

## **A COMPARISON OF EDUCATORS' AND STUDENTS' PERCEPTIONS OF ACCOUNTING ETHICS EDUCATION**

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### **ABSTRACT**

*Serious breaches of ethical conduct have caused the collapses of several large companies in the world and have called for adherence to a code of ethics as a fundamental platform for the accounting profession. Many firms, however, have failed to incorporate training on ethics but rather relied on colleges and universities to instil ethical behaviour in future employees. Hence accounting educators and researchers have focused considerable effort on promoting ethics education in the study program. Using ecological and motivational theories as a lens for understanding accounting ethics education, this study compares educators' and students' perceptions as a first step in developing a congruent ethics course. It attempts to identify their congruent or dissonant conceptions in certain debatable issues in accounting ethics education: (1) Can ethical behaviour be learned at the university? (2) What are the objectives of learning accounting ethics? (3) What is the learning process? and (4) Who is the appropriate instructor? Factor analysis was conducted to reduce 26 questions to eight factors, and a one-way analysis of variance (ANOVA) was used to test the means of the educator group and student group for each of the eight factors. Results show that there are significant differences between the Australian accounting educator group and the student group for four factors "Delivery of ethics education", "Transferability and source of knowledge", "Active experimentation" and "Reflective observation". However, there are no significant statistical differences among the participants in this study concerning other issues in accounting ethics education, i.e. goals of ethics education ("Moral Developments" and "Professionalism"), "Separate course", and "Qualifications".*

### **1. INTRODUCTION**

For the recent decades, serious breaches of ethical conduct have caused the collapses of several large companies in the world, such as Enron, Xerox, HIH, One.Tel, Vivendi and World Com. Interestingly, a common theme in many of these companies was the misuse of generally acceptable accounting principles to create fictitious profit figures or to hide liabilities. For example World Com capitalised expenditure as assets when it should have been expensed, which resulted in bogus profits of millions of dollars (Sydney Morning Herald, 26 June 2002). Enron used a series of companies within the group to hide debts as those companies were not included in the consolidated financial statements (Wall Street Journal, 23 September 2002). Arthur Anderson which acted as the independent auditor to some of these collapsed companies also fell. Investigations showed a high conflict of interest and a lack of independence characterised the relationship between Arthur Anderson and many of its clients (C.C.H. Australia Limited, 2001).

These business scandals have called for adherence to a code of ethics as a fundamental platform for the accounting profession. Many firms, however, have failed to incorporate training on ethics but rather relied on colleges and universities to instil ethical behaviour in future employees. Hence accounting educators and researchers have focused considerable effort on promoting ethics education in the study program. In education, an understanding of the differences between students' and teachers' epistemological beliefs can serve as a useful reference for curriculum designers to develop strategies for creating greater congruence between teacher and student preferences. This study is an exploratory comparison of accounting educators' and students' perceptions of accounting education. More specifically, it explores the variations in their beliefs of what to teach, objectives to achieve, the ethics educator, and the learning process in this area. An understanding of the variations will assist educators to progress from their traditional teaching styles to incorporate multiple and creative teaching activities that include student-centred learning strategies.

Ecological theory posits that human development is driven by proximal processes (i.e., adult expectations), but youth's personal characteristics (i.e., their personal educational expectations and beliefs) might mediate the effects of proximal processes on academic outcomes (Bronfenbrenner and Morris, 1998). The ecological framework is consistent with motivational theories which assert that satisfaction of personal characteristics can be a powerful motivator of behaviour (Bandura, 1986; Dweck, 1991). Over the last decades, a substantial amount of psychological and educational research has been conducted on student learning perceptions (Dweck and Leggett, 1988; Wentzel, 1998). Empirical findings indicate that student beliefs reflect a broad range of outcomes, to include social as well as academic interests. Moreover, they are powerful predictors of other aspects of motivation such as effort, persistence and academic accomplishments. For a course to be effective, therefore, it must be acceptable to students and teachers. Teacher and student perceptions of what constitutes appropriate course contents and teaching methods strongly influence their acceptance by both groups, and they affect subsequent student learning (Clandinin and Connelly, 1992). However, course and teaching materials usually are developed by experts (Clandinin and Connelly, 1992), and students' perceptions and opinions are rarely considered. Using ecological and motivational theories as a lens for understanding accounting ethics education, this study compares educators' and students' perceptions as a first step in developing a congruent ethics course. It attempts to identify their congruent or dissonant conceptions in certain debatable issues in accounting ethics education.

