Using standards rubrics to assure graduate capabilities within the context of undergraduate liberal arts programmes: curriculum design and assessment

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Abstract

In 2011 members of the School of Philosophy and Theology at The University of Notre Dame Australia (UNDA) Sydney campus, designed two standards rubrics as part of a project aimed at undertaking research within the area of assuring graduate attributes and capabilities in Australian universities. The standards rubrics designed were oriented towards developing particular graduate attributes intrinsic to the Core Curriculum programme in philosophy, ethics, and theology; all students at UNDA are required to undertake this programme, which reflects a 'liberal arts' or 'liberal education' approach to university education.

In this paper, we engage in an institutional case study of this project, discussing the advantages and challenges of developing and using these standards rubrics with a specific focus on: how they have already been used, how we plan to use them in the continuing development of our Core Curriculum programme, and the particular challenges we face in developing standards rubrics within a 'liberal arts' or 'liberal education' environment. In doing so, we will attempt to demonstrate the usefulness of developing standards rubrics as a basis for careful and systematic review of our pedagogical approach, and curriculum and assessment design so as to assure the achievement of graduate attributes and capabilities.

Given our focus on developing these standards rubrics within a Catholic liberal education environment, the paper will begin with a discussion of the tradition of liberal education. This tradition provides the immediate context for the graduate attributes and capabilities toward which our rubrics are oriented and helps explain the specific nature of the Core Curriculum programme. The article will then consider key theoretical problems that arise in attempting to assure graduate attributes and capabilities within a liberal education environment, including problems related to educating towards objectives or attributes that are difficult to assess or measure due to their generality. In the final part of the paper, we demonstrate the usefulness of developing standards rubrics as a means of reviewing our pedagogical approach and curriculum design for the purposes of fostering graduate attributes and designing assessments that enable students to demonstrate the degree to which they have attained graduate attributes.

Keywords: rubrics, graduate capabilities, graduate attributes, curriculum design, assessment

1. The context of this study

1.1. A Catholic university and its graduate attributes

The nature of a Catholic university is defined by the apostolic constitution on Catholic universities, *Ex Corde Ecclesiae,* as a place *dedicated to research, to teaching and to the education of students who freely associate with their teachers in a common love of knowledge* (Pope John Paul II, 1990). In the most general sense, according to the apostolic constitution, a Catholic university is defined by a search for truth and meaning within the framework of a dialogue between faith and reason in which both are seen as necessary components and in which education is oriented towards the integrity of the human person (Pope John Paul II, 1990).

Ex Corde Ecclesiae also suggests more specific qualities of the approach to education within Catholic universities including: an integrative approach to knowledge, an emphasis on ethics, and the centrality of theology in the life and teaching of the university (Pope John Paul II, 1990). In short, *Ex Corde Ecclesiae* stipulates that a Catholic university must be explicitly Christian and must embody the aspirations of the earliest universities to be communities dedicated to the pursuit of universal truth (Pope John Paul II, 1990).

The 'liberal arts' or 'liberal education' approach, a model of education intrinsic to the idea of a Catholic university, looks to Ancient Greece for its earliest impetus and was developed further during the time of the Roman Empire (Kimball, 1995). The classic formulation of this approach to education, in a specifically Catholic sense, is found in John Henry Newman's *The Idea of a University* first published in 1852. In this text, composed of a series of discourses, Newman defines the university as a place of teaching 'universal knowledge' (Newman, 1996). Within this framework of universal knowledge Newman goes on to define the purpose of university education as fostering the *exercise and growth of certain habits, moral and intellectual...* and to educate human persons and their capacity to live well (Newman, 1996, pp.4-5).

Those who take Newman's *Idea of a University* to be seminal in defining the nature of a Catholic university tend to extract from these discourses two main themes: first, that a Catholic university must be oriented towards educating the whole human person for the sake of a good or happy life, and further, that a Catholic university must be oriented towards the truth – inasmuch as we define truth as universal knowledge or integrated truth. Alasdair MacIntyre engages with precisely this issue when he asks the question as to what makes a university a community; a *'uni-versity'* as opposed to a *'multi-versity'* (MacIntyre, 2009). The answer, according to MacIntyre, lies in the analogous relation between universe and university; the universe is the unified reality to which a university refers to in its quest for truth (MacIntyre, 2009). Thus, a university as a community is unified by a common pursuit of universal/unifying truths about the reality in which we live. It follows, then, that there must be something that unifies the disparate disciplines for a university to be a single community, whether it be a common love of knowledge, a common notion of academic freedom, etc... In the case of the Catholic university, MacIntyre suggests, it is philosophy and theology that unify all disciplines in their respective pursuits of truth (2009).

