Teaching Ethics To Undergraduates:
An Examination Of Contextual Approaches

H. Francis Bush, Ph.D., Virginia Military Institute, USA
Karen Gutermuth, Ph.D., Virginia Military Institute, USA
Clifford West, Ph.D., Virginia Military Institute, USA

ABSTRACT

Our purpose was to advance the current academic discussion on how to most effectively teach managerial ethics at the undergraduate level. We argued that undergraduate ethics education should be comprehensive, multi-dimensional and woven into the fabric of each student’s experience. In particular, we hypothesized that the inclusion of service-learning experiences and a rigorous honor system would lead to better identification and resolution of ethical dilemmas. A survey of 304 undergraduates from four colleges and universities yielded modest support for our hypotheses. In conclusion, we discuss possible explanations for the results and avenues for future studies.

Keywords: teaching ethics, college honor codes

INTRODUCTION

Judging by the volume of scholarship and the number of academic journals devoted to the subject, business ethics is important. For example, the Journal of Management Education, published by the Organizational Behavior Teaching Society, devoted an entire issue in February 2006 (Vol. 30, No.1) to teaching business ethics. In its Assurance of Learning Standards, AACSB International (January 2007) considers “ethical and legal considerations in organizations and society” as essential management-specific knowledge and skills (p. 18). However, after decades of academic inquiry and debate, we are hard-pressed to pin down this frustrating, moving target. We argue its definitions and parameters and teach it defensively, in fear of offending a diverse audience. If, metaphorically, teaching ethics is like “nailing Jell-O to a tree”, then we provide the hammer and the nails as educators. In our opinion, it is time to head to the academic hardware store for more effective ones.

Our objective is to advance the current discussion on how to most effectively teach managerial ethics at the undergraduate level. First, can ethics be taught to relatively immature young adults? And, can it be taught without trampling on diverse religious backgrounds or by imposing the tenets of a particular faith? Most important, can these lessons be expected to translate into better decisions when graduates face ethical dilemmas in the workplace?

The authors believe these questions can be answered in the affirmative but only in certain contexts. In particular, we believe ethics cannot just be taught in the traditional classroom and textbook manner but must be experienced. Students must be immersed in an environment and culture where honesty, fairness, consideration and empathy are constant expectations. We will propose a multi-dimensional approach to teaching ethics, which includes well-accepted components but less ordinary ones as well, and will argue the latter may have the more significant, long-term impact. Finally, we will report the results of an examination of undergraduate business students’ abilities to discern ethical dilemmas and propose resolutions in both academic and business settings.

MULTI-DIMENSIONAL MODELS OF MANAGERIAL ETHICS

Figures A and B provide the theoretic and practical bases for this study. First, what factors explain managers’ responses to ethical dilemmas? And, more specifically, how can the ethics component(s) of their undergraduate educations affect managers’ attitudes and values?
Figure A is a synthesis from the chapter on managerial ethics and corporate social responsibility in Daft and Marcic’s *Understanding Management* 5e (2006). The presentation therein is comparable to those in most undergraduate Principles of Management textbooks, where ethical or unethical decisions are presented as the result of ethical dilemmas managers face. These dilemmas occur because right and wrong paths are not obvious. In the grey area that replaces decisions in black and white, tradeoffs are faced among costs and benefits, with regard to affected parties and over time.

Figure A  
Determinants of Managers’ Ethical Choices

![Figure A](image)

Daft and Marcic (2006) argue that whether an ethical choice is eventually made is due, in part, to managers’ personal attributes, such as personality, religion, values, attitudes and personal needs. But, organizational and professional factors are also important determinants. An organization’s top leaders are both the architects and embodiment of its culture. What employees see from them is more important than what they hear, as leaders’ actions are the true reflection of organizational values. Further, employees pay attention to who receives promotions and the most coveted rewards, and why they do. Does it really matter to the firm how efficiency is achieved or the deal is closed? Moreover, formal codes of conduct/ethics and training programs may provide guidance in the face of decision-making uncertainty. This is pertinent not only at the organizational level but also for employees with strong professional affiliations (e.g., physicians, engineers, CPAs). (pp. 126 -142)

Figure B  
The Impact of Education on Managers’ Ethical Choices

![Figure B](image)
The textbook example cited above seems to reflect mainstream thinking, in that multiple forces are in play, as managers wrestle with ethics-laden decisions. Herein, we are concerned with factors specific to the manager her/himself. In particular, we are focusing on those values and attitudes which could be shaped by the person’s undergraduate education. In Figure B, we contend that four pedagogical and contextual factors can combine to mold those values and attitudes in the direction of the ethical high ground. First, textbook content and in-class exercises can provide a solid, if not abstract and artificial foundation. In those instances where service-learning and honor codes/systems are added, empathy and personal integrity are likely and invaluable outcomes. Thus, we will contend that the context of undergraduate business education is at least, if not more, important than the content, when matters of ethics are concerned.