## **2. ACCOUNTING ETHICS EDUCATION**

There are several issues in ethics education often debated in the business and psychological literature. Among them are four critical questions concerning accounting ethics education:

- (1) Can ethical behaviour be learned at the university?
- (2) What are the objectives of learning accounting ethics?
- (3) What is the learning process?
- (4) Who is the appropriate instructor?

A summary of the literature review on these four critical issues is shown in Table 1.

The most fundamental question in ethics education is whether it can be taught and learnt at the university level. This question has been addressed in volumes of business and psychological literature, and studies conducted to examine the effects of business ethics teaching on students' ethical behaviour have produced mixed results. Support for ethics teaching programs comes from institutional and academic sources. However, ethics education at the university is not without resistance and the common objections range from its palliative intent to its failure to achieve the desired learning outcome.

The next question is what are the objectives of ethics learning. Adapting from Callahan's (1980) principles, Loeb (1988, 1991) has suggested several objectives for accounting ethics instruction, ranging from moral sensitivity and prescriptive reasoning to moral virtue. These objectives are to:

- (1) relate accounting education to moral issues,
- (2) recognise issues in accounting that have ethical implications,
- (3) develop a sense of moral obligation or responsibility within students,
- (4) develop the abilities needed for students to deal with ethical conflicts or dilemmas,
- (5) learn to deal with the uncertainties facing the accounting profession,
- (6) set the stage for a change in ethical behaviour, and
- (7) appreciate and understand the history and composition of all aspects of accounting ethics and their relationship to the general field of ethics.

Although there is no consensus as to what should be the objectives of ethics education in accounting which are needed to evaluate educational outcomes, Dobson & Armstrong (1995) and Armstrong *et al.* (2003) propose similar objectives with special emphasis on virtue development.

**Table 1**  
**Summary of Literature Review on Four Critical Issues in Accounting Ethics Education**

<i>Issues in Accounting Ethics Education</i>	<i>Literature</i>
<b><i>Can ethical behaviour be learned at the university?</i></b>	
Support for ethics teaching programs	Rest, 1987; Bok, 1988; Loeb, 1988; Hosmer, 1988; Henderson, 1988; Luoma, 1989; Weber, 1990; Sims & Sims, 1991; Parker, 1994; Moizer, 1995; Mintz, 1995; Leung & Cooper, 1995; Wright, 1995; Lovell, 1995; Eynon, Hill Stevens, & Clarke, 1996; Eynon, Hill & Stevens, 1997; Gunz & McCutcheon, 1998; and Wimalasiri, 2001.
Common objections:	
1. Personal ethics does not transfer to professional ethics.	Furman, 1990; Bishop, 1992; McDonald & Donleavy, 1995.

*Table contd.*

<i>Issues in Accounting Ethics Education</i>	<i>Literature</i>
2. Teaching ethics in accounting courses at the university level has no impact on professional behaviour.	Bishop, 1992; McDonald & Donleavy, 1995; Oddo, 1997.
3. The true motive of ethics instruction is merely a response to corporate scandals.	Cohen & Pant, 1989; Bishop, 1992; McDonald & Donleavy, 1995; Oddo, 1997; Castro, 1989.
4. Ethical ideals are formed mainly from influences of home, church (or similar), society and pre-university education.	Shenkir, 1990; Kerr & Smith, 1995; Oddo, 1997.
5. Ethics is unscientific and non-empirical and therefore should not be taught in the accounting curriculum.	McDonald & Donleavy, 1995.
6. Ethics cannot be taught without indoctrinating or imposing the instructor's own value system	Shenkir, 1990; Bishop, 1992; Poynter & Thomas, 1994; Loeb, 1994.
<b><i>Objectives for accounting ethics instruction</i></b>	Callahan, 1980; Loeb, 1988, 1991; Dobson & Armstrong, 1995; Armstrong <i>et al.</i> , 2003.
<b><i>The learning process</i></b>	
1. Lecture method.	Loeb, 1988; Armstrong & Mintz, 1989; McNair & Milam, 1993.
2. Written short cases (less than one page in length).	Langenderfer & Rockness, 1989; Armstrong & Mintz, 1989.
3. Written long cases (more than one page in length).	Loeb, 1988; Mintz, 1990; Hildebeitel & Jones, 1992; Lane & Schaupp, 1992; Armstrong, 1993; Kerr & Smith, 1995; McDonald & Donleavy, 1995.
4. Code of ethics or conduct.	AICPA <i>Code of Professional Conduct</i> , 2002; AICPA <i>Statements on Standards for Tax Services</i> , 2000; Mintz, 1990; McNair & Milam, 1993; Armstrong, 1993; Oddo, 1997; Armstrong <i>et al.</i> , 2003.
5. Accounting ethics assignment.	Pizzolatto & Beville, 1996.
6. Video vignettes method.	Hosmer & Steneck, 1989; Mintz, 1990; Hildebeitel & Jones, 1992; McDonald & Donleavy, 1995.
7. A separate course in accounting ethics.	Loeb, 1988; Sims & Sims, 1991.
8. Integrate accounting ethics within existing accounting courses.	Gandz & Hayes, 1988; Mintz, 1990; Bishop, 1992; McNair & Milam, 1993; Piper, Gentile & Parks, 1993; Loeb, 1994.
<b><i>Qualifications of ethics educators</i></b>	
1. Accounting educators with formal training in teaching ethics.	McNair & Milam, 1993; Poynter & Thomas, 1994.
2. Religion or philosophy educators.	Hosmer, 1988; Armstrong & Mintz, 1989; Sims & Sims, 1991; Gunz & McCutcheon, 1998; Oddo, 1997; Armstrong <i>et al.</i> , 2003.

