MEETING THE CHALLENGE: INCREASING ACCESS, EXPLOITING THE USE OF C&IT AND ENHANCING THE QUALITY OF LEARNING AND TEACHING

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INCREASING ACCESS

There is no shortage of challenges facing education. Perhaps one of the most significant, best articulated, and most widely accepted is Millennium Goal 2: *Achieve universal primary education* [http://www.un.org/millenniumgoals]. The target of Millennium Goal 2 is to ensure that, by 2015, all boys and girls will be able to complete a full course of primary schooling. There is some evidence to indicate that progress is being made towards this goal. Indeed, the proportion of children in primary education in developing countries increased to 88% in the school year 2004/2005 (UNESCO, 2007). However, there are still over 113 Million children, mainly girls, who are denied schooling worldwide and some 800+ Million illiterate adults worldwide; two-thirds of these are women (Latchem, Lockwood and Baggaley, 2007). National Open Schools are enabling children to gain access to education. For example, in India the Institute for Open Schooling [http://www.nios.ac.in], together with Regional Open Schools has increased participation rates to 90%-95%. India's National Assessment and Accreditation Council have released a toolkit aimed at enhancing the quality of teacher education [http://naacindia.org/publications.asp]. SchoolNets, such as the one in Africa [http://www.schoolnetafrica.org/english/index.htm] are also increasing access. Indeed, at the launch of the 2008 PAN Commonwealth Conference at the University of London, 17th May 2007, Professor Abdul Khan, Assistant Director General for Information and Communication, UNESCO noted that the world-wide trend for school enrolments was accelerating. However, at the same event the President of the Commonwealth of Learning, Sir John Daniel, noted that although encouraging this increased enrolment in primary schools ". . . is creating a tidal wave (of students) directed at Secondary Schools" – and subsequently a surge of students wanting to enter higher education. In working to achieve millennium Goal 2 we are increasing the challenges facing tertiary and higher education. Indeed, over ten years ago, when Vice Chancellor of the UK Open University, Daniel remarked:

> *In the last seven days, somewhere in the world, a new university campus should have opened its gates to students. Next week, in a different location, another new university ought to begin its operations.*
>
> *At the end of the millennium in which the idea of the university has blossomed, population growth is outpacing the world's capacity to give people access to universities. A sizeable university would now be needed every week merely to sustain the current participation rates in higher education.*
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> *(Daniel, 1996, p.4)*

I am unaware of a new university being opening this week – or last week – or the week before. However, I am aware of the expansion in distance education around the world and success of Open Universities in SE Asia as well as those planned for Africa: the African Virtual University [http://www.avu.org/home.asp] and small nation states such as the Virtual University of Small States of the Commonwealth [http://www.col.org/colweb/site/pid/3109]. The growth of national Open Universities, their expansion and conventional universities embracing distance learning methods, has been a success story. It is thus surprising that an advanced technological country, like Singapore, is planning a fourth conventional university that will enrol 2,500 – 3000 per year to meet increasing demands for higher education. Unfortunately, with 81,900 applications for 13,950 places at the three Singaporean Universities in 2007 it is clear that simply scaling up current provision will not satisfy demand (Strait Times, 2008). To meet the challenge of increasing access we will need to teach differently and to embrace C&IT and distance teaching methods.

USING APPROPRIATE MEDIA

An array of audio, video, textual material and realia ('the real thing') are used in a variety of ways in our teaching; they represent a powerful mix of media. But how do we ensure we use these media, and the powerful interactive features of C&IT, to best effect? How do we avoid using technology for 'technology sake', select and deploy appropriate media? What criteria do we adopt in determining which are the most appropriate media for our needs, or rather the needs of our students, and how do we deploy

these in a Flexible Learning context? The ACTIONS Model, summarized in Figure 1, (Bates, 1995) has been invaluable to teachers, trainers and course designers.

