Graduates for the 21st Century

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Terry Eagleton was recently asked to write a book on “The Meaning of Life” (2007). The catch was the book was not to exceed 100 pages! He actually succeeded, granted with the help of a good deal of wit, but more importantly, without compromising intellectual standards. Eagleton's challenge was perhaps not dissimilar to that faced by Scottish universities that are now expected to demonstrate their engagement with the latest QAA Enhancement Theme “Graduates for the 21st Century”.

Of the nine Enhancement Themes the sector has been asked to engage in since 2003, this one certainly not only sounds the most profound but is also the broadest. It is intended to pursue an integrating approach and bring together the previous themes, particularly employability, assessment, flexible delivery and teaching-research linkages. Given that engagement with each of the themes is encouraged typically for only a couple of years before a new one is given priority, the challenge is certainly upon us, over the next year or two, to develop ways of engaging with “The 21st Century Graduate” theme that could eventually make a positive difference to the experience of future students.

What attributes, skills and competencies will graduates need in the 21st century and how can the achievement of these attributes best be supported?

Does the theme have substance?

What to make of claims that the world we live in is different now from what it used to be? That our graduates need to possess new forms of knowledge in order to contribute effectively to the world of work, play a significant part in technological innovation, make a positive difference to the survival of our planet, and contribute successfully as well as meaningfully to intercultural understanding and conflict resolution? What to make of claims that today’s students are different? Are we, the lecturers, course organisers and teaching administrators different from our colleagues twenty years ago? How to respond to claims that the university, its staff, and the forms of knowledge and inquiry it is concerned with, and the teaching and assessment strategies it employs, need

What are Enhancement Themes?

Enhancement themes are part of the Quality Enhancement Framework Scotland adopted for its higher education sector and they mark specific areas in which institutional and sector-wide innovation and development in pedagogy and curriculum are particularly encouraged (www.qaa.ac.uk/scotland/qualityframework/enhancementthemes.asp).

The questions underpinning the latest theme are:

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What to make of claims that the world we live in is different now from what it used to be? That our graduates need to possess new forms of knowledge in order to contribute effectively to the world of work, play a significant part in technological innovation, make a positive difference to the survival of our planet, and contribute successfully as well as meaningfully to intercultural understanding and conflict resolution? What to make of claims that today’s students are different? Are we, the lecturers, course organisers and teaching administrators different from our colleagues twenty years ago? How to respond to claims that the university, its staff, and the forms of knowledge and inquiry it is concerned with, and the teaching and assessment strategies it employs, need

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to urgently adapt to the challenges posed by this new context of the 21st Century? Are these contested issues?

Yes and no, and maybe. It is undoubtedly the case that UK higher education policies on widening participation and internationalisation have contributed to today’s student population being much more diverse than only twenty years earlier (we can observe this in relation to age, prior academic preparation, gender distribution in certain programmes, proficiency in the English language, ethnicity, faith, disability and also the cultural and social capital students have acquired before coming here). It is further apparent that many undergraduate students have had extensive exposure to information technologies that most teachers were incapable of imagining only a few years ago (and some of us are still stuck in a state of sheer wonder at the students’ facility in using and easily adapting to ever newer versions that appear on the market. Teachers who have not yet fully caught on to the basics, such as Facebook, Wikis, Blogs, and Twitter, or the difference between iphones and ipods, and routinely use e-diaries and communicate with colleagues and postgraduate students through skype, might at times indulge in nostalgic memories of the good old days of the 20th Century University!). A large proportion of students expect universities to make greater use of new technologies in their teaching and assessment practices and our failure to do so may easily lead to a perception that our practices are out of date.

New technologies aside, a culture of accountability also made students more vocal about what they expect of a university education. Students’ scores on the feedback scale of the National Student Survey, for example, stirred up considerable debate within the University over the adequacy of our feedback provision. Are our feedback and assessment practices adequate for the context of the 21st Century?

But the student body having grown larger, more diverse, more used to the latest information and communication technologies and possibly more vocal regarding the quality of education received, is not all the latest enhancement theme encourages universities in the 21st Century to engage with.

Policy initiatives on higher education released over the past several years, in the UK and other Western countries, emphasise that universities should prepare students for employability, lifelong learning and civic responsibility given the increasingly complex and uncertain contexts of our times (AAC&U, 2002; Dearing Report, 1997; DfES, 2003). Related documents describe today’s world as rife with unprecedented challenges and the University’s role as finding ways of responding to these and thus serve the needs of society.

In the remainder of this essay I will offer a few observations on what might be involved in educating students in and for the 21st Century. My focus will be on two related questions:

Must the University change in order to meet the needs of the 21st Century graduate, and if so, to what extent? And/or are students, and society at large, best supported by a University that remembers its unique purposes and fulfils its distinct functions?

With the help of the Careers Service, the University recently released a list of so-called ‘Generic Attributes of Graduates of The University of Edinburgh’ that is seen to describe the qualities that students will have developed by the time they leave our institution. I draw on these locally developed attributes and place them within the context of the wider debate on Graduates for the 21st Century, the aims of higher education and the difference between ‘production’ and ‘action’. My purpose is to argue that the Edinburgh attributes are consistent with both the University’s distinct ‘raison d’être’ and the needs of the 21st Century student and society.

Preparing for employability: a matter of compliance or contestation?

Some observers of higher education recognise policies that emphasise the university’s role in preparing for employability, lifelong learning and civic responsibility as the government’s direct response to the pressures of globalisation, which impose an agenda on universities to produce a certain kind of worker, learner or person. Rather than being simply compliant with such an imposed agenda these colleagues invite us to critique and contest it.

