will report the outcome of each unit as a uniform mark that can be related to an equivalent grade.

The final grade for the subject is determined by adding together the uniform marks for the three units. Thus in *Table 2* below, candidate X, with unit results of two low Bs and a C, ends up with an overall CC, while candidate Y, with two good Bs and a C, gets a BB. It is possible for a student to be ungraded on the work submitted for one unit (or even two) and still obtain enough uniform marks for an overall qualification grade.

Table 1 The minimum uniform marks required for each grade:

Unit grade	**A***	**A**	**B**	**C**	**D**	**E**	**F**	**G**
Maximum uniform mark = 100	**90**	**80**	**70**	**60**	**50**	**40**	**30**	**20**
Qualification grade	**A*A***	**AA**	**BB**	**CC**	**DD**	**EE**	**FF**	**GG**
Maximum uniform mark = 300	**270**	**240**	**210**	**180**	**150**	**120**	**90**	**60**

Table 2 Example of unit and qualification grades achieved by two candidates

	Unit 1	**Unit 2**	**Unit 3**	**Qualification**
Candidate X	**71 (B)**	**72 (B)**	**63 (C)**	**206 (CC)**
Candidate Y	**78 (B)**	**74 (B)**	**66 (C)**	**218 (BB)**

Students who do not achieve the standard required for a grade GG will receive a uniform mark in the range 0 – 59 and be recorded as U (unclassified).

Re-sits

Each unit (examination and portfolio unit) can be re-taken once only. A re-sit will incur an additional fee upon entry.

If a student is disappointed by his/her grade and thinks that he/she can improve it, the centre would need to enter the student for the next available examination or moderation series, as appropriate.

Administrative procedures

Centres already authorised for Edexcel GCSE and GNVQ will automatically be accepted as centres. New centres will need to go through a GCSE approval process and should obtain the necessary forms by contacting Customer Services on 0870 240 9800.

There is no registration process (as in GNVQ). Centres indicate their intention to offer the qualification by completing an Early Notification of Entry form and this estimate of entry will be entered on the system as for GCSE.

The Joint Council will agree examination and portfolio entry dates for General Qualifications. Examination entries, portfolio moderation entries and cash-in can be made by EDI or by completing the appropriate form, quoting the unit code.

Examination materials will be despatched to centres that enter students for Unit 1. Practice tasks and data files for the computer-based examination will be made available on the Edexcel website by 1 October prior to the examination (apart from the 2003 examination series). Centres wanting hard copy must request it from the Assessment Leader.

Invoices will be generated for all students entered per test and moderation series.

At the time of entry for the final unit(s), or after all units have been 'sat', centres must make an entry (no charge) to cash-in the unit achievements by entering students for the qualification code.

Support and training

A full range of support material will be made available in hard copy and/or available to download from the Edexcel website (www.edexcel.org.uk).

This will include:

- specification
- specimen paper and mark scheme
- tutor support pack
- examiner/moderator reports
- activity booklet (downloadable from website) and support website (organisation scenario plus data files)
- past examination papers and mark schemes
- additional resource materials (published on website)
- answers to Frequently Asked Questions (published on website)
- information manual.

Edexcel delivers a full INSET programme to support these GCSEs. This includes generic and subject-specific conferences, seminars, workshops and customised events for individual centres.

Further information on INSET programmes can be obtained from Customer Services on 0870 240 9800.

Email for enquiries – trainingenquiries@edexcel.org.uk

Email for bookings – bookingenquiries@edexcel.org.uk

Information concerning published support material can be obtained from:

Edexcel Publications
Adamsway
Mansfield
Notts. NG18 4FN

Tel: 01623 467467
Fax: 01623 450481
E-mail: publications@linneydirect.com

Individual units

Unit 1: ICT Tools and Applications

Introduction

Unit 1 focuses on the development of ICT skills and their appropriate application within a variety of organisational contexts. Once an understanding of the features and possibilities of ICT applications has been acquired through practical use, students go on to look at how and why organisations use ICT to carry out processes and to communicate effectively. Whilst the specification is divided into five main application areas, students are expected to integrate outputs from different applications to present information effectively. For example, a graph produced in a spreadsheet could be incorporated into a newsletter, report, memo or PowerPoint presentation.

Assessment

The unit is externally assessed by a practical computer-based examination with activities related to a scenario. Students should familiarise themselves with this scenario by working through the Activity Booklet issued each year in October (mid-November in 2002). This will enable them to consider the types of ICT tools and applications appropriate to the organisation, familiarise themselves with the structure of the organisation, its employees and the external organisations/people with whom it communicates.

Notes on the activity booklet

The Activity Booklet consists of a scenario and a set of practical hands-on activities focusing on the following five skill areas:

- Presentation of information
- Organisation and analysis of numerical information
- Organisation and analysis of structured information
- Organisation and presentation of information using multimedia software
- Communication, searching and selection of information

Students are required to integrate output from some or all of these skill areas.

The Activity Booklet is supported by a website that provides background information on the organisation and downloadable data files for use in the specified activities. Information on how to retrieve and use the data files will be provided in the Activity Booklet.

An example of the Activity Booklet can be found in the Specimen Papers with Mark Schemes (UG011673), available from Edexcel Publications and on the Edexcel website. The specimen materials are based on the company BurgersAway! The website for BurgersAway! can be found at:

http://www.edexcel.org.uk/edexcel/html.nsf/pages/Online+prerelease_login

Whilst working on the activities, students are expected to practise effective file management and standard ways of working. For example, ordering and labelling of output should be viewed as necessary skills in these areas as well as preparation for the examination.

Relationship between the Activity Booklet and the Examination

The Activity Booklet, containing details of the scenario and the practice activities, will be made available on 1 October each year. In any one academic year, the same scenario will be used for the January and June examinations. However, in 2002 – the first year of the qualification – the Activity Booklet will be released in mid-November and the same scenario will be used for three examinations – June 2003, January 2004 and June 2004. A new Activity Booklet will be available from 1 October 2004 for the 2005 examination series.

The Activity Booklet will be made available on the Edexcel website. Hard copy will be sent to centres only if they request it (in writing) from the Assessment Leader.

The scenario is meant to act as a focus for teaching, learning and discussion. The activities do not carry marks.

The examination builds upon, but does not repeat, the activities in the Activity Booklet. It will use the same scenario.

It is important to note that all aspects of the specification may be tested, even if not covered in the Activity Booklet. Students must be familiar with all the skill areas in the specification.

The examination

The examination will be available in January and June each year. The first examination will be in June 2003.

The examination is computer-based, but not on-line. It is 2 hours and 30 minutes in duration. Each student will require sole use of a computer for the duration of the examination, plus access to appropriate software and a printer. Any data files needed for the examination will be made available on the Edexcel website four weeks in advance. These should be downloaded and stored in each student's user area. Centres can request copies of the files on disk or via e-mail.

Centres can 'stagger' the examination over a period of 5 days, so that different groups of students sit the examination at different times during the examination window. Centres are required to schedule the examinations as late as possible within the window – eg a small centre would schedule all examinations on day 5, a medium centre would use days 5, 4 and possibly 3, while the largest centres would use all five days. At the end of each examination session, all papers and printouts ('scripts') must be collected in and stored securely in the same way that any other examination paper would be stored. It is the responsibility of the centre to ensure security between examination sessions within the window. It is recommended that centres create new user names and passwords for all students prior to the examination and restrict access to these accounts to the period of the examination session only.

A sample of centres will be selected for inspection during the test period. Before each series, these centres will be required to inform Edexcel of their test dates within the window.