Philosophy enables this unification of difference by its very nature; for philosophy is the search for universal or transcendent truth. Within the context of a Catholic university, philosophy has as its primary task and role the unification of disciplines and the establishment of the conceptual relations between disciplines (MacIntyre, 2009). Theology enables this unification through the study of God inasmuch as, within the Catholic tradition, it is God who/that explains the unity of relations between various aspects of reality and it is God who/that explains the unity of human persons and our quest for truth in the fullest sense (MacIntyre, 2009). It is for this reason that most, if not all, Catholic universities either offer a

'Core Curriculum' programme in philosophy and theology or will accord philosophy and theology a special unifying role in the intellectual life of the university.

This view of a specifically Catholic university education, in particular as it is expressed in Core Curriculum programmes, almost invariably shapes the graduate attributes or graduate capabilities statements of Catholic universities. Even when the graduate attributes of a Catholic university are apparently the same as those of public/secular universities, the uniquely Catholic approach to university education will signify a distinct interpretation of the meaning of the stated graduate attributes. The graduate attributes of UNDA are: communication, critical and reflective thinking, technical competence and interdisciplinarity, life-long learning, ethical responsibility, philosophical and religious approaches to life, team work, research and information retrieval skills, internationalisation, and commitment to active citizenship. The graduate attribute of philosophical and religious approaches to life is one obvious criterion of the Catholic identity of UNDA but it is important to note that all of these graduate attributes will be interpreted in light of the Catholic nature of the university.

At UNDA the Core Curriculum programme contains its own internal learning objectives which are oriented towards fostering and developing in students core graduate attributes of the University. The objectives of the Core Curriculum programme are mandated by the Trustees of the University, the formal body of the University tasked with promoting and maintaining the Catholic identity of the university. These Core Curriculum objectives unpack and develop a distinctive Catholic understanding of the University's graduate attributes. The Objectives of UNDA's Core Curriculum programme are as follows:

1. To communicate the Catholic view of the integration of faith and reason;
2. To provide introduction to ethics as an academic discipline in preparation for life and work;
3. To introduce the concept of liberal arts education and its capacity to enrich education within both professional and humanities degree courses;
4. To enable a coming together of students of different backgrounds and interests;
5. To create habits of philosophical and theological reflection that will last for life and have a positive effect upon autonomous and rational decision-making.

When we look to synthesise the university graduate attributes and the Core Curriculum objectives, the specifically Catholic approach to university education taken by UNDA is brought to light. For example, it is evident that the graduate attribute of 'life-long learning' can be unpacked and developed within the framework of the formation of habits of philosophical and theological reflection. In similar fashion, each of the graduate attributes of the university can be unpacked and explained in further depth through the learning objectives of the Core Curriculum programme (see Table 1 below).

1.2 An experimental pilot programme – LOGOS: An institutional case study

The compulsory Core Curriculum at the University of Notre Dame has traditionally been offered to students via three standard introductory academic units: an introduction to philosophy, an introduction to ethics, and an introduction to theology. Over the years, however, concerns emerged about whether it was really possible to foster and promote in students the attainment of the basic objectives of Catholic university education through standard academic units in this fashion. Could we assert with any confidence that at the end of these three standard academic units their objectives and those of Catholic university education in general have been attained or at least begun to be attained; for example, do students have a sense of what it means to integrate faith and reason, do they understand the notion of a fulfilled or happy life, or the concept of the person as it is presented to them within the context of the Core Curriculum? In other words, doubt began to emerge about whether the Core Curriculum achieved its goals, and further, whether we could be assured

that our graduates had attained the graduate attributes or objectives specific to Catholic university education.

Table 1: The Relationship between Core Curriculum Objectives and Graduate Attributes

Core Curriculum objectives	Graduate attributes
To communicate the Catholic view of the integration of faith and reason	communication philosophical and religious approaches to life life-long learning
To provide introduction to ethics as an academic discipline in preparation for life and work	ethical responsibility commitment to active citizenship
To introduce the concept of liberal arts education and its capacity to enrich education within both professional and humanities degree courses	technical competence and interdisciplinarity research and information retrieval skills internationalisation
To enable a coming together of students of different backgrounds and interests	communication team work
To create habits of philosophical and theological reflection that will last for life and have a positive effect upon autonomous and rational decision-making	critical and reflective thinking life-long learning philosophical and religious approaches to life