Figure 1: **ACTIONS** model: Strengths and weaknesses of the medium

Access	- to the medium
Cost	- to student and institution
Teaching	- the role it performs
Interaction	- that is facilitated
Organisation	- its ability to support
Novelty	- to the learner
Speed	- to generate the medium
	(Bates, 1995)

The model enables us to consider Access to the medium in question – if all learners do not have ready access is the use of this medium appropriate? It addresses the Costs associated with that medium for institutions and learners – can the institution create and distribute that medium cost effectively, can learners afford it? The model encourages the learner to consider the Teaching function of that medium – does the medium used facilitate the desired learning outcomes, is it the most appropriate application for this technology? Learner Interaction with the medium is obviously a key consideration – what interaction does it facilitate and are these the ones desired? In pragmatic terms, the Organisation is not only responsible for generating the media, its distribution, but also its support and maintenance – can the institution sustain the use of this media? Whilst the media being considered may not represent Novelty to the teacher or trainer could it be intimidating to the learner – would be learner have the necessary skills to interpret the media used? The major cost in any teaching or training operation is staff. At what Speed can the medium be produced – can it be updated readily?

The model serves to reveal the strengths and weaknesses of particular media in a particular teaching context. Application of the model to the design of teaching material could do much to avoid 'electronic page turning' sites and others that merely leave learners to 'fend for themselves'. A Code of Practice that required course designers to assess the appropriateness of the different media deployed in the teaching material could do much to ensure the quality of course materials. What is more, such attention to the most appropriate use of media could save valuable resources - resources that are expended on high cost but low efficacy media.

EXPLOITING THE MEDIA

When thinking about teaching media in general, and C&IT in particular, it is tempting to consider the most recent, high profile technological developments and to consider their potential use in learning and teaching. For example, the Sony hand-held videogame machine, the PlayStation Portable now has a new facility, to connect to Skype - the free voice-over-Internet service. This hand–held, battery driven mobile device with computing power and connectivity is illustrative of developments in mobile or mLearning (Kululska-Hulme and Traxler, 2005) and is likely to have numerous educational applications.

However, one needs to differentiate between the medium being used in teaching and learning and the delivery method. Via three simple media categories - audio, video and realia I would like to illustrate how innovation and good practice can be exploited within the context of C&IT.

Audio

If increasing access to education is a major challenge in developing countries then the contribution of the clockwork radio (Baylis, 1999) must stand out as a milestone. The power of audio and linking audio to other media – audio vision – has long been recognised. Indeed, over ten years ago Tony Bates noted

> *When I am pressed to say what I think is the most cost-effective teaching medium, I tend to answer 'audio cassettes plus print'. I believe that audio cassettes are the most underrated technology of all in open and distance learning.(Bates, 1995, p. 148)*

CDs, DVDs and steaming audio may have replaced audio cassettes but the power of audio vision remains. Indeed, for the first two decades of the UK Open University broadcast radio was an integral part of the teaching package. Improvements in technology now mean a radio station can be fitted into a suitcase, powered by a car battery or solar power, and linked to FM networks [http://www.col.org/colweb/webdav/site/myjahiasite/shared/docs/suitcase.pdf]. In Tajikistan, Uzbekistan and Kyrgystan the Silk Road Radio [http://www.silk-roadradio.uz] delivers Soap Operas, with educational themes, to millions of listeners. In the State of Ceara, Brazil, the School of Public Health provides print materials to distant health workers, circulated in newspaper format as part of a State wide commercial newspaper, and links this material to a State wide radio programme. In Bangladesh, illiterate farmers are using a portable audio player, in the vernacular language, to learn how to grow Nile

Tilapia in rice paddies. This 'double cropping' is raising the standard of living and educating illiterate adults (Barman and Little, 2006).

Video

An even more powerful media is video – be it on DVD or streaming from a server. Video has, for example, the ability to present accounts from experts, famous designers or innovators as illustrated in the account of the invention of *Netlon* (the thermo-plastic mesh that is extruded from rotating dies (see video clip 1). The animation sequence, that illustrates the design features of *Netlon* production, would be extremely difficult and lengthy to explain in words or diagrams. In this context, animation is an appropriate medium.

The ability to simulate real life events, with none of the attendant dangers is illustrated in an extract from the UK Royal National Lifeboat Institution (RNLI) *Sea Safety Training* Interactive CD [http://www.rnli.org.uk/seasafety]. Sailors will be aware of the importance of recognising Cardinal Marks – the prominent North, South, East and West buoys that are positioned at key points on charts and the importance of being able to recognise their light signature in fog. The RNLI interactive CD displays the shapes and colours of these buoys, allows the user to 'increase' fog levels until only their light signature is visible (see video clip 2); another good use of the medium.

