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# The Use of Dialectical Enquiry in an Accounting Course

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There is evidence of discontent with contemporary university education generally, and accounting education in particular. This paper examines some reasons for the discontent and suggests one way to address it, namely dialectic enquiry. The process of contradiction and reconciliation is at the heart of dialectic enquiry. From two opposing positions, dialectic enquiry requires a third position, or synthesis, to emerge which allows the participants to progress their exploration of an issue. The authors describe the introduction of dialectical enquiry in a university accounting course and discuss the potential learning improvements it can offer. The authors hope this paper will encourage others to introduce dialectical enquiry into their classrooms and report their findings.

#### (1) INTRODUCTION

The authors of this paper are three academics¹ who are attempting to reassess the purpose of their teaching roles as contemporary university academics, in a fast changing world. The paper starts with a brief reflection on pedagogical alternatives in university education and accounting education, and the need to adopt a critical perspective in the classroom. The paper then introduces some educational innovations including problem based learning and dialectical inquiry. The authors go on to discuss how dialectical enquiry was implemented in a tertiary accounting course in an effort to improve the learning environment for their students.

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#### (2) SOME PEDAGOGICAL REFLECTIONS

# 2.1 The Purpose of a University Education

The relationship between teachers and students has frequently been based on the premise that teachers must impart knowledge to passive students, who will become enriched by the experience. Haigh (1994), for example, describes how some students want simply to be "filled up" with ideas and skills, which they believe will be used as "recipes" for responding to situations in their future lives.

Inglis and Dall'Alba (1998) argue that education must involve something more than the transmission of a pre-selected body of knowledge to students. Education should involve the provision of the opportunity for students to learn that change is inevitable, and they must appreciate, "the value of change and ... adapt and develop within the changing business environment" (p. 199).

The authors believe that education involves developing students as critical<sup>2</sup>, independent thinkers, rather than as 'properly' informed individuals (Dearn, 1996; Rogers, 1983; Schon, 1971). Education should concern itself with helping students become aware of how best to continue learning throughout life, rather than with merely acquiring any static body of knowledge. Teachers, therefore, need to become facilitators of learning rather than purveyors of information (Adler and Milne, 1997). Education must provide something more than merely fact-transmission and *status quo* socialisation.

Furthermore, education which addresses well-structured hypothetical problems with technical solutions encourages young managers to identify well-structured problems to deal with. It does not help them to appreciate the complexities of society, and their need to develop themselves to identify and face the real and difficult problems that they will encounter. Too often in university courses, problems are oversimplified in an effort to discover the correct answer. The perspective that problems possess only one 'right' answer, which is 'absolutely right' was challenged by Hegel well over a century ago<sup>3</sup>. The following quotation (Mitroff, 1983) explains the current position well:

In school...the problems that are presented to the students are so greatly simplified. Indeed some would say that what are presented under the guise of problems are really exercises and not problems at all.... An exercise is something that typically has a single correct solution and, furthermore, when it is arrived at it is recognised as such by all parties.... Problems, in contrast, may have many different solutions because they may be looked at from different, equally valid angles.... In an exercise, we can be relatively confident that each party starts from the same set of givens, that is, the same definition of the exercise to be solved. In a problem...[it] is not the same for all parties because each interprets it from very different grounds, defining the basic problem somewhat differently (p. 17).

Educators should not be looking for the correct 'truths' in societal studies in universities, as "there is no single correct solution to most business problems but the best solution depends upon the context within which the problem arises" (Inglis and Dall'Alba, 1998, p. 199). It is necessary to encourage and foster good thought processes which can help educators and society to remain constantly vigilant and to be able to progress. This may not be simple, as some teachers may find it easier to provide instruction in an environment in which 'absolutely correct' and 'absolutely wrong' answers are expected to exist.