Having reviewed the suggested objectives of accounting ethics education, it is now the turn to consider the learning process that could be employed in ethics instruction to achieve the objectives. Accounting educators have suggested various methods, including the use of lectures, case studies based on real business events or newspaper articles as a tool for analysis, short descriptive scenarios (short cases) for dilemma discussions, official ethics guidance of professional bodies, term papers or assignments and video vignettes. Another debatable question concerning the teaching method is whether accounting ethics should be taught as a separate course, or by integrating it within various accounting courses.

The final question concerns identifying the instructor who is best qualified to teach ethics when it is included in the accounting curriculum. While some educators are satisfied that accounting educators are qualified, many question their qualifications and argue that ethics should be taught by religion or philosophy educators as it has its origin in normative philosophy.

Accounting educators and students do not necessarily hold the same views on the above issues concerning accounting ethics education. Thus, the following hypothesis is posited in this exploratory study:

There are significant differences in accounting educators' and students' perceptions of accounting ethics education in relation to their views on:

1. the delivering of ethics education;
2. the transferability and source of ethics behaviour
3. the objectives of learning accounting ethics;
4. the perceived effectiveness of various teaching methods or approaches; and
5. the perceived qualifications of accounting ethics instructors

### **3. METHODOLOGY**

Two separate research instruments were developed for educators and students. Each version contained six sections and both instruments were identical except the first section which sought demographic information of each participant. The remaining five sections (Appendix 1) attempted to elicit responses to 26 questions designed to tap the perceptions of participants on the accounting ethics education issues as discussed in the previous section of the paper. In these sections, participants were asked to indicate, on several seven-point Likert-type scales, their perceptions on various issues as mentioned in the hypothesis above. To support the assumption that a seven-point equal-interval scale was used to record respondents' perception, only the continuum extremes were captioned, e.g., 7 being very unimportant to 1 being very important (Torgerson, 1958). This method has been widely used in accounting research, e.g., Knapp, 1987; Gul et al., 1992; and Auyeung and Sands, 1996. To ensure the instruments achieve the purpose of the study, a pilot survey was conducted using students and academics of a large Australian university. After considering comments from students and academics regarding the ambiguity of the questions, the final versions of the questionnaires were prepared.

The educator version of the questionnaire was placed on a website specifically created for this study. Educators who participated in this study were accounting academics drawn from universities in Australia. A personalised electronic mail was sent to each of these academics and their task was to complete the questionnaire via a secured (with a password) website

address. Participants were assured of the anonymity of their responses and of the voluntary nature of this study. A total of 63 usable responses were received.

Accounting students who participated in this study were drawn from a large university in Australia. The lecturer who administered the survey explained the purpose of the study to the students at the end the lecture and assured them of their anonymity. Students were asked to participate voluntarily in the research. Those who wished to participate remained in the lecture theatre and questionnaires were distributed to these students. They were encouraged to respond as thoroughly as possible, and 79 completed questionnaires were useable.

