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Engaged pedagogy: A study of the use of reflective journals in accounting education

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Engaged pedagogy: A study of the use of reflective journals in accounting education

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Abstract

This paper provides a report on a study of innovation in postgraduate education in which a reflective learning journal was used for formal assessment purposes in a management accounting course. Prompted by the discourse on the shortcomings of accounting education in terms of learning processes, learning experiences, and learning outcomes, the reflective journal was designed to address concerns related to poor uptake of teaching and learning innovations in the discipline and recognised deficiencies in the generic competencies of accounting graduates. Utilising action research methods, the incremental approach to the implementation of the assessment activity is described and evaluated based on an analysis of 73 journal submissions across a five-year period. The results, while based on a sample of limited size, indicated a dichotomy in surface versus deep approaches to learning in reference to the assessment task, but with improvements in student performances and learning outcomes when more radical change to the learning journal assessment item was introduced.

Keywords: learning journal, reflective journal, assessment, postgraduate studies, accounting education

Change in accounting education

For well over two decades it has been widely argued that accounting courses are outmoded, conventional, and based on transmissive models of teaching, learning and assessment (Accounting Education Change Commission 1990; Albrecht and Sack 2000; Ahern, Kujil and Marrian 2007). In consequence, graduates lack appropriate competencies, such as critical thinking, communication, and reflective skills, essential to independent learning and successful practice within the accounting profession (Mohamed and Lashine 2003; Springer and Borthick 2004). Learning and assessment of the procedural and technical aspects of accounting, rather than the cultivation of professionally relevant generic skills, continue to preponderate in courses in the discipline, with teaching largely fixed on knowledge transference and the passive participation of learners (Boyce et al. 2001; Saunders and Christopher 2003; Leveson 2004).

Meeting the challenge of calls for change demands the development of a pedagogical approach to encourage student-centred learning, recognise the need for active and experiential learning strategies, and promote knowledge transformation and reflection in learners. There is a strong imperative for innovations and learning interventions in accounting courses in order to develop students' generic skills, consistent with the goals of lifelong learning, deep approaches to learning, and holistic education (English, Lockett, and Mladenovic 2004; Kavanagh and Drennan 2008). There is a similar history of deficiencies within the sub-discipline area of management accounting (Perera and Harrison 1995), with which this paper is concerned, and continued pleas for course reorientation and pedagogical change in this area (see Burns, Hopper and Yazdifar 2004; Lord and Robertson 2006).

Research indicates that building the capacity for reflective practice is often overlooked in both postgraduate accounting studies and accounting practice (Brown and McCartney 1998), and that employers continue to perceive weaknesses in the writing and problem

solving abilities of management accounting graduates (Tan, Fowler, and Hawkes 2004). Learning journals are one strategy for fostering the forms of deep learning and reflective practice which promote and allow for the demonstration of skills development and have the capacity to produce the type of practitioners the profession demands.

Learning journals

Learning journals represent ‘self-directed methods that facilitate reflection’ (Lockyer, Gondocz, and Thivierge 2004, 50). The journal is a narrative, personal disquisition in which students can record and relay their thoughts, feelings, attitudes, comments and reflections on the content of a course and their learning journey in that course. Their use in business courses is perceived to be a more recent ‘innovative’ addition to the array of assessment techniques (see Adams, Barker, and Lancaster 2002), and there is limited available evidence on the use of learning journals in educating accountants (for exceptions see Day, Kaidonis, and Perrin 2003; Mintz 2006; Samkin and Francis 2008). According to Varner and Peck (2003), learning journals provide a means for meeting the needs of postgraduate adult learners in business disciplines, as well as constituting appropriate assessment vehicles. Learning journals are an acute form of divergent assessment where the focus is on originality and individuality, and how the learner learns and thinks (see Torrance and Pryor 1998).