In 2011-2012, the School of Philosophy and Theology at UNDA, Sydney campus, was given the opportunity to radically re-think and re-design the way we offer the Core Curriculum programme to our students. What emerged from this opportunity is the current pilot version of the Core Curriculum, entitled the 'LOGOS Programme'. Aside from the name 'LOGOS', intended to signify the unity of faith and reason and theology and philosophy, the LOGOS Programme was an experimental approach to the Core Curriculum for the University of Notre Dame; it was explicitly oriented towards the mandated 'formational' objectives of the Core Curriculum and the graduate attributes of the University. Graduate attributes, and the various generic skills they involve, are integral to learning outcomes for units of study, but they are also closely connected to the mandated Core Curriculum Objectives and hence to the Catholic mission of the University. For example, the philosophy module of study entitled, "To what extent is our behaviour determined?" asks whether humans are capable of free choice. Students are expected to come to an appreciation of the significance of the idea of freedom in understandings of the human person; to be able to identify and explain concepts

which underpin understandings of human action; to be able to critically evaluate competing conceptions of human responsibility and accountability; and to be able to explain the extent to which a variety of human choices can be regarded as free. In doing so, the Catholic understanding of the human person opens discussion to the theological implications of human freedom and responsibility.

The key reasons for redesigning the Core Curriculum programme were to give students choice in what they studied in philosophy and theology; to provide some flexibility of study; and to make more explicit the relevance of philosophy and theology to everyday life and training for the professions. Consequently, instead of requiring students to attend regular weekly lectures or tutorials, the LOGOS Programme is divided into modules of study; each module consists of a discrete class on a particular topic in philosophy, ethics, theology, or a synthesis of philosophy and theology oriented towards and applied to various professions. We offer a wide range of modules, e.g., 140 over a semester of teaching, but students only need to complete eight modules to meet the class attendance requirements of a unit. Thus, students can select module topics that interest them, or are relevant to their intended professions. On completion of each eight modules the student is required to submit a graded assessment task to complete a unit. The LOGOS Programme, overall, consists of three units and three carefully designed assessment tasks; the first a philosophical essay, the second an ethical case study, and the third a critical reflective portfolio.

The opportunity to radically reform how we offered the Core Curriculum programme also provided us with the opportunity to more explicitly examine how we fostered and promoted student attainment of the Core Curriculum objectives and how we could design assessment tasks that would provide students with the opportunity to demonstrate their completion of the objectives. This in turn – at least theoretically – would give us some assurance that students were achieving the graduate attributes of the University via the Core Curriculum programme. By happenstance, at much the same time as we were developing and designing the new LOGOS Programme, we were also contacted by Beverley Oliver regarding the opportunity to develop standards rubrics for assuring graduate attributes. Developing the standards rubrics served as a solid basis for designing the assessments for the LOGOS Programme in the first instance, but has also assisted us in thinking through the curriculum design of the LOGOS Programme.

2. Key theoretical problems

2.1. Liberal education and graduate outcomes

Most research on 'liberal education' or 'liberal arts' education as discussed in this paper emerges from the U.S. This is unsurprising given the prevalence of the liberal education tradition there, the many 'liberal arts' colleges and religious universities, and the enduring conviction that liberal education is effective in producing capable citizens; e.g. the 1828 Yale Report *determined that a traditional liberal arts curriculum is the best means to prepare for a changing society* (Seifert et al., 2008, p.108). Despite the popularity of vocationally oriented education, the conviction persists that liberal education leads inevitably to better educational outcomes, higher attainment of generic skills and attributes, increased employability and greater engagement in civil life. (AAC&U, 2005; Ferrall, 2011; Hardwick Day, 2011; Nussbaum, 1997 and 2010).

Recently, however, educational research has questioned the validity of claims regarding the optimal educational outcomes of liberal educational institutions, while noting the higher cost of attending these institutions by comparison with public colleges and universities (Hoover, 2011). Eckles (2010), for example, suggests that while the liberal education model has been praised throughout U.S. history, little research has been done to determine the outcomes of such education. Likewise, Seifert (2008) claims that the effect of liberal education is an 'empirical black box' since there is little certainty about its outcomes or about how liberal

education achieves these outcomes (where such evidence is available). Organisations such as LEAP (Liberal Education and America's Promise), AAC&U (Association of American Colleges and Universities), and The Annapolis Group, which collectively represents 130 private liberal arts colleges, have nonetheless engaged in various forms of social research in an attempt to defend their claim to educational excellence and achievement of graduate outcomes.

Certain aspects of the US research into liberal education are relevant to the Australian context and, specifically, to the context of the Core Curriculum programme at UNDA. Firstly, the research summarises claims made by liberal education institutions as to outcomes and states that:

1. Its emphasis on universal knowledge and generic skills helps develop graduates who have exemplary generic thinking skills in analysis, reasoning (both theoretical and practical), argument, and communication.
2. Its emphasis on ethics, practical reasoning, and citizenship fosters and produces graduates who are more active and thoughtful citizens.
3. Its approach to educating the whole person produces graduates who are more flexible, capable of adapting to change and therefore more employable.