The 26 questions contained in the instruments (Sections 2–6) were examined to confirm their interrelationships using factor analysis. Factor analysis enables the grouping of these questions (as factors) and reveals relationships within the data (Hair *et al.* 1998). All questions (or variables) were explored using a varimax rotation to identify principle components. Variables that loaded at 0.4 or above were accepted as having the potential to form a factor (Tabachnik and Fidell, 2001). Most correlations in the correlation matrix were over 0.4 and therefore factors could be extracted from the correlation matrix thus satisfying the assumption of “factorability of R” for factor analysis. Responses for questions in Section 5 of the questionnaires were divided into Section 5a (questions 1-6) concerning teaching methods, and Section 5b (question 7 and 8) concerning a separate ethics course versus integrating ethics into accounting courses. The analysis suggested that variables in the instruments could be reduced to eight factors with eigenvalues greater than 1.00 as cut-off (Table 2). Internal consistency (Cronbach alpha  $\alpha$ ) of each factor was examined. As can be seen from this table, the alpha of two factors (separate course and qualifications) was below the cut-off of 0.6. While various grouping of

**Table 2**  
**Factor Analysis**

	<i>Number of Factor</i>	<i>Name of Factor</i>	<i>Cronbach <math>\alpha</math></i>	<i>Total Variance Explained</i>
<b>Section 2</b> –Ethical behaviour education (3 questions)	1	Delivery of ethics education	.6431	51.076%
<b>Section 3</b> –Objections to ethics education (6 questions)	1	Transferability and Source of knowledge	.6387	51.464%
<b>Section 4</b> –Goals of ethics education (7 questions)	2	Moral developments (questions 1, 3, 6, 7)	.7295	68.043%
		Professionalism (questions 2, 4, 5)	.8331	
<b>Section 5a</b> –Teaching methods (6 questions)	2	Active experimentation (questions 2, 3, 6)	.6792	68.437%
		Reflective observation (questions 1, 4, 5)	.6553	
<b>Section 5b</b> –Teaching methods (2 questions)	1	Separate course (question 7)	.3460	57.797%
<b>Section 6</b> –Qualifications (2 questions)	1	Qualifications (question 1)	.1985	55.148%

variables were attempted, the  $\alpha$  had not been improved. When the cronbach alpha was below 0.6, the variable with the highest loading value was selected. Therefore, for the factor “separate course”, the variable was “Separate course in accounting ethics”, and for “qualifications”, the variable was “Accounting educators with formal training in teaching ethics”.

Exploratory factor analysis for all sections was conducted and produced similar results. Tests were also carried out to confirm that the assumptions for factor analysis, such as normality, factorability and linearity, were satisfied.

#### 4. FINDINGS

Dependent variables for this analysis were the eight factors as identified in the previous section while the independent variable was the participant’s role as the educator or learner. Means and standard deviations of factor scores or scale scores for the educator and student groups were calculated for each factor and presented in Table 3.

A one-way analysis of variance (ANOVA) was used to test the means of the educator group and student group for each of the eight factors. The results are reported in Table 4. The analysis indicates no significant differences for four factors: moral developments, professionalism, separate course and qualifications. Findings revealed significant differences in the perceptions held by the two groups in four factors: delivery of ethics education,  $F(1, 140) = 8.450, p < .004$ ; transferability and source of knowledge,  $F(1, 140) = 10.414, p < .002$ ; active experimentation,  $F(1, 140) = 14.716, p < .001$ ; and reflective observation,  $F(1, 140) = 3.813, p < .053$ . Thus the hypothesis was partially supported.

**Table 3**  
**Means and Standard Deviations of Factor Scores and Scale Scores**

<i>Factor</i>		<i>Educators (n = 63)</i>	<i>Students (n = 79)</i>
Delivery of ethics education	Mean	-.460	-.041
	Std. Dev.	.973	.748
Transferability and source of knowledge	Mean	-.121	-.515
	Std. Dev.	.760	.645
Moral developments	Mean	-.181	-.281
	Std. Dev.	.852	.674
Professionalism	Mean	-.065	.114
	Std. Dev.	1.018	.956
Active experimentation	Mean	.263	-.335
	Std. Dev.	1.095	.997
Reflective observation	Mean	.218	.683
	Std. Dev.	1.057	.953
Separate course	Mean	2.030	1.414
	Std. Dev.	.464	.411
Qualifications	Mean	1.655	1.600
	Std. Dev.	.405	.352

Two demographic variables (age and gender) were identified and interactions between the participant’s role and these variables were considered in order to satisfy that the significant

differences as discussed above were due to the participant's role. The appropriate method used in this analysis was factorial between subject ANOVA, examining separately the interaction between role and age, and role and gender. There was no significant difference among the respondents on gender, but significant difference on age was obtained.

