

# ETHICS IN ACCOUNTING: AN INDISPENSABLE COURSE?

**Janice Klimek, University of Central Missouri**  
**Kelly Wenell, University of Central Missouri**

## ABSTRACT

*Following the unmasking of billion-dollar earnings manipulations at corporations such as Enron and WorldCom in the early 2000s, the accounting profession has had to reexamine ethics and its implications (Duska & Duska, 2003). Shortly after, the National Association of State Boards of Accountancy (NASBA) proposed adding two required ethics courses to the accounting curriculum (Shawver, 2006). NASBA backed off on the recommendation due to pressure from the accounting profession and accounting educators. While nearly all college accounting programs integrate ethics into accounting courses to meet the public demand for ethical accountants, schools in Texas are required to offer a 3-hour stand alone course. Conflicting research exists regarding whether requiring a separate ethics course instead of integration has a significant effect on accounting students' ethical reasoning abilities. In this paper, the ethical reasoning abilities of accounting students in an Ethics in Accounting course were compared to the ethical reasoning abilities of accounting students who had ethics discussions integrated into their accounting courses instead of a required course. Ethical reasoning abilities were tested using an instrument called the Defining Issues Test-2. The students who took an Ethics in Accounting course before graduation did seem to have higher ethical reasoning abilities than those students who had ethics integrated into their accounting courses. Based on the results of this study, it is recommended that NASBA reconsider its decision to eliminate the requirement of a 3-hour course on Ethics for accounting majors.*

## INTRODUCTION

It is well known that companies such as Enron and WorldCom engaged in unethical earnings manipulations such as falsely recording expenses as assets and hiding debt in complicated off balance sheet financial arrangements. Such practices led many to unknowingly invest in corporations that were on the brink of bankruptcy. In the aftermath of these companies' failures, the accounting profession has had to reexamine ethics and its implications (Duska & Duska, 2003). In 2002, the Sarbanes-Oxley Act and Statement of Auditing Standard 99 (SAS 99) were enacted to clarify issues related to ethics and fraudulent financial reporting and to help restore investor confidence in financial statements (Shawver, 2006). The Sarbanes-Oxley Act created new standards for corporate accountability as well as stiffer penalties for noncompliance including imprisonment for up to twenty years (Klutz, 2006). SAS 99 aimed to further integrate the auditor's consideration of fraud

into the audit processes developed for a publicly traded company. In response to the Sarbanes-Oxley Act and SAS 99, accounting profession regulators began to look at enhancing ethics training for current and future accounting professionals (Ramos, 2003).

## ETHICS AND ACCOUNTING EDUCATION

The issue of how ethics should be integrated into the accounting curriculum and to what degree state professional boards of accountancy should influence such curriculum decisions is of great interest to the accounting profession. State Boards of Public Accountancy determine the educational requirements needed for a candidate to sit for the Uniform Certified Public Accountant (CPA) examination and CPA licensure. Individual state boards look to the National Association of State Boards of Accountancy (NASBA) for guidance in setting these educational requirements (Mastracchio, 2008).

In 2003, NASBA addressed the ethics content of the education requirement and initially determined that two stand-alone courses should be included. It later developed the *Rules 5-1 and 5-2 Exposure Draft* (2005) which suggested the addition of two required 3-hour courses, *Ethical and Professional Responsibilities of CPAs* and *Ethical Foundations and Applications in Business*, to the accounting curriculum. Topics to be incorporated into these courses included:

- The nature of ethics
- Differences in rule-based versus principle-based approaches to ethics
- Compliance with fundamental ethical principles of integrity, objectivity, commitment to professional competence and due care and confidentiality
- Professional behavior and compliance with technical standards and laws
- Concepts of independence, skepticism, conflicts of interest accountability and public expectations
- Social responsibility
- Nature of professional fiduciary responsibilities
- Ethical dilemmas and consequences of unethical behavior to the individual, to the profession, and to society at-large
- Corporate governance and public interest. (Mastracchio, 2008)

The NASBA proposal met with widespread criticism from accounting educators and the profession, specifically the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA). (Van Wyhe, 2007) Many educators felt that NASBA's proposal would be too difficult to implement, considering the costs of recruiting qualified individuals to develop and teach such courses (Hurt & Thomas, 2008) and there is little evidence that stand-alone courses in ethics actually increases students' ethical reasoning abilities (Desplaces et al., 2007). As of 2007, NASBA changed its requirement to include either a 3-hour course in ethics or the integration of equivalent topics in the accounting and business curriculum (Mastracchio, 2008).

