

The Reflective Accountant: Changing Student Perceptions of Traditional Accounting through Reflective Educational Practice

Nicholas C. McGuigan, Lincoln University, South Island, New Zealand
Thomas Kern, University of Canterbury, South Island, New Zealand

Abstract: The study of introductory accounting is characterised by certain topics that have traditionally proved challenging for students often resulting in the adoption of a negative perception towards the academic discipline (Weil, 1989; Sharma, 1997; Lucas, 2000; Mladenovic, 2000; Lucas, 2001; Lucas and Mladenovic, 2006). Drawing on reflective educational theory, this paper describes the introduction of a reflective journaling exercise within a business information course in order to increase student engagement with course related material. The paper commences with a review of literature relating to reflective practice in education followed by an analysis on the use of learning journals, clearly depicting the advantages and disadvantages associated with this teaching technique. The paper then describes the context in which the research takes place, including the nature of the course, its learning objectives and its educational philosophy. Extracts taken from individual reflection journals and essays maintained by students are utilised to provide an evaluation of the perceived usefulness of the teaching method. The findings of the study are then discussed and analysed, with the conclusion and suggestions for further research presented in the final section.

Keywords: Accounting Education, Reflection, Experiential Learning, Learning Goals, Student Perceptions

Introduction

THE ENVIRONMENT IN which accountants operate has, in recent years, become increasingly complex leading to significant changes within the profession. Increasing pressure is being placed on the accountant to provide a service beyond that of the traditional shareholder which encompasses a broader community responsibility (International Federation of Accountants, 2003). Intensifying this change are the pressures associated with the recent global financial crisis, changes in information and communication technology and the continuous introduction of newly issued accounting standards.

Within an educational context, the study of introductory accounting has traditionally proved challenging to students, encompassing both business language acquisition and knowledge of technical accounting (Weil, 1989; Lucas and Mladenovic, 2006). There is a growing body of knowledge about student preconceptions of accounting and their effect on introductory accounting courses (Sharma, 1997; Lucas, 2000; Mladenovic, 2000). Lucas (2000 and 2001) and Lucas and Meyer (2005) report that students' negative preconceptions of accounting include perceptions that accounting is boring and dull, a technical subject consisting solely of numbers and mathematical formulae, and mainly objective, with no need for judgement. This can lead students to adopt a learning approach that may result in a su-

perficial and limited understanding of the content within accounting courses (Beattie, Collins and McInnes, 1997; Lucas and Mladenovic, 2006; Meyer and Land, 2005).

To combat the increasing complexity and rapid change experienced by the accounting profession and to foster a deeper approach to learning by the student, a call is emerging within the literature for the implementation of innovative teaching techniques that assist in the development of learners' generic skills required for the current emerging practitioner (Accounting Education Change Commission, 1990; Albrecht and Sack, 2000; Gordon and Debus, 2002; Hall, Ramsay and Ravan, 2004; Rodrigues, 2004; Cope and Staehr, 2005; Lucas and Mladenovic, 2006; Kavanagh and Drennan, 2008).

An innovative teaching technique that enables the development of generic learning skills and promotes a deep approach to learning is that of a reflective learning journal (Bonk and Smith, 1998). The aim of this paper is to describe the implementation and experience of using a reflective journal to enhance student engagement and increase the relevance of learning material to participants in an undergraduate accounting decision-making course. In order to provide an evaluation the paper draws on extracts taken from individual reflection journals and essays maintained by students.

The rest of the paper is organized as follows. Relevant literature on the use of learning journals in accounting education is reviewed next. This is followed by a description and discussion of the background to the research and the research methodology employed. The findings of the study are then discussed and analysed, with the conclusion and limitations presented in the final section.

Literature Review

This section commences by reviewing literature relating to reflective practice in education followed by an analysis on the use of learning journals, clearly depicting the advantages and disadvantages associated with this teaching method. The section concludes by reviewing the use of learning journals within accounting education.

Reflection in Education

The practice of reflection in education has been well established (Dewey, 1933; Schön 1983, 1987; Brookfeld, 1989; Palmer, 1998). Dewey (1933), one of the earliest advocates for self-awareness in the learning process, argued that reflection is the "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p.9). Schön (1987) provides further support by arguing that a conventional educational focus on 'technical rationality' is inadequate for solving complex problems. Schön (1983) emphasises an educational focus on 'technical rationality' creates a standardisation of the learning process that does not engage the 'spontaneous, intuitive performance of everyday life' (p.49). Palmer (1998) contends that the focus on the learner and their individual learning journey is rarely explored in tertiary institutions, with their focus primarily on developing the question of 'what' (the nature and boundaries of the problem) and 'how' (the methods and techniques for finding solutions). These educationalists have called for a redesign of curriculum that includes reflective educational principles.

A review of the literature (see, for example, Kolb, 1975, 1984; Johns, 1994; Hatton and Smith, 1995; Moon, 1999a; Kennison and Misselwitz, 2002; Varner and Peck, 2003; Williams

and Wessel, 2004) provides a number of models for reflection to occur within an academic context. A synthesis of these models produces four key dimensions of reflection, namely, describe, analyse, transform meaning and action, as illustrated in Kennison and Misselwitz's (2002) definition of reflection:

“Reflection is the purposeful contemplation of thoughts, feelings, and happenings that pertain to recent experiences. With thoughtful consideration, one challenges one's initial thinking and feelings embedded in a meaningful experience. With further review and exploration, one creates and clarifies the personal meaning of the lived experience. (p.239)”

Schön (1983) places ‘describing the experience’, at the beginning of the reflective process. This first dimension acts as a context for personal learning when the individual starts to ask questions that describe the experience. The second dimension constitutes an ‘analysis’ of key events that have taken place involving a mental review of the experience. Moon (1999a) defines this reflective process as ‘a mental process with purpose and/or outcome in which manipulation of meaning is applied to relatively complicated or unstructured ideas in learning or to problems for which there is no obvious solution’ (p.155). Atkins and Murphy (1993) suggest this act of mental processing is structured around an experience that may induce an emotional discomfort, creating the basis of the third dimension ‘transformation of meaning’. The individual's deconstruction and reconstruction of meaning from an experience should, if one is aware, lead to a constructive challenge of existing relationships and patterns. In this respect, reflection provides the individual with a better understanding of the experience, not necessarily its complete resolution. This reinforces understanding rather than problem resolution as the learning outcome. The fourth dimension, ‘action to change future behaviour’, culminates in the learning from previous situations and the possession of a heightened level of self-awareness.