Park (2003) described a number of reasons why learning journals offer positive experiences for students, including factors related to ownership, awareness of learning, self-confidence, regular reading, a focus on the whole course, engagement with the material, and reflectivity. Similarly, George (2002) noted how reflection can be encouraged by journaling and that this process can stimulate deep, rather than surface learning. Other empirical studies suggest that learning journals can be used as evidence of reflective thinking and for the diagnosis of deficiencies in the abilities of students to think reflectively and critically (Wong

et al. 1995; Kember et al. 1999). There is also some evidence that learning journals significantly improve not only generic skills, but also knowledge of content (Burrows et al. 2001). Given these potential benefits, learning journals offered scope for redressing the inadequacies of accounting programs by enriching students' meta-cognitive skills and understanding of content, helping students to develop improved techniques for learning, and enlivening an otherwise conventional assessment regimen.

The learning journal project

A project to trial the learning journal in a postgraduate management accounting course was conducted in an Australian university and this paper provides a report on the experiences of this trial and subsequent refinement of the learning journal innovation from 2004 to 2008. A total of 37 students successfully completed the course over the five-year period – 19 of whom submitted their journal at the end of the course (2004 to 2005) and 18 of whom submitted journals on three separate occasions during the course (2006 to 2008).

Learning objectives

Students were enrolled in a compulsory master's level course in management accounting, offered through distance mode. The overall objectives specify that upon completion of the course students should be able to demonstrate a discipline-based understanding of thought and theory, evaluate research designs, critically evaluate theories and research studies, and relate thought, theory and the research literature to the practice of management accounting in the real-world. In terms of generic competencies, students are formally advised that the course and formal assessments target the application of research, analytical, critical thinking, writing and reflective skills.

Journal content

In the trial phase of the assessment project (2004 to 2005) the first two assignments in the course were traditional essays. The third assignment in the course required students to maintain and submit a reflective learning journal covering all modules of the course. Variations in the structure and requirements of the assessment regime from 2004 to 2008 are detailed in Table 1.

[take in Table 1]

A reading (Boud 2001) on learning journals and reflective practice and comprehensive instructions for keeping the learning journal were provided to students. Further guidance on compiling the journal was provided in response to students' posts on an online course forum. The written guidelines for the learning journal asked students to include general notes, thoughts and reflective comments about the modules studied. Students were advised to focus on practice and to relate theories and research to their professional experiences, other disciplines, and their prior studies.

In addition, students were also required to complete a series of specific journal activities. In the trial stage of the learning journal initiative there were 14 mandated journal activities, plus a major integrative activity bringing together all modules of the course. All of the journal activities were fashioned to tap critical, interpretive and reflective skills. Some activities asked students to compare scholarly articles representing alternative views on an issue, or to synthesise two bodies of the literature. Other activities required knowledge transformation, the proffering of personal opinions, and the retelling and reflection on professional experiences. Examples of these structured activities appear in the Appendix.

The inclusion of this structured component was informed by the cautionary note that journal requirements need to be explicit to ensure that 'students don't fall into the trap of writing a diary' (American Accounting Association 1995, 4.3.6). Another motivation for

including structured activities was the distance education offering of the course, meaning that students do not attend tutorials or seminars in which to engage in discussion and debate. The prescribed journal activities were designed as a relevant substitute for class interaction and as a means for framing, mediating and scaffolding learning, and prompting reflection.

Evaluation of the project

Following the introduction of the learning journal in 2004, an iterative process of action research-driven course development (see Kember 1998) was utilised in making refinements for successive offerings of the course from 2005 to 2008. Evaluation of students' learning journals, and of the overall learning journal initiative from a research project perspective, was conducted using thematic analysis. The primary themes for evaluating and rating the journals were criticality, reflections on practice, reflections on first-hand experience, reflections on learning, and personal opinions. Aggregated ratings in respect to these factors yielded a basis for classifying journal submissions as indicative of students' adoption of either deep or surface approaches to learning. The themes and relevant examples of journaling practice for each theme, for both surface and deep learners, are provided in Table 4. This level of analysis also helped to address the issue of what marking criteria to apply and how to assess and evaluate journal submissions - a concern featured significantly in the learning journal literature (see Smith and Tillema 2003, 626; Creme 2005).