Still others, however, argue that a separate course is necessary. Armstrong (1993) found that students who took a general ethics course followed by an ethics and professionalism capstone course

achieved significantly higher ethical reasoning scores. This suggests that increased numbers of ethics courses in an academic setting does lead to an increase in one's ethical sensitivity (Bean and Bernardi, 2007). Bernardi (1994) also found that accounting managers who scored higher on a measure of ethical sensitivity also detected fraud at a higher rate, which suggests that teaching ethics to students may increase ethical behavior once these students become professionals.

Even though arguments have been made for adding an Ethics in Accounting course to the accounting curriculum, based on a review of the websites of the fifty State Board of Accountancy websites, it appears that only Texas and Maryland have implemented ethics course requirements to date. Texas specifically requires an *Ethics in Accounting* course. Maryland allows for a business ethics course to fulfill its ethics education requirement.

Since 2005, the Texas State Board of Public Accountancy (TSBPA) has required that students complete an approved 3-hour college course in ethics, as opposed to an ethics-integrated accounting curriculum, in order to sit for the Uniform CPA exam. (Hurt and Thomas, 2008) This requirement was added shortly after the passage of the Sarbanes-Oxley Act. The State Board believed that it would be easier to evaluate a CPA candidate's completion of the ethics education requirement if the candidate was required to submit a transcript with a TSBPA-approved ethics course. The TSBPA also believed that requiring the separate course would allow the board to have more influence on the accounting curriculum since all accounting programs seeking to have an ethics course must have their ethics course syllabus approved by the TSBPA (Hurt & Thomas, 2008).

A direct consequence of the TSBPA's ethics requirement is that many colleges and universities in Texas and nation-wide have implemented ethics courses for accounting majors in order for their graduates to be qualified to sit for the Uniform CPA examination in Texas. While Texas currently requires a 3-hour *Ethics in Accounting* course, is this approach really better than the approach of integrating ethics related topics into the curriculum via several accounting courses? This paper investigates whether requiring a separate ethics course instead of integration has a significant effect on accounting students' ethical reasoning abilities.

## MEASURING ETHICAL REASONING ABILITIES

For many years, researchers have based their measurement of ethical reasoning abilities on Kohlberg's model of moral development, the Cognitive Moral Theory (CMT). (Armstrong, 1993, and Bernardi, 1994) In the CMT, Kohlberg (1969) identified three major levels of moral judgment in children: pre-conventional, conventional, and post-conventional. In the pre-conventional level, a child has not yet become aware of social conventions. In the conventional level, children no longer perceive individuals such as parents as authority but instead view social groups as authority. In the post-conventional level, a child's morality goes beyond the frame of reference of any one particular society (Dubuc, 2002). For each level, Kohlberg proposed two stages of moral development as follows: pre-conventional stage - (1) punishment and obedience

and (2) instrumental exchange; conventional stage - (3) interpersonal conformity and (4) law and order; post-conventional stage - (5) prior rights and social contract and (6) universal moral principles (Jacobs, 2008).

At Stage 1 (from age 2-3 to about 5-6), individuals seek to avoid punishment from authority figures such as a parent. At Stage 2 (from about age 5 to 7), individuals learn, through receiving rewards, that it is in their best interest to behave well. At Stage 3 (from about age 7 to 12), individuals begin to long to meet the expectations of other members of their peer group. At Stage 4 (from about age 10 to 15), the conventions that guide an individual's behavior expand to include those of the society. In examining a dilemma, an individual considers the norms and laws of society. At Stage 5 (starting as early as age 12, in some cases), individuals feel contractually committed to every person around them because of a rational assessment of the benefits that everyone can derive from the existence of rules. At Stage 6, individuals' judgments of what is good and bad are influenced by universal moral principles. Individuals at Stage 6 agree that laws and societal values are valid, but if these laws conflict with their own principles of human dignity, they will still follow their established principles. According to Kohlberg, people go through these six stages of moral development in the order listed above. Most children are at the pre-conventional level, and most adults have reached the conventional level. However, Kohlberg estimated that only 20 to 25% of adults will ever reach the post-conventional level of morality (Dubuc, 2002).