Effective learning in higher education is an active process where students personally engage with the learning material, taking responsibility for their own learning (Biggs, 1993; Ramsden, 2003). The approaches students take to the learning process has received a great deal of exposure in the literature (see, for example, Marton and Säljö, 1976; Biggs, 1987, 1989, 1993; Entwistle, 1981; Beattie, Collins and McInnes, 1997; Ramsden, 2003; Warburton, 2003). These approaches can be classified as either a deep approach to learning or a surface approach to learning, both of which produce a different quality of learning outcome (Perry, 1970). When a student is engaged in a deep approach to learning a student focuses on the underlying meaning of the material studied, resulting in learning with understanding.

A surface approach to learning is more likely to be adopted when students are faced with a heavy academic workload, leading to a superficial understanding of learning content (Ramsden and Entwistle, 1981; Entwistle and Tait, 1990; Trigwell and Prosser, 1991). Therefore, as the aim of the approach focuses on memorisation and reproduction of material, students are unlikely to develop appropriate skills or competencies (Sharma, 1997; Booth Lockett and Mladenovic, 1999; Ramsden, 2003; Hall, Ramsey and Raven, 2004).

Students adopting a deep approach to learning utilise previous knowledge and experiences in order to develop a framework to understand the composition of the discipline, clearly displaying a commitment to learning and a genuine interest in the material (Sharma, 1997; Hall et al., 2004). Ramsden (2003) argues that the adoption of a deep approach to learning

leads to quality learning outcomes including a sound understanding of the subject, the development of higher order thinking skills (Booth et al., 1999), better developed conceptions of reality (Sharma, 1997) and the processing of data at a high level of generality (Biggs, 1987, 1989; Ramsden, 2003).

Plack and Greenberg (2005, p. 1546) argue that reflective practice in education can ‘give meaning to experience and promote a deep approach to learning’. Reflection enables a student to develop a questioning mind-set allowing for the continuous updating of their knowledge and skills. A teaching method allowing for the introduction and refinement of reflective practice in higher education is that of a learning journal.

Learning Journals in Education

The activity of recording reflective thought in a structured or unstructured but continuous manner, is often represented in differing forms, including, learning journals, learning logs, reflective diaries and notebooks (Moon, 2004). There are numerous ways in which an educator can create these activities to achieve different purposes to enhance the learning process (Rainer, 1978; Young and Fulwiler, 1986; Fulwiler, 1987; Holly, 1991; Moon, 1999b). Moon (1999b) differentiates between the differing forms, stating that learning journals are a means to record the learning that occurs, while reflective diaries require learners to reflect on an experience and learning logs provide a record of events that have occurred. All these differing techniques require an element of reflective practice (Moon, 1999b; 2004).

A review of the literature (see, for example, Chi, Bassock, Lewis, Reimann and Glaser, 1989; Chi, de Leeuw, Chiu and LaVancher, 1994; Salisbury, 1994; Hatton and Smith, 1995; McCrindle and Christensen, 1995; Barclay, 1996; November, 1996; Locke and Brazelton, 1997; Boud and Walker, 1998; Mezirow, 1998; Woodward, 1998; Moon, 1999b and 2004; Tomlinson, 1999; Haigh, 2001; Kallaith and Coghlan, 2001; Lucas, 2001; MacFarlane, 2001; Kennison and Misselwitz, 2002; Langer, 2002; Spalding and Wilson, 2002; Varner and Peck, 2003; Howieson, 2004; Crème, 2005; Plack and Greenberg, 2005) details the advantages and disadvantages associated with the use of learning journals in education. These advantages and disadvantages are summarised in Table 1.

Table 1: Learning Journals: Advantages and Disadvantages

Advantages
Supporting understanding and the representation of understanding
Enhancing student engagement
Providing continuous feedback to the learner
Increasing active involvement and ownership of learning
Encouraging self-directed learning
Focussing and directing learning

Recording course and personal experiences
Facilitating learning from experience
Developing critical thinking
Increasing reflective thinking ability
Enhancing creativity
Enhancing reflective practice for personal development and self-improvement
Encouraging meta-cognition
Supporting communication
Improving writing
Disadvantages
Students' resistance to journaling due to perceived irrelevance to learning
Difficulty in writing in the first person
Superficial reflective practice
Emotional impact on reflective practice
Limitations in creativity through a structured assessment with an assigned grade
Difficulties in assigning grades to students' reflective writing
Behavioural implications of students through assessed work

The learning journal enables students to develop their reflective skills by providing a mechanism for capturing their personal experience (Kallaith and Coghlan, 2001). Moon (2004) contends that the act of writing a learning journal is in itself a learning process, as it is a means for articulating thought and addressing current conceptualisations. A well established link between the act of writing and the formation of personal understanding exist, where a participant in formulating an idea in writing can further clarify its specific meaning (Chi et al., 1989 and 1994; Harasim, Hiltz, Teles, and Turoff, 1995; Locke and Brazelton, 1997; Moon 2004). In struggling, therefore, to express and defend their points of view, students engage in higher order thinking skills, such as analysis, synthesis and evaluation (Bloom, 1956; Kanuka and Anderson, 1998; Rourke, Anderson, Garrison, and Archer, 1999; Whittle, Morgan, and Maltby, 2000). The act of writing facilitates a deeper analysis of the experience through the student's assessment and articulation of the learning experience, often resulting in a new or enhanced meaning. In completing a learning journal exercise the student is able to visualise the experience more objectively, by remaining external to the experience, they become detached from emotion (Moon, 1999b).

Woodward (1998) found that learning journals assisted students to develop a number of different personal attributes within the delivered programme. The use of learning journals enabled '[students to] discover personal qualities they were hitherto unaware of and gave them a new perception of both themselves personally and the learning processes they had embodied during the program. It helped them discover who they were, what they knew, what they could do, and what they were like as individuals ...' (Woodward, 1998, p.421). Varner and Peck (2003) provide further support, stating that learning journals encouraged students

to become more self-directed and focussed on assignment work, anchor learning within their own experience and enhanced their ability to solve problems.

