Gaps and Overlaps: a model to map the development of generic skills within a profession based undergraduate degree.

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Abstract
This paper will describe a project which aims to develop a model that will map the approaches to acquiring generic attributes and skills within the undergraduate accounting degree offered by Charles Sturt University. The paper reports on part of a larger project that will identify the technical and generic skills and attributes both required by the accounting professional bodies and expected of graduates by the University. The generic skill and attribute set identified in this process were mapped against the current teaching and assessment practices within the undergraduate accounting degree to identify any gaps or overlaps in the efficient transfer of these competencies to students.

Introduction
Over the last decade there have been increasing calls for changes in accounting education from the accounting profession, industry, and accounting academics (Albrecht & Sack 2000). In the dynamic and competitive environment of today, accounting graduates are expected to have acquired the technical skills of the profession but, more importantly to employers, should emerge from university with broader skills of analysis, problem solving, critical thinking and communication as well as competence in the common vocational skills required in modern office workplaces (CPA & ICAA 2005; Sin & Jones 2003). The challenge to universities teaching accounting is how to integrate the development of such attributes into the curriculum yet still satisfy the expectation that students will gain the required technical skills of the profession.

There has been considerable debate within the education literature regarding the types of skills and attributes students graduating from university should possess (for example Sumsion & Goodfellow 2004; Moore 2004; Bath et al 2004; Barrie 2004). This debate is taking place at a time when universities are experiencing increasing pressure from governments, employers, and society to develop graduates who are capable of meeting the demands and tensions of the modern workplace. However, within the education literature the identification of the constructs which comprise these skills and attributes has become problematic. This uncertainty is a reflection of the disparate views and differing ontological and pedagogical paradigms adopted by those participating in the debate.

In the current political climate, and amidst higher education sector upheaval, there is growing recognition that Higher Education Institutions (HEI) will come under closer scrutiny to ensure they are delivering quality outcomes in developing graduates across all disciplines (for example, Sumsion & Goodfellow 2004; Hill 2003; Hills & Stewart-David 2001; Harris, Adamson, & Hunt 1998). This creates an imperative for HEIs to map the delivery of their education programs in terms of technical and generic skills to the expected quality outcomes. Several research projects reported in
the education literature have attempted to map, in particular, the delivery of generic skills and attributes (Sumson & Goodfellow 2004; De La Harpe, Radloff, & Wyber 2000). However, very few of these ‘mapping’ projects have attempted to go beyond a cross sectional snapshot of generic skill delivery in an undergraduate degree course. This project aims to develop a laddered approach to delivery of generic skills.

The Accounting Paradigm

Like many academic disciplines accounting undergraduate degrees rely upon accreditation from the professional bodies which in Australia are the CPA Australia (CPA) and the Institute of Chartered Accountants of Australia (ICAA). In Australia HEIs delivering accounting degrees are jointly accredited by the two major professional bodies and HEIs accredited to teach accounting must undergo regular formal review processes with the professional bodies. As part of this process the CPA and ICAA specify what topics the accounting specialisation being offered must include to retain accreditation, and also explicitly outline the generic attributes that graduates are expected to attain through their accounting education.

The challenge to universities teaching accounting is how to integrate the laddered development of these generic skills and attributes into an already crowded accounting curriculum, yet still satisfy the expectation that students will gain the required technical accounting skills of the profession.

The Research Project

This paper reports on part of a project undertaken to map the delivery of both generic and technical skills to students in an undergraduate accounting degree at an Australian university. The research project adopts an embedded action research paradigm with the intent of actively engaging academic teaching staff in a dialogue on generic student outcomes. The phenomenographic nature of the research is expected to encourage a discourse amongst staff as to what are the important generic and technical skills and attributes for graduates, and how best they should be transferred to students. Such a discourse will serve to move staff towards a shared understanding of the constructs of what may be broadly termed graduate accountant capability.

