Graduate attributes for the public good

There is a growing focus on the nature of the attributes that students leave university with, including how these attributes will equip graduates for future employment (Barrie 2007: 439). In addition, the role of the university in producing graduates for the 'public good' has been highlighted (Walker 2010). In South Africa the need for graduates who will be able to participate in growing the national economy was emphasised in the National Plan in Higher Education some ten years ago now (DoE 2001). More recent mandates emanating from the Department of Higher Education and Training (for example the guidelines provided for aligning programmes with the HEQF) have augmented this understanding to also include issues of citizenship and social justice.

Conceptualising these 'outcomes of a university education' can become complex. In describing them, authors through the years have referred to 'generic skills' (Bennett, Dunne & Carré 1999; Van Schalkwyk 2002), 'transferable skills' (Drummond, Nixon & Wiltshire 1998), 'core skills' (Preece 1990), 'generic capabilities' (University of Technology, Sidney), 'graduate capabilities' (Kember & Leung 2005), 'employability skills' (Steven & Fallows 1998) and the like. The term 'graduate attributes', however, appears to have achieved fairly widespread acceptance in the most recent literature reviewed (Barrie 2006, 2007, 2009; James, Lefoe & Hadi 2004) and given its usage in the South African context (Griesel & Parker 2009) has been adopted in this overview.

Understanding exactly what graduate attributes are, and when and how they ought to be 'developed', is, however, less easily resolved. Bowden et. al. (2000) have described graduate attributes as "[T]he qualities, skills and understanding a university community agrees its students should develop during their time with the institution." Here the focus is on process and a development over time as the student moves from first-year through to graduation. For others, however, the emphasis is towards ultimate employability where 'generic skills' are described as 'the skills, values and attitudes which potential employers might find desirable' (James, Lefoe & Hadi 2004: 2). Implicit in these definitions is a tension that is not always readily understood. Conceiving of these understandings along a continuum offers a way of mediating this tension by recognising that in some instances the generic skills and knowledge needed to be successful at university (such as the ability to communicate effectively) will eventually translate into the attributes expected of a graduate. Thus graduate attributes are seen to 'include, but go beyond, the disciplinary expertise or technical knowledge … [T]hey are the qualities that also prepare graduates as agents for social good in an unknown future (Bowden et. al 2000). According to Barrie (2004: 262-263), graduate attributes encompass more than 'skills and attitudes'… and should result from the 'usual *process* of Higher Education'.

How academics understand or interpret graduate attributes, both their nature and their role, is fundamental to how any institutional conversation on these issues could be taken forward. Here the work of Barrie (2006: 224) is once again informative and could strengthen the notion of a continuum of understanding. Although he argues that typically there are four different conceptions of graduate attributes which stand in a hierarchical relationship to one another, there still is a sense of each new conception merging to some extent with its predecessor. Thus he describes 'additive' conceptions which see generic graduate attributes as actually being precursors to university entry – thus what students

enter with – or as being complementary to any disciplinary learning that occurs at university. On the other hand, however, he suggests that there are transformative conceptions of graduate attributes where these are seen to interact with other university learning outcomes such that they will facilitate the application of disciplinary knowledge and/or enable learning and knowledge creation.

An important aspect to be considered when embarking on an institutional approach to the development of graduate attributes is that of disciplinary differences. Again previous research provides insight as to a way forward. It is evident that disciplinary difference ought to be recognised and institutional policy relating to the development of graduate attributes would need to be sufficiently flexible to allow for such difference. Interestingly, however, Barrie (2006) reports that when analysing responses elicited from participants across fourteen different disciplines, the difference in the conceptions of graduate attributes where not clearly drawn along disciplinary lines.

Desired attributes in graduates have been defined on a number of levels. In South Africa, SAQA formulated the *critical cross-field outcomes* (CCFOs) (SAQA 1997) which were to be reflected in all educational programmes. Although the intention with the CCFOs was for application across the entire education sector, they bear mention here.

SAQA defines CCFOs as “those generic outcomes that inform all teaching and learning” (Ref: SAQA Website – Glossary of Terms). According to SAQA, CCFOs 'are those outcomes deemed critical for the development of the capacity for life-long learning'. It is compulsory for standards setters to incorporate some of the critical outcomes into standards as they are developed, and qualifications must contain all of the critical outcomes at the appropriate level on the NQF.