Textbook materials

Due to the AACSB guidelines noted above, most modern, management textbooks contain an entire chapter or significant subsection devoted to the topics of ethical dilemmas, managerial and corporate ethics, and/or corporate social responsibilities. A common starting point for their discussions is the notion of organizational stakeholders, popularized in the work of Freeman (1984). According to Freeman, stakeholders are “…groups and individuals who can affect the organization…” (p.48) And, stakeholders and organizations are engaged in reciprocal relationships, because the firm also affects stakeholders. (p. 25) The challenge for managers is to prioritize multiple and often competing demands. For example, customers desire low prices and high quality; employees desire generous wages and benefits and safe, healthful work conditions; while shareholders desire revenue growth, profitability and a fair return on their investment. Simultaneous satisfaction is very difficult if not impossible.

In his ground-breaking works, Carroll (1979, 1991) used very similar notions. He separated claims on the business into four, hierarchical categories of responsibilities. Economic responsibilities faced by managers are to produce goods and services valued by customers and to do so at a cost that yields profits to the owners of the firm’s assets (i.e., shareholders, for a publicly-traded company). Legal responsibilities are tied to local, state and federal statutes and regulations. Businesses are expected to withhold and pay taxes, avoid discrimination in all aspects of employment and adhere to broad regulations governing workplace health and safety, environmental pollution and financial disclosure. In addition, there may be regulations specific to an industry (e.g., the SEC for stockbrokers; the FCC for television and radio networks; the FDA for pharmaceutical firms; the NRC for nuclear power plants). Ethical responsibilities fall outside the bounds of both the economic and legal categories. They are based on broad, societal expectations for appropriate behavior on the part of organizations, to do what is right and to avoid harm, even when not mandated by law. Discretionary responsibilities are not prescribed by statute or societal expectations. They are largely voluntary and tied to charitable acts on the part of the firm, which benefit a community or perhaps society as a whole. Sponsoring a 10K race to raise money for research on a terrible disease, endowing college scholarships for underprivileged teens and providing inexpensive lodging for the families of seriously ill children near hospitals are likely to improve a firm’s reputation in the community or even nationwide. However, to eschew such activities and, instead, to invest financial resources for future job growth would not be viewed harshly in most cases. (in Daft, 1997, pp. 154-56)

For present purposes, management’s ethical responsibilities are the center of attention. Unfortunately, the admonition to do right and avoid harm is awfully vague. Students are still left without clear guidance, when texts decry self-serving behaviors and advocate fairness, impartiality and integrity. (Daft & Marcic, 2006, p.138) Many texts include the utilitarian, moral rights and justice approaches, as models to discern ethical from unethical conduct. (Jones & George, 2003, p. 91) Others have added the individualism and integrative social contracts perspectives (Daft & Marcic, 2006, p. 124; Robbins & Coulter, 2002, p. 125) At best, these approaches are confusing for purpose of practical application and, at worst, can lend themselves to a search for “the path of least resistance”.

Various experts (e.g., Trevino, 1986; Shaw & Barry, 1995) have combined aspects of the above approaches and offered managers simplified decision models in the face of ethical dilemmas. Essentially, unless a series of questions can all be answered by “Yes”, then the decision is likely not ethical. For example, “Would family members, friends and colleagues approve of the decision?; and, “Would you allow everyone to do what you are considering doing?” (in Jones & George, 2003, p. 92; Daft & Marcic, 2006, p. 126) While this advice is quite
practical and well-grounded theoretically, we must consider if our students will recall the appropriate questions, two, five or ten years hence?

Cases & Role-playing

According to Donaldson and Preston (1995), discussions of stakeholders and ethics tend to be descriptive, normative and instrumental, depending upon the source or text. Students are told what occurs, what should occur and the contingencies surrounding ethical decisions on the part of managers. In subsequent chapters, students learn about decisions in the face of uncertainty and bounded rationality. (Daft & Marcic, 2006, pp. 208, 212) Clearly, these are related topics; and, instructors have the opportunity to utilize vignettes, cases and exercises intended to illustrate ethical implications in a wide array of real and imaginary business decision situations.