The research project undertaken had two outcome foci. Firstly, the project aimed to develop a model with which to identify and map the delivery of generic skills across the whole of an undergraduate commerce degree. The approaches adopted were examined to identify how they were embedded into the subject curriculum. Secondly, the project developed a generic graduate skill and attribute data set based on cohesive curriculum development through the progressive acquisition of generic skills. The identified generic skill set was mapped against the curriculum of the accounting undergraduate degree to identify any gaps or overlaps in the development of these graduate attributes.

Models developed within the literature to date have mapped assessment activities to the subject objectives (Medlin, Graves & McGowan 2000) and assessment tasks to graduate capabilities (Malcolm & Hopkins 2005), but have not attempted to map the integration of generic and technical skills or the sequential development of those skills over a course of study. This project seeks to identify and map the delivery of all of these skills and attributes of accounting graduates deemed important and necessary by the
accounting profession, the HEIs, and the broader society. This paper presents the first stage of the project in mapping generic graduate attributes.

**Contribution of the Research**

This project seeks to provide a framework to map the opportunities for the integration of specific skills within the accounting curriculum and to model the effective scaffolding of the progressive acquisition of those skills for use in curriculum planning. It is expected that this study will make a significant contribution to the professional practice of accounting educators and may be extendable to other disciplines. The project is unique in that it will contextually operationalise both the generic and technical skill constructs of an accounting degree and map the sequential and laddered delivery and transmission of these skills through a three year undergraduate program. The project will also make a contribution to HEIs delivering accounting programs by providing a mechanism through which institutions can more easily satisfy the accreditation requirements of the accounting professional bodies. The project will also make a significant contribution to professional practice for accountants by improving the learning outcomes of graduates through the seamless sequential delivery of both technical and generic skills.

**Literature review**

**Taxonomy of graduate outcomes**

The taxonomy applied to graduate capabilities and competencies within the education literature has become confused, with a range of terms being used relatively interchangeably, the meanings of which have not been fully understood (Sumison & Goodfellow 2004; Borthwick & Wissler 2003). This confusion is in part a reflection of the disparate views and differing ontological and pedagogical paradigms adopted by those participating in the debate. As a result the identification of the constructs which comprise these skills and attributes has become problematic and has impeded the progress towards shared understanding and beneficial outcomes (Borthwick & Wissler 2003).

The terms used to describe graduate outcomes include skills, attributes, abilities, capacities, capabilities, competencies and qualities. These terms are used in combination with a range of descriptors including generic, core, transferable, employability, vocational, personal, and graduate. Thus the meanings and combinations of the two parts of the construct vary, increasing the likelihood of misinterpretation (Borthwick & Wissler 2003).

There is a recognised distinction between the discipline-based skills and attributes developed through a particular study specialisation and the generalised skills and attributes that are expected of all graduates. Barrie (2004) argued that these generalised skills should be described as ‘generic’ in that they are developed regardless of the field of study. These generic capacities are not entry level skills but are important outcomes of university learning to be looked for in a graduate of any degree (Barrie 2004). In this paper the term *generic skill* or *generic attribute* is operationalised as applying to outcomes expected on completion of an undergraduate program and *technical skill* or *technical attribute* as outcomes applying specifically to the discipline specialisation, in this case accounting.
Higher Education Institution (HEI) Graduate Attributes

Much of the recent focus on generic and technical skill acquisition within the education literature has been on conceptualising the generic skills or attributes that should be acquired by all university undergraduates, regardless of discipline. Within Australia and internationally many Higher Education Institutions (HEIs) have attempted to articulate the particular qualities of the education they provide by describing within the university mission statement the attributes and skills expected of their graduates (Barrie 2004). Most Australian universities are explicit about these skills and attributes that they expect to be generic to their graduates and seem to have broadly followed the definition of generic attributes proposed within the Australian Higher Education Council 1992 report Higher Education: Achieving Quality.