The extent to which we agree with this view is a matter not just of differences in ideology or conceptions of the purposes of higher education but also of different interpretations of what preparing students for employability, lifelong learning and civic engagement means. Perhaps the issue might be framed as such: Is university education a process of production whereby externally imposed purposes (to bring about employability, civic responsibility and lifelong learning) are seen as pre-determined ends and our degree programmes as nothing more but the means to effectively and efficiently realise these? Or does university education have its own (internal) distinct ends, which find expression in the very nature of the opportunities for learning that our degree programmes afford? And are these opportunities for learning not only effective in bringing about certain ends but also desirable and meaningful in their own right, and in the best interest of society, as, we assume, are the ends themselves?
How do we typically understand the ends or aims of higher education?

Are they obvious or contested? If we think of higher education not as a system but as a process, does the very notion of higher education, as compared to the education offered in schools and other settings, place certain parameters on a definition of educational aims of universities? Asking academics how they understand the aims or purposes of higher education will bring about different responses, for example the development of the individual student’s intellectual autonomy, the formation of general intellectual abilities and perspectives, the enhancement of the individual student’s personal character, or the development of the ability to critically comment on the host society (see also Barnett, 1992, pp.20-21). There might be alternative views and they are not necessarily mutually exclusive. But is it possible to say anything more succinct about the underlying nature of these aims that we typically associate with the idea of education at university level? Can we identify their essence?

Ron Barnett (1992) attempted such a synthesis of aims and concluded that:

“Contained within the idea of higher education are the notions of critical dialogue, of self-reflection, of conversations, and of continuing redefinition. They do justice to the idea of higher education because it is through such processes of the mind that a higher level of understanding — and ultimately action — is achieved” (p.29).

In order to engage in these processes of self-reflection and critical dialogue, he argued, students need to be introduced to high-level concepts and a breadth of frameworks so that they can critically evaluate issues from a variety of perspectives. What is implied in Barnett’s definition of the aims of university education is a concern for personal development, intellectual development and engagement with our social world.

Preparing students for employability, civic responsibility and lifelong learning may be consistent with these aims and processes of higher education if preparing for employability is understood not as fitting graduates into predetermined roles but as helping them shape the world of work (Teichler, 1999), if preparing for civic responsibility is understood not as promoting compliance but as supporting students in becoming critical and engaged (Giroux, 1991), and if preparing for lifelong learning is seen not simply as helping students to constantly adapt to new situations to satisfy solely personal and economic purposes but as promoting ethical development and learning for social justice, democracy and civic engagement (Bagnall, 2001).

Rather than viewing higher education as a form of ‘production’ directed at satisfying externally imposed ends or purposes it may be seen as a form of ‘action’ (Arendt, 1958) where the means (the higher education experience we provide) and the ends (criticality, curiosity, and democracy) are internally or constitutively related (Carr, 2000). Engaging with notions of employability (and civic responsibility and lifelong learning) need not mean to uncritically succumb to an externally driven agenda but could involve creating an internal agenda and owning it (Fanghanel, 2007; Kreber, 2010). The ‘ifs’, then, are fundamental.

But how best to support students in their learning for criticality, curiosity and democracy -- what type of learning opportunities would be suitable to assist students in attaining these goals?

Supporting complex learning

At a Higher Education Colloquium on “The 21st Century Graduate” organised by the TLA Centre last year (www.tla.ed.ac.uk/events/Colloquium2009.htm), Professor Ron Barnett proposed several attributes as being crucial for student success in academic life and also post graduation. Specifically he distinguished between qualities and dispositions. By dispositions Barnett meant the ways in which students go forward or engage with their studies and the world. He suggests these include:

- A will to learn
- A will to engage
- A preparedness to listen
- A preparedness to explore
- A willingness to hold oneself open to experiences
- A determination to keep going forward

By qualities he meant the direction and character that are given to these dispositions. Professor Barnett suggests qualities include:

- Integrity
- Carefulness
- Courage
- Resilience
- Self-discipline
- Restraint
- Respect for others
- Openness

Both dispositions and qualities are important. While dispositions could be fostered through curricular arrangements that require students to take responsibility for their learning, qualities, Barnett argues, would be encouraged principally by pedagogies (that is the concrete ways in which course teams encourage students to engage in the learning process) that are both affirming of students but also hold up critical standards.
At the Edinburgh Higher Education Colloquium on “Teaching and learning within the disciplines” organised by TLA in 2005 (www.tla.ed.ac.uk/events/Colloquium2005.htm), Professor Marcia Baxter Magolda also commented on the pedagogies needed to bring about complex learning. She argued that the complexities and uncertainties of our times render it imperative that universities prepare students for self-authorship. By the latter she means an intellectual and personal maturity that is influenced by but also supports students’ increasingly sophisticated conceptions of the subjects and disciplines they are studying.

Self-authorship is promoted through activities whereby students are encouraged to engage with the viewpoints of others, including the ways of thinking, the practices and the values that define particular disciplinary communities (Hounsell & Anderson, 2009) and, through this engagement, are assisted in reframing their understanding of the issues they are studying and also of themselves. The very idea of learning underlying this approach is that of a social, socio-cultural and transformative process rather than that of a purely cognitive and accumulative activity.

Baxter Magolda suggests that the development of self-authorship is supported through pedagogies that are based on three principles: students are validated or confirmed in their ability to know and contribute, learning is situated in the students’ experience, and learning is conceptualised as a relational process of shared knowledge building whereby different interpretations are considered and evaluated. These principles also underlie the process of inquiry-based learning where students learn in a research mode.

In a recent LERU (League of European Research Universities) paper entitled “What are universities for?”, the authors commented:

“Generation by generation universities serve to make students think ... they are taught to question interpretations given to them, to reduce the chaos of information to the order of an analytical argument. They are taught to seek out what is relevant to the resolution of a problem, they learn progressively to identify problems for themselves and to resolve them by rational argument supported by evidence; and they learn not to be dismayed by complexity but to be capable and daring in unravelling it ... They are the qualities which every society needs in its citizens ...”. (Boulton and Lucas, 2008, paragraph 30).