Based on the CMT, Rest (1979a) developed the Defining Issues Test (DIT) to quantify ethical reasoning ability. The P score, originally used to measure an individual's moral development, was based on a participant's rankings of items related to ethical dilemmas written to test Kohlberg's Stages 5 and 6. It shows the relative importance participants give to these stages when making a moral decision. The latest version, DIT-2, improves upon the DIT with updated dilemmas and an improved method of detecting unreliable participants. Rest added the N2 score to the DIT-2. The N2 score combines two effects, "acquisition of new thinking" represented by the increasing P scores (post-conventional schema) and "systematic rejection of simplistic thinking" represented by decreasing stage 2 and 3 scores (personal-interest schema). This score is believed to be a more valid indicator of ethical reasoning (Bebeau & Thoma, 2003).

The DIT-2 has been employed in the accounting literature to investigate how gender, culture, and specific ethics courses affect the ethical reasoning abilities of accounting students. For example, Venezia (2005) used the DIT-2 to research differences in the ethical reasoning of Chinese accounting students and American accounting students. He concluded that culture did indeed have an effect because the Chinese students achieved higher P scores. Richmond (2001) also used the DIT-2 to compare female versus male accounting students' P scores. The findings suggested that females possess a higher ethical reasoning ability. When compared to a control group of intermediate accounting students, the results were that the seniors enrolled in the *Ethics in Accounting* course did have higher scores. However, according to Rest (1979a), moral judgment (or the P score) is strongly related to education, so testing students at the same education level should produce more decisive results. Armstrong (1993) used the DIT to ascertain whether a senior-level

*Ethics in Accounting* course had an effect on students' P scores. Results showed that students who took a general ethics course followed by an ethics and professionalism capstone course achieved significantly higher ethical reasoning scores.

### THE CURRENT STUDY

The current study expands on prior research by comparing students from two different accounting programs, all of whom were at the same point in the educational process. One group of students was required to take a 3-hour *Ethics in Accounting* course and the other where students obtain ethics-related content that is integrated within several accounting courses. (See Table 1 below for descriptive statistics.) The study sought to determine whether graduating seniors who took an *Ethics in Accounting* course displayed higher ethical reasoning abilities than graduating seniors whose ethics exposure occurred through integration into several accounting courses.

The current study differs from prior studies in three significant areas. First, unlike Armstrong (1993), this study compares students who are at the same educational level, all senior accounting majors in their final semester of coursework. Armstrong compared students enrolled in Intermediate Accounting with senior accounting students who chose to take an elective ethics and professionalism course that, at the time of the study, was a one-time offering. Rest (1979b) stated that moral judgment is related to education level so comparing juniors beginning their accounting program with seniors may itself be reason for significant differences in P scores among the two groups. In addition, the fact that students self-selected into the ethics course presents another weakness of the 1993 study.

Second, this study compared students who had ethics integrated into the curriculum of several courses throughout their undergraduate program and students who were required to take one accounting ethics course to meet the ethics requirement. In Armstrong (1993), there was no reason to believe that the students in the control group had any exposure to ethics in their previous coursework. In the current study, all seniors had been exposed to ethics; however, in one group, exposure to ethics in accounting was obtained through several courses while in the second group, the exposure took place almost exclusively through the required accounting course.

Finally, the Armstrong (1993) study used the DIT, specifically a comparison of P scores among the two groups of students. The current study employs the latest version, the DIT-2, which improves upon the DIT with updated dilemmas and an improved method of detecting unreliable participants. Unlike the P score, the N2 score added in the latest version combines two effects, "acquisition of new thinking" represented by the increasing P scores (post-conventional schema) and "systematic rejection of simplistic thinking" represented by decreasing stage 2 and 3 scores (personal-interest schema). As noted previously, this score is believed to be a more valid indicator of ethical reasoning (Bebeau & Thoma, 2003).