# 2.2 Accounting Education and the Need for Innovation

The Bedford Committee in the United States reports, "Professional accounting education, which has remained substantially the same over the past 50 years, is generally inadequate" (1986, p. 171). In Australia, accounting education has also been described as "...being in a state of 'chronic neglect' and in 'great need of support and revitalization'" (Tippett, 1992, p. 994). Despite the wide recognition of the problem, and the establishment (and winding-up) of the Accounting Education Change Committee in the United States, change has been slow (Davis and Sherman, 1996). The Accounting Education Change Commission suggested:

Accounting programs should prepare students to *become* professional accountants, not to *be* professional accountants at the time of entry to the profession.... Therefore, pre-entry education should lay the base on which life-long learning can be built (1990, p. 307).

An extensive body of scholarship has developed on tertiary learning and teaching, but has not, in the authors' experiences, been readily assimilated into accounting education, even though many individuals now appear more willing to be innovative. See, for example, the literature guide on cooperative and collaborative learning provided by Ravenscroft, Buckless and Hassall (1999).

Some commentators hold that the focus on a scientific approach to knowledge creation has limited not only accounting education but also accounting research (Davey, 1993; Carr and Kemmis, 1986). However, in recent years approaches other than the scientific approach to knowledge creation in accounting, such as an ethnographic or critical approach, have been accepted (Chua, 1986; Hopper *et al.*, 1987; Arrington and Schweiker, 1992; Morgan and Willmott, 1993) and change in educational offerings may follow, to reflect this broadening perspective on understanding and knowledge creation.

Kimmel (1995) explains how accounting educators might incorporate critical thinking into their curricula, "in order to move our students to higher levels of intellectual development" (p. 301). He suggests that this would encourage students to develop the abilities to:

- value truth above self-interest
- accept change
- empathise
- welcome divergent views
- tolerate ambiguity
- recognise personal biases (ibid.)

Kimmel suggests that the critical thinking approach provides the best benefits when applied to "capstone" courses (final year courses), which require students to integrate their learning experiences from the diverse courses they have studied throughout their education. He believes accounting graduates should be able to think independently as they are "defining problems accurately... [and] must maintain a commitment to arriving at the best solution in the face of multiple potential pressures and influences from both of the affected parties" (ibid). Inglis and Dall'Alba (1998) reinforce this view suggesting that students should be encouraged to "undertake critical reflection on ongoing procedures and practices ... in order to engender constant improvement, rather than maintaining the status quo" (p. 199).

Hassall, Lewis and Broadbent (1998) suggest that case studies provide an excellent way to encourage senior students to develop certain skills, namely to:

- appreciate the difficulties involved in clearly defining problem areas;
- apply and integrate previously acquired subject skills and knowledge;
- work within groups;
- question assumptions, listen to arguments and respond accordingly;
   and to
- realise that there are rarely right or wrong answers to real life situations. (pp. 326-327).

Hassall *et al*, in applying the problem based learning (PBL) approach<sup>5</sup>, explain how their case study approach in their final year course, *Financial Decision Making*, allows subject knowledge to, "be integrated in a problem-solving environment" (p. 333).

Adoption of PBL often requires a transformation in core conceptions of the purposes of education and the nature of learning and teaching. The following are the key characteristics of problem-based learning programmes:

- An acknowledgment of the base of experience of learners.
- An emphasis on students taking responsibility for their own learning. Students are expected to take an active part in planning, organizing and evaluating their own learning.
- Experiences which are multidisciplinary or transdisciplinary. If holistic problems are the focus of learning, then courses cannot fit

into well-defined categories of existing subject divisions. They must necessarily cross existing boundaries between disciplines.

- An appreciation of theory and practice being inextricably intertwined. There is no pre-established division between concepts and applications. Theory is drawn naturally into knowledge through the demands of problem solutions.
- A focus on the processes of knowledge acquisition, rather than the products of such processes. Students are confronted with the need to know how to approach a problem and acquire new knowledge, and how to process their experiences through various forms of reflection (Boud, 1985, p.15).

