Changing the accreditation of learning under the 14-19 reforms

The aims of the 14-19 agenda are to make reforms in three main areas:

- raising attainment now;
- designing new curriculum and qualifications; and
- delivering on the ground.

This section outlines the provision and developments to ensure that appropriate curriculum and qualifications are in place to meet the key stage 4 National Curriculum requirements, ensure the success of the 14-19 provision, and for it to be "the best anywhere" (DfES, 2007a).

All schools must follow the National Curriculum for ICT at key stage 4. Most schools will offer a programme leading to a qualification at key stage 4 although this is not mandatory.

The National Qualifications Framework

The National Qualifications Framework (NQF) provides a measure of level. Qualifications at the level of GCSE D-G are deemed to be level 1, those at the level of GCSE A*-C are level 2, and those at the level of A level are level 3.

An important "driving factor" in school development is the publication of performance figures. For the purposes of school performance figures and tables, *threshold performance* at key stage 4 is deemed "5 passes". Formerly this was expressed as 5 GCSE A*-C. With the diversity of qualifications, a new measure is being introduced that determines volume of study as a percentage (with 5 GCSEs=100%) and points level. In order to reach the threshold a learner must achieve 100% with level 2 passes in English and mathematics.

For post-16 students another important measure, alongside level and number of units, is the UCAS tariff (UCAS, 2006). UCAS have agreed a points value for all accredited qualifications that may be used to guide entrance to higher education courses. Under this system, for example, a grade A GCE A-level pass is given 120 points, grade A Applied ICT A level pass 240, Distinction at BTEC National Level 3 240.

Trainees should be aware of the performance figures for their placement schools, how they relate to those of other schools in the locality, the strategies in place to improve those figures and the contribution that the teaching of ICT makes to the threshold achievements.

Entry level	Level 1	Level 2	Level 3	Level 4	Level 5
	4 or more GCSEs at grades D to G	4 or more GCSEs at grades A* to C	at least 2 GCE A2 Levels or 1 A Level and 2 AS Levels or 4 AS Levels	Undergradua te degree	Postgraduate degree
	BTEC Introductory Award	BTEC First Diploma	BTEC National	BTEC Higher National Diploma (HND)	
	Entry to Employment (E2E) NVQ Level 1	NVQ Level 2	NVQ Level 3	Higher professional qualifications (NVQ Levels 4 and 5)	
New Diploma entry level	New Diploma	New Diploma	New Diploma		

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certificates	Foundation	Intermediate	Advanced	

Overview of qualifications including the New Diploma

Section 96 and the national database of accredited qualifications

"Under the provisions of section 96, 98, 100 and 101 of the Learning and Skills Act 2000, schools, institutions and employers in England may offer to those under the age of 19 a course leading to an external qualification which is funded either by a Local Education Authority or Learning and Skills Council only if the qualification is approved" (DfES, 2002c).

At key stage 4, schools and colleges can only offer qualifications that appear on the DfES "Section 96" list. The 96 here refers to the section that deals with this issue in the Learning and Skills Act 2000.

The National Database of Accredited Qualifications (NDAQ) supersedes openQUALS. This database contains details of all accredited qualifications in England, Wales and Northern Ireland. There are many alternative qualifications in ICT. QCA, and its counterparts in Wales and Northern Ireland, maintain the National Database of Accredited Qualifications (NDAQ) website at http://www.accreditedqualifications.org.uk

The qualifications are divided into Entry level (EL), GCSE, GCE (post 16 usually), VRQ (vocationally related qualifications), and NVQ (vocational qualifications). Further, for ICT, they are divided into IT Users and IT Practitioners. These are sometimes referred to as learning and skills sectors 6.1 and 6.2 respectively. Some qualifications, such as GCSE, cover both.

VRQs (unlike NVQs) can give graded results and they allow for the incorporation of vendor-awarded qualifications (see below) as units. An example from Cisco is the incorporation of their successful Cisco Networking Academy Programme into the National Qualifications Framework (NQF) (Cisco, 2006).

In the NVQ category there are many work-based units in the IT for Users and IT Practitioners sectors. These will most often be offered by further education colleges rather than 'schools' and require the learning/performance to be assessed in the workplace. The NVQs in IT include ITQ and ECDL. The Increased Flexibility Programme (IFP) provides for 14-16 year olds to learn off-site and to gain NVQs in other subjects, for example, motor vehicle engineering, as well as Applied GCSEs.

The range of qualifications available to schools

GCSEs and GCEs are available in ICT and Applied ICT. Many centres also offer GCE Computing; sometimes, this is in place of the ICT/Applied ICT courses. It is interesting to note that schools can be specialist Technology Colleges or Maths and Computing Colleges. ICT falls somewhere within or between these specialisms!