The marking of student journals and the evaluation of the journals as part of this research project was conducted by the same educator across the 2004-2008 period, with the exception of 2005 when another professor marked the journals. However, both professors then independently evaluated all journals submitted that year ($n = 7$), with this procedure serving as a qualitative test of inter-rater reliability. A comparison of the evaluations made by the two educators revealed a complete congruence in categorisations with respect to whether

individual journals were illustrative of students having applied deep or surface approaches to learning.

Analysis and results – Trial stage

The success of the learning journal assignment was analysed on a two stage basis, representing the trial phase of implementation (2004 to 2005) and the more radical refinement stage (2006 to 2008), with reference to the 73 submissions of all 37 students successfully completing the course within the five-year period. The first year (2004) of the trial proved highly useful in identifying pitfalls in the implementation of the assessment innovation and problems in achieving the desired learning objectives and outcomes, with the results of this trial providing guidance and justifications for improvements in subsequent years. Table 2 furnishes evidence across a number of dimensions for the journals submitted by students ($n = 12$) in the initial year of the trial.

[take in Table 2]

Journal length and content

Journals varied in length from 14 to 261 pages, with a mean length of 67.5 pages and median length of approximately 58 pages. The analysis reported in Table 2 also reveals that most journals comprised a weighty component of summary notes of the prescribed readings and responses to the required journal activities, and very meagre critical reflective entries of a more general nature. This result was attributed to the educator's failure to clearly detail for students how to journalise critical reflective comments, and to allocate sufficient marks to the general critical reflective component of the journal. These problems were rectified in the next iteration of the trial (refer to Table 1).

Learner characteristics

Deeper analysis of the journals revealed that submissions were clearly divisible into two groupings. The observed distinctions were indicative of differences in students' approaches to learning. The larger group, comprising 60% of the cohort in this initial year of the trial (see Table 2), included those students whose journals strongly indicated weaknesses in approaches to learning and in the skills set needed to come to grips with the assessment task. Based on the emergent dimensions of the journals of these learners (see Table 4), this group was categorised as 'Surface/non-reflective'. In terms of the Biggs' (1999) SOLO taxonomy the journals of students in this group were unistructural or multistructural, demonstrating lower levels of complexity of cognition. Further, the contents of these journals were relatively brief and displayed declining levels of achievement and performance in students' coverage of the first through to the last module of the subject. As part of the assignment instructions students had been alerted to the need to work on their journals on a weekly basis, but despite this advice most of the journals submitted by the Surface/non-reflective group indicated that the journal had been written-up at the end of the course. This point was reinforced by the tendency for these students to request extensions of time on the due date for journal submission, or to make a late submission.

Conversely, students composing the other group demonstrated strong critical capacities, confidence in voicing controversial personal opinions, and informed reflection on learning, practice and experiences (see Table 4). This group was classified as 'Deep/reflective' and displayed the higher levels of relational and extended abstract cognition identified by Biggs (1999) as typifying deep approaches to learning. The journals of these students also exhibited comprehensiveness, understanding, abilities to identify relationships within and beyond the course, self-awareness, and risk-taking in tendering personal intellectual positions (see Table 4), matching the criteria noted by Creme (2005, 290) as exemplifying a 'good record of study' within a learning journal context. These journals also

included lengthier discourses concerning students' thoughts and reflections beyond those in response to the prescribed journal activities.

Issues in assessment composition

A comparison of average marks awarded for the journals highlighted the distinctions between the two groups of learners - the Surface/non-reflective group mean mark was 62.9%, and the Deep/reflective group mean mark was 84.8%. However, average marks awarded for the initial two essay style assignments in the course did not vary significantly between the two groups, with a mean score for the Surface/non-reflective group of 71.5%, and 69.5% for the Deep/reflective group. These results raised questions about the capacity of traditional essays in fostering and adequately gauging the depth of students' learning and critical-reflective abilities.

Feedback

Following submission and marking of the journals, detailed feedback was provided to each student consisting of a Comment Sheet, specific remarks and suggestions made within the body of each student's journal, a student's score on each content requirement, and an assessment criteria sheet. The assessment criteria sheet was reproduced from the course materials provided to students and was marked with the educator's assessment of the student's performance across six dimensions (presentation, style, sources, structure, content, and development) and according to four levels of a standard grading scale.