The case approach is a traditional and well-accepted pedagogical tool in business education. Lundberg and Enz (1993) describe a multi-step process for determining the facts, problems, goals, etc. of a case, then integrating conceptual and theoretic models into analyses and feasible alternatives. Each of the Principles of Management textbooks referenced above has at least one case accompanying its “Ethics” chapter, and one text without a stand-alone chapter has mini-cases with ethical implications imbedded in several chapters (i.e., Robbins & Decenzo, 2001). Ancillary materials for many texts include DVDs and internet links for clips from Hollywood movies; some covering ethical issues. In addition, case books and article compilations on business ethics are plentiful and available for classroom use.

Tyler and Tyler (2006) propose a sequenced approach to teaching ethics to business students, wherein the readiness for individual students to address ethical issues in a decision scenario is considered. In four stages from Pre-contemplation to Contemplation to Action to Maintenance, students progress from being unaware of the relevance of ethics education to being able to consolidate and synthesize their learning. (pp. 48-49) Their approach is comparable to Kohlberg’s (1976) classic model of moral development, in which stages build on one another to reach higher levels of human cognitive complexity. At Kohlberg’s lowest level, individuals are self-interested and will follow rules to avoid punishment. At the highest level, s/he is both self aware and selfless, able to discern ethical issues and make ethical decisions based on a well-developed set of internal values. (in Tyler & Tyler, 2006, p. 50 and Daft & Marcic, 2006, p. 127)

Tyler and Tyler (2006) propose activities appropriate for each stage, ranging from stories to games to case analyses to experiential exercises. They further supply us with the specific names and citations for many of these cases, exercises, etc. Role-playing exercises are available as well. In the Journal of Management Education edition mentioned at the outset, Comer and Vega (2006) present a role-playing exercise on whistle-blowing. In these exercises, students are allowed to “get inside the skin” of various characters and, depending upon the scenario, view the situation from the perspectives of stakeholders affected (and perhaps harmed) by the decision(s) made.

In both the Kohlberg and Tyler and Tyler progressions, empathy seems to be a human characteristic essential at the highest level or stage. An empathetic person is able to view a situation from the perspectives of others. Faced with an ethical dilemma, empathy is essential and likewise the pedagogical tools which can help students to develop it. Yet, a nagging question remains about the artificiality of the cases, exercises, etc. discussed above. Does the student really interject her/himself into the situation or simply “go through the motions” for purpose of the assignment? In the event of the latter outcome, not much about the student and her/his values and attitudes would be expected to change.

Service-learning

As with the topic of business ethics, service-learning appears to be important and popular. An entire issue of the Academy of Management’s Learning and Education Journal (Vol. 4, No. 3) was devoted to it in 2005. The consistent and overarching theme across empirical, theoretic and anecdotal contributions was that this is a tool business educators can use to broaden their students’ educational experience and improve their managerial perspectives and skills, while simultaneously providing assistance to the surrounding community. Managerial ethics
was not the only issue addressed. However, there seemed to be agreement that a service-learning experience has the potential to significantly alter a student’s view of business’ roles as well as of his/her responsibilities as a manager, allowing him/her to “grow both professionally and personally” (Lester, Tomkovic, Wells & Flunker, 2005, p. 278).

Service-learning is one way of overcoming the narrowness of functional business training, wherein the primary concerns are those of accounting, finance, operations or marketing and the single-minded pursuit of increasing shareholder wealth. In working with diverse others to solve real community problems, the artificiality of a structured classroom is replaced by the harsh realities of human needs attendant to poverty, race, age and gender. Thus, argues DiPadova-Stocks (2005), students have an opportunity to “…reflect on their own lives, better understand the consequences and impacts of business, economic and public policies, to learn about their world and their responsibilities… and (later) to exercise power with more wisdom, discretion and, hopefully, compassion….”. (p. 346, 349) Lester et al. (2005) contend that “…Service-learning experiences, therefore, can be seen as one instructional technique that encourages individuals to be socially responsible and engage in moral actions…without prescribing ‘rules of ethical behavior’….”. (p. 279)

Among our initial questions were whether ethics can be taught to relatively immature and inexperienced young adults and whether we could avoid trampling upon students’ diverse religious upbringings in doing so. Since ethics is taught in public-supported schools as a secular topic, we believe service-learning is an important step in that direction. Students are forced to consider needs and perspectives other than their own, hopefully developing empathy along the way. They are also asked to “do the right thing”, without adherence to any particular orthodoxy.