Whilst there is no complete and generally accepted classification of graduate generic attributes amongst HEIs, many individual institutions, have developed their own declarations (CSU 2003; Barrie 2004; Ross & Evans 2002, Medlin & McGowan 2000; Harris et al 1998). Such statements are common amongst Australian universities and many derive from the 1992 Higher Education Council report ‘Achieving Quality’ which defined generic graduate outcomes as the “skills, personal attributes and values which should be acquired by all graduates (and) represents the central achievement of higher education as a process” (1992, p.20). The generic descriptions of graduates across Australian universities are similar and many have developed a broad focus going beyond statements regarding the professional employability of graduates to more general declarations that include personal life skills such as the capacity to act as ‘global citizens’ and ‘as agents of social change’ (Barrie 2004, p.262).

Like many other Australian HEIs CSU has a set of graduate attributes outlined in broad terms as part of its 2002 – 2005 Strategic Plan (CSU 2003) but these graduate attributes have not been explicitly articulated down from the strategic level to staff in teaching centres. The CSU graduate is expected to have a comprehensive discipline based knowledge complemented by the ability to apply that technical knowledge, learn and work both independently and collaboratively, write and speak effectively, exercise reflective and critical judgement, effectively use information technology, and demonstrate a national and international perspective in their approach to life and study (CSU 2003).

At the operational level within the Faculty of Commerce at CSU, the university’s graduate attributes are articulated by teaching staff into skills and competencies which are then expressed explicitly in the subject outline and assessment tasks. Whilst there is no evidence of formal articulation from the university-level enunciation of graduate attributes to staff at the teaching level, within the CSU Faculty of Commerce assessment guidelines ensure that specific technical and generic skill outcomes are incorporated into student assessment tasks.

The Australian Government has overseen the implementation of the Graduate Skills Assessment (GSA) test developed and administered by the Australian Council for Educational Research (ACER) since 1999. The test is designed to provide an objective measure of the entry and exit level generic skills of undergraduate university students and assesses student skills in logical thinking, critical reasoning, interpersonal understanding, and written communication. Whilst the GSA has been
available since 1999 it has received little support from either universities or students and is not widely recognised by employers (DEST 2004).

The development of graduate attribute statements by most Australian universities is an example of the ongoing use in Australia of outcome-based education (OBE) and competency based education and training (CBET) models (Donnelly 2002; Bowder & Masters 1993). Such models are driven in part by the increasingly heavy quality compliance focus placed on HEIs and the need to satisfy the external audit requirements of bodies including the recently formed Australian University Quality Agency (AUQA). The pedagogical danger with the use of OBE and CBET in defining abstract generic attributes is that without a planned delivery mechanism (syllabus) there is no way for HEIs to ensure that graduates will be given the opportunity to develop the required skills within the set curriculum (Donnelly 2002). Bath et al (2004) described the inherent difficulty in the process of ‘translating’ the top-down enunciation by universities of graduate attributes into discipline-specific descriptions. A number of authors have also critically reported on the difficulties faced in articulating these generic attributes into a discipline curriculum, and problems in encouraging a shared understanding and commitment amongst academic staff (Clanchy & Ballard 1995; Barrie 2004; De La Harpe, Radloff, & Wyber 2000; Summison & Goodfellow 2004).

Statements by universities on the generic graduate attributes of successful students, seek to articulate to the broader community the skills and characteristics that are developed through an undergraduate degree program. The profession and industry have consistently identified skills in analytical problem solving, communication, commonly used business computing technology, interpersonal relations, and teamwork as being the key generic attributes required of graduates (Burnett 2003; Medlin et al 2000). In research conducted by Bowden and Masters (1993) it was found that the professions are generally satisfied with the standard of graduates however questions have been raised about how students are assessed on the development of the claimed attributes.