## DESCRIPTION OF THE STUDY

### Participants

In the current study, the ethical reasoning abilities of 60 senior undergraduate accounting students in their final semester of accounting undergraduate coursework were measured at two mid-sized, accredited higher-education institutions in the United States. A test measuring ethical reasoning abilities was administered to senior-level accounting students who had just completed the *Auditing* course at an accredited public university in the Midwest and to senior-level accounting students who were just completing the *Business and Professional Ethics for Accountants* course at a Texas University. All students were tested at the end of the spring semester of their final year.

Students in the Auditing course had completed a program where ethics was integrated into the accounting curriculum through discussions in several different upper level accounting courses. Students in the ethics course were required to take the course. The school's general studies program did not include any other required ethics course; however all were required to take a religion course. A review of 45 syllabi associated with all of the undergraduate courses in the accounting program also showed that ethics was not consistently incorporated into other required accounting courses for the Texas school. A couple of sections did require attendance at a one-day integrity roundtable and one course included a one-day lecture on the legal and ethical issues for IT auditors, so these students received virtually all of their ethics training from the required *Business and Professional Ethics for Accountants* course.

Of the 60 students involved, 8 were purged from the analysis due to inconsistencies in ratings and rankings of the questions posed within the test instrument. Table 1 below lists descriptive statistics for the 52 usable subjects. There were no significant differences between the two groups with regard to Age, Educational Level, Citizenship and Primary Language. However, there were significantly more females at the institution where ethics is integrated across the accounting curriculum. This difference did not affect the overall results, though, as gender was not correlated with the N2 score. (See Table 3.)

## MATERIALS AND PROCEDURES

This study utilized the DIT-2 test provided by The Center for the Study of Ethical Development at the University of Minnesota. The DIT-2 consists of five storied dilemmas followed by twelve issues which participants are asked to rate in terms of importance. The DIT-2 scores reflect each student's ethical reasoning ability based on their responses to the questions asked after each dilemma.

	3-HOUR COURSE	INTEGRATED ETHICS
GENDER	<i>Female: 5</i> <i>Male: 8</i>	<i>Female: 28</i> <i>Male: 11</i>
AGE	<i>Mean: 22.39</i>	<i>Mean: 23.97</i>
EDUCATIONAL LEVEL	<i>All Seniors</i>	<i>All Seniors</i>
U.S. CITIZENSHIP	<i>Yes: 13</i> <i>No: 0</i>	<i>Yes: 36</i> <i>No: 3</i>
ENGLISH PRIMARY LANGUAGE	<i>Yes: 13</i> <i>No: 0</i>	<i>Yes: 37</i> <i>No: 2</i>

## VARIABLES

Following are the variables used to measure the ethical reasoning abilities assessed in Rest's DIT-2 instrument (Bebeau & Thoma, 2003).

### Personal Interest Schema Score

This score represents the proportion of items selected, after reading a dilemma, that appeal to Stage 2 and Stage 3 thinkers. Stage 2 focuses on the direct advantages to the actor and on the fairness of simple exchanges of favor for favor. Stage 3 focuses on the good or evil intentions of the parties, on the party's concern for maintaining friendships and good relationships, and maintaining approval.

### Maintaining Norms Schema Score

This score represents the proportion of items selected that appeal to Stage 4 thinkers. Stage 4 focuses on maintaining the existing legal system, maintaining existing roles and formal organizational structure.

### Post-conventional Schema Score

This score, the P score, represents the proportion of items selected that appeal to Stage 5 and Stage 6 thinkers. Stage 5 focuses on organizing a society by appealing to consensus-producing procedures. Stage 6 focuses on organizing social relationships in terms of intuitively appealing ideals. The P Score is calculated by adding each participant's scores from Stages 5 and 6. The percentage P Score can range from 0 to 95 and is interpreted as the extent to which the participant prefers post-conventional moral thinking.

### **Utilizer Score (U)**

The U Score represents the degree of match between items endorsed as most important and the action choice taken on that story. A high U score represents consistency between item endorsement and action choice; a low score represents a lack of consistency.