The difficulties associated with the act of reflective writing and journaling have been well documented in the literature (see, for example, Boud and Walker, 1998; Jasper, 1998; Moon, 1999a, 1999b and 2004; Tomlinson, 1999; Lucas, 2001). Often when asked to reflect in formal educational situations, many learners are unclear of what is expected of them, have difficulty in understanding what they should do, see the activity as irrelevant to their learning and/or discipline and as a result resist reflective activities. Moon (1999b) argues that students often struggle with the requirement to write in the first person as it is a vastly different form to academic writing, utilising personal thought and reasoning where there is no concrete solution or outcome. Moon (1999a, 1999b and 2004) advocates for the need to scaffold the student's reflective learning experience, through provision of explicit requirements and expectations, detailed instructions and learning objectives and guidance in the reflective process.

The creation of a learning journal for assessment purposes within an educational context derives a number of limitations, namely, superficial reflection, behavioural implications of students associated with assessed work and limitation on creativity (Salisbury, 1994; Hatton and Smith, 1995; Mezirow, 1998; Kim, 1999; Moon, 1999b). Salisbury (1994) states that when utilising a learning journal as a means of assessment in a formal educational context, an artificial environment in which to reflect is created. The result being a highly structured and more formal writing, than what would otherwise be the case if learners were left to reflect on their practice. Furthermore, Salisbury (1994) contends that this artificial environment induces some learners to write the reflective material that they think will be viewed favourably by their facilitator. The design of learning journals with expected word limitations, unclear instructions and untransparent expectations can result in a student producing a superficial and descriptive reflection (Hatton and Smith, 1995; Mezirow, 1998; Kim, 1999).

The Use of Learning Journals in Accounting Education

Kavanagh and Drennan (2008) argue that the rapid change and increasing complexity experienced by the accounting profession has resulted in employers requesting a heightened level of generic skills from its employees. Generic skills can be described as 'employability' skills used in the application of knowledge. These skills are not necessarily job specific, but rather develop across all industries and employment levels (Woods, Felder, Rugarcia and Stice, 2000). Prior research indicates that these 'employability' skills are under-developed within accounting graduates (Lovell, 1992; May, Windal and Sylvestre, 1995; Adler and Milne, 1997a, b; Hassall, Lewis and Broadbent, 1998; Kavanagh and Drennan, 2008). Albrecht and Sack (2000) provide guidance as to the types of generic skills most desired by the accounting profession. These include, in order of importance: written communication, analytical and critical thinking, oral communication, information technology, team work, decision making, interpersonal skills, leadership, continuous learning, project management, and professional demeanour.

This situation presents a challenge to accounting educators to incorporate a heightened level of skill development transfer parallel to the acquisition of technical accounting knowledge. Consequently, a change in teaching emphasis is required to ensure that prospective accountants are equipped with the necessary skills to survive in this environment (Accounting Education Change Commission, 1990). Harwood (1999) describes the need to engender

lifelong learning skills in students by focussing not on what teachers teach but instead on how students learn.

In this context, students must also embrace the change in accounting education practice, to take an active role in their learning. Smith, Sheppard, Johnson and Johnson (2005) emphasise the importance of students being active learners, not only to achieve a deeper approach to learning, but to network with fellow peers and build a sense of community within a course. To achieve this desired level of student interaction, undergraduate courses need to be re-designed to focus on a student-centred experience, where the facilitator relinquishes control and guides students through prepared learning activities.

Rodrigues (2004) accordingly argues for the careful planning and development of undergraduate courses, which should utilise a variety of teaching techniques to heighten the level of learning taking place. Lucas and Mladenovic (2006) provide further support, arguing for new pedagogical approaches to be used to engage students in learning accounting. The quality of student learning methods needs to encourage students to learn independently using techniques that actively engage them in the learning process (Albrecht and Sack, 2000; Mathews, Jackson and Brown, 1990).

Bonk and Smith (1998) state that the use of reflective learning journals in accounting education can foster generic learning skills development within learners. Through this reflective practice, students are able to develop critical thinking skills that encourage and nurture a deep and elaborative processing (Schön, 1983).

A search of the literature reveals little research undertaken on reflective learning journals within accounting education. Day, Kaidonis and Perrin (2003) provide an account of a learning journal exercise utilised in an accounting theory course to promote higher order thinking skills. Howieson (2004) describes the implementation and use of a self-reflective learning journal in a postgraduate accounting theory course.

Samkin and Francis (2008) document a learning portfolio, introduced within a technical financial accounting course, to develop critical and creative thinking and foster a deep approach to learning. They report that the new teaching method was not universally popular, in particular, learners found the concept of reflection difficult to comprehend. However it was found that those students who engaged with this teaching method proved to develop a deeper approach to learning.

This paper attempts to provide further insight into the use of reflective journaling within accounting education by describing the implementation of a learning journal assessment exercise in a first year decision-user accounting course. The paper reports on an assessment of student perceived benefits and weaknesses associated with this teaching resource. Furthermore, an attempt is made to establish whether students' perceptions of accounting as a discipline have changed as a result of a heightened engagement with course learning material, achieved through the journaling exercise.

Research Methodology

Background to the Study

Acct 103, Financial Information for Business, is taught in the first year of a business degree at Lincoln University, New Zealand. The course is mandatory for all accounting majors who wish to satisfy the requirements of the New Zealand Institute of Chartered Accountants

(NZICA)¹ and is also a core paper within the commerce degree programme. The aims of the course, which focuses primarily on a decision-user appreciation of financial statements, are to provide an understanding of the basic concepts underpinning the preparation and analysis of financial reports and to apply these concepts to the interpretation and management of accounting data.

As Acct 103 is mandatory in the commerce degree, the course is run three times per annum; once in each semester and in January summer school. Approximately 500 students enrol in the course each year, with a roughly equal gender split and an increasing number of mature learners. The student composition can be classified into three main groups, namely, agricultural and life science students, students enrolled for other business major areas of study and accounting major students.

The student diversity in Acct 103 presents challenges for the teaching staff to cater adequately for the varying needs of all students. This challenge is met by employing a teaching philosophy that is active in nature, whereby students are engaged in an integrative and interactive classroom environment (Biggs, 2003; Ramsden, 2003). The course assessment supports this teaching philosophy, providing students with the opportunity to build on their knowledge of course material through formative assessment practices, such as the development of business proposals and reports, which progress towards summative pieces of work (Race, 1996). The integrative nature of the course is developed by the completion of an evidence portfolio, which is applied to an integrative case study and linked to the final examination.