**Table 4**  
**Results of Analysis of Variance**

<i>Factor</i>	<i>Degree of Freedom</i>	<i>Mean Square</i>	<i>F ratio</i>	<i>Sig.</i>	
Delivery of ethics education	Between groups	1	6.175.731	8.450	.004*
	Within groups	140			
Transferability and Source of knowledge	Between groups	1	5.273	10.414	.002*
	Within groups	140			
Moral developments	Between groups	1	.335	.583	.446
	Within groups	140			
Professionalism	Between groups	1	1.086	1.121	.292
	Within groups	140			
Active experimentation	Between groups	1	13.19	14.716	.001*
	Within groups	140			
Reflective observation	Between groups	1	3.725	3.813	.053*
	Within groups	140			
Separate course	Between groups	1	.373	1.730	.194
	Within groups	140			
Qualifications	Between groups	1	.098	.688	.409
	Within groups	140			

\* Significant at the 0.05 level

## 5. CONCLUSIONS

Results in Table 4 show that there are significant differences between the Australian accounting educator group and the student group for four factors "Delivery of ethics education", "Transferability and source of knowledge", "Active experimentation" and "Reflective observation".

Based on the mean factor scores in Table 3, the significant difference in the factor "Delivery of ethics education" identified from the ANOVA is due to the finding that the educator group (mean =  $-.460$ ) is more agreeable than the student group (mean =  $-.041$ ) with the delivery of ethics education at university. In addition, educators are found to have a significant difference to students for the factor "Transferability and source of knowledge", and mean factor scores reported in Table 3 suggest that the academic participants (mean =  $-.121$ ) are significantly less inclined to believe than the learner participants (means =  $-.515$ ) that ethical ideals are formed from influences of home, church, society and pre-university education and that personal ethics does not transfer to professional ethics. This interpretation of the results complements the analysis of the responses for the factor "Delivery of ethics education".

The next interesting result relates to the difference among educator and student participants on the acquisition of knowledge. Table 3 also reveals that educators (mean =  $.218$ ) are significantly more prepared than students (mean =  $.683$ ) to use the lecture method and the



professional code of ethics in their teaching-learning strategies. As such, accounting educators are likely to believe in knowledge acquisition through reflective observation of the teacher and the official code of ethics. By contrast, students (mean =  $-.335$ ) are more prepared to accept than educators (mean =  $.263$ ) the active experimentation learning mode. Australian students tend to prefer dilemma discussions (case studies) rather than learning normative ethics provided by the profession as rigid guidance for day-to-day moral decision making. Nor do they prepare to wholly accept the epistemic authority of teachers in their learning process. This finding is consistent with that of Auyeung and Sands (1996). The discrepancies between educators and students may be explained by the former's choice to remain in control of the classroom situation, whereas the latter want to actively explore values and construct their own beliefs.

There are no significant statistical differences among the participants in this study concerning other issues in accounting ethics education, i.e. goals of ethics education ("Moral Developments" and "Professionalism"), "Separate course", and "Qualifications". Both groups believe that professionalism and moral developments are important goals to be achieved. They also express their approval of having a separate course in accounting ethics and tend to believe that accounting educators are qualified to teach accounting ethics (Table 3).

This study provides an understanding about differences in the perceptions of accounting students and educators on some critical accounting ethics education issues. A course in accounting ethics should accommodate these differences and strategies for creating greater congruence between educator and student preferences should be developed. While it is believed that this study makes a useful contribution to the ethics education literature, some limitations should be noted. The students in this study were drawn from one Australian university. There are also generational differences between educators and students and possibly, differences in exposure to ethics dilemma. The findings of this study should be considered as exploratory, and future research may be undertaken to include accounting students from more universities and to address the age and ethics exposure gaps in order to make the findings more conclusive.

### **References**

- American Institute of Certified Public Accountants (2002), *Code of Professional Conduct*, New York: AICPA.
- American Institute of Certified Public Accountants (2000), *Statements on Standards for Tax Services*, New York: AICPA.
- Armstrong, M. B. (1993), 'Ethics and Professionalism in Accounting Education: A Sample Course', *Journal of Accounting Education*, Vol. 11, pp. 77-92.
- Armstrong, M. B., Ketz, J. E. and Owsen, D. (2003), 'Ethics Education In Accounting: Moving Toward Ethical Motivation and Ethical Behaviour', *Journal of Accounting Education*, Vol. 21, pp. 1-16.
- Armstrong, M. B. and Mintz, S. M. (1989), 'Ethics Education in Accounting: Present Status and Policy Implications', *Government Accountants Journal*, Vol. 38, pp. 70-76.
- Auyeung, P. K. and Sands, J. S. (1996), 'A Cross-Cultural Study of the Learning Style of Accounting Students', *Accounting and Finance*, Vol. 36, pp. 261-274.
- Bandura, A. (1986), *Social Foundations of Thought and Action-A Social Cognitive Theory*, Prentice-Hall, Englewood Cliffs, NJ.