They went on to suggest:

“The more recently advocated functions of universities [here they mean entrepreneurialism, managerial capacity, leadership, teamwork, adaptability and the effective application of technical skills] are only part of a wider project which contains their essence. That capacity that leads to economically significant outcomes is derivative from a deeper creativity” (paragraph 31).

Similarly, as was argued earlier, a concern with employability and adaptability towards lifelong learning is perhaps best interpreted as derivative from, or a side-effect of, the very nature of university education, which is rooted in intellectual and critical engagement with significant questions stimulated through active enquiry within individual disciplines and across disciplines.

**Learning within and across disciplines**

Discussing the linkages between teaching, learning and research, Stephen Rowland (2005) argued that at the very core of learning at university level was enquiry rooted in ‘intellectual love’. He maintained that one of the university’s principal functions, therefore, was to foster a disposition in students to wanting to engage in such enquiry and always yearning to find out more about a subject or issue. Boulton and Lucas (2008), in the recent LERU paper, likewise observed:

“The point is to direct a students’ attention to that which, at first, exceeds their grasp, but whose compelling fascination draws them after it”.

Rowland (2006) further proposed that students should be involved in learning that is characterised by critical dialogue, within but also between the disciplines, so that they develop the capacity to challenge the ideological positions and assumptions that underlie the various perspectives they encounter.

One way of stimulating such critical and possibly cross-disciplinary dialogue is through enhanced opportunity for interdisciplinary study. At a Learning and Teaching Forum organised by the TLA Centre in 2008, on ‘Encouraging greater choice within the curriculum’ (www.tla.ed.ac.uk/services/LTforums/LTforumFeb08.htm), Professor Marcia Devlin, then at the University of Melbourne, commented on the widely publicised Melbourne Model of curriculum reform, that offers students enhanced opportunity to engage in multi- but also interdisciplinary study at undergraduate level (for a discussion of the distinctions between these concepts see Davies and Devlin, 2007), where students have the opportunity to study complex topics (such as the AIDS pandemic, land use or global warming) from the perspectives of several disciplines through a coordinated effort of discipline specialists.

Similarly, Professor Baxter Magolda, who spoke at the Edinburgh Colloquium on “Teaching and learning within the disciplines” (www.tla.ed.ac.uk/events/Colloquium2005.htm), argued that graduates must
be able to translate their disciplinary learning into transdisciplinary contexts. In other words, students need to be able to apply their academic learning to the complex issues encountered by our humanity (one might think of climate change, intercultural conflict resolution, animal and human health and welfare, the economic crisis, etc.), solutions to which are calling not just for a single disciplinary lens but multiple and possibly interdisciplinary lenses to inform them. This requires both a sound grounding in particular disciplinary perspectives but also an understanding of the limitations of these and an appreciation of alternative frameworks.

The Edinburgh graduate attributes make reference to the students’ capacity to critically engage with the frameworks, values, methodologies and boundaries of the disciplines studied.

The Edinburgh model of graduate attributes

The Edinburgh model of graduate attributes developed with the help of the Careers Service, is built around three overarching attributes or themes, namely ‘enquiry and lifelong learning’, ‘aspiration and personal development’ and ‘outlook and engagement’. Each of these themes or attributes is seen as a cluster of four overlapping skills and abilities: ‘research and enquiry’, ‘personal and intellectual autonomy’, ‘communication’ and ‘personal effectiveness’.

These attributes were identified through focus group discussions with staff and students in each of our three Colleges. Although these attributes are principally seen to enhance employability, the skills, abilities and personal qualities underlying them can be seen as critical not only for being successful in the work setting but also for contributing effectively in other social environments (see also Yorke & Knight, 2003).

Examples of the Edinburgh attributes include:

• Having an informed respect for the principles, methods, standards, values and boundaries of their discipline(s) and the capacity to question these
• Being open to new ideas, methods and ways of thinking
• Being intellectually curious and able to sustain intellectual interest
• Being able to respond effectively to unfamiliar problems in unfamiliar contexts
• Recognizing the benefits of communication with those beyond their immediate environments
• Being able to flexibly transfer their knowledge, learning, skills and abilities from one context to another, utilizing their understanding of the issues pertinent to each situation

Can such a list of graduate attributes serve a meaningful purpose?

The very notion of a ‘list’ does not sit comfortably with many of us: lists make us think of something that is prescriptive, a managerial rather than academic concern and we even tend to associate lists with close-mindedness. Is an alternative reading available to us?

A closer look at the suggested attributes reveals that most of them are informed by a research ethos and are compatible with Boulton and Lucas’s (2008) account of the type of education characteristically found in research-intensive settings. They also are consistent with how philosophers and developmental psychologists studying questions of curriculum and learning in higher education – for example Professors Baxter, Magolda, Barnett and Rowland – describe the nature of learning at a higher level. But some of us may still ask: Do we really need such a list? Does it not just state the obvious? Moreover, might it not be more meaningful for each programme to identify the distinct attributes -- or dispositions and qualities as Barnett put it -- it intends to promote in its graduates? Perhaps the list of attributes developed with the help of the Careers Service can only be a starting point, albeit a very helpful one. It says “this is what we strive to promote in all our graduates, regardless of the specific programme(s) on which they are studying”. It thereby invites further discussion and debate around whether these attributes are meaningful and how they might apply within disciplinary contexts.

Interpreting these ‘generic attributes’ for particular disciplinary contexts and programmes won’t be easy. Nonetheless, programme teams embarking on this task might find it rewarding as it is likely to result not only in an academically-sound but also a pedagogically-sound rationale for how the degree programme is structured. There will be issues to be resolved, particularly in relation to course design and assessment. What are the learning environments and learning tasks that allow students to develop the attributes we identified as desirable and what assessment practices are best suited to both further their development and establish whether standards have been met? Likewise, students may find it helpful to their learning if they are made aware of the attributes the programme is intentionally trying to promote.