These are the critical outcomes adopted by SAQA:

1. Identify and solve problems in which responses demonstrate that responsible decisions using critical and creative thinking have been made.
2. Work effectively with others as a member of a team, group, organisation, community.
3. Organise and manage oneself and one's activities responsibly and effectively.
4. Collect, analyse, organise and critically evaluate information.
5. Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
6. Use science and technology effectively and critically, showing responsibility towards the environment and health of others.
7. Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

SAQA also identified five developmental outcomes which were defined as follows:

In order to contribute to the full personal development of each learner and the social and economic development of the society at large, it must be the intention underlying any programme of learning to make an individual aware of the importance of:

1. reflecting on and exploring a variety of strategies to learn more effectively;
2. participating as responsible citizens in the life of local, national and global communities;
3. being culturally and aesthetically sensitive across a range of social contexts;
4. exploring education and career opportunities;
5. developing entrepreneurial opportunities.

Most universities, including Stellenbosch University, have some description of the sort of graduate they would like to send out into the world (*The profile of the Stellenbosch University Graduate* 2001). Often these descriptions will have some of the national understanding (such as the CCFOs) embedded in them, while at the same time will seek to highlight attributes that could be regarded as unique to that particular institution.

The profile of the Stellenbosch Graduate was approved by Senate in 2001. At that time, the profile comprised the following:

- developed and *well-rounded people* whose potential is enhanced to the fullest;
- people who are *competent and equipped for professional life*;
- people who are adaptable and equipped for *lifelong learning*;
- people who can play a *leadership role* in society as responsible and *critical citizens* in a democratic social order;
- people who are capable and equipped, through the application of their high-level skills, to play a constructive role in the *responsible and sustainable development of the country and society*, and who, in so doing, contribute to the wellbeing and quality of life of all people.

In 2004, a sixth description was added to the profile, namely:

- people who are equipped to function effectively in a *multilingual context*.

Even within institutions there are often variations on the institutional theme (See *The profile of the Stellenbosch Medical Doctor*[1]).

Often lists of graduate attributes are clustered, as was the case in the HESA commissioned study which generated four clusters, namely, *basic skills and understanding, knowledge and intellectual ability, workplace skills and applied knowledge* and *personal and interactive skills* (Griesel & Parker 2009).

The changing higher education landscape, both nationally and internationally, the impact of globalisation and massification in higher education and shifting realities suggest that it is opportune for the Stellenbosch University community to revisit the issue of graduate attributes and consider a revision of the current profile. It is clear from the above that a shared understanding of exactly what is meant by graduate attributes will be an important point of departure for any project that seeks to revisit the role and nature of graduate attributes within a particular institution. In addition, a number of key principles ought to be considered when embarking on a project to encourage the development of graduate attributes:

- That desirable attributes are most usefully formulated at both university and module level, specifically when integrated in the curriculum in the context of disciplinary knowledge
- That teaching and learning practices, including assessment, ought to be aligned with module outcomes, including those linked to graduate attributes
- That formative feedback is fundamental to the development of graduate attributes
- That academics' current conceptions of graduate attributes need to be explored and shared

[1] http://sun025.sun.ac.za/portal/page/portal/Health_Sciences/English/New%20Education/MBChB

- That the link between graduate attributes and generic skills/academic literacies is carefully considered
- That the way in which graduate attributes are assessed and the way in which we demonstrate these attributes in our graduates (e.g. market them to the outside world), requires thoughtful planning.

Further important considerations for SU would include the way in which an acknowledged set of graduate attributes speak to the university's vision and mission, the HOPE project and the millennium development goals.

Establishing a renewed or revised set of graduate attributes - specifically those that would contribute to the public good - is clearly only the first step in the process towards producing graduates who actually portray the desired attributes. Inculcating these attributes into the teaching and learning ethos at the university will be a further, equally critical, step.

It is hoped that our conversations at this colloquium will:

- remind us of the need for graduates who can meaningfully transform society,
- give us opportunity to reflect on what some of these attributes might be,
- allow us to reflect on the role of the academic in this journey, and
- envision the sort of institution where graduates of this nature can be nurtured.

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Susan van Schalkwyk
Nicoline Herman
André Muller
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