Honor Codes & Systems

The primary contention of this paper is that ethics cannot be effectively taught as a stand-alone course. Rather, ethical issues should be identified in multiple academic contexts. And, honor codes and systems can be essential components of an educational community, which places ethics among its most important values. (McCabe, Trevino & Butterfield, 2006)

In their discussion of leader development, Husted and West (2008) explain that service academies and military colleges, such as the U.S. Military Academy, the U.S. Naval Academy, the U.S. Air Force Academy, the Citadel and Virginia Military Institute, subscribe to the notion of educating the “whole person”, mind, body and spirit (i.e., values and beliefs). Therefore, a core component of a military education is the pursuit of character-building; and, the focal point of character-building in the context of a military education is an honor code. Most military colleges have adopted a code which states that a cadet will neither lie, cheat, steal nor tolerate those who do. (Husted & West, p. 36)

The honor system pervades all aspects of cadet life, holding them accountable for words and deeds. Queries must be answered truthfully, without partial truths or quibbling. Instructors leave the classroom rather than proctor exams. There is no need for such oversight; all work-for-grade must be a student’s own, unless otherwise specifically permitted. And, money and personal items seldom disappear from unlocked cadet rooms. (Husted & West, p. 36)

The honor system is owned by cadets, with the oversight of faculty and administration advisors. Upper class cadets comprise the honor court’s staff, judges, prosecutors and juries. The accused even has the option of selecting a cadet as his/her defense counsel. Most important, these tend to be single sanction systems: “One strike and you are out”. And, no one is exempt, cadet captain or private, varsity athlete or work-study student. Integrity in all regards is neither an abstraction nor an option for cadets. After four years of immersion in an honor system, they do not simply behave honorably; they are honorable. (Husted & West, p. 36)

Moreover, the concept of holding students accountable for their actions is not unique to military academies and colleges. The University of Virginia and Washington and Lee University both require students to adhere to honor codes and answer for breaches thereof. However, the results of adjudication may not be as severe and permanent as at a military school. At the University of Virginia, for instance, violations of the honor code must be
judged to be both intentional and serious to warrant dismissal, and guilty verdicts may be appealed on the basis of new evidence or procedural failures. In addition, a student who commits a dishonest act but makes a “conscientious retraction” before anyone suspects him/her of an honor offense will not be subject to dismissal but must face the immediate consequences of his/her actions (e.g., a grade of 0 on an exam).

Indeed, not all military schools are uniform in their application of an honor system. The U.S. Naval Academy enforces an “honor concept”, which emphasizes “thou shalt” rather than “thou shalt not” principles, coupled with a comprehensive honor education program. New midshipmen are not initially held to the same high standards as the upper classes, and guilty verdicts are subject to a range of punishments, including but not limited to dismissal.

McCabe and Trevino (1997) and McCabe, Trevino and Butterfield (2002) found consistent evidence that honor codes at the undergraduate level are effective in reducing the undesirable behaviors mentioned above. This is not surprising; dismissal is a high price to pay for “cutting corners” on an assignment or disavowing one’s bad behavior. McCabe et al. (2006) focused on academic dishonesty at the graduate level but suggested that “modified” honor codes, similar to those of the University of Virginia and the U.S. Naval Academy might also be appropriate for graduate business programs. According to the authors, “The practical implication for business schools is that honor codes, including modified codes, reduce the burden on faculty to monitor and enforce regulations concerning cheating and help cultivate students’ character by holding them responsible for sustaining the ethical community”. (p. 303)

The authors firmly believe integrity, as a necessary precondition for ethical decisions, can be derived from a student’s experience in an educational honor system, regardless of upbringing or religions leanings. Faced with the admonition that s/he can neither lie, cheat, steal nor tolerate those who do, as a condition of retaining membership in the college community, one’s attitudes and accompanying behaviors inevitably and irreversibly change.

**RESEARCH PROPOSITIONS**

It has long been expected that institutions of higher learning will produce graduates prepared to contribute to their disciplines, their communities and their nation (DiPadova-Stocks, p. 346). As an important subset, business programs graduate individuals who will contribute to their employer’s success, which by normal standards means its survival, growth and profitability. But, success is not acceptable at any price. Businesses and the people who manage them have ethical responsibilities to behave with honesty, fairness, impartiality and by avoiding undue harm and respecting individual rights and privileges. (Robbins & Coulter, 2002, pp. 124-25)

Ethics and ethical responsibilities are therefore important topics, and their inclusion in undergraduate business curricula is currently mandated by AACSB. Teaching managerial ethics from textbooks, cases, videos, etc. can be effective, but with critical limits. Such tools and techniques are abstract and artificial. They are just another “hurdle” to be cleared on the way to the end of the semester and the eventual diploma. As educators, we must all wonder at times how much of the material we present to our students actually “sticks”, as they pass through our courses.