- Bishop, T. R. (1992), 'Integrating Business Ethics into an Undergraduate Curriculum', *Journal of Business Ethics*, Vol. 11, pp. 291-299.
- Bok, D. (1988), 'Can Higher Education Foster Higher Morals?', *Business and Society Review*, Vol. 93, pp. 4-12.
- Bronfenbrenner, U. and Morris, P. (1998), 'The Ecology of Developmental Processes'. In W. Damon and R. M. Lerner (Eds.), *Handbook of child psychology*, New York: Wiley.
- Callahan, D. (1980), 'Goals in the Teaching of Ethics'. In D. Callahan and S. Bok (Eds), *Ethics Teaching in Higher Education*, New York: Plenum Press.
- Castro, B. (1989), 'Business Ethics and Business Education: A Report from a Regional State University', *Journal of Business Ethics*, Vol. 8, pp. 479-486.
- C. C. H. Australia Limited (2001), *Collapse Incorporated: Tales, Safeguards and Responsibilities of Corporate Australia*.
- Clandinin, D. J. and Connelly, F. M. (1992), 'Students' Experience of the Curriculum'. In E. W. Jackson (Ed.), *Handbook of Research on Curriculum*, New York: Macmillan.
- Cohen, J. R. and Pant, L. W. (1989), 'Accounting Educator's Perceptions of Ethics in the Curriculum', *Issues in Accounting Education*, Vol. 4, pp. 70-81.
- Dobson, J. and Armstrong M. B. (1995), 'Application of Virtue Ethics Theory: A Lesson from Architecture', *Research on Accounting Ethics*, Vol. 1, pp. 187-202.
- Dweck, C. S. (1991), 'Self-Theories and Goals. Their Role in Motivation, Personality, and Development'. In: R. Dienstbier (Ed.), *Nebraska Symposium on Motivation*, Vol. 38, pp. 199-236.
- Dweck, C. S. and Leggett, E. L. (1988), 'A Social-Cognitive Approach to Motivation and Personality', *Psychological Review*, Vol. 95, pp. 256-273.
- Eynon, G., Hill, N. T. and Stevens, K. T. (1997), 'Factors That Influence the Moral Reasoning Abilities of Accountants: Implications for Universities and the Profession', *Journal of Business Ethics*, Vol. 16, pp. 1297-1309.
- Eynon, G., Hill, N. T., Stevens, K. T. and Clarke, P. (1996), 'An International Comparison of Ethical Reasoning Abilities: Accounting Students from Ireland and the United States', *Journal of Accounting Education*, Vol. 14, pp. 477-492.
- Furman, F. K. (1990), 'Teaching Business Ethics: Questioning the Assumptions, Seeking New Directions', *Journal of Business Ethics*, Vol. 9, pp. 31-38.
- Gandz, J. and Hayes, N. (1988), 'Teaching Business Ethics', *Journal of Business Ethics*, Vol. 7, pp. 657-669.
- Gul, F. A., Huang, A. and Subramaniam, N. (1992), 'Cognitive Style as a Factor in Accounting Students' Perceptions of Career-Choice Factors', *Psychological Reports*, Vol. 71, pp. 1275-1281.
- Gunz, S. and McCutcheon, J. (1998), 'Are Academics Committed to Accounting Ethics Education?', *Journal of Business Ethics*, Vol. 17, pp. 1145-1154.
- Hair, J., Anderson, R., Tatham, R. and Black, W. (1998), *Multivariate Data Analysis*, Upper Saddle River, N. J: Prentice Hall.
- Henderson, V. (1988), 'An Ethics Roundtable: Can Business Ethics Be Taught?', *Management Review*, Vol. 77, pp. 52-54.

