

## **Graduate Attributes and the Knowledge Society: Developments in Scottish Higher Education**

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### Abstract

Higher education is in a state of transformation across the world. The 2009 synthesis report from the Global University Network for Innovation (GUNI) entitled 'Higher Education at a time of Transformation: New Dynamics for Social Responsibility' draws attention to the many challenges that confront the sector that stem from those of wider society. It argues that we must move beyond the 'ivory tower' or market-oriented university' towards one that innovatively adds value to the process of social transformation. However, there are emerging tensions that bear upon this question and coalesce around such issues as reactive versus proactive approaches with respect to knowledge paradigms; a focus on the knowledge economy versus the knowledge society; and knowledge relevance versus competitively driven knowledge. One approach to higher education that attempts to grapple in with these issues is 'The Graduates in the 21st Century Enhancement Theme' within the Scottish higher education system. This goes some way to recognising that graduate attributes rest, not simply on the ability to master knowledge content, but perhaps more importantly on the personal qualities that graduates acquire during the course of their learning. These qualities are now regarded as key aspects of being able to contribute to the evolving globalised knowledge society and economy. This paper offers a sympathetic and yet critical appraisal of this approach as it attempts to inculcate and develop in students a range of abilities to deal with complexity, uncertainty and multi or transdisciplinarity. The demands made upon such attributes are ones that are not only concerned with employability but also an increasing concern with global issues and the development of civic awareness and responsibility. It is argued that these pressures, in effect, lead to a concern with how graduates develop their sense of identity as something that is engineered and re-engineered to meet these demands.

## Introduction

Higher education is in a state of transformation across the world. The 2009 synthesis report from the Global University Network for Innovation (GUNI) entitled *Higher Education at a time of Transformation: New Dynamics for Social Responsibility* draws attention in its introduction to the many challenges confronting the sector that stem from those of wider society: beyond the 'ivory tower' or 'market-oriented university' towards one that innovatively adds value to the process of social transformation. The report argues that this creation and distribution of socially relevant knowledge is something that needs to be core to the activities of universities, thereby strengthening their social responsibility (p 7). The report goes on to outline the emerging tensions that bear upon this question. These obviously apply to the Scottish higher education sector as much as any other and come together around a set of interlinked oppositional themes: reactive versus proactive institutions with respect to knowledge paradigms; the knowledge economy versus the knowledge society; universities for the public good or private good; and knowledge relevance versus competitively-driven knowledge.

Although these may at first sight appear high-order concerns and issues that are somewhat at a distance from everyday teaching and learning practices in higher education, they do however have a considerable bearing on it. It is clear that on the back of these concerns rests what higher education is for in terms of equipping graduates with the tools to deal with complexity, uncertainty and change. This requires being able to work across as well as between disciplines, the ability to integrate knowledge from different sources, and the capacity to analyse ethical, social and environmental implications of knowledge. This is a tall order indeed and it is therefore not enough to simply focus on traditional aspects of teaching, learning and assessment in higher education unless we are clear on how these aspects relate to such higher-order concerns. To do otherwise would be to fail to consider the very purpose of how these core activities of higher education directly relate to the development of graduates who are able to operate in and for a changing world.

As the GUNI report puts so well, this calls for us to be clear and to rethink the purpose of higher education; a purpose that is one of transformation rather than transmission:

The central educative purpose of HEIs ought to be the explicit facilitation of progressive, reflexive, critical, transformative learning that leads to much improved understanding of the need for, and expression of, responsible paradigms for living and for 'being' and 'becoming', both as individuals alone and collectively as communities.' (GUNI, 2009, p 11)