Demonstrating attributes

With the goal of better meeting the needs of students and employers, The University of Edinburgh will soon start issuing to graduating students the Higher Education Achievement Report (HEAR). Rather than just reporting the degree classification achieved, HEAR is intended to offer more information about the content of courses, students’ strengths and weaknesses, and
the full range of skills and experience that students gain during their time at university.

Within The University of Edinburgh but also in the sector more widely, discussions have been taking place during the past several months over how this might be achieved. A strong driver in these deliberations has been the question of how to demonstrate that our graduates are ‘employable’. Providing evidence of employability is seen in direct relation to certifying the graduate attributes students have attained through their engagement with the university.

There are several possible ways of doing this, among them the recording of student involvement in significant extracurricular activities. A small caveat should be raised at this stage: too much concern with performance measurement could render university engagement with the whole notion of ‘desirable graduate attributes’ a rather meaningless or superficial endeavour. The point is the crucial difference between overt demonstration of a performance, behaviour or action and the student’s internal dispositions and qualities driving it.

Perhaps rather than focusing our efforts on the best way of measuring whether students have achieved certain attributes, we could turn our critical eye to the kinds of learning opportunities we intend to offer and the intellectual and ethical reasoning processes, and learning dispositions and qualities, we hope these will inspire. The message to employers, then, perhaps need not be, ‘We certify that this student is good at communication, risk management and team work, etc.’, but instead could be: “Our degree programmes at The University of Edinburgh are thoughtfully designed to promote the development of such and such attributes through the following kinds of learning opportunities …”.

If we can show how complex graduate attributes are infused with the academic learning outcomes underlying our individual degree programmes and are developed through intellectual enquiry typical of education informed by a research ethos, it is easier to claim that Edinburgh graduates are making significant contributions to society at large, not just in the form of specific technical skills and their deployment in specific roles in the economy, and hence for ‘employability’, but also in terms of preparing students to confront the challenges of complexity, change and uncertainty characterising the 21st Century.

References


Yorke, M., & Knight, P. (2003) The Undergraduate Curriculum and Employability. Enhancing Student Employability Co-ordination Team (ESECT) and Learning and Teaching Support Network (LTSN) Generic Centre.
The environment is one where the rate of change is intensifying and the pressure to succeed increases. It is supercomplex, risky and turbulent.

This depiction is true, both of the operating context for higher education and the world into which our students graduate. Together, these facts influence the provision universities aim to deliver to their students – in terms of learning and teaching, and in relation to the co-curriculum.

Both universities and students want not only to survive but to thrive, prepared to tackle the key challenges faced by the societies of today and tomorrow.

This necessitates the ability to ask tough questions, work across boundaries, to pioneer and innovate, yet control risk. Potential has to be maximised, drawing on wide-ranging strengths and honest self-appraisal, engaging effectively with surrounding environments, professions and communities. These attributes are key to the success of institutions and students alike, and are encompassed in Edinburgh’s statement of graduate attributes.

Grasping these challenges as a University, both for our institution and for our students, steers the work of the University’s Employability Consultancy and stimulated the development of the University’s graduate attributes framework.

Graduate attributes: the story so far …

‘Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include but go beyond the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents of social good in an unknown future.’

‘the skills, knowledge and abilities of university graduates, beyond disciplinary content knowledge, which are applicable to a range of contexts’

Graduate attributes are not remedial or bolt-on skills; they are skills, abilities and dispositions that transform and enable higher education knowledge and learning and must be translated into a discipline context in order to make full sense.

Research of existing national and international work on graduate attributes, covering both the statements developed and how these were used by institutions, highlighted the work of Simon Barrie, University of Sydney. Barrie’s conceptual model appeared to have strongest suitability for the University of Edinburgh context, structure and ethos, and was used to inform the development of our framework and as a basis for further discussions. Cross-institutional consultation with staff and students in 2008 identified three overarching attributes, underpinned by four overlapping clusters of skills and abilities which describe an Edinburgh graduate.

Each overarching attribute (in the outer ring) can be understood as a blend of the four overlapping clusters
of skills and abilities. The particular skills and abilities that comprise each of these clusters will likely differ by academic discipline.

Each of the overarching attributes and underpinning clusters of skills and abilities exists on a spectrum – students will have their own personal journeys, starting and finishing their University lives at different places on the spectrum, but all students will have the opportunity to benefit from the transformative nature of the University experience. Regardless of their starting points, by virtue of the experience offered by the University, all students should make progress on these spectrums, concluding their time at the University better equipped for their futures.

Ours is a complex and highly devolved institution. One of the challenges was therefore to develop a graduate attributes framework that makes sense across the University. This results in two important features:

- the framework is aspirational in nature, rather than only being a statement of current practice; and
- the framework’s structure solicits interpretations of the statements that differ between academic domains, while retaining an overall cohesion. This tailoring is necessary to ensure the graduate attributes are relevant to all levels within the University.

Graduate attributes: differing contexts

The development of student attributes is a constant thread throughout the University’s Strategic Plan, whether referring to learning, teaching or research. Apply these attributes to different contexts and we see how they shape our students and graduates …

- to academia – the type of students and researchers they are/can be;
- to society/community – their contribution to society and citizenship; and
- to work and career – their employability.

As a consequence, work that helps foster our students’ attributes impacts on, and is supported by, all aspects of the student experience. It is these graduate attributes that help prepare our students to tackle the ever evolving challenges facing them during and at the end of their studies.

If we view these graduate attributes within the context of work and career, we see students’ ability to be successful and have impact, both in the short and long term – in other words, their employability.

The challenges are well known and pronounced within the labour market in particular, but a student who has been given and has grasped the range of opportunities available while at University, will have both maximised the value of their time and enhanced their employability. Such students stand out from the crowd within today’s increasingly competitive labour market.