- Hiltebeitel, K. M. and Jones, S. K. (1992), 'An Assessment of Ethics Instruction in Accounting Education', *Journal of Business Ethics*, Vol. 11, pp. 37-46.
- Hosmer, L. T. (1988), 'Adding Ethics in the Business Curriculum', *Business Horizons*, Vol. 31, pp. 9-15.
- Hosmer, L. T. and Steneck, N. H. (1989), 'Teaching Business Ethics: The Use of Films and Videota', *Journal of Business Ethics*, Vol. 8, pp. 929-936.
- Kerr, D. S. and Smith, M. L. (1995), 'Importance of and Approaches to Incorporating Ethics into the Accounting Classroom', *Journal of Business Ethics*, Vol. 14, pp. 987-995.
- Lane, M. S. and Schaupp, D. L. (1992), 'Teaching Business Ethics: Bringing Reality to the Classroom', *Journal of Business Ethics*, Vol. 11, pp. 225-229.
- Langenderfer, H. Q. and Rockness, J. W. (1989), 'Integrating Ethics into the Accounting Curriculum: Issues, Problems, and Solutions', *Issues in Accounting Education*, Vol. 4, pp. 58-69.
- Leung, P. and Cooper, B. J. (1995), *Professional Ethics: A Survey of Australian Accountants*, Melbourne: Australian Society of Certified Practising Accountants.
- Loeb, S. E. (1988), 'Teaching Students Accounting Ethics: Some Crucial Issues', *Issues in Accounting Education*, Vol. 3, pp. 316-329.
- Loeb, S. E. (1991), 'The Evaluation of "Outcomes" of Accounting Ethics Education', *Journal of Business Ethics*, Vol. 10, pp. 77-84.
- Loeb, S. E. (1994), 'Ethics and Accounting Doctoral Education', *Journal of Business Ethics*, Vol. 13, pp. 817-828.
- Lovell, A. (1995), 'Moral Reasoning and Moral Atmosphere in the Domain of Accounting', *Accounting, Auditing and Accountability Journal*, Vol. 8(3), pp. 60-80.
- Luoma, G. A. (1989), 'Can Ethics be Taught?', *Management Accounting*, Vol. 71, pp. 14-16.
- McDonald, G. M. and Donleavy, G. D. (1995), 'Objections to the Teaching of Business Ethics', *Journal of Business Ethics*, Vol. 14, pp. 839-853.
- Mintz, S. M. (1990), 'Ethics in the Management Accounting Curriculum', *Management Accounting*, Vol. 72, pp. 51-54.
- Mintz, S. M. (1995), 'Virtue Ethics and Accounting Education', *Issues in Accounting Education*, Vol. 10, pp. 247-267.
- Moizer, P. (1995), 'An Ethical Approach to the Choices Faced by Auditors', *Critical Perspectives on Accounting*, Vol. 6, pp. 415-431.
- McNair, F. and Milam, E. E. (1993), 'Ethics in Accounting Education: What is Really Being Done', *Journal of Business Ethics*, Vol. 12, pp. 797-809.
- Oddo, A. (1997), 'A Framework for Teaching Business Ethics', *Journal of Business Ethics*, Vol. 16, pp. 293-297.
- Parker, L. D. (1994), 'Professional Accounting Body Ethics: In Search of the Private Interest', *Accounting, Organisations and Society*, Vol. 19, pp. 507-525.
- Piper, T. R., Gentile, M. C. and Parks, S. D. (1993), *Can Ethics be Taught: Perspectives, Challenger and Approaches at Howard Business School*, Boston: H. B. S. Press.
- Pizzolatto, A. B. and Beville, S. (1996), 'Business Ethics: A Classroom Priority', *Journal of Business Ethics*, Vol. 15, pp. 153-158.

- Poynter, H. and Thomas, C. (1994), 'Review: Can Ethics Be Taught?', *Management Accounting*, Vol. 76, p. 72.
- Rest, J. R. (1987), 'Can Ethics be Taught in Professional Schools? The Psychological Research'. In S. M. Mintz (Ed.), *Integrating Ethics and Professionalism into the Accounting Curriculum*, Redwoods City, CA: California Society of CPAs.
- Shenkir, S. W. (1990), 'A Perspective from Education: Business Ethics', *Management Accounting*, Vol. 72, pp. 30-33.
- Sims, R. R. and Sims, E. J. (1991), 'Increasing Applied Business Ethics Courses in Business School Curricula', *Journal of Business Ethics*, Vol. 10, pp. 211-219.
- Sydney Morning Herald, 26 June 2002.
- Tabachnick, B. G and Fidell, L. S. (2001), *Using Multivariate Statistics*, Boston: Allyn and Bacon.
- Torgerson, W. S. (1958), *Theory and Methods of Scaling*, New York: Wiley and Sons.
- Wall Street Journal, 23 September 2002.
- Weber, J. (1990), 'Measuring the Impact of Teaching Ethics to Future Managers: A Review, Assessment, and Recommendations', *Journal of Business Ethics*, Vol. 9, pp. 183-190.
- Wentzel, K. R. (1998), 'Social Relationships and Motivation in Middle School-The Role of Parents, Teachers, and Peers', *Journal of Educational Psychology*, Vol. 90, pp. 202-209.
- Wimalasiri, J. S. (2001), 'Moral Reasoning Capacity of Management Students and Practitioners: An Empirical Study in Australia', *Journal of Managerial Psychology*, Vol. 16, pp. 614-634.
- Wright, M. (1995), 'Can Moral Judgement and Ethical Behaviour be Learned?', A Review of the Literature. *Management Decision*, Vol. 33, pp. 17-28.