The authors contend that the principles of PBL can be as appropriate for accounting education, as for other areas of education and, particularly, that the use of dialectical enquiry fits within this group of PBL approaches.

# (3) DIALECTICAL ENQUIRY

Dialectical enquiry demands the clear and formal statement of differing positions, assumptions and implications, in a shared problem-solving environment. All parties involved in dialectical enquiries seek to discover an acceptable solution to enable progress to be made.

The process of dialectical enquiry involves the supporters of one policy (or recommended course of action) stating their position as clearly and briefly as possible. This statement is termed the *thesis*. Those who do not support the thesis are required to provide an alternative policy, termed the *antithesis*, which they argue represents a better way to proceed. The thesis and antithesis usually illustrate two opposing ways of viewing a problem. The two parties argue in an attempt to derive a third option, which all concerned agree to be better than either of the original options. The new option is termed the *synthesis*.

The dialectic does not immediately attempt to determine if proposed solution X is better than proposed solution Y; it first asks what assumptions led the proponents of each solution to adopt their positions.

Conflicting assumptions will be recognised, often for the first time. Disagreement in non-routine and equivocal situations (many of which may give rise to on-going problems in organisations) may be caused by differences in the understanding of the problems, and the underlying assumptions which have led to the understandings, rather than disagreement with the proposals for proceeding. It is important that students are provided with opportunities to realise this. "The essential task of the dialectic is to resolve oppositions." (Connelly and Clandinin, 1988, p. 95).

Through the dialectic, thought proceeds via contradiction and the reconciliation of that contradiction. McWhinney (1992) explains the usefulness of contradiction:

Contradictions [drive] a person or a community from the first awareness of negation to a resetting on a new truth. Few people have been comfortable living without some mode of establishing what is true, right, better or more beautiful. Yet progress can come by letting go of one truth to explore another. This exploration is the heart of dialectic (p. 213).

The usefulness of dialectical enquiry for investigating management issues and concepts has been well argued by Dehler and Welsh (1993) and Mitroff and Linstone (1993), who suggest that "In today's world, economic success demands that one be able to examine problems from multiple perspectives...[and] that one formulate multiple and conflicting definitions of critical problems" (p. viii). Mitroff and Linstone (1993) provide examples illustrating the power of the use of dialectical enquiry in the American automobile industry (General Motors) and Homelessness (the Weingart Centre, Los Angeles).

The dialectical approach does not confine itself to examining the selected problem in a restricted decision area; rather, it seeks to examine the entire thinking environment which has led to a chosen policy being proposed. The dialectical process, therefore, encourages holistic thinking which involves a broader approach to knowledge creation, "[It encourages] a plurality of knowing and engenders wisdom, understanding, and creativity." (Hart, 1998, p. 8). The authors maintain that students are also encouraged to appreciate the complexities and contradictions which are

encompassed by societal problems and to develop an empathy for others' appreciation of the problems. The dialectical approach also encompasses the critical perspective by seeking constant improvement on an issue or concept.

## (4) DIALECTICAL ENQUIRY IMPLEMENTED

# 4.1 Background

In an attempt to address the problems perceived in many educational offerings, the authors designed a course called, *Accounting, Organisations and Society*, incorporating many of the elements of a PBL approach and, in particular, dialectical enquiry.

The course encourages students to examine how and whether accounting is being used in contemporary organisations and society to promote change, or to maintain the status quo. The design and content of the course aims to promote a critical perspective in students. Students are encouraged to recognise that the decision models in society are not preordained, but are socially constructed. They are challenged to identify the underlying assumptions which support the accounting frameworks being used to help control contemporary societies.

# 4.2 Course Description<sup>7</sup>

Dialectical enquiry was introduced into the *Accounting, Organisations and Society* class in 1995, when the course was first offered. The numbers in the class have varied from seven in 1995 to one hundred in 2001. The dialectical enquiry sessions take place in tutorials which have from 24 to 30 students. The time allowed for each session is two hours. Within each tutorial group, there are five dialectical enquiry sessions during each twelve week semester course.