However, it is widely recognised that it is difficult to assure or validate these claims about graduate outcomes or attributes. There is little hard data - empirical or otherwise - about graduate outcomes for students educated in liberal education institutions beyond data from 'graduate satisfaction' surveys and graduate 'self-assessment' surveys. The task of validating claims about graduate attributes poses a significant epistemological problem for liberal education universities or liberal arts colleges. How would a university or college, which makes significant claims about the generic skills, citizenship qualities, and employability of its graduates, justify these claims in any substantial way?

2.2. Graduate attributes and liberal education in the Australian context

The conception and use of graduate attributes in the Australian university context responds to similar concerns about the need to demonstrate the reality of graduate outcomes; and in particular to demonstrate a university's ability to provide an education that is both relevant to the new 'knowledge economy' and assures employability of graduates (Barrie, 2006). In the Australian context, however, graduate attributes often seemed to appear 'overnight' and were vague and largely inconsistent (Clanchy & Ballard, 1995). This might suggest that many Australian universities were unsure of what precisely they achieved educationally, beyond teaching discipline-specific content (Green, Hammer, & Star, 2009).

The emergence of graduate attributes and the concern about graduate outcomes in the Australian higher education context is markedly different to the situation in the US, where there has been a strong and longstanding tradition of making claims about the characteristics of graduates, in relation to generic skills and qualities, and of offering education explicitly oriented towards particular character traits or attributes. In Australia, on the other hand, the emphasis appears to have been on discipline specific knowledge (Donleavy, 2012).

Jones' (2009a) research suggests that, for complex reasons, graduate attributes often remain '*espoused theory'* or ideals separated from the views of academic staff about discipline specific learning. Jones' (2009a) study implies that a discipline specific focus predominates amongst the surveyed Australian academic staff; graduate attributes are viewed as distinct from discipline knowledge and skills, or as appropriately embedded tacitly into the discipline specific knowledge, or less positively as externally imposed and a threat to the independence of the discipline and to academic authority. This tension between the

notion of graduate attributes and discipline specific knowledge is one of the most common themes in the literature on graduate attributes in Australia (Barrie, 2006, 2012; Hughes & Barrie, 2010; Jones, 2009a, 2009b; Green et al., 2009; Donleavy, 2012); it arguably reflects the way in which Australian universities have become what MacIntyre calls *'multi-versities'* dominated by distinct disciplines without a shared or unified vision of education or of the desired characteristics of graduates.

In this respect, institutions such as UNDA, Campion College, and the Australian Catholic University, which are explicitly oriented toward the Catholic liberal education tradition, have a distinct advantage in the genesis of the development of graduate attributes. This is because our graduate attributes reflect a unified vision of university education, which is comfortable '*with generic skill development of a complementary, enabling and even character building nature*' (Donleavy, 2012, p.352). Academics in these Catholic tertiary institutions are already comfortable with the idea of education as '*formational'* or character building and therefore may find it easier to promote and foster graduate attributes than colleagues at public/secular universities in Australia (Donleavy, 2012).

2.3. The problem of forming and demonstrating graduate capacities within a liberal arts programme

Even if, as research suggests, a university like UNDA is oriented toward dealing with graduate attributes, we are still left with the problem of assuring that the graduate attributes are attained. The approach we have taken, and will continue to take over the next few years, responds to recommendations identified in the literature, specifically those of: (i) reviewing our pedagogical approach to teaching the objectives of the core curriculum, (ii) ensuring the alignment of desired attributes and curriculum, and (iii) developing criteria and standards by which the attainment of graduate attributes might be assessed (Green et al., 2009). We are, therefore, using curriculum design as a means of focusing on the role of the Core Curriculum in 'forming' key graduate attributes via its objectives; and assessment design to provide opportunities for students to demonstrate their attainment of graduate attributes.

Before we move on to a discussion of curriculum and assessment design issues, it is worth drawing out the difference between the problems posed by 'graduate attributes' in the Catholic 'liberal education' model of university education and the problems posed by graduate attributes in 'public/secular' models of university education.

Many articles addressing graduate attributes begin with a discussion of how and why graduate attributes emerged in Australian universities (Barrie, 2006, 2012; Green, 2009; Oliver et al., 2011; Wood et al., 2011; Donleavy, 2012; de la Harp & David, 2012). Almost all of these begin with a recognition that graduate attributes in the Australian context arose primarily out of a need to orient university education towards graduate employability and therefore to some measure of accountability to business and government. Hence, the emergence of graduate attributes has often been perceived as heralding a shift in the purpose of university education in Australia, from *elite, research-centred institutions designed to reproduce a professional, intellectual class... (to)... a more vocational, mass educational focus, with universities playing a central, if vexed, role in the formation of professional, white collar employees* (Marginson, 2000 as cited by Star & Hammer, 2008, p. 238). This perception explains the difficulty of many public/secular universities in coming to terms with graduate attributes since they inherently refer to a view of education at odds with the traditional model, in which most academic staff were themselves educated and formed.