Video has the ability to present a sequence of particular activities or experiments; to provide primary source material upon which the theories are based and to collapse a lengthy real time process into a short period of time thus illustrating a sequence of events more efficiently. The illustration of the *Rabbit's Heart Experiment* (see video clip 3) combine these key features. Apart from only one rabbit's heart being sacrificed it gives the learner a clear view of the entire experiment, it compresses hours of laboratory work into a few minutes and yet provided experimental data from which to work; another fine example of using the most appropriate media. Other examples, plus advice on the most effective deployment of video and multimedia have been assembled (Koumi, 2006).

None of us would advocate replacing practical work with video representation – but being able to view an expert practitioner, in action, and to be able to replay that particular practical skill on demand, is one of the strengths of video. This was exploited in the DenTec Project at Manchester Metropolitan University (Ready, 2002). Demonstrations of dental techniques were recorded on high quality video so that all students could see exactly what was happening – sometimes clearer than the actual demonstrator! The archiving of these images, and their availability on demand, was judged by learners to be a significant aid to learning.

Realia

Using 'the real thing' in teaching is not always easy – as the UK Open University discovered when it decided to teach the physiology of the brain – sending learners a real sheep's brain through the post! More recent versions of the course use a plastic model of a human brain that allows the learner to study the various components (see video clip 4). The model is anatomically correct with removable component parts that fit together. In another course UK Open University students studying geology do not spend long field trips collecting poor specimens but receive appropriate specimens, together with slides, diagrams, charts and a magnifying glass to aid their study (see video clip 5).

Paramedics undergoing training at Auckland University of Technology are able to diagnose and treat dozens of medical emergencies without risking the life of a single patient. The full size manikin that replaces a human being has a pulse, blood pressure and can 'speak' to the paramedic via electronic communication equipment installed in the manikin! The trainer can simulate the symptoms of these medical emergencies, tell the paramedic (via the manikin) what they feel and react to the treatments received.

Whilst practical activities are often prized, and represent a demonstrable learning outcome, it does not mean these practical activities have to be undertaken in a laboratory or clinical setting. The Society of Cosmetic Scientists [http://www.scs.org.uk] realised that their successful diploma could simply not be scaled up to offer more places. Attendance in London for a weekly practical sessions precluded hundreds of potential learners. Their decision to transform the required practical work, into a series of Practical Activity Kits (PAK), enabled a five-fold increase in student numbers. Replacing a two-week residential course on perfumery by a 20 hour PAK serves to illustrate what is possible. It is noteworthy that the director of the residential course is on record as saying the PAK was 'as good if not better than the residential course'. The experience lead the University of Plymouth to offer the first degree in perfumery – offered at a distance.

EXPLOITING C&IT

The recent (2007) survey of C&IT and education in 53 African countries [http://www.col.org/colweb/site/pid/4766] provides information on:

- How C&IT is currently being used in the education sector in Africa, and the strategies and policies related to its use.
- The common challenges and constraints faced by African countries in their use of C&IT.
- What is actually happening in these countries and extent of donor involvement.

Amongst the survey findings are reported growing public and private partnerships, increasing digital content development, growing interest in open source software and operating systems, improved connectivity and rapid growth in wireless networks. Case studies of innovation and good practice are provided.

Examples of innovation and good practice can be found around the world. In India, specially equipped trains take information, business and agricultural training to remote communities (Baggaley and Ng, 2005). Furthermore, the large scale production of the Amida Simputer [http://wwwamidasimputer.com] and the One Laptop Per Child initiative [http://olpc.com/pictures.html] - costing US$100, will make C&IT available to increasing numbers of learners. Plans by the Indian Government to design the US$10 laptop will further increase access. Elsewhere, in Bangladesh, boats equipped with solar-powered C&IT facilities travel the river networks to provide free education and library services (Latchem, Lockwood and Baggaley, 2007). In Malaysia: specially equipped buses take C&IT facilities to remote areas [http://sdnhq.undp.org/it4dev/stories/malaysia.html].
Coupled with these initiatives are publications that will extend our understanding and application of C&IT (Weller, 2002, Naidu, 2003, Jochems et al, 2004, Juwah, 2006, Conole and Oliver, 2007).

A QUALITY LEARNING EXPERIENCE

The quality of learning and teaching is an issue that permeates all institutions of higher education and is one that the International Network for Quality Assurance Agencies in Higher Education [http://www.inqaahe.org] seeks to address. It is a body that includes over 65 countries. The Quality Assurance 'Guidelines of Good Practice', agreed by the General Assembly in Wellington, New Zealand in April 2005 [see http://www.inqaahe.org/docs/GG%20printing.doc], offers constructive advice and examples of sources of evidence.