Among the most common level 2 ICT qualifications are the GCSE in ICT (single award), GCSE in Applied ICT (double award) and DIDA 'family' – the Diploma in Digital Applications or, more properly, the Diploma in Digital Applications for IT Users. Using the notion of threshold performance, a GCSE in ICT contributes 20% of threshold, GCSE in Applied ICT 40% and DIDA 80%. The NDAQ gives full tariffs for all qualifications, indicating their level, percentage contribution to threshold and points value. This latter measure indicates the breadth of study more finely.

The GCSE in Applied ICT was introduced in 2003. It has a similar structure to the earlier GNVQ Part One award. Students take three units and gain a 'double award'. The qualification was designed before the publication of the Tomlinson (2004) report but had similar aims and objectives. These include

- introduce students to work-related learning
- provide students with an overview of the sector
- equip students with some of skills they will need in the workplace or in further education or training

empower students to take charge of their own learning and development

(Edexcel, 2002)

A further objective is to "provide a range of teaching, learning and assessment styles to motivate students to achieve the best they can" (Edexcel, 2002). The assessment style for this course has been interpreted as a rather paper-intensive one. Partly as a result of this, and in order to exploit the developing multimedia facilities in schools, Edexcel designed and introduced the Digital Applications suite of qualifications. These provide an Award, Certificate and Diploma in Digital Applications – AIDA, CIDA and DIDA – worth 20%, 40% and 80% of threshold respectively (c.f. single, double and quadruple GCSEs).

The DIDA family use an electronic portfolio as the basis for assessment. It is thus "a paperless qualifications ... that focuses on the practical application of technology" (Edexcel, 2005). Further it is "designed to stimulate students' creativity and develop real-world, practical skills" (ibid.) The use of the e-portfolio in DIDA presages their wider use in other areas of learning. The government's e-strategy has an action to 'provide a personalised learning space for every learner that can encompass a personal portfolio', and a milestone to make a 'personalised learning space with the potential to support e-portfolios available to every school [and college] by 2007-08.' (Becta, 2007)

The full GCSE course provides the traditional single award (20% of threshold) with a combination of coursework and examination. The nature and content of these specifications vary between awarding bodies but are governed by the need to cover the National Curriculum. As an example AQA offer two such awards – labelled specification A and B. A significant difference between the two is in the nature of coursework assessment. In specification A, students have to produce a project and respond to board-set tasks (AQA 2006a). In B they have to produce two reports (AQA, 2006b). A complete overview of the GCSEs (full, short and Applied) offered by the major awarding bodies – AQC, CCEA, Edexcel, OCR and WJEC – may be found on the Joint Council for Qualifications website (JCQ, 2005). There is also a similar list for GCE qualifications (ibid).

Along with all other awards, the GCSE specifications will be affected by the review of the secondary curriculum (QCA, 2007d) and the need to embed functional skills. There maybe fundamental changes in the 'menu' of GCSEs offered as a result. With numbers of students taking Applied GCSE ICT courses falling by 10% in 2006 (JCQ, 2006:89) and the 'applied' nature of ICT as a whole it may well be that the distinction between Applied ICT and ICT is removed in the future.

Some schools use the GCSE short course option to provide accreditation and enable pupils to meet the National Curriculum requirements at key stage 4. In the qualification framework they are level 1/2 and offer 10% contribution to the threshold.

"This specification offers a flexible unitised format. Short Course candidates take the first two units only, while full course candidates must complete a further two units" (OCR, 2007a).

There is a concept of qualifications being proxies for key skills (QCA, 2004). If this is continued with functional skills, it may well be that a stand alone functional skills qualification replaces the short course GCSE as there may not be a need for both.

An alternative offered by school schools to all key stage 4 pupils is an entry level ICT course. It is at level 1 and not counted on performance tables. "Formerly known as the certificate of achievement, entry level qualifications are the first level in the national qualifications framework. They are designed for learners who are not yet ready for GCSE, NVQ or other level 1 courses. There are three stages of achievement, which are broadly in line with National Curriculum levels 1 to 3. Specifically, candidates have the choice of entry level 1, entry level 2 or entry level 3 ICT" (OCR, 2007b). QCA has identified good practice in the use of qualifications at Entry level and developed a number of case studies to illustrate how this has been achieved in variety of educational settings (QCA, 2007b).

"Entry level qualifications have been beneficial to teaching and learning. They motivate learners, increase their confidence and help them to progress. They help teachers to create better-quality learning programmes and encourage them to raise their expectations of learners...... At the heart of all these programmes must be a shared vision of how the learning below level 1 of the NQF can best be met" (QCA, 2005).

