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Developing a scholarly approach to the evaluation of assessment practices

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Abstract

Purpose – The purpose of this paper is to examine and reflect on current assessment practice in a large undergraduate accounting programme delivered both in Australia and offshore, from the perspective of academics in their first semester at a “new-to-them” university.

Design/methodology/approach – The changing higher education environment and the reality of assessment in the current context are considered, as they raise a number of important issues around assessment practice. Some of the often cited literature linking teaching, learning and assessment, including student-centred learning and Confucian heritage culture, is also discussed. A reflective approach is used where Säljö’s five categories of student learning are used as the basis for informed reflection of the assessment used in the “new” academics' first semester at the university. The use of empirical evidence to test these reflections would be the next step in this scholarly approach to teaching and learning.

Findings – The reflections reveal a disparity between reality and the ideal in relation to assessment practice. Issues regarding timely feedback to students and timing of assessments can result in summative assessment when it has the potential to be formative. This paper has provided an opportunity for “new” academics to engage with the higher education literature early in their careers.

Originality/value – This paper is a resource for academics beginning to engage with the higher education literature around assessment, teaching and learning and can also be used to inform and improve the teaching and learning practices of many academics in higher education.

Keyword(s): Assessment; Higher education; Students; Learning.

Introduction

If we wish to discover the truth about an educational system, we must look into its assessment procedures (Rowntree, 1977, p. 2).

This paper is the result of research into assessment practice, undertaken by a group of academics teaching in a “new-to-them” institution. It is a collaborative effort that has evolved as part of a mentoring project undertaken at the School level and was aimed at developing a
scholarly approach to teaching and learning. Four members of the research group are new, full-time higher education academics who participated in the mentoring process. The school librarian/research support officer also played an active and important role in locating appropriate articles and guiding and assisting the mentees in their research. The result is a paper that will be of particular interest to academics “new” to higher education as an introduction to the abundance of literature in the area of teaching and learning in higher education. It can also be used to inform and improve the teaching and learning practices of many academics in higher education.

The purpose of this paper is to examine and reflect on current assessment practice in a large undergraduate accounting programme delivered in Melbourne (Australia), Singapore, Hong Kong and Malaysia. The discussion begins with an overview of the impact of changes in the higher education sector. Some of the often-cited literature linking teaching, learning and assessment is reviewed, including literature regarding student-centred learning and Confucian heritage culture.

The reality of assessment and classes in the current context is then considered followed by the reflections of assessment practice by the authors of their first semester in a new educational setting. Säljö's (1979) classification of student learning provides the framework for these reflections. The final section contains concluding remarks. Empirical evidence to test these reflections is the next stage in this scholarly approach and is reserved for a subsequent paper.

Overview of the changing higher education environment

Over the past two decades, the Australian university system has undergone immense change, driven largely as a result of changes at the national policy level. These changes have been well documented elsewhere (Marginson and Considine, 2000; Coaldrake and Stedman, 1998) and are not the focus of discussion in this paper. The outcomes of these changes have included “massive growth in student numbers, reduced funding from governments, increased demands for accountability and the transforming potential of new technologies for teaching and learning …” (Bellamy et al., 2003, p. 14).

In Australian universities, the number of enrolled students at higher education institutions have steadily increased with 842,183 students in 2001 to 957,176 students in 2005 – an increase of almost 14 per cent, with overseas students consisting of almost 19 per cent of these students in 2001 and steadily increasing to become 25 per cent of students in 2005 (Department of Education Science and Training, 2006). Birrell and Rapson (2005) collected data from Australian universities on accounting graduates and found that in 2003, 31 per cent of undergraduate and postgraduate accounting graduates were international students. There is little reason to doubt that changes of this nature directly impact on the nature of, and our overall approach to, the core activity of teaching and learning. As a consequence, ensuring a scholarly approach to teaching and learning, demonstrated by an understanding of the literature to inform continuous improvement in course design, becomes a critical part of the academic's role.