In order to enhance student engagement and increase the relevance of learning material to students participating in the course a reflective journal exercise was developed and implemented in semester 2, 2008.

Development and Implementation of Reflective Journaling in Acct 103

The reflection activity introduced into the course comprised of two components, namely, a weekly reflective journal and a single written assignment. This piece of assessment was weighted as 10 percent of a students overall grade for the course.

Students were required, in their first week of lectures, to compose two learning goals that they would like to achieve from attending Acct 103. Students were asked to document these in a learning journal that was maintained for the duration of the 12-week semester. The set learning goals were of a personal nature, each being unique to the individual student therefore encouraging ownership of the learning by the learner (Woodward, 1998). A number of written examples of possible learning goals were provided to students in lectures, to provide a low level of guidance. This was in order to encourage the thought process and not dominate it, as the exercise was designed to enable students to personally engage with an area of their own interest.

An individual reflective learning journal was to be maintained throughout the semester. The journal design requested students to compose a reflective contribution at the end of each week for both a personal reflection of experience in their educational setting and a discussion of how this may relate to their external environment; family, personal finances, business practice etcetera. Journal entries were required at the end of the week in order to distance

¹ The New Zealand Institute of Chartered Accountants (NZICA) is the professional accreditation body for chartered accountants in New Zealand.

students from their immediate setting and therefore encourage more reflection on key issues (Uline, Wilson and Cordry, 2004).

Students were provided with reflective practice guidance documentation, on the course website, to assist with the construction of learning journal entries. This documentation illustrated a theoretical framework in which to reflect: describing the experience, analysing it, creating an enhanced meaning and action for future learning (Moon, 1999a; Kennison and Misselwitz, 2002). Students were required to present their learning journal each week in tutorials where the tutor would sign their journal for completion. There was no formal grade assigned to a student's learning journal in order to limit restrictions formal assessment may place on a student's free development of thought and learning process (Moon, 1999a; 1999b; 2004).

The second component of the reflective activity required students to submit a reflective essay addressing their set learning goals, reflective journal and overall progress within the course. The written assignment required students to provide a summary of their learning through the course, using their journal entries as a foundation. The essay design enabled the student an opportunity for a secondary reflective analysis, therefore allowing a deeper reflection of their learning over the whole course (Moon 2004).

The written assignment was presented to students in comparison to the purpose and nature of a balance sheet within financial accounting. The financial statement offers an insight into an organisation's financial position, clearly depicting its assets, liabilities and its resulting net wealth. Similarly, the reflective essay is designed to provide the student with their individual learning position, clearly illustrating the student's journey of learning within the course, their current progress and aspirations they may have for future academic study. The requirements² of the essay were provided to students during the second week of the semester in order to enhance the level of guidance provided to the learner (Uline et al., 2004).

The grading of the reflective essays, out of a maximum of 100 marks, was designed to encourage the development and recognition of reflective practice. Table 2 illustrates the criteria according to which marks were awarded.

Table 2: Marking Schedule for Reflective Essay

Grade	Criteria
100	Very good contribution, learning incident examples provided, critical evaluation of learning documented. Reflective practice evident. Well structured essay. Very good language and communication skills.
80	Good contribution, learning incident examples provided, critical evaluation of learning position explained. Reflective practice developing. Well structured essay. Good language and communication skills.

² Reflective essay requirements are available from the authors on request.

60	Reasonable contribution, some learning examples provided, critical evaluation lacking. Adequate language and communication skills.
40	Some contribution, but essay not justified through learning experience nor evaluated. Inadequate language and communication skills.
20	Learning experience not described nor evaluated. Poor language and communication skills.
0	Not Complete or Unsuitable

Research Objective and Data Collection

The primary objective of the study was to evaluate the usefulness of reflective journaling within Acct 103, as perceived by the students. To achieve this, 131 student reflection essays were analysed using five key advantages identified in the reviewed literature.

The unit of analysis for each key advantage was its identification and related comments students made in their reflective essay. When these conceptual units of analysis are inductively analysed into categories, with properties, classes and examples, they can describe the overall perception students have of accounting (Strauss and Corbin, 1990).

Underlying Data

Of the 166 students enrolled in the course, Acct 103 during Semester 2, 2008, 131 reflective essays were received. This represented a 79% submission. The 21% who did not submit were students who had either withdrawn from the course or failed to complete. A class grade distribution of reflective essays is presented in table 3.

Table 3: Grade Distribution of Reflective Essays, Semester 2, 2008

Grade	Students	Percentage
100	24	18.32%
80	72	54.96%
60	32	24.43%
40	2	1.53%
20	1	0.76%
0	0	0.00%
Total	131	100.00%

With a class grade average of 77.7%, table 3 indicates a relatively high level of reflection given the marking guide utilised.

Data Analysis

To achieve the stated objectives of this study, two main stages of analysis were undertaken. The first stage comprised of students' reflective essays being coded in accordance with identified advantages from the literature. Table 4 depicts the coding criteria derived from these stated advantages, along with a relevant description.

Table 4: Derivation and Description of Coding Criteria

Literature Derived Advantages	Criteria	Description	Code
Supporting understanding and the representation of understanding	Relevance and Relation	Course more realistic for students? Better relation to course material?	1
Enhancing student engagement			
Providing continuous feedback to the learner	Self-direction and Self-assessment	Learner independence? Improved goal-setting? Assisted with assignment work?	2
Increasing active involvement and ownership of learning			
Encouraging self-directed learning			
Focussing and directing learning			
Recording course and personal experiences	Anchor Learning	Links between theory and practice? Did they realise the mechanisms behind the theory?	3
Facilitating learning from experience			
Developing critical thinking			
Increasing reflective thinking ability			
Enhancing creativity	Personal Attributes	Learning about themselves as individuals in the learning process?	4
Enhancing reflective practice for personal development and self-improvement			
Encouraging meta-cognition			
Supporting communication	Improved Communication	Increased written communication? Improved internal dialogue?	5
Improving writing			

Within table 4, the left hand column illustrates the advantages in student reflective journaling derived from literature, as summarised in table 1. These advantages have been categorised into five criteria shown within the second column. A brief description of each criterion as used for the purpose of analysing the students' reflective essays then follows, ending with a code for each criterion.