All scripts for the centre must be sent to the nominated examiner on or immediately after day five.

The examination is un-tiered. There is no choice of questions. It will consist of a number of practical activities. Tasks within each activity will be progressive. It is expected that only those students capable of higher grades will complete all the tasks within one activity before moving on. The order and weighting of the activities may vary, but the final activity will always involve some integration of results from earlier activities.

Students are not expected to spend all the time in the examination working at the computer. The length of time allocated for the examination is such that students will have time to print out and collect their printouts as their work progresses, thus building in a natural break from screen work. They should also spend some time reviewing their work once it is printed to check that layout, styling and sizing are appropriate and fit for purpose.

A further 30 minutes at the end of the examination may be set aside for printing any outstanding work.

Students may not bring textbooks or any other material into the examination.

Students may re-sit the examination once only (there will be a charge for this re-sit). Students who wish to re-sit in January of any year would be advised to familiarise themselves with the latest scenario by completing the relevant Activity Booklet.

The results will be reported as a UMS mark from 0 – 100 which can be related to a grade (see page 9 of the specification).

Teaching and learning strategies

The vocational context

In the spirit of this vocational qualification, it is essential that students develop skills within real-life contexts. They should be aiming to produce output that is fit for a specified purpose within an organisation. Many students will have no previous experience of the standard types, and purpose, of business documents and should have the opportunity to study a range of real-life examples. Simulations may also be created within the classroom eg setting up a committee meeting with a particular purpose, requiring an agenda and minutes and, perhaps, a report. Other scenarios may generate database reports, what-if situations in spreadsheets, etc. In all cases, the presentation of the output should be business-like and fit for purpose.

Differentiation in schemes of work

As the qualification is untiered, the examination covers all grades from G to A* and developing a suitable scheme of work may be challenging. The specification builds on the Key Stage 3 ICT schemes of work. However, it is likely that students will commence study for this qualification with skills in the various applications at widely differing levels. To some extent, an individual programme of study may be appropriate.

The table that follows sets out the skills to be covered within each ICT application. They are listed in order of progression. Students should work through each list as far as they are able. This reflects the approach taken in the Activity Booklet and the examination, where each activity will be progressive and students will need to move on to the next activity when appropriate. Practise in this technique may be gained when working through the specimen examination materials.

Order of study

The five ICT application areas are tabulated for clarity. However, this should not be seen as a recommended order of study. Some centres may wish to complete each of the application types in turn. In this case, the five applications may be covered in any order.

An alternative strategy would be to build skills in the different areas in parallel, within a context. Examples of this type of approach are provided in the earlier section of this guide entitled 'Models of delivery'.

If Unit 1 is to be taught alongside other units, skills from all application areas that are appropriate for producing reports for Parts 2(a) and 2(b) of Unit 2, and Unit 3 should be acquired first.

It is essential that Unit 1 is completed before tackling Parts 2(c) and 2(d) of Unit 2. Students need a thorough understanding of all the application areas if they are to design and implement an appropriate ICT system.

Whichever mode of delivery is chosen, students will need to keep applying their skills throughout the course, both in readiness for the examination and in the completion of Units 2 and 3.

The final section of the table is concerned with the integration of data and files from different applications. This is an essential use of ICT within organisations and students should be encouraged to develop skills in this area from the outset.

Skills to be covered within each ICT Application

	Learning outcomes	Additional notes
1	**Communication, searching and selection of information using the internet** Students should be able to: • logon to the internet • use e-mail software and communicate between individuals and groups • select and use appropriate features of browser software, eg forward, backward, bookmarking, favourites • use search engines, single and multiple criteria • locate, select, download relevant material • refine searches to obtain specific material	The aim should be for students to use the internet efficiently both for communication and for locating information. Students may find it useful to become familiar with the internet as an effective tool for learning at an early stage to allow them to use it to help them with subsequent learning activities and information seeking. Students should be aware of the use of web pages by organisations as a form of communication.
2	**Organisation and analysis of numerical information using spreadsheet software:** Students should be able to: • identify the components of a spreadsheet, using the correct terms eg row, column, cell reference • manually plan/design a spreadsheet for a given purpose including appropriate layout and titles • construct formulae • enter a range of data eg text, number • format cells to match data type • construct appropriate, efficient formulae • enter simple formulae • replicate formulae • use simple functions eg SUM, AVERAGE. • insert and delete rows and columns • print spreadsheets to fit to specified page • print spreadsheets in formula view • cut, copy, paste and move data between cells, rows and columns • produce charts/graphs with data and axis labels, legends, chart title • use functions including SUM, AVERAGE, IF-THEN, • use operators +, -, *,/, <, >	Students should aim to be proficient in manually planning a spreadsheet solution, ensuring that all references and formulae are correct. The lists of functions and operators are roughly in progressive order of difficulty and it is expected that only those aiming for the higher grades will achieve proficiency in the complete list. Formulae and logical expressions should be constructed in an efficient format. For example, using IF..THEN..ELSE in preference to repeated IF statements Students need to understand the purpose of absolute cell references and should practise their use in realistic situations such as the variable VAT rate used in the specimen pre-release Task SP6. The ability to test the solution is crucial in order to ensure that the design is fit for purpose. This will prepare students for the essential process of checking their work during the examination.

	Learning outcomes	Additional notes
	• use absolute cell references • print selected areas • carry out simple test procedures to check that the spreadsheet is fit for purpose • use <=, >= appropriately	
3	**Organisation and analysis of structured information using database software** Students should be able to: • identify components of a database, using correct terms eg table, record, field, data type, size • manually plan/design a database structure for a given purpose • understand the purpose of validation rules • identify and create a primary key • enter data, including data entry forms • print in table format to fit to specified page • sort a table on a given field, ascending or descending • search on a single field • produce printed reports of eg sorts and searches • establish appropriate validation rules/input masks • sort on multiple fields within a table • search on multiple fields within a table • understand the purpose of primary and foreign keys • set up relationships between tables • search on related tables • use logical operators AND, OR, NOT • use relational operators +, -, *,/, <, >, <=, >=	The tasks are progressive, although it should be noted that where the creation of a relationship is required, this would need to be set up before data is entered even though it is a higher level requirement. If there is such an Activity in the examination, it will be constructed so as to allow those unable to set up a relationship to continue with some of the subsequent tasks. Complex searches might include searching on one field, but printing information from both tables or searching on fields in both tables. For example of the progression, see Activity 3 in the Specimen Activity Booklet.

	Learning outcomes	Additional notes
4	**Organisation and presentation of information using multimedia software** Students should be able to: • design an outline structure and navigation route for a presentation • manually plan the presentation with sources, storyboard, script, images, colours, animation, sounds, language • create and/or find the separate components of the presentation • import text/images from other sources, including their own data files • produce individual frames/layouts/backgrounds/slides • combine the separate components to create a final presentation • check the presentation and edit where necessary • print individual slides to fit to a specified page • print a specified number of slides to a page • annotate different types of component	The emphasis should be on a complete presentation that is fit for purpose. The choice of a real-life context is crucial. Planning is critical here if a professional, uniform design is to be achieved. Students should learn to annotate designs to clearly show the various components used. Similar annotation should be used on printouts in preparation for the examination For example, see Activity 5 in the Specimen Activity Booklet
5	**Presentation of information using word processing, publications and presentation software** Students should be able to: • enter text • use appropriate text formatting features eg font, size, bold, italic, underline • use appropriate layout features eg margins, justification, headers/footers, bullet points • cut, copy, paste and move text • incorporate clipart • use colour • use templates and wizards, and edit appropriately • import graphic images, tables, graphs, charts from other software • use word wrap around images/objects • use mail merge facilities • understand the purpose of a house style • choose an appropriate document style for a particular purpose	Many of the standard business documents can be covered in this section. Students should be given the opportunity to look at as many examples of real-life documents as possible. They should be encouraged to note features of the writing style and presentation of the documents and to assess their suitability for the purpose. Students should be familiar with all standard business documents so that they are (a) prepared to select the appropriate type for a purpose and (b) equipped to include all standard features.