Teaching, learning and assessment literature

The literature clearly indicates that teaching, learning and assessment are linked. Ramsden (1992, p. 86) states that “good teaching and good learning are linked through the students'
experience of what we do”. The discussion that follows will examine the concept of deep and surface learning and assessment and feedback from a teaching and learning perspective.

To evaluate student learning, it is important to understand the distinction between deep and surface approaches to learning. Säljö (1979) classified students' understanding of learning into the following five categories:

1. learning as a quantitative increase in knowledge (i.e. acquiring information);
2. learning as memorising (i.e. storing information which can then be reproduced);
3. learning as acquiring facts, skills and methods that can be retained and used as necessary;
4. learning as making sense or abstracting meaning (i.e. relating parts of the subject matter to each other and to the real world); and
5. learning as interpreting and understanding reality in a different way (i.e. comprehending the world by reinterpreting knowledge).

The first three conceptions represent “surface-level” learning, the last two “deep learning”. It is important to realize that each higher conception implies that the earlier conceptions have already been acquired. For Ramsden (1992), the first three represent an understanding of learning that is “external” to the learner, while the last two categories represent an understanding of learning that is “internal” to the learner. Deep approaches to learning occur where a student's intention is to understand what they are learning by relating what they have learned previously with what they are learning now, relating theoretical concepts and learning to everyday situations, linking knowledge gained from previous courses as well as differentiating between argument and evidence. On the other hand, surface approaches to learning occur where a student's intention is to complete the requirements of the task at hand. This involves identifying key words or sentences rather than the formula that is used to solve the problem, rote learning information for assessment tasks, focusing on unrelated aspects of the task, not reflecting on concepts or facts and not distinguishing between principles and examples. Ramsden (1992) asserts that it is important that as teachers we are aware that all students have the capacity to be deep and surface learners and that these approaches “represent what a learning task or set of tasks is for the learner” and are not characteristics of the student.

A third approach to learning was introduced by Entwistle and Ramsden (1983) and Biggs (1987), as cited in Heikkila and Lonka (2006). This approach is referred to as the achieving or strategic approach and it describes students who “work hard to achieve good grades” by choosing a learning strategy that will maximize their academic success (Heikkila and Lonka, 2006, p. 100). Kember (2000) identifies that students taking this approach are motivated to achieve a high grade regardless of whether they are interested in the material being learned.

Ramsden (1992) identifies that a number of factors can encourage surface approaches to learning such as, for example, assessment methods that cause anxiety to a student, lack of or even poor feedback to students on their progress, a focus on procedural applications and information recall and an absence of independence when studying.

Further, Ramsden (1992) states that deep approaches to learning are encouraged by, for example, teaching that highlights how the subject matter is relevant to the student, clearly stated academic expectations, assessment and teaching that encourage students to engage
with learning tasks actively and in the long term and students being able to have a choice in
the study content and method and having an interest in the subject matter itself.

While a student's approach to learning develops from a number of influences, Ramsden
(1992, pp. 84-5) identified that these “approaches are intimately connected to student's
perceptions of the context of learning”. Ramsden (1992, p. 84) explains that a student's
perception of “assessment requirements, of workload, of the effectiveness of teaching and the
commitment of teachers, and of the amount of control students might exert over their own
learning” as well as their prior educational experiences, will interact to help form the learning
approach they use.

Booth et al. (1999, p. 280) in their research of students undertaking accounting degrees at
universities in Australia, have suggested “the approaches to learning literature emphasizes the
contextual nature of learning … learning is not viewed in isolation, but is discussed in
relation to a number of factors such as curriculum, assessment, modes of teaching students,
prior experiences and perception”. Lucas (2001) also describes the need for an understanding
of the context in which these approaches are adopted. That is, the context is influenced by
students' preconceptions of, and their perceptions of, relevance. Lucas (2001) suggests that
the design of modes of assessment should be reviewed so as to discourage a format or surface
approach to learning.

Ramsden (1992, pp. 96-103) describes the following six principles required for effective
higher education teaching. This paper will focus on the third principle in relation to
appropriate feedback and assessment:

1. **Interest and explanation.** Does the material provided stimulate student interest both
   from a content and relevance viewpoint?