Student essays were re-read word-by-word to identify comments that showed a relation to the above criteria. These comments were then highlighted and provided with a relevant code. For example, the following comment was found to relate to ‘relevance and relation’ and therefore coded as a ‘1’.

“...and I think all this information I have learned will be very important for me in the near future when I start working but will be more important for me personally in managing my life and my finances.”

The second stage of the analysis involved the collation of these coded comments in order to provide each criterion with a rank of student perceived usefulness.

Results and Discussion

This section aims to describe the findings from the coding of individual student reflective essays through a summarisation of results, supported by descriptive examples of student comments.

Student Perceived Usefulness of Reflective Journaling

The coding of student essays was completed in order to provide a confirmation of literature-derived advantages of reflective journaling by the student cohort. Table 5 illustrates this relationship through a summary of the number of students that made at least one comment related to a specific criterion.

Table 5: Ranked Advantages of Reflective Journaling

Rank	Criteria	Students	Percentage ¹
1	Personal Attributes	112	85.5%
2	Relevance and Relation	110	84.0%
3	Self-direction and Self-assessment	90	68.7%
4	Anchor Learning	33	25.2%
5	Improved Communication	24	18.3%

¹ The percentage has been calculated based on the total number of students who submitted a reflective essay (131).

The results, from table 5, indicate that an overwhelming majority of the students perceived an improvement in ‘personal attributes’ and an enhanced ‘relevance and relation’ to course material, with 85.5% and 84.0% respectively. A heightened appreciation of ‘self-direction and self-assessment’ was indicated next, with two out of every three students providing comment. Examples of student reflective comments coded under these criteria include:

Personal attributes

“My journaling experience has made me a reflective student and the process of reflecting is ingrained in my practice now.”

“Understanding is the key issue of learning accounting. Learning accounting does not need to memorise a lot of information or styles.”

“My journal entry for 15/08/08 reads: do not take knowledge for granted. This was based on the fact that I found “classification” easy, had not reviewed it and bombed that part of the first test. Note to myself, memory is not what it used to be, give everything due consideration.”

Relevance and Relation

“From what I have learnt in this subject I will be able to apply it when I go home and take over the farm. Budgeting will be a very important factor as will calculating my performance. The knowledge I have of accounting while not extensive will greatly help me in the future.”

“In some regards I wish I had have taken it in my first year as it would have been helpful to understand many of the aspects of the subject that needed to be applied in many of my Farm Management assignments.”

“I did a one-week budgeting and actually collect the receipts for recording for workshop four. By actually doing it, I realised the usefulness of it.”

Self-direction and Self-assessment

“My habits were definitely getting better and it was getting easier to manage time.”

“Weekly diaries meant I have been able to note problems throughout the course, and as a result, remedy these problems by asking other students at workshops or asking the workshop tutor.”

“At the end I was able to overcome this lack of interest by doing lots of practice and working through some examples given in the text book, and self assessments in order to reinforce my understanding.”

This finding confirms the contention by Woodward (1998) and Varner and Peck (2003) that reflective learning journals assist with the development of a student’s personal attributes and self direction within the delivered programme. The least perceived advantages of journaling were ‘anchor learning’ (25.2%) and ‘improved communication’ (18.3%) as evidenced through student comments. These comments included:

Anchor learning

“Learning about the collapse of Enron really intrigued me and especially helped me realise the relevance and effects of accounting to business and the world.”

“In particular I was very happy to thoroughly learn about the financial statements and the components of them because I have come across them in the past when I have had no understanding of them.”

Improved communication

“If you don’t have time management or communicate with your colleagues’ then you don’t have a chance of being successful at the highest possible standard for the business. I feel that I have been able to improve my standard of writing through the completion of this journal exercise.”

“I have gained many benefits from writing these journal entries as I can clearly see, in hindsight, how my writing has changed to indicate points in a clearer way. I believe this has told me something about my thinking process in this course as things seem to be a lot clearer.”

It is surprising that only a small number of students commented on ‘anchor learning’ (25.2%) and ‘improved communication’ (18.3%) as it has been clearly documented as an advantage within the literature (Chi et al., 1989; Locke and Brazelton, 1997; Whittle et al., 2000; Kallaith and Coghlan, 2001; Moon 2004). However, this could have been due to some students’ inability to realise such an advantage in their current academic position. Further investigation into the reasons for this would need to be undertaken in order to refine the analysis.

The Distribution of Total Student Comments

While table 5 above depicted the perceived usefulness of reflective journaling based on the number of students who made at least one comment related to a specific criterion, this section illustrates the distribution of all coded student comments. Table 6 demonstrates the student perceived relative importance of individual advantages associated with learning journals, indicating a weighted result.

Table 6: Relative Importance of Student Perceived Advantages

Rank	Criteria	Comments	Percentage	Average
1	Personal Attributes	235	32.8%	1.79
2	Relevance and Relation	223	31.1%	1.70
3	Self-direction and Self-assessment	189	26.4%	1.44
4	Anchor Learning	42	5.8%	0.32
5	Improved Communication	28	3.9%	0.21
	Total	717	100.0%	

The weighted results support the findings depicted in table 5 with ‘personal attributes’, ‘relevance and relation’ and ‘self-direction and self-assessment’ being ranked as the three most important advantages perceived by students. This was indicated through approximately a third of overall student comments relating to both ‘personal attributes’ and ‘relevance and relation’ respectively. Based on the total number of student essays this shows that every student made on average nearly two comments about the improvement of these two criteria. This indicates strong support for the use of learning journals in order to enhance a student’s learning ability through the development of personal attributes and to ensure the relevance

of the course's content (Woodward, 1998; Moon 1999b and 2004). Furthermore, the findings illustrate a quarter of student comments refer to 'self-direction and self-assessment' providing support for the notion that learning journals provide students with a means to take ownership and responsibility of their learning (Varner and Peck, 2003).

The weighted results confirm the findings found in table 5, that 'anchor learning' and 'improved communication' are the least predominant advantages associated with reflective journaling as indicated in student comments, with a share in total comments of only 5.8% and 3.9% respectively.