This move away from the almost exclusive focus on higher education as involving the transmission of knowledge to a growing focus of the learner and the transformational nature of the experience has been a feature of the Scottish system since 2003. This reform known as the 'Enhancement Themes' approach has led to a range of policy and institutional initiatives that have attempted to modernise the higher education system in light of the increased participation and widening of access. As the name of this approach suggests, the focus is on enhancement as a means of changing and improving the higher education experience. This is based on the view that the student is at the centre of the process and that the focus needs to be on learning experience rather than the traditional focus on pedagogy *per se*. This has led to a series of projects which have been overseen by the Quality Assurance Agency (QAA) for higher education in Scotland. These include a consideration of the nature and purpose of the First Year; developing employability, changes to assessment practices, responding to students' needs, and research-teaching linkages. Taken together these various themes have gone a considerable way to shaping institutional practices through for example teaching and learning strategies that have impacted upon the learning experience for students.

### **The knowledge Society and the Knowledge Economy**

There has been something of a debate around the differentiation of the terms 'knowledge society' and 'knowledge economy' and the relevance of this for higher education (Sörlin and Vessuri, 2007). The two terms tend to be used interchangeably but it is evident that although they are inter-related, there are differences between them. The term knowledge society arose from the earlier term of 'information society' in order to move beyond the notion of technological change and to include social, cultural, economical, political and institutional transformation. Some writers, notably Castells (2001), refer to the informational society, making the comparison between industry and industrial. In this regard Castells draws attention to the ways in which his use of the term informational is indicative of a form of social organisation in which information is fundamentally linked to productivity and power. Castells goes onto

consider how informationalism reinforces control over the labour process and extends capitalism through a 'networked' *modus operandi* around the world.

However whilst his position has much to say about the reach of informationalism within the knowledge society in which knowledge is aligned with production, he has less to say about knowledge as a potentially negotiable, conflicting and perhaps liberatory aspect of human activities and social relations. In other words, there is a conflation between the knowledge society and the knowledge economy that reduces the latter to the former. However, the knowledge society may also be viewed as distinct from the knowledge economy in the sense that it is more than a commodity or something to be managed. It can also be regarded as something that is a participative and interactive process that is for the public good.

For the purpose of this paper, my position is not to become ensnared in debating the appropriateness of one term or another, but rather to consider how higher education can support both a transformative role as well delivering graduates who are able to operate within the knowledge economy and drive it forward. My focus is therefore on how students develop both as citizens within the knowledge society and also in relation to their potential employment as part of the knowledge economy. As Probst, Raub & Romhardt (2000) point out, knowledge is based on information, but is always bound to persons and constructed by them. For this reason educators in higher education need to bear this in mind as they design curricula and pedagogies that aim to develop graduate attributes.

### **Graduate Attributes: Graduates for the 21<sup>st</sup> Century**

All twenty Scottish higher education institutions are currently working on the 'Graduates for the 21st Century Enhancement Theme' which attempts to consolidate and build on the previous Themes. A major focus of this work is the development of graduate attributes (GAs) in terms of the qualities that graduates acquire during the course of their learning. These qualities are key to being able to contribute to the evolving knowledge economy and society that we now live in. The ability to adapt to changing circumstances, to work across knowledge boundaries and to become active and engaged citizens are therefore crucial outcomes for this approach.

However, whilst this is an often a much admired approach to higher education reform, it is not without a number of challenges and tensions. These, of course, are

not unique to Scotland, but the strong focus on graduate attributes arguably throws them into greater relief. Take the increased diversity of student population that enters the first year, which is a result of the widening of participation. How can we ensure that this diverse population acquires those graduate attributes that we say are crucial to the purpose of higher education? And how do the varying personal, cultural and economic circumstances of students impact upon the development of these attributes? How do students identify with their place in higher education as *students*, rather than as, for example, consumers?