2. **Concern and respect for students and student learning.** What message does our
   behaviour and attitude convey to students?

3. **Appropriate feedback and assessment.** Do students know what is required of them and
do we give students actionable feedback?

4. **Clear goals and intellectual challenge.** Are we providing our students with
   appropriate challenges that maintain their interest and do we assist students in
determining the key concepts?

5. **Independence, control and active engagement.** Are we encouraging and assisting our
   students to practice the art of enquiry?

6. **Learning from students.** Are we continuously seeking opportunities for us to learn
   about the effectiveness of our teaching, and what use do we make of student
   assessments in evaluating our actions and adapting the learning experience?

This paper will focus largely on formative assessment, “assessment that is intended to help
students grow” (Rowntree, 1977). This is consistent with the view expressed by Ramsden
(1992, p. 183) that “assessment is fundamentally about helping students to learn and teachers
to learn about how best to teach them”. Alternatively, summative assessment is assessment
that “has the clear purpose of certifying a level of attainment of a student at the point of
completion of a course or a program” (Boud and Falchikov, 2006, p. 401).

Ramsden (1992) highlights that from a student's perspective, “assessment always defines the
actual curriculum” as the assessment identifies how much work a student will need to do and
the parts of the curriculum that are the most important. Hence, it is important to recognize the
important role assessment plays in the quality of a student's learning experience. Ramsden (1992) argues that both the content and context of student learning, both past and present, will influence their approach to learning. The students' perceptions of learning are a result of their experience of our curricula, teaching methods and assessment procedures – the context of learning.

Lucas (2001, pp. 168-9), using a phenomenographic model, interviewed ten introductory accounting students, nine of whom had completed the same first year course. This allowed for an exploration of how individuals had experienced the same course. The analysis focused on finding both distinctive elements and similarities of the learning experience as experienced by the individual students. The study found clear qualitative differences in the intention of the students:

those whose intention it is to relate what they learn to what is relevant to them personally, whether for career, business or learning (deep or relating approach); and those who focus on passing the subject in order to obtain a qualification (surface or format approach) (Lucas, 2001, pp. 168-9).

Ramsden (1992) agrees with Rowntree (1977), who defines assessment as “getting to know our students and the quality of their learning”. This comes from identifying students by their characteristics and their complexities, as their strengths and weaknesses can impact on their learning potential. Informal and formal assessment also provides a means of knowing students. Hence, there is a direct link between the quality of student learning and the assessment of that learning. Ramsden (1992) views assessment as encompassing a number of perspectives including: expressing curricula goals more clearly to improve learning; measuring learning of students; learning from the experiences of our students; and, changing our students and ourselves.

Rowntree (1977) reports a number of reasons for the importance of assessment including: motivating students to learn; providing feedback to students and the teacher; and preparing students for “real life”. In addition, the teacher's use of assessment is also influenced by their own ideas about the purpose of teaching and learning, knowledge creation and the role of higher education. Similarly, in a phenomenographic study, Leveson (2000) concluded that academics, in her sample, fell into two distinct categories – those who viewed learning as the ability to memorise procedures to solve problems, and those who conceived learning as a conceptual development and change. Clearly, these disparate views of learning impact the type of assessment designed by academics.

Good teaching involves an awareness of the importance of assessment to student learning when the assessment tasks are developed. In choosing which assessment methods to use, Ramsden (1992) infers that our goals for student learning should drive the assessment methods chosen. He is also realistic in suggesting that it is rare to meet all the educational objectives with any one method of assessment. Rather, he suggests experimenting with different methods and determining the impact on student learning. This provides students with more avenues to display their knowledge and makes assessment of student achievement more accurate. It also “encourages greater responsibility for self-direction in learning” particularly where students have some choice in regard to the assessment (Ramsden, 1992, p. 192). Knowledge of a variety of assessment methods enhances the potential for teachers to choose the method best suited to measure the desired student learning outcome. Although the use of a variety of assessment methods is proposed by Ramsden (1992, pp. 191-2), he also
suggests that professional judgement is required in choosing assessment methods that meet the conceptual and procedural skills as well as attitudinal aspects that the course is trying to achieve.