Accounting Profession Graduate Attributes

The Albrecht and Sack (2000) report was widely supported in the business education literature and recommended that accounting educators alter their curriculum to produce accounting graduates with a broader set of skills and attributes, encompassing more than purely technical accounting expertise (Braun 2004; Leveson 2000; Otter 1992). More widely, there is also the recognition that Higher Education Institutions (HEIs) will come under closer scrutiny in terms of delivering quality outcomes in developing graduates across all disciplines (Hill 2003; Hills & Stewart-David 2001; Harris et al 1998). This creates an imperative for HEIs to map the delivery of their programs to the quality outcomes expected of their graduates.

The accounting professional bodies in Australia have recognised the critical importance of generic skills and attributes for accounting graduates. In the Accreditation Guidelines for Universities (CPA & ICAA 2005) the CPA and ICAA are explicit regarding their expectations of the generic skill level of graduates. The generic skills identified by the professional bodies draw from the work of Professor William Burkitt (1993) and are divided into five major groupings between cognitive skills which are split into routine skills, analytic/design skills, and appreciative skills,
and behavioural skills which include personal skills and interpersonal skills. Whilst the CPA and ICAA document provides even more specific detail of the attributes desired by employers and the accounting bodies, readers are also referred to the work of Birkett (1993) and Jones and Sin (2003) for contextualised examples of the expected competencies. Importantly, the professional bodies recognise the hierarchical nature of generic skills and call for the planned and systematic teaching of generic skills within the accounting curriculum (CPA & ICAA 2005).

Developing generic skills and attributes

Traditionally assessment tasks have focused on the assessment of technical knowledge acquisition as the output of the learning and have given less focus to the development of the broader skills necessary for life-long learning (Anderson 1998). It has been argued that these broader generic and analytical skills are not an explicit element of the syllabus but have fallen into a ‘hidden curriculum’ (Pollmann 1990). The challenge for accounting educators is to bring the coherent development of these generic skills into the curriculum design with a sequential focus comparable to that applied to the teaching of discipline technical skills. However, within the literature there is a recognition that there is tension between the overall generic skills and attributes expected of graduates by the university and the generic skills expected by the discipline (Barrie 2004).

There is recognition that different professions have different foci in terms of the importance of specific competencies and that the acquisition of such skills and attributes may be best achieved within the discipline setting (Bath et al 2004; Barrie 2004). The successful delivery of generic skills to students requires the coordinated approach to curriculum planning, teaching, and assessment associated with effective learning (de la Harpe, Radloff, & Wyber 2000).

In their research report on Competency-based Education and Training, Bowden and Masters (1993) developed a model (Fig. 1) of the relationship between discipline-based professional practice as demonstrated by observable behaviour and the underlying capacities that enable competent practice. The model provides a contextual placement of the relationship between discipline-specific skills and generic skills and highlights the important interdependency between the development of the two skill sets.

Figure 1. Relational model of observable practice and underlying capacities (Bowden & Masters 1993, p.156)
Prior studies of the integration of professional skills into business courses have identified the importance of the meaningful integration of generic skills into the curriculum by matching particular skills to assessment tasks in appropriate subjects (Guthrie, McGowan & de la Harpe 2001; Hoddinott & Young, 2001). In particular the adoption of case studies in teaching has been advanced as effective in overcoming the gap between theory and practice by providing opportunities for analytical and critical thinking within an applied context, in order to enhance understanding and develop communication and presentation skills (Wines et al 1994).

Students generally fail to see the connection between the learning objectives of the assessment task, the assessment outcome, and their approach to learning. Biggs (1999), one of the pioneers of learning approach theory, contends that design of the assessment task is critical to student’s approaches to learning, and consequently student outcomes, because students will learn what they believe they will be assessed upon (Biggs 1999). For the student, the assessment task and process is the primary concern and will largely influence the learning strategies adopted. The accounting professional bodies contend that every opportunity must be taken to reinforce the message to students that the acquisition of generic skills and attributes is an extremely important outcome of a university education (CPA & ICAA 2005).