In addition to comments made by students in their journals about learning and the assessment activity, feedback was also available to the educator from independently-conducted, formal evaluations of the course. In the first year of the learning journal trial

students' responses to these survey evaluations indicated several concerns, of which the following were typical:

The learning journal - the lack of a word limit was a problem as my journal could almost reach 10,000 words on its own.

Writing formalized "general comments" is also a problem, as once again this aspect on its own could be massive & therefore selecting "appropriate" & "inappropriate" comments (i.e. comments to include) can be arbitrary.

Student perceptions, such as these, of the negative aspects of learning journals related to task difficulty and task uncertainty, and constraints such as time and word limits. The feedback generally accorded with Park's (2003) observations and findings, although by way of contrast Park's students commented negatively on the imposition of a word limit for their journals.

Incremental change

To address the deficiencies highlighted by the analysis of student submissions and student feedback in the first year of the trial, an incremental approach to implementing refinements was adopted (see Table 1). For the next offering of the course (in 2005) the percentage of marks allocated to completing the structured journal activities was reduced, with a compensatory increase in the marks allocated to students' reflective thoughts and comments. The journal assignment instructions were reworded to better clarify what was required in writing the journal and further guidance was provided about how students could present their own thoughts, opinions and comments, rather than merely regurgitating material from the prescribed course readings. This regurgitation had been a particular problem with the Surface/non-reflective group of learners in 2004 (refer to Table 2).

Despite these changes, and with a different professor undertaking the marking and evaluation of all assessment items in the course in 2005, the nature of the distinctions between

deep and surface learners remained observable. Further, the results in respect to essays, which continued to be a component of the overall assessment in the second year of the trial (see Table 1), reinforced the conclusion that this traditional form of assessment was of limited value in building and evaluating students' deep learning and critical-reflective abilities. For example, for the learning journal aspect of assessment in 2005 the Surface/non-reflective group ($n = 3$) mean mark was 69% and the Deep/reflective group ($n = 4$) mean mark was 88.5%. However, for the first essay assignment in the course the mean marks failed to highlight any appreciable difference between learners, being a 61% mean result for the Surface/non-reflective group, compared to 68% for the Deep/reflective group.

Analysis and results – Refinement stage

Analysis and identification of issues arising from the two trial years of implementation of the learning journal assessment innovation drove more radical change in the third year (2006). The primary issues identified were that students who performed well in writing traditional essay assignments often did not demonstrate the critical, reflective and higher-order thinking skills expected in the learning journal assignment and, given that the learning journal was the final assignment in the course, where weaknesses were identified in students' skills it was too late to provide actionable feedback for students to redress deficiencies. Consequently, in 2006 the essay assignments were removed, with the learning journal instead worth 100% of assessment in the course and now serving both formative and summative assessment purposes (see Table 1). Additional structured journal activities were included and journals were required to be submitted (and assessed) at three regular intervals during the semester. This has remained the assessment regime across 2006 to 2008. In addition to providing improved opportunities for students to develop relevant skills, the strategy of requiring multiple submissions of the journal was also devised to discourage surface orientations to learning,

including the tendency for poorer performers to engage in last-minute preparation of the journal.

The first and second submissions of the journal were each worth 20% of total assessment, and the final submission was worth 60% (refer to Table 1). This assessment breakdown was conceived to give students the ability to utilise feedback to develop their skills without the risk of sacrificing a large proportion of their total mark earlier in the semester, as well as (in line with Dewey 1933) to better yield opportunities to teach students how to be critical, reflective thinkers through educator feedback provided on successive submissions.

Journal length and content

In this refinement stage 18 students completed the course, comprising five students in 2006, ten in 2007, and three in 2008, with each student making the requisite three submissions (totalling 54 individual submissions) of the journal. The length of the completed learning journals, based on the aggregate for each student's three submissions, ranged from 22 to 124 pages (excluding references), with a mean length of 63 pages and median of 69 pages. Other relevant dimensions for the journals appear in Table 3.