	Learning outcomes	Additional notes
	• design and create standard business documents for specified purposes eg memo, invoice, fax, business letter	
6	**Integration** As soon as sufficient skills are acquired, students should begin to make full use of the software tools to transfer data between applications. Students should be able to: • import text files • import graphics images from file • import data from database and spreadsheet files into presentation software • format the document into a coherent whole • mailmerge • using techniques such as resizing and wrapping.	Students should be made aware of the possibilities of integration at an early stage

Unit 2: ICT in Organisations

Introduction

This unit is designed to broaden students' knowledge of the many ways in which ICT is used by organisations in the real world beyond the classroom.

Students must carry out an in-depth investigation into an organisation or a department within an organisation to find out about some of the purposes for which it uses ICT and details of the ICT systems (hardware and applications software) used. This will give them some of the background knowledge and understanding they will need to design and implement an effective ICT system.

Assessment

This is a portfolio-assessed unit. Four items of portfolio evidence are required. The portfolio is subject to internal assessment, internal standardisation and external moderation. The maximum mark for this unit is 58.

The work for Parts 2(a), 2(b), 2(c) and 2(d) should be submitted for external moderation as one piece of portfolio evidence. However, it is likely that teachers will prefer to internally assess Parts 2(a) and 2(b) separately from Parts 2(c) and 2(d).

It is recommended that Parts 2(a) and 2(b) are assessed using one integrated assignment and that a separate integrated assignment is used to assess Parts 2(c) and 2(d).

Teaching and learning strategies

The vocational context

This is an ideal opportunity for students to see how ICT is used in the real world beyond the classroom. Wherever possible students should visit and investigate a 'real' organisation. Visits will need to be well prepared beforehand with time set aside afterwards for follow-up work in the classroom. A high street store, a medical practice, a fast-food outlet, a leisure centre, a multiplex complex, a food processing plant, a bank, a video hire shop, a newspaper office, an estate agents, a hotel are just some of the organisations which could be visited and investigated.

Some centres may well feel that it is difficult/impossible to arrange a visit to an organisation for all their students. In these circumstances case-study material can be used. However, students are unlikely to find this as motivating/meaningful as actually seeing for themselves first-hand how an organisation uses ICT. Where case studies are used, centres must ensure that they are detailed enough to allow students working at Mark Band 3 to be able to make analytical and evaluative judgements. One possible compromise is to use a mixture of case-study material and guest speakers from the organisation. It is highly unlikely that a case-study of a fictional organisation or department will be appropriate.

Also best avoided is an investigation based on the school's use of ICT. Students really do need to look beyond their own immediate environment in order to get a true picture of the extent to which ICT is now used in all sorts of organisations for all sorts of different purposes.

The knowledge, skills and understanding gained in completing Parts 2(a) and 2(b) will have a direct, beneficial effect on the quality of the work produced for Parts 2(c) and 2(d).

The internet is a valuable source of support material for this unit and some useful websites have been identified in Appendix C.

Guidance on delivery and assessment

This unit splits into two distinct halves. The first half of the unit, 2(a) and 2(b), focuses on uses of ICT in organisations. Students are expected to carry out an investigation of the uses of ICT within an organisation or a department within an organisation and to identify and describe the hardware and main applications software used.

Whilst the second half of the unit, 2(c) and 2(d), builds on this investigative work, it has a very different focus, requiring students to undertake the design and implementation of an ICT system. Ideally, students will have had the opportunity to develop and practise all the practical ICT skills required for Unit 1 before attempting this part of Unit 2. Students do not necessarily have to design and implement an ICT system for the organisation/department they have investigated.

Whilst the unit is to be assessed as a whole once completed, the evidence can be achieved in stages. Teachers may decide to cover Parts 2(a) and 2(b) early on in the first year of the course as a means of broadening students' perspectives and making them aware of the multitude of ways in which ICT is used in the real world. Parts 2(c) and 2(d) are probably best left until the second year when students will have acquired sufficient competence and understanding of the required functionality of ICT systems to tackle a substantial project of this nature.

Whilst some work – particularly for Parts 2(a) and 2(b) may be undertaken in groups, the work presented for assessment by each student must be their own.

For Part 2(a), a table similar to the one below might provide students with a useful starting point for their analysis of the ICT used by the organisation/department. However, students operating at Mark Band 3 will almost certainly need to expand on the information they provide in table format if they are to produce the level of detail required.

Organisation/department studied				
Purpose for which ICT is used	Business function involved	Description of task	How does this help the organisation/ dept operate?	How does this help the organisation/ dept meet its aims and objectives?

Students working at Mark Bands 2/3 must avoid investigating uses of ICT which all fall into the same broad category eg communication. Instead, they should look at a range of purposes for which ICT is used within the organisation eg within a manufacturing company, ICT may well be used for production control, stock control and stock ordering, marketing and payroll.

For Part 2(b), students should describe the main hardware components and some of the main applications software of the ICT systems investigated in Part 2(a) and outline their purpose. A table format would again provide a useful starting point. However, students operating at Mark Band 3 must also make some evaluative comments about how well the system as a whole meets its purpose, identify any shortcomings and suggest possible improvements.

Parts 2(c) and 2(d) focus on the design and implementation of an ICT system that meets the needs of a defined user.

Success in this part of the qualification will depend upon students (i) identifying a user, (ii) analysing the user's requirements and (iii) understanding what is meant by a 'system'.

(i) Identifying a user

An appropriate choice of user is essential at this stage. Ideally, students will have the opportunity to work with a 'real' user who has a genuine business need that can be met by an ICT system. It is crucial that the situation is realistic, whilst at the same time being within the students' capabilities. If a 'real' user is impossible to find, then someone prepared – and well briefed – to play the part is likely to be the next best alternative.

It may be that during the study of an organisation for Parts 2(a) and 2(b) students are able to identify a need for another ICT system to carry out a particular task. This would make an ideal project, although – in reality – it may well be too complex for students at this level to attempt.

Projects such as producing a newspaper or designing a poster are not appropriate. Students are expected to design and implement an ICT system which will enable a user to repeatedly perform the same, or similar, operations. In all likelihood, many students will use spreadsheet or database software to implement their systems. However, solutions using other types of software could be equally valid. There is no need necessarily for students to use more than one type of software in their implementation. The key measure of success is that the system produced meets the user's requirements and is fit for purpose.

Students will be assessed on their ability to produce realistic and effective solutions to a user's needs and to evidence the process of system design and implementation. A student who completes all the design and implementation stages for a relatively straight-forward system and fully documents each stage in the process is likely to earn more marks than a student who has poorly documented a complex system.

Ideas for suitable problems requiring an ICT systems solution will be published on the Edexcel website along with other resource materials for this qualification.

(ii) Analysing the user's requirements

Students will need to 'get into the head' of their users in order to understand the business context in which they work and what exactly they want the system to do.

Students are required to produce a design specification that covers:

- the input requirements of the system
- the processing requirements of the system
- the output requirements of the system
- a test plan
- the hardware requirements of the system
- the software requirements of the system.

Having undertaken an initial analysis of their user's needs, students should ideally be able to refer back to their user at intervals during later stages of the project to clarify points or check suitability and usability.