### **Humanitarian/Liberalism (HUMLIB)**

Early in the development of the DIT, researchers determined that a certain population of participants, those who were professionals in either political science or philosophy, consistently delivered high P scores. The HUMLIB score is simply an indicator of how close a participant came to answering questions exactly like the “professionals.” Scores range from 0 to 6 matches.

### **Political Liberalism (CONLIB)**

This score is determined from a participant’s self rating of his or her political views. The scores range from 1 (very liberal) to 5 (very conservative).

### **Religious Orthodoxy (CANCER10)**

This score represents the sum of the rates and ranks for item 9 in the doctor’s dilemma scenario within the DIT-2. This dilemma asks the subject to decide whether to provide a dying woman a drug that will hasten her death. Item 9 addresses the issue of whether only God can determine if someone should live or die.

## **STUDY RESULTS**

Independent samples t-tests were used to compare mean scores of the two student groups. (See Table 2.) The study did find differences between the two groups of students. With regard to the general comparison scores, HUMLIB, CONLIB, U-Score and CANCER10, only one of the four scores varied significantly between groups. The CONLIB variable differed significantly between groups. It is a self-reported indicator of conservatism. Students from the school that required a 3-hour ethic course rated themselves as significantly more conservative than the integrated ethics group. U score means between schools were not significantly different, suggesting that both schools’ students made consistent, although varied, choices. Also, HUMLIB scores did not vary significantly between schools, suggesting that neither student group answered questions in a manner more in line with the “professionals” than the other. Finally, the CANCER10 scores showed no significant differences between groups with regard to religious orthodoxy or how God factors in to an ethical decision related to life and death.



	3-HOUR COURSE MEANS	INTEGRATED ETHICS MEANS	T-TEST SIGNIFICANCE (P-VALUE)
N2	43.9428	33.9774	.027*
STAGE2/3 (schema 1)	18.1538	26.8205	.035*
STAGE4P (schema 2)	38.0000	33.1282	.222
PSCORE (schema 3)	40.3077	35.0256	.208
CANCER10	4.7692	4.3077	.612
CONLIB	3.6200	2.9200	.054*
HUMLIB	1.5385	2.1538	.101
U	.1647	.1404	.536
STAGE2	2.3077	3.0513	.428
STAGE3	6.7692	10.3590	.035*
STAGE4	19.0000	16.5641	.222
STAGE5	16.2308	14.1282	.258
STAGE6	3.9231	3.3846	.517
AGE	22.3850	23.9740	.315
* .05 level of significance			

Although there was no significant difference in P scores between the groups of students, students from the *Ethics in Accounting* course had higher N2 scores. These results are important. First, it lends credibility to the revised DIT-2 in that only the more refined score actually produced significant results. Second, it suggests that students who took an *Ethics in Accounting* course have higher levels of ethical reasoning ability than students who studied ethics in an integrated curriculum.

As for the three schemas, only the personal interest schema (Stages 2 and 3) varied between schools. It seems that those students who did not take a 3-hour *Ethics in Accounting* course were more likely to answer questions based on direct advantages to the actor in the dilemma. Upon further analysis, results differed significantly for only the Stage 3 individual score, which seems to have driven the significant results for the combined personal interest schema and ultimately the N2 score as well. As discussed above, individuals at Kohlberg's moral development Stage 3 tend to make decisions that meet the expectations of other members of their peer group. They concentrate on fairness and maintaining friendships. It appears that students who have studied ethics in a more concentrated setting are more able to make decisions based on the facts of the situation and not revert to choices based on what their peers expect.

Table 3 shows correlations among the variables. As noted earlier, the variable SCHOOL is significantly correlated with the N2 score, a measure of moral development. However, it seems that the significant N2 score is driven by significant variations between schools for only the STAGE 3 variable. No other stage variable was significantly correlated with school.