Integral to the development of a curriculum reflecting all of the skills expected to be acquired is the need to ensure the course materials identify those skills (Hoddinott & Young 2001). This will ensure that students and other stakeholders are in an informed position when evaluating their satisfaction with the course outcomes. Students’ ability to learn is enhanced when they undertake the journey of discovery themselves rather than being told facts or conventions to learn (Prosser & Trigwell 1999). Further, when students approach a topic from a number of different perspectives learning is enhanced. Embedding the development of generic skills into the delivery of technical skills and encouraging scaffolded delivery has a two-fold effect of developing generic skills and encouraging deep learning.

Limitations to the development of generic skills - academic issues

It is argued in the education literature that the general confusion over the generic skill construct and over the identification of what are the important generic skills extends to academic teaching staff (Barrie 2004, de la Harpe, Radloff, & Wyber 2000). Barrie (2004) contends that university teaching staff responsible for developing graduate attribute outcomes “do not share a common understanding of either the nature of these outcomes, or the teaching and learning processes that might facilitate the development of these outcomes” (Barrie 2004, p.263).

Whilst there is evidence within the literature (Bath et al 2004) that many assessment tasks seek to teach generic skills, in many of these tasks the skill is neither specifically taught nor is the expectation of skill transference explicitly identified in the assessment task. Rather, it appears to be an expectation that students will attain the generic skill by osmosis (Bath et al 2004). Where there is evidence of attempts to develop generic skills through assessment, these occur in an ad hoc and stand alone manner rather than being developed in an integrated hierarchical fashion that permeates the whole of degree curriculum (de la Harpe, Radloff, & Wyber 2000).
Limitations to the development of generic skills - structural issues

The current working environment for Australian academic staff creates a further hurdle for the adoption of teaching strategies for generic attributes. Given the external funding pressure being applied to HEIs, the focus of universities is on generating external funds to supplement declining public sector funding. In this environment academic workloads are increasing and academics are being asked by university management to look for ways to lower their teaching workloads. The biggest factor in a teaching academics workload is usually marking. Workload pressure invariably results in academic staff adopting formative assessment options that minimise marking time. Whilst it is not the intention in this paper to enter the pedagogical argument as to whether multiple choice questions are an effective assessment tool, or whether one essay is as effective an assessment discriminator as two essays, the fact remains that students are being asked to do less written formative assessment. This provides fewer opportunities, both for academics to critically assess students work, and for students to improve their written communication skills (Commonwealth of Australia 2001).

External financial pressure on Australian universities has also led to the increased use of casual and part-time staff for teaching which AUQA has identified as limiting the uptake of generic skills by students (Carroll 2004). Part-time staff are rarely included in University professional development programs for enhancing teaching, nor are they likely to be included in informal discussions amongst full-time academics where teaching practices are discussed.

The traditional promotion structure for academic staff in Australian universities is heavily weighted in favour of research outcomes and contributes to the difficulty in convincing academic staff to engage in innovative assessment tasks. The focus of the university Research Quality Framework (RQF) funding model shortly to be implemented in Australia, further directs academic attention on the importance of research rather than teaching.

The pressure on universities to develop alternate funding sources has also contributed to a more competitive market for students amongst Australian HEIs. Increasingly course structure and course offering decisions in Australian universities are being driven by perceptions of market forces rather than by pedagogical issues. Typical of the problems caused by this approach is the increased modularisation of subject offerings and the consequent decrease in the use of prerequisite subjects. With the modularisation of subject offerings the sequential delivery of both technical and generic skill sets becomes problematic and better learning outcomes less certain (Commonwealth of Australia 2001).

A further impact of structural changes in the Australian HEI market is the increasing articulation agreements between different levels of tertiary institutions. Articulation agreements between universities and Technical and Further Education (TAFE) Colleges enable TAFE students to transfer to a university degree program and gain substantial credits from universities for their prior TAFE studies. Invariably these agreements include virtually all of the core first year subjects of a three year undergraduate university degree where, by necessity, the critical development of generic university graduate attributes must commence. Increasingly universities are having only limited input into the teaching of both generic and technical skills to
students who have articulated across from TAFE, yet are ostensibly graduating with a three year degree.