Defining employability

‘a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful
in their chosen occupations, which benefits themselves, the workforce, the community and the economy.

Employability is not the same as gaining a graduate job; rather it implies something about the necessary attributes and capacity of the graduate to function and be successful in a job and be able to move between jobs, thus remaining employable throughout their life.

The University has responded to the drive to enhance employability across the higher education sector by successfully bidding for strategic funding from the Scottish Funding Council, available to 2011. As part of the Employability Initiative the following have been established:

• **Employability Steering Group** chaired by the Vice Principal Academic Enhancement; and

• **Employability Consultancy** which exists as a central resource working with all levels of the University to coordinate, develop, support and promote, existing and new activity designed to enhance student employability.

The Employability Initiative has already undertaken a large number of employability-enhancing activities, ranging from the development of new School- or discipline-specific provision to University level projects. One of these projects has been the work outlined above on graduate attributes.

As noted above, graduate attributes in their fullest sense are much broader than just employability – graduate attributes have relevance to all aspects of the student experience and therefore have a range of linked agendas, e.g. curriculum renewal, HEAR (Higher Education Achievement Report), work-related learning, PDP (Personal Development Planning) and ePortfolios.

**Graduate attributes: the story continues…**

The Employability Initiative has worked to tackle graduate attributes from an employability perspective within local and pan-institution projects. However, the work on graduate attributes is linked not just to employability, but to all aspects of the University’s student provision and seeks to help the University and its students tackle the challenges of the coming years. Through consultation, this work has produced an aspirational framework of graduate attributes that concurrently allows an overall cohesion and different disciplinary interpretations.

The foundation work has been done. The challenge now is to interpret the framework to our individual settings; to consider and recognise the existing practice that fosters these attributes; to share this to enhance overall provision; but most importantly to share it with our students so that they can best prepare themselves to leave University ready for the challenges awaiting them.


Further information on the Employability Initiative, the Employability Consultancy and the Graduate Attributes Framework is available on the Employability Initiative website (www.employability.ed.ac.uk). If you wish to discuss this further, or are interested in taking forward work on graduate attributes within your own setting, please get in touch – contact details are also available on the website.
Sean Brocklebank: ‘Best Postgraduate Tutor’

Interview by Miesbeth Knottenbelt, TLA Centre (IAD)

Sean Brocklebank recently won the EUSA Teaching Award for Best Postgraduate Tutor. Sean is in the third year of his PhD in the School of Economics. He came to Edinburgh in 2006 to take a one-year Masters course, which led to an ESRC-funded PhD programme.

How has Sean developed his teaching?

Like most of his fellow PhD students, Sean started teaching tutorials in the first year of his PhD. He found it fun right from the beginning. His experimentations were received well and motivated him to put in a bit more energy. He sees it as his personal challenge to engage students with dry and difficult subject material. Digging out current news stories and live examples from the internet to illustrate dry facts, processes and numbers on a weekly basis; and turning challenging problem-solving exercises into class games, are two examples in his growing repertoire of keeping students tuned in.

His School’s support and interest in his new approaches encouraged him to get more involved, and he has subsequently acquired significant roles in the School. He is developing a new set of tutorials and labs for students on a Masters course; creating more engaging materials for the weekly first-year tutorial programme; and designing and implementing an ambitious new School-wide support and development programme for next year’s new PhD students. Apart from an occasional stand-in for an absent lecturer, he has not done much of his own lecturing so far. This will have to wait for the time being as he needs to keep progressing work on his PhD project and several other current initiatives.

What keeps him going?

Sean discusses his teaching with his colleagues, especially before trying out new material. His contemporaries, with few exceptions, share offices and come together regularly with the course organiser to plan and prepare for the next set of teaching tasks over pizza. (Sean successfully lobbied to get pizza organised for these weekly tutors’ meetings.) Trying out different things and tweaking them along the way helps Sean figure out what works and how it can work better, and keeps his teaching alive. For example, he has discovered that throwing a chocolate at correct answers to tricky questions, seems to get all students actively involved (‘Even the Masters students, some of whom are very mature and experienced, seem to go for this!’). He has now established a budget and store for his chocolate supplies in the School.

He also puts serious efforts into getting to know his students, for example, by organising an ambitious programme of social events (a Halloween party, a trip to the Highlands and other weekly activities). This helps him find out how well they understand the material and how his teaching is working. A series of focus group meetings with students at different levels organised by the School also provided him with useful pointers for his current work. Some external teaching resources (handbooks and online materials such as the Higher Education Academy’s Economics Subject Centre website) are now coming to his attention, and Sean is keenly tapping into these to see what is on offer.

His next steps?

Although there is little overlap between the courses on which he is teaching and helping re-design on the one hand, and his personal research project (on personality in economics) on the other, he obviously enjoys taking on growing responsibilities in this area and considers the range of these experiences valuable. Beyond his immediate plans of publishing two collaborative interdisciplinary papers and working on an ESRC summer internship for the Cabinet Office, the future after the PhD looks quite open and full of possibilities. Going by his successes to date, Sean will undoubtedly rise to the many challenges that he will manage to create for himself, and the EUSA Teaching Award will be documented as a small but significant milestone along a rich and lively path of ambitious initiatives.
Why PebblePad?
Nora Mogey and Robert Chmielewski, Information Services

From the start of the academic year of 2010/11 the PebblePad eportfolio system will be provided and supported for all Edinburgh University students and staff. What is PebblePad? Why should anyone be interested in using PebblePad? Which PebblePad tools are likely to be of particular interest?

ePortfolios are often defined as purposeful collections of digital artefacts that exhibit learners’ efforts, progress, and achievements in one or more areas. However, the use of ePortfolios should not be viewed solely as a static gallery. When embedded into the curriculum they facilitate reflection, collaboration and assessment and can be used to document learners’ achievements holistically, incorporating social and personal development just as easily as traditional academic activities. Moreover, we can use ePortfolios to encourage students to set personal learning goals and to provide feedback as peers, as tutors or as friends.