**Table 3**  
**CORRELATIONS**

		SCHOOL	AGE	GENDER	CONLIB	HUMLIB	U	CANCER10
N2	Pearson Correlation	-.307*	-.284*	.162	-.100	-.116	-.079	-.052
	Sig. (2-tailed)	.027	.041	.251	.482	.414	.580	.717
PSCORE	Pearson Correlation	-.177	-.176	.194	-.144	-.085	-.195	-.049
	Sig. (2-tailed)	.208	.121	.169	.308	.550	.166	.729
STAGE 2	Pearson Correlation	.112	-.026	.118	.136	.127	.012	-.217
	Sig. (2-tailed)	.428	.854	.407	.335	.369	.934	.122
STAGE 3	Pearson Correlation	.293*	.389**	-.220	.113	.475**	.107	-.293*
	Sig. (2-tailed)	.035	.004	.117	.426	.000	.452	.035
STAGE2/3	Pearson Correlation	.294*	.311*	-.130	.155	.452**	.094	-.341*
	Sig. (2-tailed)	.035	.025	.358	.272	.001	.508	.013
STAGE 4	Pearson Correlation	-.173	-.220	.002	.105	-.391**	.185	.322*
	Sig. (2-tailed)	.220	.117	.989	.458	.004	.189	.020
STAGE 5	Pearson Correlation	-.160	-.218	.206	-.052	-.067	-.196	-.058
	Sig. (2-tailed)	.258	.120	.143	.713	.638	.164	.685
STAGE 6	Pearson Correlation	-.092	.043	.029	-.249	-.065	-.056	.004
	Sig. (2-tailed)	.517	.763	.836	.075	.646	.696	.976

\* .05 level of significance

\*\* .01 level of significance

AGE was negatively correlated with the N2 score, a surprising result given previous study results. AGE was also positively correlated with the STAGE 3 variable, another surprising result as this variable is a component of the N2 score where AGE was negatively correlated. It is also important to note that AGE was not significantly different between schools, so it doesn't explain differences in N2 scores between schools. The STAGE 3 variable is also significantly correlated with HUMLIB and CANCER10, measures of conservatism and religiosity, although once again, neither was significantly correlated with SCHOOL.

### CONCLUSION

Students who take an *Ethics in Accounting* course before graduation do seem to have higher ethical reasoning ability than students who have had ethics integrated into their accounting courses. A class specifically concentrating on ethics seems to help students learn to focus on the facts of a given situation when making a decision instead of on how they might be perceived by peers. Given these findings, it seems that adding a 3-hour course to the accounting curriculum may be warranted.

Limitations of this study, however, may suggest avenues for future research. First, the small sample size makes it difficult to make broad generalizations about the effectiveness of a stand-alone *Ethics in Accounting* course. Next, one of the schools studied is a private, religious university while the second is a state-funded university. Although scores related to religious orthodoxy were not significantly different between schools, the CONLIB scores did vary. CONLIB results indicated that one group of students saw themselves as more conservative than

---

the other. Future research should seek to determine the effects of such differences on mean N2 scores of the two groups.

Future research should also examine whether the type of school, the state in which each school is located, or some other factor may have caused such differences to occur. Finally, whether students' ethical reasoning abilities change as they gain work experience in the accounting profession should also be examined in future longitudinal studies. It may be that experiences in the workplace dictate how professionals react to ethical dilemmas, regardless of the method in which they were exposed to ethics in accounting as part of their undergraduate curriculum.

In summary, ongoing accounting scandals call attention to the deepening crisis in ethics that, if not addressed by the profession and academicians, will cause the government to act again in the interest of the public. It seems that the National Association of State Boards of Accountancy (NASBA) may want to consider revisiting its decision to back off requiring additional ethics training for accountants. The results of the current study suggest that more ethics training in the form of a separate 3-hour *Ethics in Accounting* course does correlate with higher ethical reasoning abilities. Adding an ethics course to the accounting curriculum may produce students with higher ethical reasoning abilities. Given that accountants in all practice areas are frequently faced with ethical dilemmas, universities should consider offering a required or elective *Ethics in Accounting* course for seniors and graduate students regardless of whether it is a NASBA requirement.