Universities like UNDA, ACU, or colleges like Campion College face a different problem when confronted with the demand for assuring graduate attributes. The Catholic liberal education model is inherently oriented towards graduate characteristics or qualities that generally translate easily into graduate attributes, despite some issues of interpretation. Rather, the Catholic liberal education model faces the problem of how to convince its

students, academic staff, business partners, and government that exposure to the unifying and foundational disciplines of philosophy and theology is a legitimate way of forming and assuring graduate attributes; and further, that the graduate attributes fostered through this exposure are relevant to the contemporary needs of Australian society. The claim of Catholic tertiary institutions in Australia to offer a unique educational experience and excellent graduate outcomes depends upon addressing these problems convincingly.

3. Objectives of pedagogical, curriculum and assessment design issues in liberal arts programmes

Some of the more practical explorations of the literature relating to the attainment of graduate attributes identify the need for a shift in the pedagogical approach to university teaching and learning. Cassandra Star and Sara Hammer (2008) justify this need by arguing that *…in societies saturated with information, the ability to master knowledge, rather than be mastered by it, is the hallmark of both a capable knowledge worker and a good citizen* (p. 240). Faced with the sheer amount of easily accessible information, students are often overwhelmed by information or can no longer discriminate between intellectually credible and non-credible sources of information. For some students, the important distinction between fact and knowledge, or empirical fact and explanation, has disappeared. In this context, it is not enough for academic teachers to provide discipline specific theory and knowledge; rather it becomes crucial for them to provide students with the capacity to master knowledge.

Consequently, the shift in educational focus from discipline specific knowledge to graduate attributes is no arbitrary ploy to erode the purpose of universities, but rather, is a necessary response to fundamental changes brought about by a *supercomplex* society (Barnett, 2012). In this situation of supercomplexity, *for graduates and citizens to truly master knowledge, the emphasis on what is taught and how it is taught in universities must shift from the traditional focus on 'content' to one which emphasises 'process': what graduates can do with knowledge* (Star & Hammer, 2008, p. 240). In this respect, it is important to ensure that students are given the opportunity to engage in practising key graduate attributes, such as critical thinking and reflection in the classroom or online to help them appreciate the value of graduate attributes for their future lives and careers (Treleaven & Voola, 2008).

The pedagogical approach taken by UNDA in this context is guided by the 'the engagement premise', which claims that the defining feature of American tertiary education in the twenty first century will be the emergence of student engagement as an organizing construct for institutional assessment, accountability, and improvement efforts (Kuh, 2009). The premise holds that *engagement helps to develop habits of the mind and heart that enlarge [students'] capacity for continuous learning and personal development* (Kuh, 2009, p.5). Specifically, the premise proposes that:

> The more students study a subject, the more they know about it, and the more students practise and get feedback from faculty and staff members on their writing and collaborative problem solving, the deeper they come to understand what they are learning and the more adept they become at managing complexity, tolerating ambiguity, and working with people from different backgrounds or with different views. Engaging in a variety of educationally productive activities also builds the foundation of skills and dispositions people need to live a productive, satisfying life after college (Kuh, 2009, p.5).

Kuh notes that one of the earliest iterations of the engagement premise was the pioneering work of the eminent educational psychologist Ralph Tyler, showing the positive effects of time on task on learning. This change in our pedagogical approach required a corresponding change in curriculum design to engage students in process-oriented learning (or capability-

building learning); to focus on the 'how to' as well as the 'what' and the 'why' of learning so that teachers clearly articulate their expectations of student learning, including learning oriented towards the attainment of graduate attributes or capabilities (Green et al., 2009). As Treleaven and Voola (2008) have noted, this also demands that the development of graduate attributes is embedded into course content in an authentic manner.

It is often asserted that students measure the curriculum in terms of assessment and that they orient their learning efforts primarily towards those aspects of the curriculum that will be assessed (Gibbs, 2003). Therefore if we are to encourage the attainment of graduate attributes, we should carefully design assessment tasks to clearly, explicitly and authentically develop graduate attributes (Wood et al., 2011). Equally, the purpose of assessment in this context must also be oriented towards enabling students to self-reflectively demonstrate their attainment of those graduate attributes or capabilities (Boud & Falchikow, 2006).