(iii) Understanding what is meant by a system

Students are expected to design and implement an ICT system, not just a one-off activity.

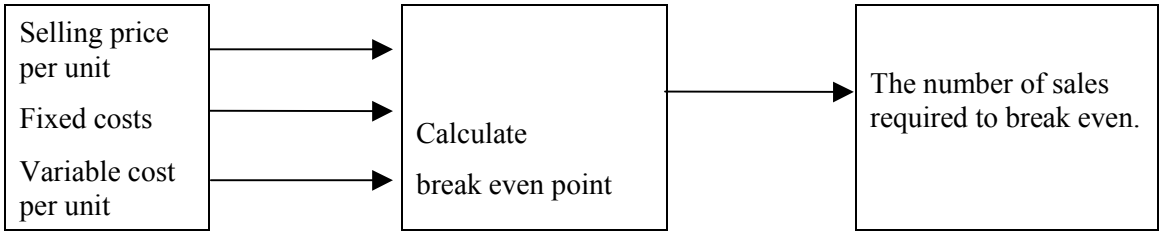
The system should have clearly identifiable input, process and output requirements for a data-handling task that transforms input data into output whenever required by the user.

For example, a user needs a system that works out the break-even point for each product the company makes.

Input includes the selling price and variable costs of the item as well as the fixed costs for the product line.

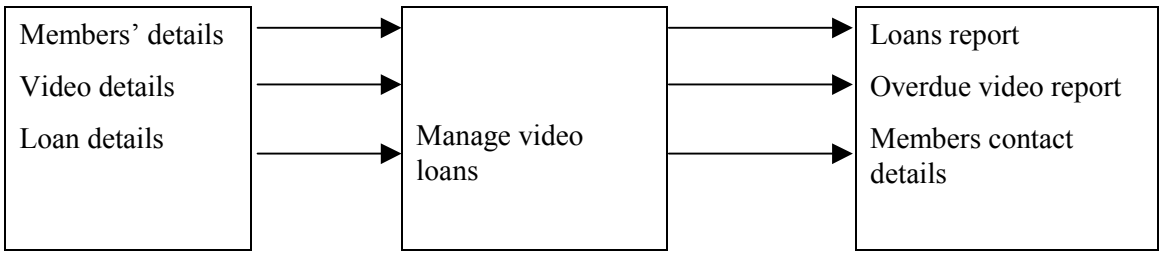
Output required is the break-even point, which is the number of items that need to be sold to cover all the costs.

The process will calculate this number.

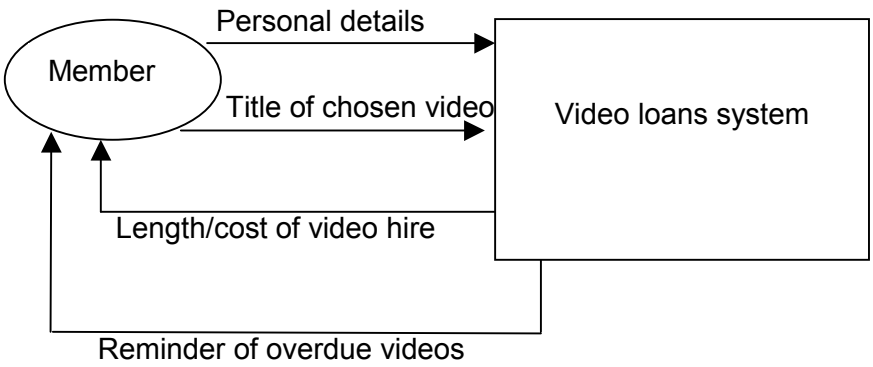


The user will be able to use this system whenever required.

The owners of a video shop needs an ICT system to keep track of video hires. They need to have accurate information about which videos are out on loan at any time, any that are overdue and contact details for members who fail to return a video on time. The diagram below illustrates a system that could be used to process the input and produce the output required by the user.



Students could use simple data flow diagrams to show the flow of data through the system and the processes that the system performs. They might start by producing a context diagram (DFD0) representing the organisational context in which the system is to be set. Such a diagram would show the main external entities of the system, the nature and direction of the information that passes between the system and the external entities with which it interacts. An example of a context diagram for the video hire system is shown below:



Students need to identify the processes which the system needs to perform and explain what they do. Lower level DFDs can be used for this purpose, but are not a requirement. A table such as the one below might be less daunting.

Process	Process description	Input	Processing	Output	Stores
1	Make new membership record	Personal details	Create a new membership record and allocates a unique membership number	Membership number and details	Membership file
2	Make new video record	Video details	Create a new video stock record and allocates a unique video stock number	Video no	Video file
3	Record new video loan	Membership number, video stock number	Create a new video loan record		Loans file
4	Record video return	Membership details	Looks up video loan record using membership number/video stock number and writes the date video returned	Videos still on loan for member	Loans file

During the design stage, students should think about sensible testing of the input, processing and output of their system including:

- validation, using acceptable, unacceptable and extreme input values
- operational features, such as menus and buttons
- processing, such as searching, sorting, performing calculations
- printed and screen output matches their design.

They should draw up a plan at this stage showing what tests will be carried out once the system has been implemented. An example is shown below.

Process to be tested	Input data	Expected output	Actual output	Comments/ action taken
			These cells would only be completed at the end of the implementation stage in Part 2(d)	

Students should provide evidence that they have implemented the system designed in Part 2(c). The best way of doing this is to produce annotated screen dumps which illustrate/explain the development and operation of the system and how it meets the user's requirements.

Witness statements completed by the user or – failing that – the teacher giving details of how well the system operates and meets user requirements should be provided. Care should be taken to ensure that witness statements are suitably detailed and individually prepared. Simple tick lists are not appropriate.

Students should provide clear evidence that they have carried out their test plan to check the operation of the system. They should record expected and actual results obtained for each test. Hard copies of test results should be provided. Should bugs or deficiencies in the system be found during testing, students should show how these have been or could be fixed.

Students should provide evidence that they have evaluated the system against the systems requirements, identifying where the system does and does not meet the user requirements and suggesting ways in which the system could be improved in order to better meet the needs of their user.

Students should provide user documentation that will enable the user to understand the purpose of the system and how it can be operated, including responses to any error messages encountered.

Students' ability to work independently

One of the key discriminators in Parts 2(c) and 2(d) is the extent to which students have worked independently to design and produce their system. Staff should refer to page 8 of the specification when assessing students' work in order to determine what constitutes 'support and guidance' in this context. It is important to be aware that even if the quality of the work produced fits into Mark Band 2/3, students who have received 'support and guidance' from the teacher in order to achieve this can only be awarded a maximum of 7 marks.