In each tutorial group, the students are split into groups of six<sup>8</sup> and required to conduct dialectical enquiries into contemporary issues chosen by them. In each group two students provide a thesis, and two an antithesis. The remaining group members chair the discussion and attempt to encourage the evolution of a synthesis.

Each group of students chooses its own topics for discussion, within a broad area prescribed in the course outline, for example, *Corporate Social Responsibility*. Each group identifies a specific issue within the chosen topic area to be argued. Each group has to control its own efforts, and record its own progress. In this way, students learn how to manage not only their own contributions, but also the contributions made by other group members.

Generally the students select societal issues rather than organisational problems since they have little shared knowledge of the latter. Two examples from the 1999 course are shown in Table 1.

TABLE 1
Example of Student Topic Selection, Thesis and Antithesis, 1999

Topic	Thesis	Antithesis
Gold-mining in New Zealand	Large areas of NZ are dependent on gold mining for their economic existence. Therefore, gold mining must be supported.	Gold mining has caused several NZ waterways to be contaminated with cyanide. Gold mining must therefore be banned from 'clean and green NZ'.
Genetically modified foods (GMF)	The production of GMF is potentially harmful to the human race. It should not be allowed in NZ.	The production of GMF represents scientific progress. The new technique must be exploited fully if NZ is to compete globally in the food market.

The gold mining dialectic evolved when some students whose family homes were in a gold producing town, met with university colleagues who were keen to protect the environment. The thesis students argued that the town would disappear without the gold mine, with significant social consequences. The antithesis students provided evidence of current environmental degradation to waterways and the surrounding environment caused by mining operations from companies no longer resident in New Zealand. They argued that the costs, for example, of

rebuilding dams to contain hazardous waste, will have to be met by New Zealand taxpayers. The derived synthesis allowed mining to continue, subject to the companies involved creating trust funds to protect future environmental interests.

By way of contrast, the GMF dialectic resulted in no synthesis. Nevertheless, all of the students involved reported that they had learned a lot about the issues involved through attempting to resolve the contradictory positions within the dialectic.

During the dialectic sessions, the students are encouraged to appreciate that a major purpose of interchanges with other students with whom they do not agree should be to *listen* to what others have to say. For example, in the goldmining dialectic above, the environment-friendly students demonstrated that they had heard that without gold mining, whole towns could disappear. Thoughtful interchanges allow the students to discover if other people's views are capable of modifying their own. The environment-friendly students conceded at an early stage that gold mining should be allowed to continue with certain conditions, and the pro-mining group demonstrated that they had heard good arguments in support of better environmental protection and corporate guarantees.

Students are also required to identify the assumptions which underpin the opinions of others, and their own assumptions. Their arguments expose assumptions, which some students will have previously taken for granted or regarded as common sense. For example, they must question whether a statement such as "pollution of the environment must cease" is valid when it could cause terrible social hardship.

The students themselves are charged with helping a synthesis emerge. To illustrate the dialectical process Table 2 reproduces excerpts from a dialectical report. The synthesis obtained represents a successful way forward, which evolved from the more extreme positions taken in the thesis and antithesis.

It is often not easy for the students to identify the assumptions which relate to their perception of the problem. Table 3 identifies steps which can be used to facilitate the identification of assumptions.

# TABLE 2 Excerpts From Students' Dialectical Report

Thesis	Antithesis
The betterment of a developed society stems from the practice of open learning.	Open learning encourages conflict which will lead to a disruption in the flow of the entire social system.
Opening Position for Thesis	

- We define "open-learning" as the "freedom that individuals have in expressing their own ideas and opinions in an unrestrained manner during any discussions".
- In this era, we recognise that there is a change not only in accounting education, but also in management education. This is where the idea of "open-learning" comes in. This period of change has derived mainly as a result of dissatisfaction with the current curriculum by students and the organisations which subsequently employ them. This curriculum is accused of placing insufficient emphasis on generating vision in students and also fails in the integration of functional areas.
- Open learning provides an opportunity to influence the contents of what and how future managers are taught. This will lead to a huge impact for the betterment of society, as managers will be able to cope with societal changes.
- We assumed that society is well-educated and strives towards a "win-win" situation through open learning. In other words, the purpose of this situation is not to determine who is wrong or right, but is more of an encouragement towards growth and selfdevelopment.