The importance of feedback was demonstrated by investigations by Entwistle et al. (1989) cited in Ramsden (1992, p. 193) of first year engineering students in Scotland, which “showed an important contributory factor to student failure was an almost complete absence of feedback on progress during the first term of their studies”.

Ramsden (1992) highlights the need for effective feedback in aiding student learning. Some examples of excellent methods of feedback include use of model solutions to assessments, opportunities for students to engage in discussion with the teacher about the answers, informing students of their progress using informal assessments during class, providing the marking guide to students at the outset of the course as well as written comments on student work. Motivation for inadequate feedback can result from a reluctance to meet with students, a misconception that the provision of feedback is assisting non-deserving students, laziness in developing model solutions and fear of losing authority by admitting the reasons for assessment marks not being high. It should also be recognized that the teacher is not the only source of feedback to students. Students may also obtain feedback from self and peer assessment.

While there is a multitude of definitions of student-centred learning, those espoused by Lea et al., (2003, p. 322) provide a comprehensive list of issues to consider including:

- reliance on active, rather than passive learning;
- an emphasis on deep learning and understanding;
- increased autonomy, responsibility and accountability by the learner;
- inter-dependence and mutual respect between teacher and learner; and
- a reflexive approach to the learning and teaching process on the part of both teacher and learner.

Sparrow et al. (2000) describe student-centred learning as “consisting of three core characteristics: what is learned, how it is learned, and when it is learned” while Guest (2005) considers student-centred learning in the context of flexible learning. Guest (2005) espouses that flexible learning should empower students to engage in decision making and provide some autonomy in regard to their learning environment.

Scott et al. (1997) focused on student independence (autonomy, responsibility and accountability for learning) when implementing a student-centred learning structure in their large first year course. A particular focus for these authors was characteristics around student independence. These included:

- working collaboratively with others, choosing where and when learning can take place, using teachers as guides, engaging in summative self-assessment, students reflecting on their learning processes and acquiring new learning strategies and tools (Scott et al., 1997, p. 21).

Felder and Brent (1996) refer to the “trauma and grief” often associated with subjects that require students to undertake major responsibility for their own learning. The steps they cite are: shock, denial, strong emotion, resistance and withdrawal, struggle and exploration, return of confidence and integration and success. Adler et al. (2000) regard the adoption of student-
centred learning approaches as problematic and identify three impediments to the adoption of student-centred learning approaches as, a lack of student readiness, inadequate educator support mechanisms, and non-reflective teacher practices.

Mindful of the large increase in the numbers of international students now studying at Australian universities, and the export of accounting education, particularly to South East Asia and China, the literature in relation to Confucian-heritage culture is relevant to this discussion, particularly as the literature proposes that academics should get to know their students (Ramsden, 1992; Rowntree, 1977).

Confucian-heritage culture is used to refer to the cultures in countries such as China, Taiwan, Singapore, Hong Kong, Malaysia or Korea (Watkins and Biggs, 1996). From a learning and education perspective, Ho (1994) as cited in Ho et al. (2002), described it as “a representation of truth transmitted to, and subsequently experienced and internalized by, the student”.

Confucian-heritage culture affects student learning approaches, as well as in-class activities and attitudes towards the assessment of Asian students. Traditionally, western educators view Asian students as surface learners (Parsons and Schneider, 1974). However, Watkins and Biggs (1996) as cited in Ho et al. (2002), and Cooper (2004), considered the paradox of the Chinese learner: why are Asian learners so successful when their teaching and learning is viewed as rote memorisation? Their success is well documented and is not just in terms of academic success, but also in work-related areas.

Marton et al. (1992), as cited in Smith et al. (1998) undertook research into rote learning and found that memorization could be used to develop a deeper understanding of subject materials. The authors found that a distinction exists “between memorization that includes the development of understanding, and memorization that represents mechanical rote learning” (Marton et al. (1992), as cited in Smith et al. (1998, p. 262)). This was supported by Gow et al. (1996) as they distinguished memorisation from repetitive rote production as a necessary step in the process towards deep understanding, as well as Kember (2000), who found that students may use memorization and rote-learning as part of a process in gaining understanding of the subject material.