Other published documents, such as those from the UK Quality Assurance Agency (UK QAA) (Quality Assurance Agency, 2000, 2000a) also offer detailed guidelines to assure the quality of the teaching materials assembled. The most recent Code of Practice from the UK QAA (Quality Assurance Agency, 2004) complements previous guidelines and is intended to be neither prescriptive nor exhaustive; its purpose is to offer a framework within which Quality Assurance can be monitored and achieved.

The advice that these published sources offer is excellent and is commended to the reader. However, within the context of constructive criticism, the UK QAA Code of Practice will be briefly reviewed and several aspects that receive little or less than full attention will be identified. Readers are invited to consider parallels within their own Codes of Practice / Quality Assurance Guidelines. Building upon the best practice illustrated could enhance the quality of the learning experience we provide to our students. It could ensure that the investment made by government, private providers . . . . parents and learners provide optimum returns.

UK QUALITY ASSURANCE AGENCY PRECEPTS WITHIN THE CODE OF PRACTICE. PRECEPTS B1 AND B2: DELIVERY OF MATERIALS

The UK Quality Assurance Agency Draft Code of Practice (Quality Assurance Agency 2004) identifies nine Precepts – associated with three aspects of Flexible Learning. Precepts B1 and B2 are associated with the 'Delivery of materials'. These two precepts note the responsibility of the host institution in terms of course delivery; the need to describe course components accurately, specify learning outcomes, describe teaching, learning and assessment methods as well as the schedule for materials delivery and course assessment. The Precepts serve to provide an administrative framework for delivery and are eminently sensible. Instituting procedures that would satisfy them will do much to improve the quality of the learning experience.

However, within the Code Precept B2 appears preoccupied with operational aspects of materials delivery – with the tracking of materials and provision of a secure and robust system. Indeed, it notes the need for alternative formats for course materials if delivery is compromised. Whilst such technical / operational matters are

important there is a danger that it may place insufficient stress on a key issue – Developmental Testing & Field Trials.

Issue 1: Developmental Testing & Field Trials

The Precepts fail to offer advice and guidance on field trials / developmentally testing the academic quality, teaching effectiveness and administrative efficiency of the materials (Zand, 1994). Whilst the mechanisms of delivery are obviously important it is the quality of the teaching material that needs to be paramount. Twenty years ago, it was demonstrated that without the testing of materials students can be subjected to inadequate learning materials that hinder / prevent learning (Henderson et al, 1983). A Code of Practice which stipulates that procedures need to be instigated to trial / test materials and systems, before a course is offered to students, could do much to ensure the quality of course materials.

In this context should be the anticipatory provision for students with Special Educational Needs. Within the UK, the Special Educational Needs Act 2001 means that institutions are required to ensure those with physical and communication impairments are not further disadvantaged. Guidelines as to how teaching materials can be made accessible to communication impaired students, those who are blind or partially sighted, who are deaf, or who have other communication difficulties, needs to be identified as part of the Code. Indeed, it is likely that attention to such quality control factors could enhance the accessibility of these materials for all students.

- Do you trial actual teaching materials, with real students, under real conditions before learners are subjected to them?
- Are all administrative and clerical systems trialled before students commence their course of study?
- Do you test the arrangements and procedures associated with tutor support before tutors are allocated to groups?

Precepts B3 to B6: Learner Support

Precepts B3 to B6 note the need for students to be aware of the expectation that the institution has of them as independent learners – of the independent and collaborative learning upon which they will be engaged and the time commitment involved. They note the need to provide information and contact details for those providing learner support - an identified contact person who can offer constructive feedback on academic performance and guidance on student progression. The Precepts also note the need to provide opportunities for inter-learner discussion and to obtain feedback on their experience of the programme as well as the skills that support staff possess and the briefing and training they receive.

The provision of course documentation, at the time of initial orientation or induction to the course, would be an obvious time to convey this information and sensitize learners to issues associated with learner support. However, the Precepts fail to adequately address student's preparedness for study, the importance of presenting materials that equate to a realistic workload (how student workload can be estimated) and how staff should be prepared for their tutor role.