[take in Table 3]

In comparison to the learning journals submitted in the two-year trial stage, journals in this refinement stage generally exhibited a far more substantial component of critical thoughts, comments and reflections on content, learning, and experiences beyond that required for the structured journal activities (see Table 3). In the trial stage, such comments and reflections accounted for an average of only 6% of total journal length, while for 2006 to 2008 this mean was 40% overall. While the length of journals in the refinement stage (median = 69 pages) had not increased appreciably compared to the trial stage (median = 58 pages), the change in

journal content was nevertheless significant. From the trial to the refinement stage of the project students had moved away from making copious notes of course readings to providing original descriptions and discussions based on their own opinions, experiences and reflections.

Learner characteristics

Even though the percentage of journal content that students devoted to discussing their experiences and reflections was considerably elevated in comparison to the trial stage, journal submissions in the refinement stage continued to reveal the dichotomy in levels of accomplishment with respect to critical-reflective skills and the demonstration of deep learning strategies. Observations on the qualitative modalities for the two groups (reported in Table 4) remained valid, although the percentage of journals illustrative of surface learning orientations declined from 60% in the trial stage to 50% in this refinement stage.

[take in Table 4]

The details presented in Table 4 reveal that students comprising the Deep/reflective group demonstrated high-level discursive abilities, the capacity to inveigh theory and research, and to provide germane examples of praxis. By way of contrast, the narratives of students in the Surface/non-reflective group were highly focused on completing mandated readings and structured journal activities, and revealed limited evidence of metacognitive development. Where these students had attempted to engage in critical reflective activity, their journalised comments lacked the depth, specificity and sophistication of those of their counterparts in the Deep/reflective group.

However, in nearly all cases the learning journals demonstrated that students in both groups gained moderate to high degrees of course content knowledge and exhibited appropriate written communication competencies. Additionally, an issue connected with

course content that had not been obvious in the trial stage emerged when total assessment in the course became based on multiple submissions of the learning journals. In their journals a large percentage of students in the refinement stage of the project expressed difficulty in coming to terms with the economic theories that were a major part of the second journal submission; a point reinforced by the relatively poorer performance of students in this submission (see Table 3). The nature of these student comments pointed to a possible interplay between content difficulty and skills development for learners, and the comments of students across 2006 to 2008 reinforced the trial stage observations about the inadequacies of essay assessments not only in building generic skills, but also in assessing the depth and breadth of understanding of content.

Comparative results

Across both stages of the learning journal innovation the final result for the combined total of all assessment items revealed a general stability in the marks and grades for the two groups of students, although with an increased grade level average for the Surface/non-reflective group when additional submissions of the learning journal replaced the initial two essay assignments (see Table 5).

[take in Table 5]

Based on the results of formal student evaluations of teaching, scores were positive for all items in successive survey instruments from 2004 to 2008, and particularly so for statements such as ‘I found this subject stimulated my learning’, ‘the assessment tasks assisted my learning’, and ‘I have developed my capacity to communicate my ideas/knowledge in this area more effectively’. On all such questions the mean score was above five on a seven-point Likert scale anchored by 7 Very Strongly Agree and 1 Very Strongly Disagree. In the open-ended comments section of the survey the learning journal was the aspect of the course about

which students most frequently commented. The comments typically pointed to students realising and valuing the role of the learning journal in improving their approaches to learning and in achieving relevant learning outcomes. These comments indicate that the journal enabled them to relate theory and research to practice and real-world experiences, and assisted them to develop generic competencies in addition to mastery of course content.

The learning journal as an assessment task was a great idea to stimulate personal thought. It has certainly assisted me not only through this particular subject, but my own life experiences.

The learning journal is the best way to motivate me to think about the readings that I had read. The learning activity provided me with the opportunities to explore other resources and interact with the materials in learning in this subject.

The course was well structured and materials provided therein gave me greater insight into management accounting and to a great extent has changed my perception relative to designing a[n accounting] system in an organisation.

Student comments suggested that the learning journal assessment activity prompted students to actively engage in the learning process and to interact with the learning materials, as well as providing an enhanced and less conventional learning experience.