Suggested Scheme of Work – Unit 2

	Learning outcomes	Suggested activity	Notes
1	**How and why organisations use ICT** Students should demonstrate understanding of: • the structure of large organisations • the four functions of business: sales, purchasing, finance and operations • the ways in which departments within an organisation communicate and exchange information with each other and with external bodies • the ways in which organisations use ICT • the ways in which departments within an organisation use ICT to communicate and function effectively • the information requirements of a system • the components used in an ICT system and their contribution to the overall purposes of the system.	A well-prepared visit to an organisation/department within an organisation to investigate the ways in which it uses ICT Alternatively, a classroom-based investigation of an organisation/department within an organisation using a guest speaker from the organisation plus case-study materials and videos.	Case-study materials based on fictitious organisations are unlikely to be appropriate Students should investigate at least three or four purposes for which the organisation/dept uses ICT. Those working at Mark Bands 2/3 must have looked at a range of different purposes eg communication, production control, financial management, stock control Students can extend their research to take in aspects of Unit 3 or vice-versa Links too with Unit 1: students can collect examples of business documents, establish their purpose and target audience, study the writing style, layout and presentation style etc in preparation for producing their own documents

	Learning outcomes	Suggested activity	Notes
2	**Main components** Students should demonstrate understanding of: • the purpose and characteristics of the main hardware components of an ICT system: input devices, processors, output devices, ports and cables, storage devices • the network protocols/services and additional hardware devices which are needed so that data can move within and between organisations • how applications software is matched to users' processing needs when designing ICT systems.	Students might be able to take pictures of the ICT systems they see on their visit. These can be analysed later in class to identify hardware components and establish their purpose The school's network manager might be willing to provide an 'ask the expert' session with the class, either face-to-face or via e-mail Magazines such as Computer Shopper, PC Answers and Computer Buyer are good sources of information on hardware	
3	**How ICT systems are designed and implemented** Students must be able to design and implement an ICT system. They must: • identify user requirements • produce a design specification • implement the system • test the system.	Students will feel a greater sense of ownership of their project if they have a real user to work with. If this is not feasible, someone prepared to role-play is the next best alternative.	If every student in the class is working on a different problem this will put enormous pressure on the teacher who will need to provide help and support on a one-to-one basis for each student! It might be best to present students with a limited choice of problems for which an ICT system is needed. Group projects are not acceptable.

Unit 3: ICT and Society

Introduction

This unit encourages students to look at the impact of ICT on society and to examine both its positive and negative effects. It is a very open-ended unit, reflecting the fact that new ICT products and applications are constantly being developed.

Students must study four people, or groups of people, and in each case they must:

- describe the technologies used by these people in their personal, social and professional lives
- discuss how far these technologies meet their needs
- discuss how current legislation protects these people from the harmful effects of ICT.

In examining how far the technologies meet the needs of these people there is an expectation that students take a brief look at what other technologies might perhaps meet their needs better.

Assessment

This is a portfolio-assessed unit. Five items of portfolio evidence are required. The portfolio is subject to internal assessment, internal standardisation and external moderation. The maximum mark for this unit is 58.

Teaching and learning strategies

The vocational context

In order to achieve the higher mark bands students must evaluate how far current technologies meet the needs of the people they have studied. It will be difficult for them to do this unless they have the opportunity to discuss this with the person/people involved. Case study material, unless very comprehensive, might therefore limit achievement.

Wherever possible students should investigate real people. This could be supported by research into current technologies using the internet, school or local library (books, CD ROM), TV and video etc. Students could perhaps use current technologies to conduct their research – surveys on the school intranet, telephone/e-mail interviews, video link-up to a special school, etc.

Visits to interview employees in a science park or a modern office block could be arranged. Students could visit a retail outlet to see for themselves the range of electronic available. Where large-group visits are not possible, speakers (a home-office worker, a newspaper reporter/photographer, an architect …) could be invited into school – if possible with some of the items of technology that they use. Students may even be able to take advantage of work experience placements to interview an employee or the Human Resource department about modifications made in the workplace for people with special/particular needs.

Other resources which teachers might find useful are listed in *Appendix C*.

Guidance on delivery and assessment

This unit requires students to carry out a series of investigations and produce reports on the use of ICT in society. As there are five such investigations/reports to undertake it may be necessary to break down the unit in order to sustain students' interest, motivation and commitment. However, blocks of work need to be sizeable enough to be meaningful, ensure continuity and eventually give a sense of the whole unit.

Whilst the unit is to be assessed as a whole once it is completed, the evidence can be achieved in stages and teachers might like to consider integration of this unit with Unit 1 so that students can practise and fine-tune the practical skills acquired in that unit. If this approach is adopted care needs to be taken to ensure coverage of all aspects of Unit 3 and to provide opportunities for students to generate all the evidence required. Suggested models for delivery have been provided in the early part of this teacher's guide.

It is likely that the investigative aspects of the unit will take up most of the delivery time allocated. While some work, particularly in the early planning and research stages, may take place in groups, the input of the individual student should be clearly identified, and the judgements and conclusions reached must be their own. The evidence collected during the research stage of the unit should **not** be submitted with the portfolio work unless it supports the assessment decision.

The technologies listed in the *What you need to learn* section of the specification should not be seen as comprehensive, other technologies may be investigated by candidates if appropriate to the individual they are investigating.

Parts 3(a), 3(b), 3(c) and 3(d) all require students to describe the technologies used. This does not mean that they have to provide technical specifications or details of how things work. The emphasis should be on identifying the technology, describing some of its key features and explaining what it is used for. For example, students working at Mark Band 1 might identify e-mail as one technology used by Mr Smith (an adult in employment). They could briefly describe features of e-mail such as distribution groups, archiving and file transfer and indicate what Mr Smith uses these for. Students operating at Mark Band 2 must explain how particular features of the technology meet specific user needs eg the e-mail distribution list allows Mr Smith to send a last minute meeting reminder, a copy of the agenda and minutes of the last meeting to everyone in his project group. By using the acknowledgement of receipt facility, Mr Smith can check who has received this information. Those working at Mark Band 3 must evaluate to what extent the technology meets needs. Does everyone in Mr Smith's project group read their e-mail regularly? Is acknowledgement of receipt sufficient? Are there additional features such as group scheduling which Mr Smith and his colleagues should consider using?

Students may need support in identifying the needs of the individual/group under study. A table such as the one below might help them identify, for example, what the adult in employment needs in his/her personal, social and professional life.

Investigate the technologies used by: **Mr Smith (an adult in employment)**				
	I need to be able to….	What do I use now?	How does this help me?	What would be better?
Personal				
Social				
Professional				

Students should remember to consider the negative aspects of the impact of ICT as well as the positive ones.

Part 3(e) need not be a separate section. Students may well find it more relevant to link their research into legislation with their study of how individuals/groups use ICT. This will make it easier for those operating at Mark Band 3 to evaluate the extent to which the legislation protects people/groups from the misuse of ICT.

Whilst students must use ICT to present their findings, teachers should interpret the word 'report' in its widest sense and encourage students to use the most appropriate application to present their findings to the intended audience. Multi-media presentations, flyers, posters, web pages and newsletters are all acceptable forms of report (providing their content covers the assessment evidence grid).

Differentiation

Some care needs to be taken in the design of assessment tasks. Mark Band 1 students must have the support and structure needed to allow them to describe the technologies used. However, higher ability students need to be moved away from lists and descriptions and into analytical/evaluative comments that assess **how far** ICT systems have affected the everyday life of the individual concerned.

For example, an assignment for 3(d) could be: 'You are a member of the Newtown community action group. You have been asked to bid for some money to buy an item of new technology that would be of benefit to the people in Newtown. Find out what technologies are currently used and suggest something suitable.'

Mark Band 1 students could list and describe the technologies used in the community, indicate how useful they are and suggest something that would be better. Mark Band 3 students might compare 'Newtown' with another more-technically advanced community and their justification for the purchase of the new technology would involve them in analysing where current technologies fail to meet the needs of those living in – or using – the town's facilities. This would thus move them into Mark Band 3. Students could present their report as a PowerPoint presentation with full presenter notes.