The Student Perception of Accounting

It was envisaged that providing a student with a weekly opportunity to stop and take pause on their learning would enable them to relate the theoretical material presented in lectures with the real-world environment. This may include a student being able to see the relevance company budgeting has to their own personal finance, enabling them to limit their student debt. In this respect, students would change their overall perception of the nature and relevance of accounting as a discipline.

To measure a potential change in the perception of accounting, respective student comments were coded in a similar fashion to the key advantages presented above. In total, 69 comments relating to student opinions of accounting and finance were found. This represents 56 individual students (43%) commenting at least once of a positive change in perception. Examples of student reflective comments include:

"The original perception I had of accounting and finance was that it was for boring people. However, this is not true at all, I have found it very interesting and I am considering changing my degree to a bachelor of commerce majoring in accounting."

"I feel doing this course I have developed a better understanding of accounting and do not dislike it as much as I thought I would. But this does not mean I will be taking it again."

"At the beginning of the semester I came into accounting and finance for business with a huge preconception that the course would be very dry and math focussed. I did not imagine that in the end I would actually enjoy learning about accounting."

"I'm also very glad that I have overcome my misconceptions about accounting and in the end turned out to find the course very valuable and enjoyable."

In completing this exercise, it was evident from student essays that learners' original perception of accounting was akin to the findings of Lucas (2001) and Lucas and Meyer (2005) where students perceived accounting as dull and boring and as a technical subject consisting solely of numbers and mathematical formulae. The results provided above indicate a noticeably positive change in student perceptions of the academic discipline.

Conclusion, Limitations and Further Research

This paper describes a successful implementation of a reflective journaling exercise within a first-year accounting decision making course. The learning journal and written essay submission have enabled continuing reflective practice to occur within the course.

The findings of an exploratory study into the usefulness of reflective journaling provide confirmation of the literature-derived advantages of enhancement towards ‘personal attributes’, ‘self-direction and self-assessment’ and to ensure the courses ‘relevance’ (Woodward, 1998; Moon, 1999b; Varner and Peck, 2003). This is indicated through 85.5% of students commenting on the enhancement of their personal attributes and similarly, 84.0% discussing an enhanced relevance and relation to the course learning material. Further support was found in the analysis of total student comments with nearly a third relating both to personal attributes and relevance and relation, and a quarter to self-direction and self-assessment.

The study also indicates a positive change in students’ perceptions of the course and accounting as a discipline with 43 percent of students commenting at least once of a change in their original views held in relation to the course and/or accounting.

A limitation to the exploratory study reported is a singular perspective presented through an analysis of students’ written reflective work. Further research needs to be undertaken, in the form of an administered questionnaire to current and future student cohorts reviewing the literature-derived advantages of journaling, in order to further refine the preliminary results that are reported. This will enable a correlation to occur between student opinions derived from the questionnaires and student comments made within the reflective essays. A longitudinal perspective will also be documented through planned coding of current and future student cohorts.

An investigation into the marked difference in the distribution of student comments between the literature-derived advantages ‘personal attributes’, ‘relevance and relation’, and ‘self-direction and self-assessment’ on one side and ‘anchor learning’, and ‘written communication’ on the other side, may prove beneficial in providing an enhanced understanding for areas of improvement in the journaling process.

The overall findings of the study support the assertion by Woodward (1998), Varner and Peck (2003) and Moon (1999b; 2004) that reflective journaling can be used by accounting educators to promote the development of a student’s ‘personal attributes’, ‘self-direction and self-assessment’ and to ensure the learning in the course is of ‘relevance’.

References

- Accounting Education Change Commission (AECC). (1990). Objectives of education for accountants: Position Statement No. 1. *Issues in Accounting Education* 5 (2), pp. 307-12.
- Adler, R. W. and Milne, M. J. (1997a). Improving the quality of accounting students’ learning through action-orientated learning tasks, *Accounting Education: an international journal*, 6(3), pp. 191-215.
- Adler, R. W. and Milne, M. J. (1997b). Translating ideals into practice: an examination of international accounting bodies’ calls for curriculum changes and New Zealand tertiary institutions’ assessment methods, *Accounting Education: an international journal*, 6(2), pp. 109-124.
- Albrecht, W.S. and Sack, R.J. (2000). Accounting Education: Charting the course through a perilous future, *Accounting Education Series*, Vol. 16 Sarasota, FL: American Accounting Association.
- Atkins, S. and Murphy, K. (1993). Reflection: A review of the literature. *Journal of Advanced Nursing*, 18, pp. 1188-1192.
- Barclay, J. (1996). Learning from experience with learning logs, *Journal of Management Development*, 15(6), pp. 28-43.
- Beattie, V., Collins, B. and McInnes, B. (1997). Deep and surface learning: a simple or simplistic dichotomy?, *Accounting Education: an international journal*, 6(1), pp. 1-12.