Conclusions and reflections

As a case example based on a relatively small sample of students ($n = 37$), specific results and findings of this five-year longitudinal study of the implementation and use of reflective journals in a graduate accounting course are not intended for generalisation to broader or alternative settings. A further limitation is that the evaluation of the journals relied largely on the interpretations of a single researcher, supplemented by a modest test of inter-rater reliability and analysis of responses to a survey instrument administered to students. Given

these limitations, there is potential to undertake further studies of learning journals in accounting education, particularly where larger sample sizes are available and where there are opportunities for triangulating interpretations of data and results across multiple assessors. Studies of learning journals used in assessment in other disciplines are also warranted, particularly in those which, similar to the accounting discipline, are often taught and assessed in a very conventional manner. Such studies could add to the body of educators' understandings of the design and implementation processes (and pitfalls) of journal assessments, the criteria relevant for assessing journals, and the potential for journals to engender reflective practice and deep versus surface approaches to learning.

The multiple objectives pursued in the adoption of the learning journal in the current study, including the potential for improvements in generic and higher-order thinking skills, content mastery, and better quality learning experiences and learning outcomes for students, were reached to varying degrees. Based on responses to the course survey questionnaire, from the student perspective the learning journal was clearly seen as an intense and challenging activity, and for most students it was perceived as providing a beneficial learning experience. Students also commented that journaling improved their motivation for, and engagement in reading during the course, which is a point often not considered in studies of learning journals (O'Connell and Dymont 2006; also see Park 2003). This finding is particularly important in the context of the current case study since the distance education offering of the course renders the reading materials a major element of course delivery, and the effective use of these materials is a key factor in facilitating students' development of content knowledge and achievement of learning objectives and learning outcomes.

Both the trial implementation and refinement of the assessment task indicated that structured and directed journal activities were also vitally important in building content knowledge, and the results for all stages indicated achievement in content mastery in accord

with the findings of relevant prior empirical research (see Burrows et al. 2001). The structured activities also enabled students to demonstrate and achieve recognition for this mastery to a better extent than the traditional essay assessments which were a component of assessment in the trial stage. Although the strategy of using the learning journal as a capstone assignment in the trial stage provided a means for the educator to recognise the level of generic competencies of individual students and to identify and diagnose any deficiencies in these skills (as highlighted in Wong et al. 1995 and Kember et al. 1999), it did not provide the opportunity for students to action remedies. These observations suggest that lack of assessment or one-shot assessment of a learning journal is unlikely to deliver a number of the benefits of journaling which are commonly suggested in the literature. Changes made in the 2005-2008 period, where assessment in the course was based entirely on the learning journal and students received feedback on each submission of the journal in order to improve their subsequent performance, provided more potential for not only diagnosing, but also for ameliorating deficiencies in students' generic skills and learning habits. This refinement stage of the learning journal project provided a gateway for students to shift from surface/non-reflective learner characteristics and performances and move more towards deep/reflective modalities (see Tables 4 and 5). Such opportunities for adjustment from descriptive to deliberative forms of reflection can be termed 'critical bridging' (see Fund, Court and Kramarski 2002, 485). The elements and detailed examples of the relative differences between deep and surface approaches to learning in this assessment task (see Table 4) may provide a useful architecture for other educators to apply in assessing students' journals, as well as acting to supplement the existing work (see Creme 2005) on the criteria relevant for marking and evaluating learning journals.

The results of this longitudinal study of assessment innovation suggest that the integration and inculcation of assessable learning journals in accounting courses may assist in

delivering affirmative change in accounting education. In the refinement stage of the project, and after feedback on the first submission of their journals, many students commented in their second and third submissions that they experienced a sense of freedom in being able to say, and being appreciated and rewarded for saying, what *they* thought. They also commented that this was a 'new' learning experience for them as their past studies had instilled in them the need to depersonalise their work, regurgitate material, and satisfy or appeal to what they perceived to be the leanings or opinions of the lecturer. These feelings of student empowerment mesh with the work of Day, Kaidonis and Perrin (2003) who found that learning journals can enable students to activate their 'voice', producing an emancipatory effect for students within the power mediated student-teacher relationship.