If ethical lessons are learned no more thoroughly than the others we present, is it not reasonable to expect unethical and even illegal behaviors from some of our students later in life, if the personal and organizational factors illustrated in Figure A are in the proper *misalignment*? The much publicized miscreants at Enron, Tyco, WorldCom, Adelphia, HealthSouth and Arthur Anderson were probably not raised to cheat, steal and lie about it. Their friends and loved ones were no doubt shocked to be sending cards and letters to post office boxes in state and federal penitentiaries.

Therefore, we have argued that the context of ethics education at the undergraduate level is at least as important as the content. We contend that service-learning has the potential to widen a student’s view of the world and make her/him empathetic to others different and perhaps less fortunate. Honor systems, at their most stringent, insist on nothing less than total integrity in all academic matters. Moreover, they extend to respecting the property
of others and exhibiting complete honesty in interactions with instructors and school officials. Further, we believe that students, subject to four years of scrutiny in an undergraduate honor system, are changed fundamentally and permanently. If integrity is not a value they possessed upon entering the institution, they most certainly will possess it upon their graduation. Throughout the multitude of assignments and interactions over eight, arduous semesters, it is impossible to fake the honesty these systems demand. In the final analysis, empathy counters selfishness, and integrity precludes deceit. Absent selfishness and deceit, we believe unethical decisions and behaviors are much less likely. Therefore, we propose the following:

**Proposition 1:**

Undergraduate business students, confronted with an ethical dilemma, will have greater awareness of ethical issues when service-learning and/or honor codes have been parts of their educational experience.

**Proposition 2:**

Undergraduate business students, confronted with an ethical dilemma, will make more ethical decisions when service-learning and/or honor codes have been parts of their educational experience.

**RESEARCH METHODS**

**Subjects**

We tested the above propositions with 304 undergraduate students taking business courses in Iowa, New York, Ohio and Virginia. Two of the four schools were private; one of the four was church affiliated; and, one of the four educated within a military framework. Students ranged from freshmen to seniors, and business majors were the clear majority. Their experiences with service-learning projects and honor systems ranged from non-existent to extensive. Participation in this study was voluntary in all instances and anonymous in most. (Our own students participated as a class exercise.)

**Survey Instrument**

First, subjects were asked several background questions, which became the basis for our independent variables. We inquired if the student had been involved in service-learning projects and asked for (a) brief description(s). We also asked a series of questions intended to gauge a student’s familiarity with her/his school’s honor system (if any) and the stringency of its administration.

Subjects were asked to read three, brief scenarios and to comment on any two of them. In Scenario 1, a college dormitory Resident Advisor is asked for “help” by a student who must write an extra credit paper to retain a sizable scholarship and also becomes aware of other ways the student might cut corners. In Scenario 2, the medical member of a new product development team is being pressured to sign off on human testing of a new medicine that contains an artificial sweetener far in excess of FDA limits for soft drinks. And, in Scenario 3, a product developer at a struggling chemical company is concerned about polluting a local river in the face of recently relaxed emission guidelines. In an open-ended format without prompts, subjects were asked to identify a scenario’s ethical dilemma(s) and to suggest and justify a resolution.

**Independent Variables**

Although many students listed more than one service-learning experience, the true extent of their involvement was not always clear. We knew of one student who listed only a single Habitat for Humanity project but had played a leadership role thereon. Another had a more extensive list but only limited roles. Therefore, we decided to err on the side of caution and code service-learning experience dichotomously (i.e., 1 or 0). We measured Honor (System) Intensity by combining Yes/No answers (i.e., 1 or 0) to five sequential questions, ranging from being aware of the existence of an honor system at their college/university to knowing someone dismissed under that system.
Dependent Variables

Subjects provided responses to two open-ended questions for each scenario, as described above. The authors chose open-ended questions to allow subjects to interpret the scenarios at their own level. Responses were scaled to measure the extent to which students identified the ethical issue(s) in each and whether their recommendations reflected an awareness of an ethical framework (e.g., rights, utilitarian, justice, etc.)