As part of a pilot study, 14 course organisers decided to use the eportfolio package PebblePad during the 2008/2009 academic year. The course sizes and study subjects varied from over 200 students (Career Development Planning, Business Studies) to 12 students (MSc International Animal Health). Different aspects of PebblePad’s functionality appealed to the different course organisers for different reasons and purposes.

At the end of that academic year the course organisers were asked to summarise their experiences. Here are some of the opinions:

The overwhelming reaction from students is positive. Pedagogically, the students prefer a modality that allows them to express themselves. Indeed, if there is a danger it is that students enjoy PebblePad so much, that they spend more time of these assessments than the credits (often 35 credits) warrants.

Dr Tony Kinder  
MSc Management Research & Development

So far, everyone has received the system very favourably. Our only problem would be that there is so much that can be done in PebblePad we all tend to get lost down corners and dreaming about how we can use all the tools. I can see our use increasing as we become more familiar with the product.

Sharon Boyd  
Certificate in Advanced Veterinary Practice

Once their supervisory support has been confirmed we suggest that the students provide these named individuals with access to an ePortfolio in order to enhance the collaboration between them and their supervisors. We recommend that they use the blog tool to record their thoughts and progress and encourage their supervisors to support them via this approach.

Dr Kim Picozzi  
MSc International Animal Health

When using the system, students showed lots of their own initiative. The potential of the tool is bigger than just a personal development tool. It would not have been possible to run the programme without it.

Dr Anne Robertson  
MSc Advanced Nursing Practice

Each ePortfolio block starts with students exploring a set of exemplar ePortfolios from around the web, getting access to their own ePortfolio space, and completing core readings. This year their ePortfolio space was provided within PebblePad, and the response to it was generally positive (this has not always been the case in previous years).

Jen Ross  
MSc E-learning

Key amongst the lessons learned was the importance of knowing beforehand what is to be achieved through the use of the ePortfolio. Regardless of how attractive PebblePad may look or sound – it is just a collection of tools. As with everything, specific tools are suited to specific tasks. Therefore, if a course does not contain tasks that can realistically be completed with PebblePad then PebblePad should not be introduced.

In order to help students realise and visualise what PebblePad is (and what it is not) it was helpful to characterise PebblePad as an educational equivalent of MySpace or Facebook. Students are already familiar with using these tools to share personal information, and they are comfortable with online collaborative behaviours. Although these tools can be used in an educational context they were not designed for this,
and many students are reluctant to allow their private world of Facebook to overlap with their academic life.

PebblePad’s suite of tools is extensive, and initially may appear too generic. However almost all the tools can be tailored to local contexts, and training and support will be available to allow users to realise their vision. Amongst the customisable tools are Profiles and Proformas.

In PebblePad a Profile is a customisable framework against which users can rate and evidence their skills, abilities, competences or any other form of demonstrable learning they are asked to develop. They allow users to rate and/or evidence a range of abilities presented to them on a Profile tailored to their particular course or personal/professional needs. Over time their ability rating can be reflected upon and amended and multiple types of evidence can be added as appropriate. Some people use them for articulating learning skills or graduate attributes. They could be used extensively for professional routes like teaching, social work and health-related courses but also for programmes leading to recognition by professional bodies like law, architecture and pharmacology. Profiles can also be set up to allow multiple users to rate each other and there’s even a statement bank to store frequently used feedback and validation comments.

Proformas are essentially customisable wizards that can be created to support the diverse activities and recording requirements that learners experience. They allow users to record their learning or experience using digital forms tailored exactly to their needs. Proformas can be built using most common question types including text entries, multiple choice and Likert-style.

Some people use them to create context specific reflective frameworks well known in a particular subject area. Proformas can also be used as placement records, learning journals and assessment submission declarations. Any form that might have previously been used as a word document could be converted to a Proforma. Proformas can also be created to act as assessment feedback forms or as forms to scaffold a learner’s reflection on feedback they have been given.

Any kind of digital evidence can be added to a Profile or a Proforma including audio, video and other forms of multimedia. Equally important is the ability for users to reflect on their developing knowledge, understanding and performance over time – and for others to be able to comment on and support this process. Like all PebblePad assets peers, tutors or assessors can comment on Profiles and Proformas.

With more and more PebblePad forms and profiles being offered to students, ePortfolio tasks may become too complicated. Therefore, new solutions are being developed to make the submission process quicker and more efficient.

Another feature likely to be of particular interest is the webfolio. Students can use webfolios as an evidence-based website, used to present stories about themselves or stories about their learning. They can contain any number of pages which can be added to, edited or deleted at any time. Pages may also contain links to websites and other assets within an ePortfolio.

Tutors have also started creating blank webfolios consisting of a collection of empty forms/profiles, blogs and action plans. These are then shared or published for students to download, populate and submit.

In 2009, PebblePad was used during the first year mainly to support students’ learning activities. From 2010/11 the usage will expand as the system will also be deployed to support staff development initiatives – initially on a pilot basis within Information Services (skills framework; managers’ development programme and annual development reviews).

This article presents only a small snapshot of the tools and functionalities available in PebblePad. Readers who feel inclined to learn more are invited to look at www.ed.ac.uk/is/eportfolio and to apply at is.helpline@ed.ac.uk for an early account.


Profile: Siân Bayne

Interview by Daphne Loads, TLA Centre (IAD)

Dr Siân Bayne has been teaching at the University of Edinburgh since 2004, and is now Senior Lecturer in the Department of Higher and Community Education at the Moray House School of Education. In 2008, Sian received the Chancellor’s Award in recognition of “innovation, relevance, creativity and personal dedication” in her teaching. So what do those qualities mean to Siân?