- Biggs, J. (1987). *Student Approaches to Learning and Studying*, Hawthorn: Australian Council for Educational Research.
- Biggs, J. (1989). Approaches to the enhancement of tertiary teaching, *Higher Education Research and Development*, 8(1), pp. 7-25.
- Biggs, J. (1993). What do inventories of students' learning process really measure? A theoretical review and clarification, *British Journal of Educational Psychology*, 63(1), pp. 3-19.
- Biggs, J. (2003). *Teaching for Quality Learning at University*. Great Britain: Open University Press.
- Bloom, B.S. (1956). *Taxonomy of Educational Objectives. Handbook 1. The Cognitive Domain*. New York, NY: David McKay.
- Bonk, C. J. and Smith, G. S. (1998). Alternative instructional strategies for creative and critical thinking in the accounting curriculum, *Journal of Accounting Education*, 16(2), pp. 261-293.
- Booth, P., Luckett, P. and Mladenovic, R. (1999). The quality of learning in accounting: the impact of approaches to learning on academic performance, *Accounting Education: an international journal*, 8(4) pp. 277-300.
- Boud, D. and Walker, D. (1998). Promoting reflection in professional courses: the challenge of context, *Studies in Higher Education*, 23(2), pp. 191-206.
- Brookfield, S (1989). *Developing Critical Thinkers*. Milton Keynes: Open University Press.
- Chi, M., Bassock, M., Lewis, M., Reimann, P. and Glaser, R. (1989). Self-explanations: how students study and use examples in learning to solve problems, *Cognitive Science*, 13, pp. 145-82.
- Chi, M., de Leeuw, N., Chiu, M. and LaVancher, C. (1994). Eliciting self-explanations improves understanding, *Cognitive Science*, 18, pp. 439-77.
- Crème, P. (2005). Should student learning journals be assessed? *Assessment and Evaluation in Higher Education*, 30(3), pp. 287-296.
- Cope, C. and Staehr, L. (2005). Improving students' learning approaches through intervention in an information systems learning environment, *Studies in Higher Education*, 30(2), pp. 181-197.
- Day, M. M., Kaidonis, M. A. and Perrin, R. W. (2003). Reflexivity in learning critical accounting. Implications for teaching and its research nexus, *Critical Perspectives on Accounting*, 14(5), pp. 597-614.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. New York: D.C. Heath & Co.
- Entwistle, N. (1981). *Styles of Learning and Teaching: An Intergrated Outline of Educational Psychology for Students, Teachers and Lecturers*, Chichester: John Wiley.
- Entwistle, N. and Tait, H. (1990) Approaches to learning, evaluations of teaching, and preferences for contrasting academic environments, *Higher Education*, 19(2), p. 169-194.
- Fulwiler, T. (1987). *The Journal Book*, Portsmouth: Heinemann.
- Gordon, C. and Debus, R. (2002). Developing deep learning approaches and personal teaching efficacy within a perspective teaching education context, *British Journal of Educational Psychology*, 72(4), pp. 483-512.
- Haigh, M. J. (2001). Constructing Gaia: using journals to foster reflective learning, *Journal of Geography in Higher Education*, 25(2), pp. 167-189.
- Hall, M., Ramsay, A. and Raven, J. (2004). Changing the learning environment to promote deep learning approached in first-year accounting students. *Accounting Education: an international journal*, 13(4), pp. 489-505.
- Harasim, L., Hiltz, S. R., Teles, L. and Turoff, M. (1995). *Learning networks: A field guide to teaching and learning online*. Cambridge, MA: The MIT Press.
- Harwood, E. M. and Cohen, J. R. (1999). Classroom Assessment: Educational and research opportunities, *Issues in Accounting Education*, 14(4), pp. 691-724.
- Hassall, T., Lewis, S. and Broadbent, J. M. (1998). The use and potential abuse of case studies in accounting education, *Accounting Education: an international journal*, 7, pp. S37-S47.
- Hatton, N., and Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teacher and Teacher Education*, 11(1), pp. 33-49.

- Holly, M. (1991). *Keeping a Personal-Professional Journal*, Victoria: Deakin University Press.
- Howieson, B. (2004). *The Use of Self-reflective Study Journals in a Postgraduate Accounting Theory Course: A Case Study*. Paper presented to the 2004 IAAER/ Southern African Accounting Association Conference, Durban 30 June – 2 July.
- International Federation of Accountants (IFAC) (2003). *Introduction to International Education Standards*, New York: IFAC.
- Jasper, M. (1998). 'Assessing and improving student outcomes through reflective writing', in C. Rust (ed.) *Improving Student Learning Outcomes*, Oxford: OSCLD, Oxford Brookes University, pp. 1-15.
- Johns, C. (1994). Nuances of Reflection. *Journal of Clinical Nursing*, 3, pp. 71-75.
- Kallaith, T. and Coghlan, D. (2001). Developing reflective skills through journal writing in an OD course. *Organization Development Journal*, 19(4), pp. 61-70.
- Kanuka, H., and Anderson, T. (1998). Online social interaction, discord, and knowledge construction. *Journal of Distance Education*, 13 (1), pp. 57-74.
- Kavanagh, M. H. and Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting and Finance*, 48, pp. 279-300.
- Kennison, M. and Misselwitz, S. (2002). Evaluating reflective writing for appropriateness, fairness and consistency. *Nursing Education Perspectives*, 23(5), pp. 238-242.
- Kim, H. (1999). Critical reflective inquiry for knowledge development in nursing practice, *Journal of Advanced Nursing*, 29(5), pp. 1205-12.
- Kolb, D. A. (1984). *Experiential Learning: Experiences as the Source of Learning and Development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Kolb, D., and Fry, R. (1975). "Toward an Applied Theory of Experiential Learning" in C Cooper (ed.) *Theories of Group Process*, London: John Wiley.
- Langer, A. M. (2002). Reflecting on practice: using learning journals in higher and continuing education, *Teaching in Higher Education*, 7(3), pp. 337-413.
- Locke, K. and Brazelton, J. (1997). Why do we ask them to write, or whose writing is it anyway? *Journal of Management Education*, 21(1), pp. 44-57.
- Lovell, A. (1992). Accounting education: a developing debate, *Management Accounting (UK)*, 70(3), pp. 20-23.
- Lucas, B. (2001). *Power Up Your Mind*, London: Nicholas Brealey.
- Lucas, U. (2000). Worlds Apart: Students' experiences of learning introductory accounting, *Critical Perspectives on Accounting*, 11, pp. 479-504.
- Lucas, U. (2001) Deep and Surface Approaches to Learning within Introductory Accounting: a phenomenographic study, *Accounting Education: An International Journal*, 10, pp. 161-184.
- Lucas, U. and Meyer, J.H.F. (2005). Towards a Mapping of the Student World: The identification of variation in students' conceptions of, and motivations to learn, introductory accounting', *British Accounting Review*, 37(2), pp. 177-204.
- Lucas, U. and Mladenovic, R. (2006). *Developing New 'World Views': Threshold concepts in introductory accounting*. In Meyer, J.H.F. and Land, R. (eds.) (2006), *Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge*, Oxford: Routledge, pp. 148-159.
- McCordle, A. R. and Christensen, C. A. (1995). The impact of learning journals on metacognitive and cognitive processes and learning performance, *Learning and Instruction*, 5(2), pp. 167-185.
- MacFarlane, B. (2001). Developing reflective students: evaluating the benefits of learning logs within a business ethics programme, *Teaching Business Ethics*, 5(4), pp. 375-387.
- Marton, F. and Säljö, R. (1976). On qualitative differences in learning - 1: outcome and process, *British Journal of Educational Psychology*, 46(1). pp. 4-11.