If there is one thing that has shaped our approach to the changing nature of higher education it is the increased diversity of students at the point of entry. It is the widening of participation and the concomitant increased diversity of student background that has forced us to rethink how we encourage the development of graduate attributes across such a diverse body of students. There are therefore questions about the sociological impact on higher education and in what ways the focus on the development of certain attributes can be squared with such diversity. In a wide-ranging review, David (2007) notes:

In the early twenty-first century, there are clearly rich and diverse studies about and on higher education within a sociological methodological framework. While many of the studies point to the malign effects of globalization and neo-liberalism on the processes of managerialism and bureaucracy, masquerading as quality assurance, within higher education they also celebrate the ways in which the new forms of 'academic capitalism' allow for a diverse and potentially inclusive form of higher education....It remains an open question about what the future of higher education may hold for subsequent generations into the twenty-first century: equity or diversity or both? (p 687)

Given the impact of the current global economic situation and the imperative that has been placed on higher education to 'deliver' on employability, then David's point above becomes all the more acute. It is also the case that GAs are, to some extent, intended to contribute to the development of citizenship. And, of course, it is in this context that we need to consider and how to best integrate the previous Enhancement Themes under this banner so as to bring about a more 'joined-up' approach to the delivery of 'Graduates for the 21st Century' within the Scottish higher education system.

Whatever the details, the broad direction is towards new approaches based on dialogical modes of learning that are focused around the notion of co-learning involving participatory and problem-oriented methods. There are also moves towards disciplinary learning that involves a reflexive engagement with the subject and its forms of knowledge. However, such approaches are not without their challenges and perhaps one of the greatest is that of the risks associated with the learning process. The imperative students to be successful in their learning career in higher education and to develop their confidence is one that does not sit easily alongside the idea that they can benefit from exposure to risk and to open forms of learning that encourage creativity. In this respect, Smith (2005) notes that the quest for equity and efficiency can drive meaningful educational risk from the university. And yet if knowledge is to be at one and at the same time acquired and yet open to supplementation or challenge, then exposing students to the learning process in this way necessarily involves an element of vulnerability. However, as previously noted, students now come from a wide variety of backgrounds and need varying levels of support to gain confidence in their learning.

### **Personalisation and Personal Development Planning**

If we wish to engage and empower students in the first year then one way we can do this is through personal development planning (PDP) and an associated personalisation of the curriculum. This is very much in keeping with the view that higher education is a transformational engine for students and society in general. However, it is easy to conflate these two aspects of higher education although they are nonetheless interrelated.

Personalisation and the personal have rapidly risen up the agenda within the pedagogical discourses of higher education. This is unsurprising in a mass higher education system in which, as previously noted, questions of diversity, difference and widening participation have taken centre stage. It is also arguable that this focus on the personal is an effective counter to the notion that mass higher education has brought with it mass teaching. However, there has also been the promotion of the view that personalisation equates this with improved learning and motivation. The major pedagogical implication of such an approach is the adoption of measures designed to encourage students to be self-learning, self-actualising and self-initiating. There is the view that a homogeneous offering is not sufficient in meeting students' needs. Pedagogies that meet a diverse population of students are still nonetheless

needed within the efficiency parameters that are required in terms of what is deliverable for a mass higher education system. Yet, despite the emphasis on meeting students' needs, a major driver behind the move towards personalisation is the recognition that mass higher education has also been accompanied by a concern regarding retention and motivation. This in turn has led to a focus on the extent to which students can maintain a sustained effort over the course of their studies; their ability to persevere.

Student persistence in 'staying the course' through to graduation cannot easily be pinned down to a narrow set of explanatory factors but as Harper and Quaye (2009) note, one thing is certain: those who are actively engaged in the educational process both inside and outside the classroom are more likely to be successful than their disengaged peers. Of course what we mean by 'engagement' and 'persistence' is up for grabs, particularly in today's mass higher education context. Influential writers such as Barnett (2006, 2007, 2009) suggest that the 'will to learn' is a key aspect of the student experience that needs to be encouraged and nurtured. According to this view it is not the subject of study or the acquisition of skills that educators need to focus on but rather personal aspects such as authenticity, dispositions, inspiration, passion and spirit. Of course, this is not a new idea but what Barnett has perhaps drawn attention to more than others is how this process is related to an increasingly rapidly changing and uncertain age. As he puts it:

The fundamental educational problem of a changing world is neither one of knowledge nor of skills but is one of *being*. To put it more formally, the educational challenge of a world of uncertainty is ontological in nature. (Barnett, 2006, p 51)

Barnett's call to educators in higher education to consider how they can develop curricula and pedagogies that provide students with the qualities to persist, adapt and thrive in this environment is relevant to the notion of personalisation in the first year and the development of 'the will to learn'. Much of his focus is therefore directed towards how such qualities or attributes can be developed and in doing so this connects with related concepts such as personal development planning (PDP) and graduate attributes (GAs). Simon Barrie's work has had a significant impact on thinking about the nature of generic GAs in higher education (Barrie, 2004, 2006, 2007). For, example, in developing a conceptual framework for the development of GAs, Barrie (2007) notes a series of factors including, under the heading of participation, 'generic attributes are learnt by the way students participate and

engage with all the experiences of university life' (pp 444-49). It is clear from this work that participation and persistence go hand in hand and, of course, these are in turn related to engagement, empowerment and ultimately student retention.

The personalisation of learning has been applied differently across and within subjects but has effectively become a 'de rigueur' aspect of the higher education system (Clegg and David, 2006). However, while this discourse aims to encourage pedagogies that promote participation and empowerment, it also normalizes the view that individual agency is paramount in terms of personal reflection, planning and decision making. In line with these developments, university educators are trying to use electronic portfolios across the curriculum. E-portfolios can facilitate the recording, organising and storage of narratives about self which develop over time to provide a record of the learning process that each learner is engaged in. Students can therefore gain a knowledge and understanding about self and their programme of study by exploring aspects of their learning and wider life experiences.

However, these narratives about personal reflection may not sit easily alongside the aim of recording the development of GAs. The more we stress personalisation as a pedagogic tool, the more we open up learning beyond codified educational aims and outcomes and into a personalised and individualised world. This may be potentially liberating for students in some respects but it occurs at a time when most universities have modernised their operations based upon modular schemes with descriptors that require the specification of learning outcomes that are linked to GAs. This increasing bureaucratisation of the learning process as a codified product is paradoxical when set aside the ways in which students are encouraged to engage with their curricula in a constructivist manner, and in particular through modes of e-learning that are personalised and customised.

I would not wish to overstate this paradox given that students commonly receive a mixed or blended learning approach which incorporates traditional modes of learning such as lectures, with more participatory modes such as discussion groups and problem-based learning activities. Yet it is still further paradoxical that despite the shift towards these more participatory and open modes of learning, students are nonetheless encouraged to engage in a 'guided' personalisation of their learning through an assumed reflexive development of GAs. Documenting the process in acquiring these attributes has therefore become linked to that of personal development planning portfolios.



This tension between 'top-down versus bottom-up' approaches to personalisation also leads to a range of potentially problematic issues for educators and students alike. These typically centre on matters such as national, institutional or departmental PDP policies; access to PDP records; and whether they are academic or vocationally driven. These can become dissolved in the instantiation of PDP in terms of the overall focus on the need to get such a policy translated into action, and especially via the increasing reliance on virtual learning environments. Learning in this context can become a process of managing information (including personal information) rather than discovery, insight and growth. Thus, as some have suggested, this has enabled a managerial model of learning to be surreptitiously substituted for the dialogic and critical model which characterises the ideal of learning in higher education (Lambier and Ramaekers, 2006).