I think creativity is absolutely core to teaching. There are many, many brilliant teachers in this institution, very creative teachers, but in the end there is a limit to the learning spaces you have to play with on campus. Because my own teaching is entirely online, I am expected to use the most cutting edge and most interesting and most talked-about, the most challenging, most exciting learning environments that are out there. So that means that I am in a privileged position. Creativity is maybe not talked about as much as it might be, certainly in online learning. I think that the digital environments that we have available to us are so rich, so exciting that we need to extend our discussions beyond, for example, ‘How could I use WebCT here…?’ It’s actually much bigger than that. We’re working with a shifting media paradigm, and we have to respond to this creatively. It’s no good just trying to replicate the existing practice in online environments.

What sparks her creativity?

My students! We are very lucky in our students. Because they are all themselves practitioners in HE or FE or training and development, they’re all very engaged in the technology and very interested in the teaching and learning. They’re all very bright as well, so they really push on, push forward our ideas.

What about relevance?

In the case of my own teaching the relevance is to do with its media context and the sense that as a university and as a society generally we’re having to think creatively about what the digital culture means for us. There’s almost nothing more relevant!

And innovation?

Innovation is probably the word which is most commonly tagged on to online teaching and learning. I think to conduct genuinely innovative online learning is really, really hard. Our teaching is genuinely innovative in that we are working with globally distributed groups of learners, entirely online. Last semester we delivered a course which was completely open on the internet, all publicly available. That was very risky because that was about really putting ourselves on the line as teachers and students. Anyone from all over the world could come in and comment on students’ work and what we were doing online. It was a risky strategy. Students and teachers alike were quite nervous about it, but we seem to have pulled it off!

And what does Siân have to say about personal dedication?

Everyone on the team is very dedicated to their students and to the health of the programme. I got that award because my colleagues on the programme team nominated me and that was something which was really special for me. Since then EUSA has launched the Teaching Awards, and in the two years that they’ve been running, we’ve received two or three nominations for awards each time. It does mean an awful lot. We feel very good about what we do.

The MSc in E-learning gives professionals in higher and further education and training and development the practical skills and critical insight they need in a fast-moving and richly diverse field where learning, teaching and training are profoundly affected by the challenges of the digital age. This Masters programme is delivered fully online, and may be taken full-time over one year or part-time. Although it is a distance-learning course, participants have the opportunity to work closely with fellow students and tutors in a properly supported, collaborative and vibrant online learning environment, studying at the times and in the places which suit them best. For further information see: www.education.ed.ac.uk/e-learning/
Book Reviews

Miesbeth Knottenbelt, TLA Centre (IAD)

Developing Graduate Attributes:
Politics, process and assessment
Anne Campbell (2008) Saarbrücken: VDM Verlag Dr Müller

Responding to national pressures to turn out employable graduates with generic skills that are transferable to professional contexts, universities have developed policy frameworks and corresponding course design and delivery that explicitly intend to foster transferable skills. These skills include independent thinking, individual agency, self-directed lifelong learning, self-confidence and communication skills. This book contributes to recent debates in the higher education literature that question the nature of the claims made about teaching transferable skills through course design and delivery. It shows the full complexity of the processes that might be involved in acquiring some of these skills. It also examines the appropriateness of the current widespread intention to develop specific skills such as critical and independent thinking, individual agency, and confident communication. It shows convincingly how a set of international students with a range of origins and destinations interpret and deploy these skills and attributes in many different ways.

The generic title of this book is misleading in that its subject is quite narrowly focused on the particular experiences of international postgraduate students in an Australian university. The book presents ethnographic accounts of 10 students’ lives from before they started their studies in Australia through to what happens in their careers afterwards, in rich detail. The students are from a wide variety of backgrounds, and the accounts throw complexity on questions about when, where, how and why generic attributes and skills such as self-confidence and independent thinking are developed. For example, the case studies illustrate how the experience of living abroad in itself affects self-confidence in both positive and negative ways, and in the short term and longer term in different ways. Similarly, it shows how commitment to on-going self-development and self-directed learning appears to be influenced principally by attitudes of parents and other role models, and the opportunities that present themselves in the local communities to which the students return after their graduation. Independent thinking, individual agency and successful entrepreneurship seem to correlate closely with the size of the community to which these students return; the relative status of academic qualifications; and the nature of governance and general cultural values of these communities. How attributes such as having the confidence to challenge existing ideas are played out appears to be culturally embedded: ‘[This] may be done in private, among close friends that can be trusted, or among foreigners who insist that this is normal practice in higher education, but doing so in public is not the norm in China, The Maldives, Fiji, or Japan.’ (p. 247). The author leads to conclude that:

The development of ‘generic graduate attributes’ is a process that neither begins with the university experience, nor ends with graduation. It is a complex process lasting a lifetime, and one that is affected by many people and many different situations, of which the university experience is only one. (p. 254)

The real strength of this book, however, lies in how it reminds us of other themes that are often forgotten in teaching international students. It illustrates the richness and diversity of the life experiences that these students bring to their host universities, and the profound influence their prior life experiences have on the way they experience their studies and go on to make use of their qualifications. In this context, the case studies also raise profound questions about the appropriateness of these skills agendas that are often imposed in unquestioned jargon but tolerated in silence. In the words of the author:

It is understandable that Western countries have developed lists of generic graduate skills and attributes that are relevant to specific Western societies, but developing graduate attributes is a process influenced by the cultural, ideological, economic and political context in which it occurs. Whether these lists are (or should be) globally applicable, remains open to question. (p. 255)

While these particular case studies will perhaps be more familiar in an Australian HE context, there will be many overlaps with UK realities and this mismatch in itself does not make the argument less convincing, transferable or indeed relevant to our context.
Improving Intercultural Learning Experiences in Higher Education: Responding to cultural scripts for learning