## REFERENCES

- Armstrong, M.B. (1993). Ethics and professionalism in accounting education: A sample course. *Journal of Accounting Education*, 11, 77-92.
- Bean, D. F. & R. A. Bernardi (2007). Accounting ethics courses: do they work? *The CPA Journal*, January, 64-67.
- Bernardi, R. A. (1994). Fraud detection: the effect of client integrity and competence and auditor cognitive style. *Auditing: A Journal of Practice and Theory*, 13(supplement), 68-84.
- Bebeau, M.J., & S. J. Thoma (2003). *Guide for DIT-2*. Minneapolis, MN: University of Minnesota Press.
- Dubuc, B. (2002). Moral development. *The Brain from Top to Bottom*. McGill University. Retrieved March 5, 2010, from [http://thebrain.mcgill.ca/flash/i/i\\_09/i\\_09\\_s/i\\_09\\_s\\_dev/i\\_09\\_s\\_dev.html](http://thebrain.mcgill.ca/flash/i/i_09/i_09_s/i_09_s_dev/i_09_s_dev.html)
- Desplaces, D. E., D. E. Melchar, L. L. Beauvais & S.M. Bosco (2007). The impact of business education on moral judgment competence: an empirical study. *Journal of Business Ethics*, 74, 73-87.
- Duska, R. F. & B. S. Duska (2003). *Accounting ethics*. Malden, MA: Blackwell Publishing.
- Hurt, R. K., & C. W. Thomas (2008). Implementing a required ethics class for students in accounting: the texas experience. *Issues in Accounting Education*, 23(1), 31-52.

- Jacobs, R. M. (2008). *Kohlberg's stages of moral development*. Retrieved March 5, 2010, from <http://www83.homepage.villanova.edu/richard.jacobs/MPA%208300/theories/kohlberg.html>
- Klutzn, A. (2006). Sarbanes-Oxley essential information. *SOX-Online*. Retrieved March 5, 2010, from <http://www.sox-online.com/basics.html>
- Kohlberg, L. (1969). Stage and sequence: the cognitive- developmental approach to socialization. In D. A. Golsin (Ed.), *Handbook of Socialization Theory and Research* (pp. 347-480). Chicago: Rand McNally.
- Mastracchio, N. (2008). The role of NASBA and state boards in accounting education. *The CPA Journal*, March, 64-69.
- National Association of State Boards of Accountancy (NASBA), 2007. *Rules 5-1 and 5-2 Exposure Draft*. Retrieved 3/5/2010, [www.nasba.org/nasbaweb/NASBAWeb.nsf/PS/09C424C42CDE90BE862573A30078A798?OpenDocument](http://www.nasba.org/nasbaweb/NASBAWeb.nsf/PS/09C424C42CDE90BE862573A30078A798?OpenDocument)
- National Association of State Boards of Accountancy (NASBA) , 2005. *UAA Education Rules 5-1 and 5-2 Exposure Draft*. Retrieved 3/5/2010, [www.nasba.org/nasbaweb/NASBAWeb.nsf/PS/264D55C613B9747D862571B900755C7F?OpenDocument](http://www.nasba.org/nasbaweb/NASBAWeb.nsf/PS/264D55C613B9747D862571B900755C7F?OpenDocument)
- Ramos, M. (2003). Auditors' responsibility for fraud detection. *Journal of Accountancy*. January, 28-35.
- Rest, J.R. (1979a). *Development in Judging Moral Issues*. Minneapolis: University of Minnesota Press.
- Rest, J.R. (1979b). *Revised Manual for the Defining Issues Test*. Minneapolis: University of Minnesota Press.
- Rest, J. R., S. J Thoma, D. Narvaez & M. J. Bebeau (1997). Alchemy and beyond: indexing the defining issues test. *Journal of Educational Psychology*, 89, 498-507.
- Richmond K. A. (2001). Ethical reasoning, machiavellian behavior, and gender: the impact on accounting students' ethical decision making (Doctoral dissertation, Virginia Polytechnic and State University, 2001).
- Shawver, T. J. (2006). An exploratory study assessing the effectiveness of a professional responsibility course. *Global Perspectives on Accounting Education*, 3, 49-66.
- Van Wyhe, G. (2007). A history of S.S. higher education of accounting, part II: reforming accounting within the academy. *Issues in Accounting Education*, 22(3), 481-501.
- Venezia, C. C. (2005). The ethical reasoning abilities of accounting students. *Journal of American Academy of Business*, 200-207.

Copyright of Academy of Educational Leadership Journal is the property of Jordan Whitney Enterprises, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.