**Appendix 1: Section 2–Your Perception on Ethics Issues**

Using the scale provided, please indicate (by circling) the **extent** to which each of the following statements represents your **view** on the issue raised.

	<i>Strongly Agree</i>						<i>Strongly Disagree</i>
1. Ethical behaviour can be taught effectively at the university level	1	2	3	4	5	6	7
2. More topics on ethics in accounting courses are needed	1	2	3	4	5	6	7
3. Media coverage of corporate scandals encourages me to learn more about ethics in accounting	1	2	3	4	5	6	7

**Section 3: Objections to Ethics Teaching at University**

Using the scale provided, please rate (by circling) the **extent** to which each of the following statements represents your **opinion** on the validity of the objection.

	<i>Strongly Agree</i>						<i>Strongly Disagree</i>
1. Personal ethics does not transfer to professional ethics	1	2	3	4	5	6	7
2. Teaching ethics in accounting courses at the university level has no impact on professional behaviour	1	2	3	4	5	6	7
3. True motives of ethics instruction is merely a response to corporate scandals	1	2	3	4	5	6	7
4. Ethical ideals are formed mainly from influences of home, church (or similar), society and pre-university education	1	2	3	4	5	6	7
5. Ethics is unscientific and non-empirical and therefore should not be taught in the accounting curriculum	1	2	3	4	5	6	7
6. Ethics cannot be taught without indoctrinating or imposing the instructor's own value system	1	2	3	4	5	6	7

**Section 4: Goals of Teaching Ethics in Accounting Courses**

Using the scale provided, please indicate (by circling) the **extent** to which each of the following goals represents your **view** on the perceived importance of ethics teaching in accounting courses.

	<i>Very Important</i>				<i>Very Unimportant</i>			
1. Relate accounting education to moral issues	1	2	3	4	5	6	7	
2. Recognise issues in accounting that have ethical implications	1	2	3	4	5	6	7	
3. Develop a sense of moral obligation or responsibility	1	2	3	4	5	6	7	
4. Develop the abilities needed to deal with ethical conflicts or dilemmas	1	2	3	4	5	6	7	
5. Learn to deal with the uncertainties facing the accounting profession	1	2	3	4	5	6	7	
6. Set the stage for a change in ethical behaviour	1	2	3	4	5	6	7	
7. Appreciate and understand the history and composition of all aspects of accounting ethics and their relationship to the general field of ethics	1	2	3	4	5	6	7	

### Section 5: Teaching Methods/Approaches

Did you take part in any of the following accounting ethics instructions/training at the University?

- Yes. Please indicate (by circling) the **extent** to which each of the following methods/approaches is **perceived** effective.
- No. Please go to Section 6.

	<i>Very Effective</i>				<i>Very Ineffective</i>			
1. Lecture method	1	2	3	4	5	6	7	
2. Written short cases (less than one page in length)	1	2	3	4	5	6	7	
3. Written long cases (more than one page in length)	1	2	3	4	5	6	7	
4. Code of ethics or conduct	1	2	3	4	5	6	7	
5. Accounting ethics assignment	1	2	3	4	5	6	7	
6. Video vignettes method	1	2	3	4	5	6	7	
7. A separate course in accounting ethics	1	2	3	4	5	6	7	
8. Integrate accounting ethics within existing accounting courses	1	2	3	4	5	6	7	

**Section 6: Qualifications of Ethics Educators**

Using the scale provided, please rate (by circling) the **extent** to which each of the following statements represents your **view** on the perceived qualifications of educators giving instructions in accounting ethics.

	<i>Very Qualified</i>			<i>Very Unqualified</i>			
1. Accounting educators with formal training in teaching ethics	1	2	3	4	5	6	7
2. Religion or philosophy educators	1	2	3	4	5	6	7