**Research plan, methods and techniques**

The research project was undertaken as an action research oriented study as it was expected that the research process would materially impact on the both the process of embedding generic skills within the department where the project was undertaken, and on the attitudes and understanding of the teaching staff involved directly or indirectly with the project. The study was undertaken within the School of Business, Charles Sturt University and was undertaken in five phases:

1. the identification of the technical and generic skills and attributes acknowledged in the literature as being required by the accounting professional bodies and expected graduate attributes of the University;
2. the examination of the subject outlines and interviews with the teaching staff for each of the core subjects within the Accounting specialisation in order to identify the technical and generic skill acquisition expected and the means by which the skills are developed;
3. the identification by the accounting staff of the School, based in the literature and the data collected, of an inventory of the most important discipline based generic graduate skills and attributes;
4. the development of a schematic of the hierarchical levels of the identified generic skills and the developmental phases necessary for the stepped acquisition of those skills;
5. the mapping of the development of generic graduate skills and attributes within the current curriculum and teaching of the accounting degree and comparison against the developed model of generic attributes in order to identify gaps and overlaps in skill development at both completion of the program and sequentially through the program.

In depth interviews of staff from the School of Business were carried out to identify what generic skills were taught in each subject in the accounting specialisation and to ascertain how these skills were developed within the subject curriculum. Interviews were based on an unstructured questionnaire which sought to draw out the approach to developing student generic skills being taken by each teaching academic. Respondent staff were asked to identify the particular skills they believed were covered in their subject and describe whether the skill was encouraged, modelled, or explicitly taught. Whilst the nature of these teaching level constructs is amorphous and their usage somewhat problematic, the discursive nature of the interview process led to many full and frank discussions of the issues faced in teaching and developing generic attributes. It was also hoped that the iterative nature of the research process, with each step being taken back first to the discipline group and then to the School, would overcome the difficulty faced with prior mapping projects which was delivered top-down, and as a result, were not broadly accepted by staff (de la Harpe, Radloff, & Wyber 2000).

The Bachelor of Business (Accounting) degree is a 3 year, 24 subject undergraduate program comprised of 8 core subjects, 10 specialisation subjects, and 6 unspecified electives. Like many commerce degrees offered in Australia the core subjects are delivered in the first year and are common to all of the Bachelor of Business degrees
offered at CSU. The initial staff interview process enabled the mapping of generic skill development against all of the subjects in the business core and the accounting specialisation. Teaching staff were asked to identify the graduate attributes they saw as important and were also encouraged to broadly discuss their perception of the role of the university in delivering skills with a vocational focus.

Following the interviews, School of Business accounting staff were brought together as a group to agree on a hierarchy of generic skills and to map that hierarchy against current practice to identify any gaps or overlaps.

Results

The review of the subject outlines and interviews with staff revealed that many assessment tasks contained components designed by the academics to develop particular generic skills. While many assessment tasks make reference to generic skills in the marking criteria (some with a general comment and others specific to the assignment task), few set non-technical skills as specific objectives of the task. Further, generic skill development was rarely included in the subject objectives as published in subject outlines. Despite CSU publishing a list of expected graduate attributes there was no discernible attempt in the subjects investigated to encourage the development, or assess the attainment, of the specific CSU graduate characteristics. All of the interviewed staff believed that generic skills were an important outcome of university education, however whilst most staff were aware of the University’s graduate attributes none of those interviewed, including the writers, could articulate them clearly.

As expected a range of views were expressed by School of Business teaching staff regarding the relative importance of various graduate skills and attributes. However, there was general agreement amongst the staff interviewed on the paramount importance of written and oral communication skills. The ability to critically analyse and solve problems was also unanimously recognised as being important as was the ability to effectively use basic office software including Microsoft Word and Excel. Other generic skills and attributes considered important by teaching staff were, in no particular order, interpersonal skills, capacity for life-long learning, timeliness, teamwork, and leadership. The generic skills identified by the School of Business staff plot closely to the generic skills typically identified in the literature (de la Harpe Radloff, & Wyber 2000).