Suggested Scheme of Work – Unit 3

	Learning outcomes	Suggested activity	Notes
1	**Available technologies** Students should demonstrate understanding of: • the wide variety of technology that is available to access and exchange information and carry out transactions • the development of specialised hardware and software associated with this technology • the effects of not having access to ICT.	Create a web page with descriptions of each of the technologies.	The range of technologies in the specification should be covered at this point. Candidates may wish to add to this list, particularly as new technologies arrive. This page can be linked to other pages within the portfolio.
2	**How ICT is used in business** Students should demonstrate understanding of: • the effects of ICT on how organisations do business • the effects of ICT on customers, including the effect of the speed with which transactions can be carried out.	Visit a business to investigate how ICT has changed their business	Links here to Unit 2, students can use the research for this activity within 2(a) and 2(b) of Unit 2 or vice-versa Lower ability candidates may leave out the section on transactions, as they tend to believe it's quicker just to pay by cash at the shop.

	Learning outcomes	Suggested activity	Notes
3	**How ICT has affected working styles** Students should demonstrate understanding of: • how ICT has changed the places in which people work, where they work and how business practice has changed peoples' work patterns • the ICT skills required by employees • the way people communicate and interact at work • the types of jobs available.	Interview an adult with a list of pre-prepared questions	
4	**How ICT has affected personal communication** Students should demonstrate understanding of: • the way in which ICT has affected peoples daily lives for example: – the internet – mobile phones – entertainment and leisure – education and lifelong learning.	This should be covered in other activities for this unit	

	Learning outcomes	Suggested activity	Notes
5	**How ICT is used in community activities** Students should demonstrate understanding of: • the use of ICT in community activities such as: – cyber cafés and libraries (public access to internet) – on line chat and discussion forums – information services – public transport – clubs and societies – adventure sport.	Visits and guest speakers should be used. With case studies being used where this is not appropriate	
6	**ICT and people with special/particular needs** Students should demonstrate understanding of: • how ICT can offer improved access to people with a range of needs • how ICT can enable people with special/particular needs to access and exchange information and carry out transactions • the range of specially-adapted hardware and software available and what it is used for.		Candidates may find it difficult to access someone with special needs for this unit, it may be necessary to have a case study prepared for this

	Learning outcomes	Suggested activity	Notes
7	**Legislation** Students should demonstrate understanding of: • the reasons for the introduction of each of the acts that cover working with ICT • who is affected by the legislation • what protection is offered by each act • what aspect of ICT is affected by each act.	Undertake a research study into legislation this can be conducted using the internet, and through library visits etc	You should ensure that any study done covers the whole range of acts in the specification.

Appendix A

GCSE in Applied ICT – Specification planner

Unit 1: ICT tools and applications	Time needed	Term?/order?	Resource/staff development issues/matters for SMT
Using ICT applications			
Presentation of information			
Word processing			
Publications software			
Presentation software			
Organisation and analysis of numerical information			
Spreadsheet software			
Organisation and analysis of structured information			
Database software			
Organisation and presentation of information			
Multimedia software			
Using the internet for			
Communication			
Searching			
Selection of information			
Investigating how ICT is used in organisations			
Availability and appropriateness of applications:			
For capturing, manipulating and enhancing graphic images			
To automate and control processes including CAD/CAM			
To monitor and record physical and environmental data for analysis and interpretation			
Developing business documents			
Document:			
Purpose			
Appropriateness			
Design			
File management and standard ways of working			
File management/security			
Health and safety			
Legislation			

Unit 2: ICT in Organisations	Time needed	Term?/order?	Resource/staff development issues/matters for SMT
How and why organisations use ICT			
ICT systems – components			
ICT systems – information requirements			
Functions of a business			
How ICT is used to communicate and function effectively			
Main components			
Hardware components			
Network protocols and network services			
Applications software, integration into ICT system			
How ICT systems are designed and implemented			
Design and implementation of an ICT system, dataflow diagrams			
Investigate an organisation/department and produce a report on:			
(a) the different purposes for which the org./dept. uses ICT			
(b) the ICT system (hardware and applications software) used in the org./dept. and how it meets the needs identified in (a)			
You also need to design and implement an ICT system. Produce:			
(c) a design specification for the system including information sources, input, process and output requirements, and the types of applications software needed			
(d) evidence that you successfully implemented, tested and evaluated the system, together with guidance for the user.			

Unit 3: ICT in Society	Time needed	Term?/order?	Resource/staff development issues/matters for SMT
Available technologies			
ICT – types, purposes and development			
How ICT is used in business			
Effect on business, on customers			
How ICT has affected work styles			
Impact (and extent of impact) on work styles			
Legislation			
Reasons for introduction of legislation covering those working with ICT			
Harmful effects of ICT			
How ICT has affected personal communications			
How ICT has affected daily life. Study of effect of/on, for example:			
The internet			
Mobile phones			
Entertainment and leisure			
Education and lifelong learning			
How ICT is used in community activities			
How ICT is used in community activities			
ICT and people with special/particular needs			
For people with special/particular needs, how ICT can:			
offer improved access			
enable these people to access and exchange information and carry out transactions, using standard technology			

Unit 3: ICT in Society	Time needed	Term?/order?	Resource/staff development issues/matters for SMT
Investigate how ICT systems affect everyday life. Produce reports describing the impact of ICT on:			
(a) the way you do things at home and at school/college			
(b) an adult in employment, including the way it has had an effect on his/her working style			
(c) a person with special/particular needs			
(d) your local community			
(e) describe how far the introduction of legislation protects these people from the misuse of ICT			

Additional comments

Summary of key resource/staff development issues/matters for Senior Management Team (SMT)

Appendix B

GCSE in Applied ICT – Course planner

Term		Topic	Staff	Resources	Comments
YEAR ONE	AUTUMN TERM				Pre-release materials available (website)
		CHRISTMAS HOLIDAYS			
	SPRING TERM				
		EASTER HOLIDAYS			
	SUMMER TERM				
					June From 2003 - Exam opportunity. From 2004 - Portfolio moderation.
		SUMMER HOLIDAYS			

Term		Topic	Staff	Resources	Comments
YEAR TWO	AUTUMN TERM				
	CHRISTMAS HOLIDAYS				
	SPRING TERM				**Jan** From 2004 - Exam opportunity
	EASTER HOLIDAYS				
	SUMMER TERM				
					June Exam opportunity. From 2004 - Portfolio moderation
	SUMMER HOLIDAYS				

Appendix C

GCSE in Applied ICT – Resources

The following list provides details of resources that teachers may find useful. The listing should not be taken as a recommendation or as an endorsement of the resource by Edexcel.

There is already a wealth of published materials available and teachers should not be afraid to use textbooks already in their departments. It is unlikely that there will be one single resource that will fulfil all the teaching requirements for the course. ICT is a rapidly developing area and additional resources are continually being brought to market. Further teacher recommendations for resources will be posted on the Edexcel website as they are notified to us.

The planning template in *Appendix B* could be used alongside this resource list to aid in the planning for the delivery of the course.

Acknowledgement is given to the Learning and Skills Development Agency for the information they have provided.