#### Opening Position for Antithesis

- Open learning creates rapid social changes and causes the deterioration of traditional values in society, which will gradually destroy its culture. Assumption made: diminution of traditional values will be responsible for a country's evil. Open learning will also result in a disintegrated, uncoordinated and uncooperative society. This is due to the deterioration of culture. Besides that, society will lose its identity. Therefore, it encourages the general of secularism, which can be disastrous for a society.
- Implementation of ideas generated through open learning will be difficult, due to the influence of external factors such as economics, social and political forces.
- We need to have a technical base as a stepping stone to help managers in seeking out well-structured problems and understanding them.

The two hour discussion involved a series of iterations, modified positions and explanations, until the following synthesis was developed:

Synthesis:

The betterment of a society stems from open learning, but traditional norms must be maintained, unless proven to be detrimental to society's welfare.

Each group must provide the strongest possible arguments as to why it has chosen to adopt the assumptions identified in Step 6 in Table 3. This is necessary to ensure that all of the students present understand why the chosen assumptions are critical to the recommended policy. "Each [person]...is not asked to necessarily accept alternate assumptions, merely attempt to understand them" (Mitroff and Mason, 1981, p. 82). Once this has been achieved, the negotiation of assumptions can commence.

# TABLE 3 Steps to Help Identify Assumptions

- 1. Identify *all* of the stakeholders who will be affected by, or who will affect, the decision. The stakeholders are the entire set of members that constitute a *social* system. Often one set of stakeholders will be society or the general public.
- 2. Decide on the policy which each set of protagonists wishes to recommend.
- List the stakeholders who are most important to each suggested policy (and why). Each party must provide the assumptions which it has made about these stakeholders and show how, starting from these assumptions, the policy is derived.
- Record the assumptions underlying each party's recommended policy. Specify what assumptions have been traditionally held and why. Explain the effect of any changes from the traditional assumptions.
- 5. Examine the choice of assumptions and how well each party's recommended policy can tolerate changes in the assumptions. Test the relevance of assumptions by expressing their negatives implications and considering how the negative statements would affect the policy decision.
- 6. Re-examine the assumptions and prioritise those that remain in order of *relative* importance and *relative* certainty. Identify those which are both relatively important and relatively uncertain.

# 4.3 The Process of Synthesis

Students frequently have difficulty in understanding differing, often contradictory, assumptions which are exposed. Even more difficult is the process of coming up with an entirely new, synthesised set of assumptions that bridges the old policies and goes beyond them. A way forward is to have each party identify which assumptions from the other

party most disturb its position. Both parties are then asked to soften their offending assumptions to the point where they barely continue to support their own recommended policy.

Alternatively, each party can be asked to restate its assumptions in order to facilitate progress towards a synthesis. It is important that all individuals depart from the win-lose psychological mind set which plays such a prominent role in traditional learning processes. As most significant disagreements contain assumptions and consequences on both sides which are worthy of recognition and action, the dialectical enquiry in the classroom seeks to have students identify the worthy items, while exposing and rejecting other items. The students must be prepared to examine their own values concerning the area under discussion, and contrast them with the values of others who start from different assumptions. The synthesis involves the integration of all worthy components into a policy statement which all participants are pleased to endorse.

The facilitating staff attempt not to interfere in the students' dialectical arguments, remaining in the background and providing only brief assistance when requested. However, the initial thesis and antithesis chosen by the students are checked by staff to ensure that they provide a reasonable base on which to build a dialectical report, and from which to create a synthesis. Following the dialectical sessions, the students are required to submit a report detailing the main arguments used in their attempts to reach a synthesis (refer to Table 2 earlier).