The case study reported in this paper thus highlights that assessable learning journals can assist in countering students' preconceptions about learning and assessment and aid in reconstructing their approaches to learning. As an example of engaged pedagogy (Hooks 1993), the student learning journals also offered detailed insights and feedback to educators concerning how students think and learn (see Torrance and Pryor 1998; Ramos 2004), as well as how students perceived and reacted to challenging course content and assessment. Such feedback offers potent information to educators for developing and improving learning journal assessment tasks and for constructively aligning assessment with learning objectives and desired learning outcomes. Additionally, the longitudinal perspective to trialling and refining an assessable learning journal, as illustrated in this paper, demonstrates the unique opportunities available to educators to engage in informed reflection on their own ideas and practices in relation to assessment and evaluation.

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Appendix

Sample structured journal activities

Example 1: In your Learning Journal consider what, if any, impact the Internet has had on cost and management accounting in the organisation in which you are employed, or in an organisation with which you are familiar.

Example 2: In your Learning Journal *briefly* outline the ‘five interrelated factors that may influence the potential for accountants to play an active role in the implementation of change’ according to Chenhall and Langfield-Smith (1998, 382). Based on your experience, which factor would *you* consider the most important?

Example 3: [Part of a journal activity] Referring to the organisation within which you are employed, what [management accounting] issues in that organisation could researchers fruitfully study using case and field methods?

Example 4: In your Learning Journal consider whether the organisation you work for (or an organisation with which you are familiar) is best described as exhibiting the structure of a hierarchy or a clan.

Example 5: [Part of a journal activity] In your Learning Journal, briefly provide your opinion about whether electronic commerce technologies (as opposed to production technologies) may have a contingent affect on the design of management accounting systems.

Example 6: [Part of a journal activity] In *your* opinion, how well does contingency theory describe and/or explain management accounting in practice.

Example 7: In your Learning Journal, briefly identify what incentives would encourage *you* to work harder and outline a design for a reward system that would encourage you to devote more effort towards attaining organisational goals. [Task adapted from Emmanuel, Otley, and Merchant 1990].

Example 8: [Part of the major journal activity – added 2008] Having completed your studies [for the course], which skills have you developed the most (and how) and which skills have you developed the least (and why)? What aspects of [the course] interested you the most? Why? What aspects interested you the least? Why? Briefly describe *three* (3) accounting issues, theories, research findings, or practices covered in your study [of the course] that have had the most impact for you in terms of the way you *think* about and/or *practice* accounting.

Table 1 Assessment regime 2004-2008

<i>Year</i>	<i>Course assessment format</i>	<i>Key aspects of assessment format</i>	<i>Percentage of total assessment</i>
2004	<ul style="list-style-type: none">• Essay on Module 1• Essay on Modules 2 and 3• Reflective learning journal on Modules 1 to 4	<ul style="list-style-type: none">• Structured journal activities worth 80% of marks for this assessment item and general critical, reflective comments worth 20%	20% 20% 60%
2005	Identical to 2004	<ul style="list-style-type: none">• Additional guidance provided on journal writing and journal content• Marks allocation within journal changed – structured journal activities worth 50% of marks for this assessment item and general critical, reflective comments worth 50%	Identical to 2004
2006 to 2008	Reflective learning journal on Modules 1 to 4	<ul style="list-style-type: none">• Essay assessment items removed• Learning journal submitted three times during the semester• Additional prescribed journal activities included	100%

Table 2 Basic characteristics of learning journals – Year 1 trial (n = 12)

<i>Dimension</i>	<i>Journal length (excluding references)</i>			
	<i>14-40 pages</i>	<i>41-60 pages</i>	<i>61-80 pages</i>	<i>81-261 pages</i>
<i>Number of journals:</i>				
Surface/non-reflective (n = 7)	4	1	1	1
Deep/reflective (n = 5)	0	2	2	1
Pages devoted to summaries of prescribed readings	0 - 22	5 - 9	5 - 21	0 - 214
Pages devoted to critical/reflective thoughts & comments	0 - 3	1 - 6	2 - 12	5 - 15
Pages devoted to prescribed journal activities	14 - 36	41 - 58	12 - 42	42 - 72