In identifying the important generic attributes for graduates the School of Business accounting staff also recognised that the skill development is hierarchical and needs to be staged sequentially. The group developed a schematic of how each skill could be developed from entry level through to the expected skill level of a graduate accountant. The models of skill development reflecting the different levels of capability and the factors that influence capacity development revealed that much of the generic skill-based learning is interdependent.

School of Business accounting staff, drawing on the interview data from the larger group, identified written communication skills as the most important generic skill on which to focus. The efficacy of the mapping model can be demonstrated through the application of the model to the key generic attribute, written communication skills.
Application of model to writing skills

It is recognised that each of the generic skill constructs has its own developmental process. The process to develop each of the generic skills was incorporated into an articulated relationship model such as the schematic for the written communication construct (Figure 2). The map of the development of written communication skills was again developed by the consensus of the CSU School of Business accounting discipline staff.

![Diagram of written communication skills]

Figure 2: Hierarchical Generic Skills Relationship Model: Writing skills

It was clear from the literature and confirmed in discussion with staff that specific generic skills were not developed in isolation from other generic skills. Staff identified that the starting point for written communication skills was grammar, spelling and document structure followed by the development of professional language and finally critical analysis. As such in order to articulate critical analysis in writing skills there is a need to develop other skills such as problem solving, critical thinking and MS Word skills. These skills could only be developed in a laddered and sequential manner over the degree program; hence any expectation of a high level of writing skills in the first year of the degree program was unrealistic.
The model was developed based on the three year, 24 subject full time accounting degree program offered by CSU based on four subjects each half year semester. Using the data on assessment collated from subject outlines and staff interviews a map of assessment and graduate skill development across the eight core business subjects and the ten accounting specialisation subjects in the School of Business was created (Figure 3). The six elective subjects available to students in the degree program were excluded from consideration for this project as there is no limitation to which subjects’ students may choose making mapping problematic.

<table>
<thead>
<tr>
<th>Subject Code</th>
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<th>Assignment</th>
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<tr>
<td>ACC100</td>
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<tr>
<td>ECO110</td>
<td>Microeconomics</td>
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<td>LAW110</td>
<td>Business Law</td>
<td>Essay</td>
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<tr>
<td>MGT100</td>
<td>Org &amp; Mgt.</td>
<td>Essay based on Case Study</td>
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<tr>
<td>ACC110</td>
<td>Accounting 2</td>
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<td>ECO120</td>
<td>Macro-economics</td>
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<td>MKT110</td>
<td>Mkt Principles</td>
<td>Essay</td>
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<tr>
<td>QBM 117</td>
<td>Business Statistics</td>
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<td>ACC200</td>
<td>Accounting Systems</td>
<td>Report – Qualitative focus</td>
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<td>ACC210</td>
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<td>FIN211</td>
<td>Fin Management</td>
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<td>Critical essay</td>
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<td>ACC341</td>
<td>Accounting Theory</td>
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Figure 3: Written Communication Subject Map (Written communication tasks in italics)
The accounting staff of the School of Business undertook the mapping of the delivery of written communication skills in Figure 3 above and identified that there was a significant gap in the requirement of written assessment in the first year subjects. One of the reasons suggested by staff and supported by the literature is that staff workloads and focus on research leads teaching staff to adopt assessment practices which minimise marking. Typically lectures will adopt tests to replace large written pieces as they are much simpler to mark and require a lower level of feedback to the student. Under the current assessment schemes in the School of Business, first year accounting students are required to submit written work in essay or report form in only two of the eight subjects; MGT100 Organisations and Management in the first semester and MKT110 Marketing Principles in the second semester. It was the view of the group that for the foundation skills in written communication to be firmly established at least two more items of written submissions were required in the first year curriculum.