Issue 2: Preparatory Materials & Courses

How do we ensure students possess the necessary skills of numeracy, literacy and information technology (IT) at the time they commence their course? If learners do not possess these skills any remedial action, alongside the course being studied, could place such learners at risk. The provision of diagnostic and developmental materials for numeracy and literacy are readily available and are often distribute to learners before they commence their course of study; the materials and advice provided by the University of South Australia are typical

[http://www.unisanet.unisa.edu.au/learningconnection/student/prepare/default.asp]. In addition to the internal IT courses that institutions offer to both staff and students, independent organisations have developed transferable IT qualifications such as the European Computer Driving Licence (ICDL (see http://icdl.co.uk). This self-instructional package, available online, on CD and in paper format provide the basic IT skills a learner would need to exploit C&IT.

- Do you provide diagnostic material by which learners can assess their preparedness for study?
- Do you provide materials to rectify any deficiencies associated with literary, numeracy and / or Information Technology skills?
- Do you collect any evidence to demonstrate the need for such materials and their effectiveness?

Issue 3: Workload & Readability

Institutions enter a contract with learners; institutions provided materials, teaching, advice and assistance, learners study in the manner suggested and commit the time suggested.

However, when the learning resources presented grossly surpass the estimated study time required failure and drop out are common. Indeed, it is not unusual for actual study time for a course to be several times greater than the time publicized. Elsewhere (Lockwood, 1998) the study time for course material was shown to be four to five times that published in the course prospectus!

In terms of student workload, evidence has been presented as to how the study time associated with similar credit weighted courses may be significantly different. Indeed, researchers (Macdonald-Ross and Scott, 1995, 1995a) using a Cloze Test to assess readability demonstrated that even an institution like the UK Open University has pitched teaching materials at too difficult a level with the sheer volume of some course materials being excessive. Others, (Chambers, 1994, Lockwood, 1998) have indicated how it is possible to estimate learner workload and have revealed the implications of over length material. Indeed, it has been suggested that over length material is not only counter productive but is likely to be a major factor in student drop out / withdrawal (Lockwood, 1998). Simple tools are available, such as the Flesch Reading Ease Score, that enable course designers to calculate the readability of materials and to do this online. Furthermore, relatively minor editing to these online materials can readily reveal how changes in readability can be achieved – for the benefit of both teacher and learner.

- Do you determine the reading ability of your learners?
- Do you monitor the readability of the materials you provide for study?
- Do you estimate the workload of the materials that constitute the programme of study?

Issue 4: Tutor Briefing & Training

The main asset of a university or college is not the buildings and equipment – it is the staff. Just as no one would consider buying a motor car and expecting it to run indefinitely without fuel, oil and routine maintenance, no one should expect academic staff to perform to their best, and enhance the quality of learning and teaching, without ongoing investment in their professional development. However, creating time in a busy teaching, research and administrative schedule for staff to engage in Continuing Professional Development (CPD), funding and recognising the importance of these activities, is essential.

Within the UK the Higher Education Funding Council for England provides universities with designated funds for CPD. [http://www.hefce.ac.uk/pubs/hefce/2006/06_11] . It coordinates such allocations and report on how they are being used. With the support from this funding my own university, for example, offers all staff, academic and support staff, an Academic and Professional Development programme starting with 'Letters of Completion' for isolated elements, to Certificates, Diplomas and even a Masters degree in CPD [http://www.celt.mmu.ac.uk/apd/index.php]. What programme of CPD is offered to you and your colleagues? Are you in danger of relying on the 'pedagogic fuel' you were given many years ago to take you down the learning and teaching road?

- In what ways do you invest in your course tutors?
- Do your tutors complete an appropriate training programme?
- What evidence is collected on tutor effectiveness?

Issue 5: Programme Evaluation & Review

Precept B5 proposes that learners have an identified contact person who can provide constructive feedback on academic performance and guidance on student progression, opportunities for inter-learner discussion and provision of feedback on their experience of the programme. These proposals are to be welcomed. However, in the context of this feedback two issues emerge. The first is associated with the nature of the feedback that will be collected, the second to what actions will be undertaken as a result. In a recent book (Simpson, 2003) it is noted that amongst UK Open University students a substantial proportion of those who enquire about study with the university subsequently fail to register. Amongst those who did register about 18% failed to submit the first assignment with typically 30% failing to complete the first year. Obviously, any instrument that is administered at the end of the first year of study will fail to capture the evidence of this key group of learners. It is noteworthy that the National Student Survey in the UK, piloted in early 2005, (HEFCE, 2006) will adopt a single rather than multiple survey points. Many institutions, like MMU, are considering supplementing this data with other surveys at critical points in the student life cycle. The need to survey those who fail to progress, these key informants, is vital and may provide information that can be acted upon and shared with all learners (Brennan and Williams, 2004). Indeed, providing summaries of information provided by learners, and the actions resulting from it are not only good practice but is likely to increase response rates.