Table 3 Basic characteristics of learning journals – Refinement stage

	<i>First submission (n=18)</i>		<i>Second submission (n=18)</i>		<i>Third submission (n=18)</i>	
	Surface	Deep	Surface	Deep	Surface	Deep
<i>Approach to learning</i>						
Number of students	7	11	9	9	7	11
<i>Journal composition (ranges)</i>						
Total pages (excluding references)	6.5-24	6.5-35.5	7.5-28	13-39.5	8-42	15.5-49
Percentage of pages devoted to critical/reflective thoughts & comments	23-58%	23-72%	0-41%	18-67%	8-83%	11-78%
Percentage of pages devoted to prescribed journal activities	42-77%	28-77%	59-100%	33-82%	17-92%	22-89%

Table 4 Between-group comparisons of learning journals

<i>Dimension</i>	<i>Surface/non-reflective</i>	<i>Deep/reflective</i>
Notes (general)	Gave verbatim or paraphrased summaries of the reading materials.	Related readings for a particular module to those of other modules. Synthesised diverse literatures. Deconstructed & reconstructed the materials. Recognised and discussed interrelationships. Demonstrated holistic understanding of the course.
Thoughts (general)	Only provided thoughts directly related to the reading materials. Expressed naïve & exoteric notions.	Discussed issues from multiple perspectives. Acknowledged & understood more than one side of an argument. Evidence of self-interrogation & questioning of personal opinions & professional experiences.
Style	Writing style suited to construction of an essay.	Used original diagrams &/or tables. Writing style personalised, sophisticated & candid.
Journal activities	Provided substantially lengthier responses to more descriptive activities than to those which were more interpretive, required judgments, personal opinions, critique or reflection.	Gave relatively brief responses to less sophisticated & less demanding journal activities, with lengthier responses to more open activities. Afterthoughts on specific journal activities added at various points within the narrative. Comments & thoughts on topics often incorporated within & related to the discussion of formal journal activities.
Criticality	Provided second-hand critique (i.e. retold criticisms published by others) or did not provide any critique at all.	Provided sophisticated & cogent critical evaluations. Commented positively on the opportunity to offer critique.
Reflections on practice	Absent in most cases. Where included, examples were non-specific or clichéd.	Reflected on the theory-practice &/or research-practice nexus. Attacked the doctrinaire. Discussed 'news items' & current developments in accounting practice & provided relevant excursus on the general state of the business world. Demonstrated ability to extrapolate & provide simplified, but appropriate and logically sound analogies.
Reflections on first-hand experience	Absent in most cases. Where included, examples were generalised or inapt in relation to content & context.	Reflected on work experiences & past learning experiences. Engaged in story-telling of personal & professional experiences. Provided clear evidence of relationships of experiences to the content & context of the course.
Reflections on learning	Absent in most cases. Where included, examples were uncritical or overly plausible.	Reflections on performance, feedback & learning in previous assignment submissions in the course. Provided feedback on course content, materials & assessment items. Discussed development of personal understandings of content & described intellectual epiphanies.
Personal opinions	Did not provide personal opinions at all, or could not justify personal opinions even when explicitly required to do so.	Expressed reasoned, coherent & substantiated personal opinions. Demonstrated confidence in & commitment to personal opinions. Reflected on opinions & discussed any changes of opinion.

Table 5 Overall student results

	<i>Mean mark (grade)</i>	
	Surface/non-reflective group	Deep/reflective group
<i>Trial stage: 2004-2005</i> <i>(n = 19)</i>	63.8% (Pass) (n =10)	79.1% (Distinction) (n =9)
<i>Refinement stage: 2006-2008</i> <i>(n = 18)</i>	67.2% (Credit) (n =9)	83.6% (Distinction) (n =9)

Table 1 Assessment regime 2004-2008

Table 2 Basic characteristics of learning journals – Year 1 trial

Table 3 Basic characteristics of learning journals – Refinement stage

Table 4 Between-group comparisons of learning journals

Table 5 Overall student results