This raises the question of whether assessments in different countries test students' surface learning or deep understanding. Kember and Gow (1991) undertook research on Hong Kong students to test the anecdote that memorization and rote learning were relied upon by these students, hence undertaking a surface approach to learning. Kember and Gow (1991) used a Study Process Questionnaire (Biggs (1987) as cited in Kember and Gow (1991)) to test the learning approaches of these students as surface, deep or achieving approaches. Their results found that the scores for deep and surface learning approaches among the Hong Kong students was comparable to “those of students from CAE’s [Council's of Adult Education] in Australia, and if anything, the Hong Kong students score lower on surface approach and higher on deep”. The results also found that the Hong Kong students scored higher for the achieving approach than the Australian students which suggests that the “Hong Kong students are keener and more competitive” (Kember and Gow, 1991, p. 121). Kember (2000, p. 117) found in a later study that while “Asian students display high levels of achievement motivation … there is evidence that Asian achievement motivation has a more collective nature” rather than an individual need for competition and enhancement of ego.
A comparison of student assessments in Australia, Japan and Thailand, by Baumgart and Halse (1999), suggests that the examinations in Japan and Thailand went well beyond rote memorization. The multiple choice format provided no opportunity for partial credit for processes, but rewarded only the right responses with deep understanding. On the other hand, Australian examination papers, which were perceived as fostering deep learning, actually comprised “short answer and essay questions using a familiar format which could reward well organised, previously prepared and memorised model responses” (Baumgart and Halse, 1999, p. 336).

Kember (2000) undertook further research into the misconceptions about Asian students. He identified that students may use memorization because the course design and assessment creates this perception of having to reproduce a lot of material. He also explains that a reason that the myth of Asian students resisting innovative teaching approaches may exist is because students “were not given time and support to adapt from teaching styles they had experienced a great deal” to teaching styles that were quite new to them (Kember, 2000, p. 117).

Having provided a brief overview of the literature around teaching, learning, assessment, Confucian-heritage culture and student-centred learning, the discussion now provides an insight into the reality of classes and assessment when the authors undertook their reflections.

The reality of classes and assessment in the current context

The academic programme under review comprises 24 courses (subjects) and is offered in Melbourne (Australia), Hong Kong, Singapore and Malaysia. Assessment requirements are generally the same in all locations. Most courses in the programme require weekly student attendance at a two-hour lecture and one-hour tutorial. Approximately 90 per cent of the courses have final exams. Many courses have other assessment tasks that are also used during the semester resulting in a large proportion of academic time being spent correcting each piece of formative assessment. Academics accordingly have a vested interest in minimising the number of pieces of formative assessment.

The academic programme is subject to the accreditation guidelines for universities set by the professional accounting bodies in Australia, namely CPA Australia and The Institute of Chartered Accountants of Australia. While the guidelines do not explicitly demand the use of exams, the guidelines imply this by stating that “excessive reliance for assessment purposes on unsupervised work, or on tests of simple memory recall is not regarded as conducive to reliable assessment of quality of achievement” (CPA Australia and the ICAA, 2005, p. 7). This results in a degree of restriction on the assessment used for courses in this programme.

University student cohorts have changed over time, and it is generally recognised that they are now more diverse than in the past. There is a greater percentage of international students and a decreased percentage of domestic students as discussed earlier. The educational background of students entering a bachelor degree programme is also more diverse with a large number of students entering university after completing one or more TAFE programmes.

Cultural differences bring different learning styles, different experiences and expectations of in-class activities and also different attitudes to assessments. With such a large population of students with Asian cultural backgrounds, it is inevitable that both classroom dynamics and assessment practices are affected by Confucian-heritage culture.
The discussion now moves to an individual reflection by the authors regarding their experiences of assessment practice in the courses they were involved with in their first semester at the university.

**Reflections of “new” academics**

Based on the authors' observations and the application of the five categories of a students' understanding of learning identified by Säljö (1979), the authors reflected on whether the assessment in each course promoted deep or surface learning and whether they believe students adopted a deep or surface approach to their learning. These reflections have been informed by the literature and are shown in Table I.