4. Programme rubrics as informing pedagogy, curriculum and assessment task design

The original intention of our attempt to create programme rubrics was to systematically analyse and unpack the capabilities or standards expected of students in the Core Curriculum programme at UNDA in the context of our focus on engagement. The framework for this institutional case study was the 'Assuring Graduate Capabilities' research project in which we were asked to design course rubrics, listing the key attributes of our graduates and describing expected levels of performance ranging from beginner to expert (Oliver, 2011a). We designed two different programme rubrics, covering two of the five objectives of the LOGOS Programme. The first objective was 'providing an introduction to ethics as an academic discipline in preparation for life and work'; and the second was 'creating habits of philosophical and theological reflection that will last for life and have a positive effect upon autonomous and rational decision-making'. A rubric, in the most general sense, is a 'tool' that sets out specific expectations of students (Stevens & Levi, 2013). In this particular instance, the rubrics we were modifying were pre-designed rubrics supplied by Beverley Oliver and oriented toward the task of establishing standards for graduate outcomes or attributes.

It is important to note that at the outset we had no intention to develop rubrics that could then be used as assessment task rubrics or as bases for pedagogical and curriculum design. Rather, the use of these programme rubrics was as a basis for thinking through pedagogy. Curriculum and assessment task design emerged out of the process of attempting to design rubrics that reflected our expectations of our students. The conceptual analysis necessary to designing the rubrics served as a point of origin for our reflection on and investigations into pedagogy, curriculum and assessment design.

In the next section of the paper, we will briefly and broadly outline some of the thinking and practices that emerged out of the design of the rubrics.

4.1. Designing the standards rubrics

There were various challenges that we faced as a team throughout the process of collaboratively modifying the sample rubrics for graduate capabilities. The two main difficulties we encountered initially were the conceptual analysis of the graduate capability and subsequently the development of the descriptive framework of the categories belonging to the capability, for example, the key descriptive terms for particular categories. At first, we also found it difficult to be realistic about what we would expect from a competent graduate. We found that we tended to focus on what we would expect from a high achieving student and it was initially difficult to moderate these expectations as well as to find a way of standardising the terminology used to differentiate between the various levels of capability.

The first challenge we faced, when confronted with the provided standards rubric template, was that of identifying the qualities essential to each of the desired attributes contained in our programme. For example, it is one thing to claim that we desire our students to develop the attributes of ethical responsibility and commitment to active citizenship through the Core Curriculum objective of an 'introduction to ethics as an academic discipline in preparation for life and work', and another to specify precisely what this entails in the way of 'ethical reasoning' standards. We confronted this task using discipline specific knowledge in ethics and critical thinking in association with data from recent research on values-based action (Gentile, 2010).

The second challenge was to develop a set of standard descriptive terms for each category and as noted above, our initial expectations confused competence with excellence so that finding descriptive terms that would be fair to an average graduate was difficult. In the end, the AQF standards descriptions of what would be expected of graduate students proved to be very helpful in determining appropriate descriptive terms for the various levels, i.e., novice, competent, proficient, and expert. Analysing the development of a skill such as problem-solving led to agreement on the following set of categories to describe the capability at these different levels: beginners recognise the existence of the problem; novices recognise the nature of the problem; competent students apply rules of reasoning to the problem; proficient students/graduates apply various models of rational-decision-making to a problem; while experts are capable of evaluating and synthesising decision-making strategies.

The task of producing the standards rubrics created opportunities by orienting us toward more critical consideration of attributes/capabilities as they could be applied to the Core Curriculum. Opportunities arose in three main areas: opportunities to undertake a shift in pedagogical approach to teaching/learning, opportunities to re-examine how we approach curriculum design in the core curriculum, and opportunities to carefully and more consciously approach assessment design.

Table 2: Extract of rubric used to develop standards rubrics: Philosophical and Theological Reflection[1]

Categories	Competent graduates of this course can:
Philosophical reasoning	Understands the structure of argument and knows the rules of reasoning. Consistently and reliably employs a suite of reasoning tools. Critically evaluates own arguments and those of others and applies philosophical reasoning to various contexts.
Exploration of Revelation	Incorporates Sacred Scripture and Tradition in relation to God. Understands revelation as the underlying principle of theology and reflects on the lived experience of Revelation.

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[1] This extract only contains the descriptors for graduates (competent). The full rubric contains columns for expert, proficient, competent, novice, and beginner

Autonomy	Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences.
Rational Decision making	Clearly identifies problems and understands factors impacting upon decision-making. Applies the rules of reasoning and understands and employs various models of rational decision-making. Applies rationally decision-making techniques to everyday life and to learning contexts.
Reflection	Reviews learning to integrate personal life experience with philosophical and theological reasoning in depth and in a coherent way; is also be able to synthesise learning of philosophical and theological reasoning with life experience as the basis for planning further educational or life goals.
Appreciation of a Good Life (habit/virtue)	Articulates knowledge of the main theories about a good life, is able to offer reasoned arguments for a personal view of a good life, and actively engages in activities that reflect habits of practical reasoning and personal integration of thinking about a good life.
Learning Objective:	To create habits of philosophical and theological reflection that will last for life and have a positive effect upon autonomous and rational decision-making.