It was suggested that in either ACC100 in the first session the student assignment must be submitted in report format and that students be marked strenuously on structure and format. In the second semester it was proposed that in ECO120 Macroeconomics a problem-based essay question be set to reinforce the development of good grammatical skills and essay structure embodied in the assessment in MGT100.

General results

In examining the gaps and overlaps in the delivery of generic skill to students over the course of the degree program it was apparent that many of the skills were well covered, even if the skill was not identified within subject or assessment objectives. In particular, oral communication was well addressed with students being given a range of mediums to develop this skill including formal and informal presentations, debates and leading class discussion. However it is clear that a more coordinated approach to the delivery of these key student outcomes is necessary to ensure the efficient and laddered development of these student capabilities. To that end the process of mapping and model development outlined above seems to have already achieved some success. The iterative process of slowly working towards a shared understanding and giving teaching staff ownership seems to have overcome many of the implementation problems of other mapping projects reported in the literature.

There was a concern expressed about the capabilities of the academic staff to teach the various generic skills and some confusion regarding what was the acceptable entry level skills of students. Where students were perceived to fall short of the minimum level of skill expected in a subject, questions were raised as to how much responsibility rested with the academic staff to develop those skills. With pressure on staff to perform in areas outside teaching and concern that the curriculum was already crowded, some teaching staff believed there was insufficient time and resources to develop these skills. In discussions with staff there was also recognition that some forms of assessment (for example, essays), whilst still necessary and important, take a significantly longer time to mark than other forms of assessment and that workload arrangements should be flexible enough to adjust to different assessment.

Another key finding from the project was the need for teaching staff, subject outlines, objectives and criteria to be more explicit in describing the generic outcomes to be
achieved. As found in the learning approaches literature students engage more effectively when learning and assessment align in a discipline context (Biggs 1999).

The researchers are pleased to report that this project was well received by all staff involved, each of whom in their own manner were working to develop various generic skills. The project unearthed a range of innovative student assessment and engagement practices currently being employed by staff to develop student capacities. Under the mapping model many of these practices will become formally embedded in the curriculum and continue to contribute to the transfer of generic skills to students.

Limitations

This paper reports in part, on the results generated from the mapping of an accounting degree on a campus of a regional Australian university. The accounting degree at CSU is delivered in multiple modes across several different campuses and whilst the exam component is identical across campuses and modes the internal assessment is at the discretion of the teaching staff responsible for each cohort. To that extent, whilst the model is generalisable across different CSU campuses, the actual map developed and any gaps and overlaps identified are likely to differ between different teaching centres contingent on individual assessment and teaching practices.

A further limitation is that the School of Business teaches mostly in face to face mode and has comparatively fewer international students than other institutions. The researchers recognise that developing graduate attributes in students with English as a second language and from culturally diverse backgrounds creates further challenges for teaching staff (Soontiens & de la Harpe 2002). Similarly the development of graduate attributes in a distance education context presents challenges not addressed in this paper.

While this paper has described the mapping of generic skills across a three year degree and has articulated a number of the gaps identified when applying the models developed it has not examined the attainment of generic skills from the perspective of the student. Clear enunciation of the expected level and type of generic skill developed in subject outlines and assessment tasks will encourage the development of the skills and direct students to the importance of such skills for their careers.

Conclusion

This paper reported in part on a larger project being undertaken to map generic and technical skill development in an undergraduate accounting degree. The paper identified that many staff were committed to the development of student generic skills but identified that there was insufficient coordination in the laddered and sequential transfer of these important skills to students. This paper reported on the development of the generic skill construct ‘written communication’ and presented a model of the hierarchical elements of the skill attainment over the three years of an undergraduate program.

The model was successfully applied within the School of Business where a gap was identified in respect of writing tasks and a solution was presented for adoption.
References


Carroll, M. 2004, Quality Assuring the Student Experience: AUQA’s Findings, Keynote Address, Student Experience Conference, Charles Sturt University.