The dialectical reports are graded. This is difficult to do without being influenced by personal views, which may contradict those held by the students. Staff seek to allocate grades based on the quality of the arguments reported and the learning experiences described, rather than on their own agreement or disagreement with the positions taken or evolved to (any factual errors appearing in the reports are corrected). Marked reports contain copious notes, criticisms and suggested improvements.

The use of the dialectical enquiry technique in the *Accounting*, *Organisations and Society* course helps provide a student centred learning environment in which the participants make choices about their own learning, take responsibility for what they learn and, the authors believe, make progress towards deep learning.

### 4.4 Student Response to Course Implementation

The authors believe that the learning experiences resulting from the dialectical sessions encourage students to develop a flexible view of disagreements in society. The students manage their own learning experiences and become jointly responsible for each others' learning experiences. The environment so created has many similarities to that which they are likely to encounter in their future careers.

In the business world, accountants are often seeking adequate solutions to problems, without having clear and certain information to enable the simple identification of perfect solutions. Graduates need to have acquired a methodology to guide their decision making in such equivocal situations. Dialectical enquiry encourages the development of not only an enquiring mind, but also of good listening skills.

Generally the dialectical sessions have been well received by students. The following are some anecdotal comments received from them:

The most enjoyable academic activity for me was the dialectic enquiries. I had never done anything like them before and the feeling of reaching a synthesis so different from either original statement gives an amazing sense of mental achievement. To discover my own hidden beliefs, and then try and justify why these beliefs should be the best beliefs to have, was also a real discovery.... I enjoyed the group work involved in creating a synthesis.

I have really enjoyed dialectical enquiries. If I was to be asked what I most appreciated about the course, it would have to be the dialectical enquiries. They have helped to clarify, develop and even criticise my views on various things.... Dialectics have helped me to become more open minded, and reinforced that individuals hold different views.... With the contribution from all team members... [we] come to a better solution.... I appreciate that you do not mark our dialectics based on whether you like or dislike our synthesis... [but] on the process that we used to come to our synthesis.

In appreciation of the dialectical approach to contradictory situations one student chose to criticise the educational *status quo*:

I honestly feel that the problem is students are being taught rules and to feel bound by them. Similarly, we students are taught from an early age that one 'correct' answer exists to each problem. The rules and structured procedures learnt at school and throughout university provide the means to achieve this one correct answer. It is only when confronted with unstructured problems within today's 'real business world' that students realise their inherent inflexibility.

Another student summarised well the benefits of the dialectic exercises:

I have learnt to listen to other students' opinions and feelings.... I have become more tolerant of opposing points of view and realised that my view may not always be right, and by listening and sharing I am becoming a better and richer person.

Some students were critical of the dialectic exercises, particularly when they were first used as a pedagogical tool:

Dialectical enquiries were not appropriately guided.

Dialectic enquiries were something very new to me, and probably to most of the class. At first they seemed very difficult to understand, but as our group progressed they became a very interesting area of discussion/argument on controversial issues. The biggest strength of the sessions was in understanding how people can view the same problem differently, depending on their assumptions, background and experiences.

Some students enjoyed dialectics, but wished to be rewarded more fully for the effort involved - "Increase dialectic enquiry mark, as they require a lot of work". Another student commented, "It is interesting to know how differently guys think from girls, and culture makes a difference. In future, groups for dialectics could be made up of a mixture of sex and race, and change each week". This proposal has been suggested to subsequent students, but not imposed.

#### (5) CONCLUSION

The authors believe that their students have benefited from the use of dialectical enquiry in the *Accounting, Organisations and Society* course. It is difficult, however, to 'prove' this contention. Postmodern scholars have argued persuasively that lasting, universal remedies to the complex, evolving problems concerning the education of future accountants, are not possible. Furthermore, local remedies cannot be instantaneously discovered or proven; they must be agreed upon and absorbed into the local culture. In this environment, the dialectical enquiry approach is worthy of further development.