4.2. Opportunity 1: A shift in pedagogy: from teacher centred learning to 'practicing attributes'

Right from the outset, our discussions about redesigning the Core Curriculum Programme were oriented toward the pedagogical problems of engaging students and offering a programme that was 'formational' rather than discipline specific. Within these discussions, we formed a consensus that the way we taught in the core curriculum needed to change; that we needed to shift to a model of teaching/learning in which philosophy and theology were constituted as unifying and integrating ways of thinking, questioning, and engaging with personal and professional life experience.

As we experimented with the modules in the early weeks of the new LOGOS Programme we also found that this new orientation to teaching/learning changed what happened in the classes in very practical ways, even to the degree that we changed the physical configuration of the room. Many, if not most, of these changes in our approach to teaching/learning arose from conscious and careful reflection on our experiences of producing the graduate attributes standards. The main changes that emerged can be summarised in the following imperatives to ensure that:

- a student-centred learning environment was formed so as to minimise didactic styles of lecturing and lecturer-directed learning;
- half of each hour of class involved discussion, debate, practicing key skills, or the application of philosophical\theological argument in small groups;

- at least one of the small group sessions in each module required students to critically reflect on their own personal or professional experience relevant to the arguments covered in the class;
- students in small group discussions were encouraged to integrate and synthesise prior learning in their course of study with philosophical/theological discussion;
- a central tenet of our approach to teaching was the use of reasoned argument. As such, teachers explicitly modelled reasoned arguments and required the students, in their small groups, to practise engaging in such argument;
- a key feature of each module is that teaching/learning is oriented towards the practice and development of key capabilities and attributes. To this end, students prepare for each module they take by analysing and reflecting on short readings or questions that serve as starting points for the arguments and class discussions. Modules are designed so that each hour engages students with particular capabilities or generic skills, critical reflection, analysis, reasoned argument, communication, questioning, and a synthesis of experience, learning, and reasoning.

As noted above, attempting to achieve these changes over the four hour period of each module led us to restructure the teaching space used. In the LOGOS Programme room students are always seated in small groups, i.e. 5-6 horseshoe shaped groups physically oriented toward the centre of the room where the projector screen, whiteboard, etc. are all located. But, with minimal effort, they can also refer back to a whole class discussion led by the coordinator.

4.3. Opportunity 2: Building curriculum; forming the intrinsic characteristics of graduate attributes

A key problem that emerged as a result of providing students with choice as to which modules they studied and flexibility as to when they undertook classes was a loss of structure. We could no longer assume that students should easily be able to appreciate the structural integrity of the programme. Towards the end of the first semester of the programme, we realised that students might experience it as a kind of smorgasbord of philosophy and theology, rather than as a programme taking an integrated and unified approach to reasoning and to formation.

We originally thought that the provision of compulsory core modules would be enough to provide the requisite sense of structural integrity. The core modules are: (i) Think – an introduction to thinking, reasoning, and philosophical argument, (ii) Choose – an introduction to practical reasoning and ethical theory, (iii) Live – an introduction to reasoning and argument within Catholic theology, especially in relation to the question of the meaning of life, and (iv) Learn – an introduction to cardinal, intellectual, and theological habits relevant to life-long learning and the human quest for a happy life. However, it became clear within the first semester that the elective modules needed to be more explicitly oriented toward the objectives of the programme and the achievement of graduate attributes.

The graduate attributes/capability standards we had developed previously via our analysis of the programme's objectives served as an excellent basis for our curriculum planning. They assisted us in thinking through the topics in philosophy and theology that needed to be included in order to help students appreciate the programme's overall structure and to enable them to develop certain skills and capabilities. This kind of analysis - in which programme objectives and a structured and gradual development of certain skills and capabilities are joint focal points - has become a feature of our regular curriculum planning days.

An example of this is the way in which the graduate attributes of ethical responsibility and commitment to active citizenship are expressed through the Core Curriculum objective of an

'introduction to ethics as an academic discipline in preparation for life and work'. To succeed in fostering and forming these graduate attributes we recognise that we cannot simply expose students to ethical theories and hope this translates to ethically responsible action. Rather, we offer modules that build the basic skills intrinsic to ethical responsibility; raising awareness, developing analytic skills are accompanied by opportunities to script and practice ethical responses to real life ethical conflicts. The curriculum includes the study of practical reasoning and of key ethical theories as applied to real life cases, extracted from both personal and professional life experiences

4.4. Opportunity 3: Demonstrating graduate capabilities at University; assessing the intrinsic characteristics of graduate attributes

The final opportunity that arose from producing the graduate capability standards rubrics relates to assessment design. We found the conceptual analysis of the learning objectives and graduate attributes/capabilities particularly helpful in thinking through how we could give students the appropriate forum to demonstrate these attributes/capabilities. This, in turn, led to a change in the way that we assess the Core Curriculum Programme. There are two forms of assessments in the Core Curriculum (LOGOS) Programme: in class non-graded assessments attached to each module, and a graded assessment attached to each unit.