An alternative to the now obsolete GNVQ and the current Digital Applications qualifications is the BTEC Introductory Certificate and Diploma in IT@Work. It is a vocationally related (applied context) qualification at level 1 and contributes 80% towards the threshold. The Certificate and Diploma in IT@Work routes are designed to:

- develop a range of employability skills and techniques, understanding, personal qualities and attitudes essential for success in working life;
- develop learners' ability in IT through effective use and combination of the knowledge and skills gained in different parts of the qualifications;
- provide specialised studies directly relevant to IT and related sectors in which learners are working or intend to seek employment;
- provide a stepping stone into employment in the IT industry where some previous experience is necessary to gain initial employment.

The BTEC First Diploma/Certificate for IT practitioners is the level 2 equivalent; OCR iPro is a similar qualification (OCR, 2007c). They focus on:

- the education and training for IT practitioners who are employed in a variety of types of IT based and technical work in a support or trainee capacity, such as user support, customer services, hardware testing and production, data entry, network administration, education and training and publishing;
- developing the knowledge, understanding and skills of learners from a technician's viewpoint the role of the IT practitioner, their relationship to section/department in which they work and how their role and their department/section fits within the overall company structure and the external IT and local communities;
- providing opportunities for learners to focus on the development of the major key skills and the wider key skills in an IT context, such as improving own learning and performance, working with others and problem solving; and
- providing opportunities for learners to develop a range of skills and techniques, personal qualities and attitudes essential for successful performance in working life.

The OCR Nationals are found in an increasingly large number of centres. These qualifications are offered in four forms at level 2. The National First Award is a 20% of threshold qualification (equivalent to one GCSE), National Award 40%, National First Certificate 60% and National Certificate 80%. They offer a range of different approaches from the traditional examination at 16 model.

- flexible candidate entry (there are no entry deadlines)
- no external assessment (all qualifications are centre-assessed and externally moderated by an OCR Visiting Moderator)
- no set dates for moderation.

The move to centre-based assessment follows the model of the Edexcel DIDA family where centres are verified as having quality assured assessment processes.

Basic skills courses

The most popular basic skills courses are Computer Literacy And Information Technology (CLAIT, 2007) and the European Computer Driving Licence (ECDL, 2007). They are aligned with the NQF. An example, OCR has produced a level 1 New CLAIT. It is a VRQ with a 10% certificate and a 20% diploma. They also have CLAIT Plus, which is a level 2 award with a 20% certificate and a 40% diploma. CLAIT is an introductory course for people with little or no computer experience to those wishing to gain qualifications that extend up to Level 3.

ECDL (European Computer Driving Licence) is awarded by the British Computer Society. It has a 5% certificate at level 1 and a 20% part 2 certificate at level 2. Its new name is BCS Level 1/2 Certificate for IT Users (BCS, 2007) and BCS IT User Level 3 called ECDL Advanced.

Vendor qualifications

Students at school may be entered for qualifications awarded by vendors. Schools need to become approved academies for the vendor concerned. There are 3 popular opportunities:

Cisco (networking) http://cisco.netacad.net

Microsoft http://www.microsoft.com/uk/education/skills-dev/it-academy/faq

Oracle (database) http://academy.oracle.com

National Vocational Qualifications (NVQs)

NVQs are available in both IT Users and IT Practitioners sectors. They are 'competence-based' qualifications because students learn practical, work-related tasks designed to help them develop the skills and knowledge to do a job effectively. They are available at levels 1-5 and are vocational qualifications, with on-the-job learning and assessment.

NVQs are based on national standards for various occupations; those standards say what a competent person in a job could be expected to do. Taking an NVQ is most appropriate if the worker already has skills and experience and wants a qualification that recognises what they can do. NVQs are also courses where the worker compares their skills and knowledge with the occupation standards to see what they must do to meet them.

The phrase 'vocational contexts' is being dropped from the non-NVQ qualifications in favour of 'applied contexts' to avoid confusion between qualifications awarded through work (NVQs) and those through schools.

Other subjects

ICT teachers may find themselves being asked to contribute to courses leading to qualifications other than those labelled as ICT. This may be in respect of key or functional skills teaching but may also be part of the mainstream teaching of those qualifications. Subjects that fall into this category are those involving business, media and travel and tourism. Of particular note are those combined courses such as the level 1 Business and ICT offered by OCR or the BTEC level 3 National in e-Business.

Trainees should identify the qualifications offered in their placement schools and colleges. For each one the level and volume should be identified – how many units, how much contribution to threshold or UCAS tariff points. In the case of KS4 courses, these could be mapped against the National Curriculum. They should identify how the learning of ICT is monitored for those KS4 students who do not opt for a qualification.