The authors made use of dialectical enquiry in a university accounting course as a means of improving the learning opportunities for their students. The authors contend that the fundamentals of dialectical enquiry are well suited to achieving the specific course objectives and, in general, the objective of enabling students to become independent learners

The purpose of dialectical enquiry is not for each party to convince the other of the uncontested truth of its position, as debaters might, but rather to show why each party views the situation as it does, and what the assumptions underlying its viewpoint are. The purpose of the dialectic is to show both parties that there are different ways of viewing a given situation, and that what one party regards as a set of natural assumptions, the other regards as a set of unwarranted assumptions. In the realm of complex, real-world problem solving, there are many such contradictions. Educators must do everything in their power to locate, expose and challenge these. Dialectical enquiry is a technique which the authors believe can be beneficially complementary to other pedagogical approaches and that it can offer learning improvements to accounting students.

# APPENDIX 1 Course Learning Objectives

#### Desired developments in the students

- 1. Citizenship: their ability to be aware of their own emotional, spiritual and societal values as well as their cognitive identities. *Their* courage to promote change in organisations and society.
- 2. A knowledge of the literature which considers Accounting as a social phenomenon.
- 3. Self understanding, self awareness, self confidence and intellectual independence.
- 4. The ability to self motivate and self organise.
- 5. The ability to provide arguments and listen, rather than to 'debate'.
- 6. The wish to strive for the best solutions, rather than to seek opportunistic compromises.
- 7. To adopt a 'professional' approach to life in preparation for the workforce.
- 8. A tendency to continuously question and evaluate, throughout life.
- 9. A knowledge of their role, and the role of accountants, in society.
- 10. A knowledge of how to learn.

### Specific skills to be acquired by the students

- a. Public presentation skills.
- b. Group work skills, the ability to participate beneficially in team work.
- c. The ability to judge the performance of both themselves and others.
- d. The ability to interact with senior professional people in society.
- e. Time management skills.

#### **ENDNOTES**

- Two of the authors are accountants, and the third is an educationalist heading the Teaching and Learning Development Unit at our university.
- The term critical is used here in its broadest sense, namely that it includes any challenge to the status quo; see Roslender, 1995.
- "The history of thought and culture is, as Hegel showed... a changing pattern of great liberating ideas which inevitably turn into suffocating straightjackets, and so stimulate their own destruction by new emancipatory, and at the same time, enslaving conceptions" (Berlin, 1962, p. 19).
- Tippett is referring to the Report of the Review of the Accounting Discipline in Higher Education, Australia 1990.
- <sup>5</sup> 'Problem-based learning' is a label which educationalists have used to describe a group of innovative educational techniques.
- The following site provides access to an extensive collection of resources on PBL: http://www2.unimaas.nl/%7EPBL/link.htm.
- Also refer to Appendix I for course learning objectives.
- Or seven or eight students if the class size is not an exact multiple of six.
- Deep learning opportunities encourage students to develop, inter alia: the ability to provide arguments and listen; the wish to strive for the best solutions, rather than seek opportunistic compromises; intellectual independence; a tendency to continuously question and evaluate, throughout life; the ability to participate beneficially in team work; and the ability to judge the performance of both themselves and others (Ramsden, 1992).

#### REFERENCES

Accounting Education Change Committee. (1990). Objects of Education for Accountants: Position Statement Number 1. *Issues in Accounting Education*, 5(2), 307-312.

Adler, W.A. and M.J. Milne (1997). Translating ideas into practice: An examination of international accounting bodies' calls for curriculum changes and New Zealand tertiary institutions' assessment methods. Accounting Education, 6(2), 109-124.

Arrington, C.E. and W. Schweiker (1992). The rhetoric and rationality of accounting research. Accounting, Organizations and Society, 17(6), 511-533.