These problematic issues were drawn out and articulated in interviews conducted with staff and students in the social sciences in one recent study (Moir, Di Domenico, Sutton and Vertigans, 2008 and Moir, 2009). It became clear that while PDP is almost universally accepted in principle, the perceptions of implementation raise some problematic practical issues. Perhaps this is not to be entirely unexpected given that PDP has to function as a public institutional quality enhancement measure related to such themes as employability, citizenship and the development of GAs, and yet also as something that is private and personal to the student and within their control. It is precisely this tension between the public and private aspects of PDP that is problematic. A discourse focused on personal development is something that is almost universally agreed upon as beneficial in principle. However, it is when people come to specify what this means in practical curricular and pedagogic terms that problems arise. In other words, there is an abstract notion that PDP can lead to improved student engagement, participation and retention but this is offset by how it is to be managed in actual practice. For some, there is a clear tension here between what they regard as the academic nature of personal development leading to commitment, retention and personal transformation and the concomitant contribution to an educated citizenry, and the underlying national imperative that requires knowledge linked to economic wealth creation. It is easy to overplay this apparent divide and I would not wish to suggest that they are somehow independent of each other. Educators and students are both well aware of the intertwined nature of these aspects of higher education but it is the configuration of PDP as an instrumental process that seems to be most problematic.

To some this process is arguably more about the legitimisation of PDP and GAs as a means of showing their operation within an audit-driven and accountable culture. If this were the case then this could lead to an instrumental approach to learning and may only bring about a superficial level of engagement rather than any meaningful one that can impact upon empowerment and engagement in the first year.

This view has been most strongly put by Evans (2005) in *Killing Thinking: Death of the Universities*, who writes that there has been:

...a transformation of teaching in universities into the painting-by-numbers exercise of a hand-out culture...[in which] rich resources are increasingly marginalised by cultures of assessment and regulation....Increasingly, students are being asked to pay for the costs of the regulation of HE rather than education itself.... (2005: ix-x)

But before going down the polemical path too far, is it possible to view personalisation and the focus on PDP another way, one that has the potential to deliver students who find their studies challenging, even difficult, but who nonetheless persevere?

Higher education institutions are part and parcel of the very fabric of the social, political and economic dimensions that shape our world. They do not stand outside of that world, and therefore the idea that higher education should be concerned with the development of values is in accordance with such a view. If the case for a focus on employability relies on the notion of an adaptation to a global knowledge economy then it can also be argued that an equal case can be made for defending the inclusion of the values that encourage a more global perspective in the curriculum. This is in accord with the GUNI report referred to at the beginning of this paper and which is now very much on the higher education agenda.

It is also the case that GAs are often associated with the notion of creativity and transformation. In this respect it is worth noting Mayo's (2003, p 42) invocation of Shaull's foreword to Friere's *Pedagogy of the Oppressed*, in which he draws attention to two diametrically opposed positions on education:

Education either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about

conformity to it, or it becomes the 'practice of freedom', the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. (Freire, 1970, pp 13-14)

Although for some this polarisation may seem heavily ideological, it can be argued that a vision of higher education as not only contributing to the sharing of values but also the shaping of them is a desirable goal related to the notion of GAs. For a university education to be fit for purpose in a globalising world then students need 'a set of values that transform them, both now and in the future' (Otter, 2007, p 42).

This chimes with the focus on identity within higher education in the recent work of Barnett and Di Napoli (2007). In other words, there is a concern with how the personal aspect of being a student in higher education is related to GAs in a more engaged and transformational sense. It is also interesting that the recent edited work of Kreber (2008) points to the challenges of teaching and learning within the contradictions of increasing specialisation but also at the same time transdisciplinary contexts. This raises the issue of the local-global dimension to graduate attributes and how we begin to develop this so to encourage students from the outset of the first year to consider themselves and their relationship to their studies within this much broader context (for example, with respect to environmental issues and ethics, or with respect to the relationship between science and human rights).