In adapting Oliver's rubrics for assessment purposes we referred to Sadler (2009) who discusses rubrics as cross-tabulations of fixed criteria that provide grading schemes. Sadler explains the way in which the criteria are arranged so that there is one row for each criterion and the cells in each row contain descriptive text (using verbal quantifiers or typical features) that identifies the characteristics of a particular 'standard' for that criterion. The *verbal-quantifier* form of cell entry uses descriptors such 'little, if any, evident' to 'an extremely high level' to indicate the level of the criteria a student exhibits. The *typical-features* form of cell entry consists of a qualitative description of the corresponding 'standard,' often with reference to sub-attributes of the main criterion. The assessor nominates the cell that best characterises the quality of each student's work on each criterion. As Sadler explains, each cell in the tabulation can be given a numerical value, which is then processed mathematically along with all the other applicable cell scores to arrive at a total score for that work and, if required, a summary grade; such rubrics are described an *analytic* rubrics. In this study we used less common *holistic* rubrics in which the assessor grades simply by reviewing the pattern of cells identified in the matrix, and making an overall judgment. Both types of rubrics have their shortcomings that Sadler (2009) explains, but as a team we argued that holistic rubrics were more in keeping with the formative aims of the Core Curriculum that require us to develop a perspective on a student's overall achievement in a module, rather than to focus on particular characteristics or deficiencies that may need special attention.

The primary goal of the non-graded assessment tasks attached to each module is to enable students to practice key generic skills and capabilities. We do this by making sure that each non-graded assessment contains a series of interconnected activities, each of which focuses on a different generic skill or attribute. The key elements of the non-graded assessments are: a) a preparation task that requires students to engage in analysis of the targeted philosophical or theological topic and to reflect on how it relates to their lives; b) seminar-style teaching, group work involving deliberation, debate, logical argumentation and clear communication, activity which integrates the preparation task with exploration of the topic, and c) a final task which requires students to critically reflect upon or engage deeply with the module topic in relation to their personal and professional life experience.

The students receive feedback at the end of the module on their non-graded assessment tasks to indicate the degree to which they have met the criteria associated with module tasks. Graded assessment tasks require students to demonstrate the development of particular graduate capabilities and skills. The first graded assessment task, attached to the

LOGOS I unit, requires students to engage in philosophical argument and thus tests their abilities in communication, research, critical thinking, analysis, adopting philosophical approaches to life, and philosophical reflection. The second assessment task, attached to the LOGOS II unit, is an ethical case study which requires students to identify ethical dilemmas within real life case studies, apply an ethical theory to the case study, and demonstrate their capacity to engage in practical reasoning in justifying what they would do if confronted with the dilemma. The overarching purpose of this graded assessment is to give students the opportunity to demonstrate the development of their capacity to be ethically responsible and their commitment to active citizenship. The final graded assessment task, attached to the LOGOS III unit, is a reflective portfolio which requires students to critically reflect on their personal or professional life experience in light of their learning about philosophical and theological reflection in the LOGOS programme. The overarching purpose of this final graded assessment is to provide students with the opportunity to demonstrate their developing habits of philosophical and theological reflection; in short, the graduate attribute of life-long learning.

Conclusion

The opportunity to develop standards rubrics to assure graduate capabilities/attributes came at a time when we also had the chance to completely review the way we offer the Core Curriculum Programme at UNDA, Sydney. There have been challenges both in the project of setting up the new LOGOS Programme and in developing and applying the standards rubrics. The opportunities to carefully re-think and re-examine how we approach teaching/learning, curriculum design, and assessment tasks, have changed and will continue to affect how we approach the Core Curriculum Programme in Sydney.

The greatest strengths of the project have been its success in increasing student engagement (according to evaluation data collected by UNDA in increasing student engagement), and its impact on the integrity of the curriculum as measured by its impact on teaching practice. A community of practice has developed amongst the staff: increased motivation, greater coherence in pedagogy and a clearer focus on educational goals is evident. These strengths are no doubt due in part to the unique opportunity which a compulsory Core Curriculum presents. At the same time creating a learning environment in which students from every discipline area participate demands that a great deal of time be spent in consultation with heads of different disciplines, in timetabling and in general administrative duties.

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