Bedford Committee (1986). AAA committee on the future structure and scope of accounting education. Future accounting education: preparing for the expanding profession. *Issues in Accounting Education*, 1(1), 168-95.

Berlin, I. (1962). Does political theory still exist? In P. Laslett and W.G. Runciman (Eds.), *Philosophy, Politics and Society*, 2nd series. Basil Blackwell: London.

Boud, D. (1985). Problem-based learning in perspective, in Boud, D. (ed) *Problem-Based Learning for the Professions*, Sydney: Higher Education Research and Development Society of Australasia.

Carr, W. and S. Kemmis (1986). Becoming critical: Knowing through action research. Victoria: Deakin University.

Chua, W.F. (1986). Radical developments in accounting thought. *The Accounting Review*, LX1(4), 601-632.

Connelly E.M. and D.J. Clandinin (1988). Teachers as curriculum planners: Narratives of experience. Columbia: Teachers College.

Davey, H.B. (1993). Theoretical Paradigms of Understanding in Accounting: From Structuralism to Pluralism. Doctoral Thesis, University of Waikato, New Zealand.

Davis, S.W. and R.S. Sherman (1996). The accounting education change commission: A critical perspective. *Critical Perspectives on Accounting*, 7(1/2), 159-189.

Dearn, J.M. (1996). Facilitating active learning in introductory science classes. Higher Education Research and Development Society of Australasia Conference: Canberra.

Dehler, G.E. and M.A. Welsh (1993). Dialectical Inquiry as an Instructional Heuristic in Organisation Theory and Design. *Journal of Management Education*, February, 17(1), 79-89.

Haigh, N. (1994). Promoting intellectual independence: A legislative catalyst. Hamilton: Working Paper University of Waikato.

Hart, T. (1998). A dialectic of knowing: Integrating the intuitive and the analytic. *Encounter*, 11(3), 5-16.

Hassall, T., Lewis, S. and M. Broadbent (1998). Teaching and learning using case studies. *Accounting Education*, 7(4), 325-334.

Hopper, T., Storey, J. and H. Willmott (1987). Accounting for Accounting: Towards the Development of a Dialectical View. Accounting, Organizations and Society, 12(5), 437-456.

Inglis, R. and G. Dall'Alba, (1998). The redesign of a management accounting course upon principles for improving the quality of teaching and learning. *Accounting Education*, 7(3), 193-207.

Kimmel, P. (1995). A framework for incorporating critical thinking into accounting education. *Journal of Accounting Education*, 13(3), 229-318.

McWhinney, W. (1992). Paths of change: Strategic choice for organisations and society. Los Angeles: Sage Publications.

Mitroff, I.I. (1983). Stakeholders of the organizational mind. San Francisco: Josey Bass.

Mitroff, I.I. and H.A. Linstone (1993). The unbounded mind. Oxford University Press.

Mitroff, I.I. and R.O. Mason (1981). Creating a dialectic social science. Dordrecht: Reidel.

Morgan, G. and H. Willmott (1993). The "New" Accounting Research: On making Accounting more visible. Accounting, Auditing and Accountability, 6(4), 3-36.

Ramsden, P. (1992). Learning to teach in higher education. London: Routledge.

Ravenscroft, S., Buckless, F. and T. Hassall (1999). Cooperative learning - a literature guide. *Accounting Education*, 8(2), 163-176.

Rogers, C. (1983). Freedom to learn for the 80's. Columbus: Bell and Howell.

Roslender, R. (1995). Critical management accounting. In Ashton, A., Hopper, T. and R.W. Scapens *Issues In Management Accounting* (2nd ed.) London: Prentice Hal, 65-86.

Schon, D. (1971). Beyond the stable state: Public and private learning in a changing society. London, Temple Smith.

Tippett, M. (1992). The plight of accounting education in Australia: A review article. Accounting Education, 1(2), 99-127.