- Mathews, R. Jackson, M. and Brown, P. (1990). *Accounting in Higher Education: Report of the Review of the Accounting Discipline in Higher Education*, Vol. 1, Canberra: Australian Government.
- May, G. S., Windal, F. W. and Sylvestre, J. (1995). The need for change in accounting education: an educator survey, *Journal of Accounting Education*, 13(1), pp. 21-43.
- Meyer, J.H.F. and Land, R. (2005). Threshold concepts and troublesome knowledge (2): epistemological considerations and a conceptual framework for teaching and learning, *Higher Education*, 49, pp. 373-388.
- Mezirow, J. (1998). On critical reflection, *Adult Education Quarterly*, 48(3), pp. 185-99.
- Mladenovic, R. (2000). An investigation into ways of challenging introductory accounting students' negative perceptions of accounting', *Accounting Education: An International Journal*, 9, pp. 135-154.
- Moon, J. A. (1999a). *Reflection in learning and professional development: Theory and practice*. London: Kogan Page.
- Moon, J. A. (1999b). *Learning Journals: A Handbook for Academics, Students and Professional Development*, London: Kogan Page.
- Moon, J. A. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. London: RoutledgeFalmer.
- November, P. (1996). Journals for the journey into deep learning: a framework, *Higher Education, Research and Development*, 15(1), pp. 115-127.
- Palmer, P.J. (1998). *The Courage to Teach*. San Francisco, CA: Jossey-Bass.
- Perry, W. G. (1970). *Forms of Intellectual and Ethical Development in the College Years*, New York: Holt, Reinhart and Winston.
- Plack, M. M. and Greenberg, L. (2005). The reflective practitioner: reaching for excellence in practice, *Paediatrics*, 116(6), pp. 1546-1552.
- Race, P. (1996). The Art of Assessing 2. *New Academic*, 5(1) Spring, pp. 3 – 6.
- Rainer, T. (1978). *The New Diary*, Los Angeles: J.B. Tarcher Inc.
- Ramsden, P. (2003). *Learning to Teach in Higher Education*. London: RoutledgeFalmer.
- Ramsden, P. and Entwistle, N.J. (1981). *Effects of Academic Departments on Students' Approach to Studying*, *British Journal of Educational Psychology*, 51, 368-383.
- Rodrigues, C.A. (2004). The importance level of ten teaching/learning techniques as rated by university business students and instructors, *The Journal of Management Development*, 23 (2), pp. 169-182.
- Rourke, L., Anderson, T., Garrison, D. R. and Archer, W. (1999). Assessing social presence in asynchronous text-based computer conferencing. *Journal of Distance Education*, 14 (2), 50-71.
- Salisbury, J. (1994). *Becoming qualified – an ethnography of a post-experience teacher-training course*, PhD thesis, University of Wales, Cardiff.
- Samkin, G. and Francis, G. (2008). Introducing a learning portfolio in an undergraduate financial accounting course, *Accounting Education: an international journal*, 17(3), pp. 233-271.
- Schön, D. (1983). *The Reflective Practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. (1987). *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass.
- Sharma, D.S. (1997) Accounting students' learning conceptions, approaches to learning and the influence of the learning-teaching context on approaches to learning, *Accounting Education: an international journal*, 6(2), pp.125-146.
- Smith, K.A., Sheppard, S. D., Johnson, D. W. and Johnson, R. T. (2005). Pedagogies of engagement: Classroom-based practices. *Journal of Engineering Education*, 94 (1), pp. 87-102.
- Spalding, E. and Wilson, A. (2002). Demystifying reflection: A study of pedagogical strategies that encourage reflective journal writing. *Teachers College Record*, 104(7), pp. 1393-1421.
- Strauss, A. and Corbin, J. (1990). *Basics of Qualitative Research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

- Tomlinson, P. (1999). Continuous reflection and implicit learning – towards a balance in teacher preparation, *Oxford Review of Education*, 25(4), pp. 533-44.
- Trigwell, K. and Prosser, M. (1991) Improving the quality of student learning: the influence of learning context on student approaches to learning on learning outcomes, *Higher Education*, 22(3), p. 251-266.
- Uline, C., Wilson, J., and Cordry, S. (2004). Reflective Journals: A valuable tool for teacher preparation. *Education*, 124(3), pp. 456-461.
- Varner, D. and Peck, S. (2003). Learning from learning journals: The benefits and challenges of using learning journal assignments. *Journal of Management Education*, 27(1), pp. 52-77.
- Warburton, K. (2003). Deep learning and education for sustainability, *International Journal of Sustainability in Higher Education*, 4(1), pp. 44-56.
- Weil, S.H. (1989). *Addressing the problems of cognition in a first year accounting course at the University of the Western Cape*, unpublished Ph. D. thesis, University of the Western Cape, Cape Town.
- Williams, R. and Wessel, J. (2004). Reflective journal writing to obtain student feedback about their learning during the study of chronic musculoskeletal conditions. *Journal of Applied Health*, 33(1), pp. 17-23.
- Whittle, J., Morgan, M. and Maltby, J. (2000). Higher learning online: Using constructivist principles to design effective asynchronous discussion. Paper presented at the *NAWEB 2000 virtual conference*. Retrieved 11 November 2008, from <http://naweb.unb.ca/2k/papers/whittle.htm>.
- Woods, D. R., Felder, R. M., Rugarcia, A. and Stice, J. E. (2000). The future of engineering education III. Developing critical skills, *Chemical Engineering Education*, 34(2), pp. 108-117.
- Woodward, H. (1998). Reflective journals and portfolios: Learning through assessment. *Assessment and Evaluation in Higher Education*, 23(4), pp. 415-423.
- Young, A. and Fulwiler, T. (1986). *Writing across the Disciplines*, Upper Montclair, NJ: Boynton/Cook.

About the Authors

Nicholas C. McGuigan

Mr. Nicholas McGuigan has taught accountancy at Lincoln University since 2005. His research interests include, accounting education and environmental sustainability. He is currently involved in research looking at the application of mobile technologies to support traditional learners, active methods of facilitation to re-engage student learners and student perceptions in introductory accounting courses.

Thomas Kern

Mr. Thomas Kern has lectured in financial accounting since July 2008 at the University of Canterbury. His research interests include financial accounting for financial institutions, sustainable development and disclosures of financial institutions and accounting education.