Institute of Education, University of London, Issues in Practice series

This 65-page booklet complements the above-mentioned text very well in that it is about international students in a UK context, and in that its focus is practical. Based on an empirical study of the learning experiences of 40 international students in London, it develops three themes:

1. **The variety of cultural interpretations of learning**
   Part one discusses the fundamentally different cultural interpretations of learning in higher education contexts around the world, that are found in this set of students. These section headings illustrate some of these differences:
   - Being critical as [opposed to] confronting others’ viewpoint
   - ‘We write like we speak’
   - Reading the author [as opposed to the text]
   - The [teacher as the] respected guru
   - Respect for knowledge authority
   - Interaction as hindrance
   - Interaction as losing face

2. **Learning experiences in the UK**
   Part Two discusses what happens when differences in previous learning experiences (as documented in Part One), leads to various interpretations of what goes on during learning in the UK, and gets in the way. Some themes discussed in this part:
   - different perceptions of the purpose of talking (‘shouting’?) and reading (‘labouring’?) in learning
   - different interpretations of what we would call informality (‘a mask’?)
   - the negative effects of peer interaction (when the distance between learners, particularly between native and international students, is not bridged, there appear to be negative consequences for international learners)

3. **Intercultural learning: what might it look like and how could teaching environments be changed to enhance the experiences of international students?**
   The final part considers the complexity of any notion of ‘assimilation’ (Whose role is it to change what?). It argues convincingly that if we agree that learning should not be viewed according to one dominating story (which in all probability we would want to avoid), then our agenda becomes: How must our practice change to take these complex differences genuinely into account? This section makes many practical suggestions. We can:
   - get to know our learners: ask questions about previous learning experiences and different models of what is good practice in teaching
   - present opportunities to make the differences we find between our learners explicit
   - take these different approaches to learning into account, review and reflect on them, and adapt our approaches to take account of all learners
   - explain the approaches we take and invite discussion about these
   - ask questions about how content is received and how it is translated and transferred
   - re-assess content for inclusion of non-local content and applicability in non-local contexts
   - adapt ways in which we communicate to facilitate the situation for non-native speakers (e.g. bilingualism can be supported in the classroom, questions need to be asked, stereotyping should be avoided)
   - use logs/diaries to encourage reflexivity of teachers and learners (where logs/diaries are shared, dominant models can be challenged and discussed)
   - during classroom or on-line interaction, take action to allow for all different voices (stronger as well as weaker) to be heard

An example is provided in the Appendix of a statement in a course handbook that rationalises the particular approaches taken by the course team, and invites discussion about learning experiences. The authors sum up their conclusions:

> Intercultural learning spaces are constructed as a result of the interaction among diverse ways of making knowledge. [...] It would be a space in which multiple narratives of learning are accepted and expected as well as respected. (p.61)

The book brings a powerful message and presents plenty of ideas for following up some of its recommendations.

*Both these books are available to borrow from the TLA Centre Resources Centre.*
The Institute for Academic Development

Dr Jon Turner, Director, Institute for Academic Development

The University has a national and international reputation for innovation and excellence in teaching and learning, academic development and skills training. Until now, support for this work has been spread across several different units. In bringing these groups together into the Institute for Academic Development we aim to harness their strengths and improve support for staff and students.

The Institute was established in January 2010. It will initially comprise the Centre for Teaching, Learning and Assessment (TLA), the Postgraduate Transferable Skills Unit (transskills), the HR Researcher Development Programme and Office for Lifelong Learning (OLL) study skills provision. Our remit includes continuing professional development and dissemination of best practice in teaching and supervision, promotion of student study skills, professional and transferable skills development for PhD students and researchers, and the development of innovative strategies in teaching and assessment.

The Institute will run courses, workshops, practice-sharing events and seminars. Institute staff will offer guidance and consultation to students, staff, Schools and Colleges, and will conduct and support research into University teaching and learning. Collaboration with Schools and other groups will play a key role in our work, particularly through secondments to the Institute.

It is early days for the Institute. We plan to move to a single location by the end of 2010. In the meantime, in order to minimise disruption for students and staff, support will continue to be offered and advertised through the existing units (e.g. TLA, Researcher Development and transskills). Through consultations with Schools and colleagues from across the University we will use 2010 to develop a structure and programme of activities designed to support the strategic priorities of the University and Colleges.

Future issues of Interchange and the Institute for Academic Development website (www.iad.ed.ac.uk) will include updates on our progress. We look forward to welcoming you to future Institute events and to working with you. Please contact me (j.d.turner@ed.ac.uk) if you and your School would like to hear more about the Institute and discuss opportunities for collaboration.

The Principal’s Teaching Award Scheme

Three new projects have been funded by the Principal’s Teaching Award Scheme, all planned to start in 2010:

Monitoring, Reflecting on and Disseminating Teacher and Student Experiences within e-Learning in Biology
Professor Graeme Reid with Dr Yuhua Hu, Dr Paul McLaughlin, David Barrass, (School of Biological Sciences), Dr Hamish MacLeod, Chun Ming Tai (Moray House School of Education)

Teaching Ethnographies: Qualitative Method Training and the Reflexive Ethnography of Teaching and Learning
Dr Lotte Hoek with Professor Jonathan Spencer, Alex Robertson, Dr Jennifer Curtis (School of Social and Political Science)

Preparing Medical Students for Self-Directed Learning in Statistics: What Should We Expect of Tomorrow's Doctors?
Dr Margaret MacDougall (School of Clinical Sciences and Community Health) with Professor Simon Maxwell (Clinical Pharmacology Unit), Dr Helen Cameron (Medical Teaching Organisation), Dr Sandy Reid (School of Molecular and Clinical Medicine), Arek Juszczyk, (CMVM Learning Technology Section)

For further information about the Scheme and the projects funded by it, see the TLA Centre website at www.tla.ed.ac.uk