Paper-based resources

Title, Author, Publisher	Possible use (unit)	Tick to indicate interest
Applied ICT by Stephen Doyle Applied ICT Teacher Support Pack (Nelson Thornes) www.nelsonthornes.com	All units	
Applied ICT for GCSE (Double Award) by P M Heathcote & C Higmore (Payne-Gallway) www.payne-gallway.co.uk	All units	
ICT Projects for GCSE by R S Heathcote (Payne-Gallway) www.payne-gallway.co.uk	Unit 2(c), (d)	
Information and Communication Technology for Intermediate GNVQ by WW Milner and A Montgomery Smith. (Nelson Thornes) www.nelsonthornes.com	Unit 1 Unit 2(c), (d)	

Title, Author, Publisher	Possible use (unit)	Tick to indicate interest
Information and Communication Technology GNVQ (Liberty Hall) (Intermediate and Foundation) www.libertyhall.co.uk	Unit 1 Unit 2(c), (d)	
GCSE ICT for Edexcel Teachers Resource File (with CD ROM) Mollie Wischusen, Janet Snell, Jenny Johnson (Heinemann) www.heinemann.co.uk	Units 1, 2 and 3	
GCSE ICT for Edexcel Students Textbook M Wischusen, K Slez, J Snell, J Johnson (Heinemann)	Units 1, 2 and 3	
Information and Communication Technology GNVQ by Molly Wischusen, Janet Snell, Andrew Scales Textbook, tutor resource pack + CD ROM. (Heinemann) www.heinemann.co.uk	Unit 1 Unit 2(c), (d)	
ICT student handbook by Gareth Williams Pearson Publishing	Units 2 and 3	
Information Systems for You by Stephen Doyle Information Systems for You, Skillbuilder by Stephen Doyle (Nelson Thornes) www.nelsonthornes.com	Unit 2 Unit 1(skillbuilder)	
KeyBytes Guides Guides on the Microsoft Applications at Beginner and Intermediate levels. (Summerfield Publishing Ltd)	Unit 1	
Hardware manuals on all applications. If you are using Microsoft applications, Microsoft Press publish books at differing levels of expertise.	Unit 1	

Title, Author, Publisher	Possible use (unit)	Tick to indicate interest
Pre-release tasks for GNVQ Intermediate and Foundation (including Part One) examination papers. Edexcel website www.edexcel.org.uk	Unit 1 These can be used to provide short skill building activities, which are set in a vocational context.	
Getting Started on the internet (Essentials)	Unit 1(Activity Booklet) Unit 3, 2(a), 2(b)	
This is it Series Booklets, CD ROMs on the main applications National Extension College	Unit 1	
Internet Explorer in easy steps By Mary Lojkine (Computer Step) www.computerstep.com (also offer a range of computer books)	Unit 1(Activity Booklet) Unit 3, 2(a), 2(b)	
Industry Information Pack (Information Technology) LSDA (Learning and Skills Development Agency) Regant Arcade House 19 – 25 Argyll Street London W1F 7LS Enquiry line: 020 7297 9144	Unit 3	
School Business Studies department Again the old model textbooks are of the most value here for the basic understanding of some concepts such as payroll, budget forecasting, stock control etc	Unit 2(a), 2(b)	

Title, Author, Publisher	Possible use (unit)	Tick to indicate interest
Computer magazines Computeractive Web User WebActive Can be a valuable source of information. British Computer Society's Glossary of terms can explain a lot of 'jargon' to less experienced students.	Unit 1 Unit 2(b)	
Other useful sources would be local and national newspapers – situations vacant – comparison of jobs/skills/salaries etc	Unit 3	
Collect other paper based resources, leaflets, promotional brochures, newspaper articles, magazines and supplements. eg 'Fit to Work' – a pamphlet from the Chartered Society of Physiotherapy	Unit 3 (topical ICT issues – legislation, misuse, health and safety, work patterns, etc)	

Electronic resources

Title, website	Possible use (unit)	Tick to indicate interest
Edexcel website (Applied ICT section) FAQs, additional resource materials, exemplar work www.edexcel.org.uk	All units	
Students should be encouraged to use the on-screen HELP facility on all applications.	Unit 1 (examination)	
www.microsoft.com/ Information about applications, multimedia CDs, Internet Explorer Also www.microsoftquery.co.uk – help line	Unit 1	
GCSE in Applied ICT (Double Award) Thomas Telford School Online Ltd www.gnvqict.com email: enquiries@ttsonline.net	All units	
GCSE in Applied ICT (Double Award) @tain online supported curriculum materials Brooke-Weston CTC www.atain.co.uk email: enquiries@brookeweston.com	All units	
Springers GCSE in Applied ICT course (intranet & student CD) Nether Stowe High School http://vict.members.beeb.net email: vict@beeb.net	All units	
GCSE in Applied ICT (Double Award) e-textbook ICT Education Online Ltd www.icteducation.info or www.bcpublications.co.uk	All units	

Title, website	Possible use (unit)	Tick to indicate interest
Applied ICT GCSE Varndean e-learning www.varndean.co.uk/gnvq email: gnvq@varndean.co.uk	All units	
LSDA website www.vocationallearning.gov.uk Has a databank of resources and a discussion area to exchange good practice	All units – essential one-stop shop	
Bized.ac.uk	Unit 2	
The Key to Information Technology CD ROM (National Extension College) www.nec.ac.uk	Unit 1	
On-line tutorials The BBC website includes links to sites that provide tutorials on using applications www.bbc.co.uk/education/gcsebitesize/information_technology	Unit 1 (the website also has useful articles for unit 3)	
www.direct-ed.com Interactive multimedia site which provides some ICT assessment tests	Unit 1	
Key Skills Interactive CD ROM (Nelson Thornes Ltd)	Unit 1	
Key Skills IT multimedia CD (Further Education National Consortium)	Unit 1	
Most websites make use of multimedia – a good opportunity to let pupils explore, perhaps after being given a theme.	Unit 1 Unit 3	
Making the most of e-mail: www.liszt.com	Unit 3 (Unit 1)	

Title, website	Possible use (unit)	Tick to indicate interest
Search engines: www.yahoo.com www.altavista.com www.lycos.co.uk www.excite.co.uk www.askjeeves.com www.google.co.uk	Research for Units 2 and 3	
The Computer Network A beginner-friendly look at computers, the internet and future technology www.cnet.com	Unit 2(b) Unit 3	
Legislation and health & safety information: www.dataprotection.gov.uk www.healthandsafety.co.uk www.hse.gov.uk Suggested sites which deal with the problems of misuse and abuse: Virus hoaxes: www.icsa.net Internet hoaxes: http://hoaxbusters.ciac.org Chain letters and scams: www.scambusters.org	Unit 3	

Title, website	Possible use (unit)	Tick to indicate interest
www.teknical.com – future of e-learning www.direct-ed.com – keyskills learning site www.pcwebopaedia.com – explains computer jargon and links to more sites www.computeractive.co.uk www.zdnet.com	Units 1, 2 and 3	
www.rnib.org.uk – Institute for the blind www.rnid.org.uk – Institute for the deaf www.ed.gov/offices/OSERS/NIDRR – National Institute on disability and rehab. research www.becta.org.uk/technology/infosheets/pdf/visual.pdf – visual impairment and ICT www.becta.org.uk/technology/infosheets/pdf/learningdiffs.pdf – learning difficulties and ICT www.becta.org.uk/technology/infosheets/pdf/speech.pdf – language difficulties and ICT www.bt.com – equipment suitable for a range of disabilities	Units 1, 2 and 3	

Title, website	Possible use (unit)	Tick to indicate interest
Company websites Many organisations make use of a web presence to market their products, to recruit employees and for on-line purchases. Websites for larger organisations are endless but the following are organisations who may also be willing to host a school visit: Cadbury Tesco www.tesco.com Boots www.boots.co.uk Nat west bank www.natwest.co.uk Youth Hostels Association www.yha.org.uk E-businesses Organisations which rely totally on on-line contact with their customers (in business at time of publication!!): www.amazon.com www.lastminute.com www.qxl.com – an auction site Other company websites: Supermarkets: www.iceland.co.uk www.asda.com	If connected with visit then Unit 2(a), 2(b). Otherwise Unit 1,Unit 3 Unit 2(c), 2(d) (design of on-line forms, usability, etc) Unit 3	