Of course these issues cannot be addressed without bringing into question strategies for teaching, learning and assessment, and how these impact on undergraduate programmes. This has gained expression through the notion of active learning or inquiry-based learning. However, the challenge is not only to provide students with a translation of their curriculum into learning activities but for those very activities to manifestly demonstrate their relevance to the personalisation of study. In a recent study, Jones (2009) points out that generic attributes are very much context-dependent, and shaped by the disciplinary epistemology in which they are conceptualised and taught. Her study involved an examination of the teaching of generic attributes in physics, history, economics, medicine and law within two Australian universities. Skills such as critical thinking, analysis, problem solving and communication are conceptualised and taught in quite different ways in each of the disciplines. Jones goes on to suggest that a re-disciplined theorising of generic skills and attributes which frames them as part of the social practices within disciplines is required, one that integrates attributes within disciplinary epistemology.

## **Conclusion**

I noted previously that the quality enhancement approach within Scottish higher education is often commented upon and greatly admired. However, the sector in Scotland faces many of the same challenges with respect to the first year as the rest of the UK, or indeed for that matter many countries across the world. However, its approach to the intertwined nature of quality assurance and enhancement is distinctive in that it has arguably placed the former in the position of guiding the latter. This enlightened approach has freed up the creativity of educators in the higher education sector into putting their time and energy into how we enhance the learner experience. This is not to suggest that quality assurance and regulation are to be regarded as being somewhat relegated in terms of relative importance to that of quality enhancement but rather that there is a relationship between the two. The ultimate end in itself is not regulation per se, but enhancing the quality of the learning experience for students to meet the demands of an unfolding century that is increasingly being defined in terms of the development, exchange and transformation of knowledge.

However, it is also possible to think of Scottish higher education in terms of past tradition that can inform its future direction. . This tradition stretches back to the post-Enlightenment nature of Scottish universities; an era of the 'democratic intellect' (Davie, 1961). George Elder Davie examined the decline of a type of higher education offered in Scottish universities after the Enlightenment of the eighteenth century which encouraged breadth of study and a commitment to public engagement through the study of philosophy and a broader concern with theoretical and conceptual issues. Even today, the notion of a broad higher education, at least to begin with in the early part of a programme of study, is still with us in many of Scotland's four-year degree programmes.

Davie advanced the argument that the democracy of the democratic intellect lay in the way in which the generalism of the Scottish philosophical tradition acted as a barrier to an individualistic notion of learning and in so doing bridged the gap between the expert few and lay majority. It was argued that this created a 'sort of intellectual bridge between all classes' in which the Scottish intelligentsia remained in touch with its popular roots, retaining a strong sense of social responsibility. Davie argued that a 'common sense' developed in which the expert knowledge of

individuals was enhanced by, and held accountable to, the understanding of the wider public. This was 'democratic' in as much as there was a social distribution of intellectual knowledge. This 'democratic intellect' therefore runs contrary to the notion of intellectual elites and rule by experts. It is a perspective on intellectuality in terms of the social function of the intellectual. However, as Barr (2006) rightly points out, this was very much a male experience and one in which there is more than a little mythology surrounding the relationship between the classes.

Nevertheless, it is possible to link the notion of the democratic intellect with the developing Graduates for the 21<sup>st</sup> Century Theme. For one thing the focus is squarely on the sharing and exchange of knowledge within the context of employability and citizenship. The inclusion of graduate attributes into programmes of study has focused attention on the requirement for a broad education that engenders a wide range of attributes and skills. This has ensured that higher education institutions in Scotland tend to avoid narrow specialisation in most of their programmes of study. But more than this, the focus on GAs encourages students to engage with personalisation through both practicing and reflecting upon it. This approach encourages students to consider the mutual relationship between self and discipline as part of an ongoing communicative activity, rather than as simply an instrumental document-driven process. This is still a challenge in terms of how educators help students to acquire not only technical knowledge, but a real engagement with how to use it in relation to other forms of knowledge. However, given the need to focus on application and transformation as related to employability and citizenship or civic responsibility then it is the case that this worth pursuing as an integral democratising aspect of higher education and not as a kind of assumed addendum to it. The challenge for the future of the Enhancement themes approach lies in integrating the previous themes towards this end.

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