**Concluding remarks**

A preliminary finding of our research is that “reality does not reflect the ideal” in relation to assessment practice. Another issue that arose related to timing of assessment and provision of timely feedback to students. Occasionally, first assessments are due later in the semester. Thus the assessment which has the potential to be formative, becomes summative as students do not have the opportunity to review the feedback for improvement. This also results in academic staff not being aware of any learning problems faced by students until correcting assessments. Often this is too late for the student to withdraw from the course or more importantly, for appropriate remedial action to be taken by the academic.

The overarching aim of this paper was to provide an opportunity for “new” academics to participate in a scholarly approach to teaching and learning practice. Without question, the process of researching and writing this paper has ensured that these academics have commenced engaging with the appropriate higher education literature in a reflective manner. The timeliness of this engagement can also not be underestimated. Exposure to this practice in the early stages of an academic career is necessary as it can impact on the approach taken by “new” academics to the core activity of teaching and learning.
Table I: Reflections of “new” academics

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<th>Unit</th>
<th>Description of assessment tasks</th>
<th>Reflections of academics</th>
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| First year accounting | Assignment: Practice set with typical business transactions; processed to the stage of producing financial statements. Completed manually and electronically using an accounting software package. Both sets handed back in week 12.  
Exam: Three-hour end of semester closed book exam with eight questions. | The assignment aimed to reinforce key concepts by application. However, the vast majority of students simply followed the stage. A minority group of students copied the work of other students, clearly indicating a desire to simply pass the assessment task. The exam format and emphasis varied little from semester to semester and was largely task oriented. With minimal effort, students could reasonably predict the exams on the basis of previous exams. Both of these assessments represent categories 1, 2 and 3 thereby arguing promoting surface learning.  
Comment by academic: “A further observation is that many students viewed the course as too heavily centered on teaching the content and assessment, with little opportunity for teaching staff to know their students, resulting in an environment where students saw their role as one of simply responding.” |
| First year accounting course | Assignment: Analysis of the financial performance and position of a company using the company’s financial reports  
Exam: Three-hour end of semester closed book exam | The assignment aimed to promote deep learning with the objective of understanding basic accounting concepts by applying these concepts to financial statements, and the use of analysis, hence meeting categories 1, 2, 3 and 4. In the exam, students were required to discuss the characteristics of accounting information, and one aspect to analyze the performance of the business. Students who did not fully understand the definition of categories would not possess the analytical skills necessary to pass this component of the assessment.  
Comment by academic: “At the beginning of the semester, it was observed that many students appeared to approach study of this course by adopting a surface learning approach. However, as the semester progressed, many students appeared to adopt a deep learning approach. This change in approach reflects recognition by students of the requirements of the assessment in the course and the approach to assessment adopted by teaching staff.” |
| First year accounting course | Tutorial hand-in: Tutorial work was randomly collected four times throughout the semester. Degree of work completed resulted in a mark out of 2.5.  
Test: Multiple choice test during the semester  
Exam: Three-hour end of semester exam consisting of predominantly practical questions with limited theory questions | The tutorial hand-in tried to encourage a deep approach to learning with students having to apply the knowledge they obtained to more difficult activities that required a deeper understanding and application of the content if they were to achieve full marks for the hand-in. Thus, meeting categories 1, 2 and 3. While category 4 may have been met by some students, certainly many students seemed to adopt a surface approach to learning with a minority of students extending their learning beyond category 3.  
Comment by academic: “Through my reading of the literature, I have noticed a focus on student independence and the use of different learning styles and approaches to learning. Understanding these differences is an important part of student-centred learning.” |
| Law course | Exam: Three-hour end of semester exam | Student learning was closely directed by the content of past exams with students learning the material to the depth to be demonstrated in the exam thus encouraging the adoption of surface approaches to learning and the meeting of categories 1, 2 and 3. The lack of substantial feedback during the law course, and anticipated exam time pressure, also encouraged students to become anxious about the exam, again encouraging a surface approach to learning. |

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**Further Reading**


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