Title, website	Possible use (unit)	Tick to indicate interest
Banking/financial services (restricted access) www.hsbc.co.uk www.barclays. co.uk www.halifax.co.uk Insurance companies: www.directline.com www.tesco.com www.theaa.com Auctions: www.qxl.com Travel: www.airmiles www.buzzaway.com www.go-fly.com www.easyjet.com Motor manufacturers: www.jaguarvehicles.com www.bmw.co.uk	All these sites would provide useful resources for Unit 1 (web design), Unit 3	

Title, website	Possible use (unit)	Tick to indicate interest
Computer hardware and software websites Most computer manufacturers have extensive sites that market their products, provide technical support and facilities for the on-line purchase of equipment: Hardware: www.gw2k.co.uk Gateway 2000 Software: www.adobe.com www.corel.ca www.sage.ie (checkout the features and benefits of some of their accounts packages) General: www.dell.com www.viglen.co.uk www.tiny.com www.pcworld.com www.comet.com www.currys.co.uk Modem manufacturers: www.diamondmm.co.uk www.hayes.co.uk www.jabsco.com Other: www.ttpcom.com www.nokia.com www.siemens.com www.bango.net www.o2.co.uk www.hotmail.com	Unit 2(b), 2(c)	

Title, website	Possible use (unit)	Tick to indicate interest
Plug ins and Active X controls – extra internet features: www.real.com www.shockwave.com www.macromedia.com	Unit 2(b) Unit 3	
Web Accessories: www.microsoft.com/windows/ie/webaccess	Unit 2(b) Unit 3	
Most websites will provide examples of documentation. The following are just a few: www.bbc.co.uk – multimedia www.ft.com – spreadsheet application www.cnn.com – graphics www.tesco.com – database/spreadsheet www.buzzaway.com – database/spreadsheet www.virgin.com www.multimap.com www.e-skills.com www.consignia-online.com	Unit 1 Unit 2(c), 2(d)	

Other resources

Details	Possible use (unit)	Tick to indicate interest
Their own interest and observations! Quite often all it needs is for students to open their eyes – ICT is all around them. Ask people 'How do you do that?', 'What is that for?', etc.	Units 2 and 3	
Visits to local organisations The most relevant and motivating resources that can be used for this section come from businesses and organisations themselves. **Organisations who may be able to help in this respect** Visit to the local job centre, library, leisure centre, special school. A lot of information can be gathered from local and national charities and also from local hospitals and health centres. It may be more difficult to gather information on the extent of ICT available. **Visiting speakers** Invite visitors into school, make use of the school administration network itself and tap into the valuable resource of parents or governors **Parents, legal guardians, family contacts** Allow pupils to make contacts themselves through their own families and extended families – the results can be surprising! Students could also conduct surveys among peers and relatives. **Work experience placements** Students need examples of organisations that have both limited and extensive use of ICT. Smaller organisations may not have websites but examples may be: A local video shop A local garage may have a computerised database of the parts it holds in stock A local dentist/doctor/veterinary surgery	Units 2 and 3 Units 2 and 3 Units 2 and 3 Units 2 and 3 Units 2 and 3 Units 2 and 3	

Details	Possible use (unit)	Tick to indicate interest
School, college and university websites show how ICT is being used to market to and inform students and parents, but they also illustrate the many ways ICT is used in education and lifelong learning www.learndirect.com		
File Management and standard ways of working It may be useful to ask your school network manager to give an introductory talk on the school network and the importance of file management, security and confidentiality. The school intranet might be a useful place to conduct an on-line survey about personal use of ICT?	Unit 1 Units 2 and 3 Unit 3	
A collection of health and safety packs/leaflets from a range of companies will provide information about safe use of ICT equipment and stress the importance placed on health and safety in business	Unit 3	
Students will need a wide range of documents used in a variety of different organisations in order to understand how and why documents are so vital to successful communication, both internal and external. It is more effective if students can collect their own examples, but the teacher may find it useful to collect a folder of exemplar materials. School is a great starting point!	Units 1, 2 and 3	

Resources	Possible use (unit)	Tick to indicate interest
Computer resources Applied GCSE ICT needs to be well resourced with hardware and software which reflect industry standards, including essential requirements such as: • an integrated package including word-processor, spreadsheet and relational database. • a graphics package, desktop publisher and printer. • control technology, including a range of sensors, interface, output devices and suitable software to run these. • access to the internet • web design software. Some desirable resources might include: • digital camera • access to a CD ROM • a scanner • colour printer	Units 1, 2 and 3	

Appendix D

Observation records

What is an observation record?

An Observation Record is a document which records statements of learner performance.

It directly relates to the criteria contained within the Assessment Evidence grid included in each unit specification. It may confirm achievement or provide specific feedback on candidate performance against national standards.

Guidance on completing an Observation Record

Since an Observation Record will provide primary evidence, it is essential that the recording of performance is sufficiently detailed to enable others to make a judgement as to the quality and sufficiency of candidate performance and confirm that national standards have been achieved.

Observation Records are often accompanied by supporting/additional evidence. This may take the form of visual aids, handouts, preparation notes, cue cards, diaries, logbooks, and peer assessment records. It is essential that where present, these are included in the learner evidence. Where visual aids and handouts are used, note should be made on the Observation Record as to how these were used and their effectiveness.

The assessor of the qualification being undertaken by the candidate completes the Observation Record, therefore must have direct knowledge of the specification to enable an accurate assessment decision to be made.

All Observation Records must be signed and dated by the assessor.

Observation Record

Candidate name:	
Unit title:	Candidate number:

Activity context:

This may be provided by the assessor or candidate

Assessment evidence:

Refer to the assessment grids reproduced from the specification.

Observation notes:

Specific comments on candidate performance that demonstrates achievement of the assessment evidence.

Assessor name:	Assessor signature:
	Date:

Appendix E

Mark Record Sheets

GCSE Applied ICT (Double Award) – Mark Record Sheet

Centre no:	Centre name:	Internal moderator name:
Candidate no:	Candidate name:	Resubmission of new work / All/mostly amended / Some amendments / No amendments

Unit 2: ICT in Organisations

Assessment evidence	Annotation and page number	Mark Band 1	Mark Band 2	Mark Band 3	Centre mark	Edexcel use only
• the different purposes for which the organisation/department uses ICT		1-4	5-7	8-10		
• the ICT system used in the organisation/department, and how it meets the needs identified in (a)		1-6	7-10	11-14		
• a design specification for the system including information sources, input, process and output requirements, and the types of application software needed		1-7	8-12	13-17		
• evidence that you successfully implemented, tested and evaluated the system, together with guidance for the user.		1-7	8-12	13-17		
		FINAL TOTAL (max 58)				

Edexcel moderator use only		
Number:	**Name:**	**Signature:**

GCSE Applied ICT (Double Award) – Mark Record Sheet

Centre no:	Centre name:	Internal moderator name:
Candidate no:	Candidate name:	Resubmission of new work

All/mostly amended	
Some amendments	
No amendments	

Unit 3: ICT and Society

Assessment evidence	Annotation and page number	Mark Band 1	Mark Band 2	Mark Band 3	Centre mark	Edexcel use only
• the way you do things at home and at school/college		1-5	6-8	9-11		
• the adult in employment, including the way it has had an effect on his/her working style		1-6	7-10	11-14		
• a person with special/particular needs		1-5	6-8	9-11		
• your local community		1-5	6-8	9-11		
• the legislation that protects individuals and groups from the misuse of ICT		1-5	6-8	9-11		
		FINAL TOTAL (max 58)				

Edexcel moderator use only		
Number:	**Name:**	**Signature:**

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