- What 'routine' procedures or mechanisms are in place to evaluate all aspects of the programme across the student life cycle?
- How reliable and valid are the methods of data collection from learners and key stakeholders?
- How are the findings communicated to learners and stake holders and acted upon?

Precept B7 and B8: Assessment of Students

The criteria against which students are to be assessed, the weighting of constituent parts, and the importance of formative assessment and expectation regarding summative assessment are important elements within the Code of Practice. Comments associated with the Precepts relate to the importance of robust and secure systems, of the tracking of assignments, the briefing of external examiners and authentication of student work. These are all important aspects of student assessment. However, the cost of providing learning materials and the systems that support them is not fully addressed.

Issue 6: Costs & Economics

It is not unusual for enthusiasts within institutions to devote substantial amounts of time and resources to the creation of *3rd or 4th Generation* Flexible Learning courses (Moore and Kearsley, 1996) for small cohorts of students. However, is the production and delivery of the course, module or unit cost effective? Do student numbers in each presentation, and the number of presentations before revision, make the required investment worthwhile? Would it be more cost effective to buy in a course, direct students elsewhere or work in partnership with other organisations to achieve economies of scale? Have the costs and economics of materials and system production for the institution, and the students, been identified and reconciled (Rumble, 1997, Hulsmann, 2000).

It is noteworthy that a recent UK National Report from the Inspectorate (Further Education Funding Council, 2000) noted:

> *Colleges do not know the costs of distance learning because these are rarely disaggregated. Little or no account is often taken of the 'hidden' staff costs in producing learning materials. Notional allocations of tutors' time in making contact with students is sometimes substantially exceeding in practice. At the moment, it is impossible for most colleges to engage in any meaningful cost-benefit analysis.*
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> *(Further Education Funding Council, 2000 p. 14)*

Consideration of the cost effectiveness of Flexible Learning is not a feature of the recently published QAA Code of practice for the assurance of academic quality and standards in higher education – perhaps it should be.

- Are the 'overhead costs' of administrative, clerical, academic and support costs known?
- Is a detailed lifetime costing of the programme, and its constituent elements, presented prior to embarking upon production?
- Are the critical costing points in relation to staff costs, student numbers and infrastructure required to maintain the programme known prior to the outset?

CONCLUDING COMMENT

The challenge of increasing access to potential learners will not be achieved by trying to scale-up current, conventional provision. The success of Open Schools (Bradley, 2003), and teaching online (Weller, 2002, Juwah, 2006, Jochems et al, 2004) indicates that we can teach differently and has demonstrated that learners can achieve the required learning outcomes. Indeed, conventional institutions are increasingly becoming flexible learning institutions. However, financial resources are limited. Whilst the most expensive component in any educational enterprise remains the teacher, the most appropriate use of resources can make the difference between success and failure. In this context it is worth recalling the prophecy of Tony Bates in his book *Technology, Open Learning and Distance Learning*, published over ten years ago, Tony Bates stated:

> *. . . those countries that harness the power of multimedia communications for education and training purposes will be the economic powerhouses of the twenty-first century.*
>
> *(Bates, 1995, p. 249)*

Tony Bates was right, since his comments C&IT have become central to operations within education, industry, commerce and the public services. Within education the impact of mobile learning increases rapidly (Metcalfe, 2006, Keegan, 2008).

The Code of Practice published by the UK Quality Assurance Agency, and similar documents published by others, are sound documents and the comments above should not be regarded as major criticism of the UK QAA –

but rather suggestions on how the ongoing process by which standards and guidelines can be enhanced.

However, the process of Quality Assurance is the responsibility of all of us. As such you are invited to consider your own Code of Practice or institutional Quality Assurance Manual to ensure quality materials are presented to your students. The real challenge is to ensure every learner achieves their potential.

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