Our scenarios and scaling rubrics were developed utilizing pre-test subjects taking summer session courses. First, we sought vignettes where the dilemma was less-than-obvious. We began with twelve and narrowed them to the three that yielded the widest dispersion of responses, as to the nature of the dilemma and potential resolutions. Our scaling rubrics for dilemma identification combined the investigators’ interpretation of each scenario with pre-test subject responses. With the resolution scoring rubrics, we sought to capture the range of possible answers in light of an appropriate and consistent ethical approach (e.g., utility, justice, etc.) Once the identification and resolution scales were developed, we trained the scorers on their use. In doing so, we identified where discrepancies occurred and adjusted the scales and rubrics accordingly.

During data input, the responses of each subject were coded by two independent scorers and averaged to provide a single score for analytical purposes. The mean differences between the independently-derived scores for all subjects are presented in Table 1 below. With the lone exception of identifying the cheating dilemma, inter-rater reliability was high.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Task</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating Scenario</td>
<td>Identifying the Dilemma</td>
<td>1.3355</td>
</tr>
<tr>
<td></td>
<td>Proposed Resolution</td>
<td>-0.1697</td>
</tr>
<tr>
<td>Drug Testing Scenario</td>
<td>Identifying the Dilemma</td>
<td>0.0460</td>
</tr>
<tr>
<td></td>
<td>Proposed Resolution</td>
<td>0.0855</td>
</tr>
<tr>
<td>Pollution Scenario</td>
<td>Identifying the Dilemma</td>
<td>0.0197</td>
</tr>
<tr>
<td></td>
<td>Proposed Resolution</td>
<td>-0.0016</td>
</tr>
</tbody>
</table>

Analytic Procedures

Our dependent variables were neither continuous nor dichotomous; they were ordinal ranks determined by examining survey responses. The identification score and the resolution score were ranks from 1 to 5 and 1 to 7, respectively, with 1 being the lowest score. Therefore, we used an ordered probit model to obtain estimates, but more importantly, to determine significant determinants of the ability to 1) correctly identify and 2) provide resolutions for ethical dilemmas.

In our model, we assumed each student has an inherent ability to either identify or provide solutions to a problem. This unobservable, latent variable can be defined as \( y^* = \beta x + \varepsilon \), and we observe:

- \( y = 1 \) if \( y^* \leq \delta_1 \),
- \( y = 2 \) if \( \delta_2 < y^* \leq \delta_3 \),
- \( y = 3 \) if \( \delta_4 < y^* \leq \delta_5 \),
- \( y = 4 \) if \( \delta_6 < y^* \leq \delta_7 \),
- \( y = 5 \) if \( \delta_8 < y^* \leq \delta_9 \),
- \( y = 6 \) if \( \delta_{10} < y^* \leq \delta_{11} \),
- \( y = 7 \) if \( \delta_{12} < y^* \leq \delta_{13} \).

The \( \delta_s \) represent unknown thresholds parameters and are estimated along with \( \beta \). The probability of observing \( y = 2 \), for example, is:

\[
\text{prob}(\delta_2 < y^* = \beta x + \varepsilon \leq \delta_3) = \text{prob}(\delta_2 - \beta x < \varepsilon \leq \delta_3 - \beta x)
\]
Assuming a normal probability distribution for ε, then a likelihood function can be formed and the ordered probit applies. We used maximum likelihood estimation with quadratic hill climbing to estimate our results.

**RESEARCH RESULTS**

We were not interested in a student’s ability to ascertain and resolve any, single ethical dilemma but rather their ability to do so across the situations presented to them. Therefore, we examined the school-related scenario separate from the two with business themes, feeling the former would reflect their values plus cumulative experience much more so than “hypothetical” business situations. Tables 2 and 3 report the results of our empirical analyses. Overall, these results are interesting but inconclusive. Although all the significant results are consistent with our hypotheses, the non-significant results are too numerous to ignore.

The analysis of the responses to the cheating scenario yielded only one significant result. (see Table 2) The ability to identify the conflict presented in the scenario was increased (or affected by) the subject’s involvement in service learning activities. The ability to resolve the conflict ethically however, did not indicate a significant difference for either research condition. The lack of significant results indicates that it was unclear what the most appropriate choice was, regardless of a student’s experience with service learning or an honor system.

The analysis of the scenarios based on professional and business judgments provided two more significant results. (see Tables 2 & 3) First, subjects exposed to an honor system were significantly more likely to identify the conflicts but did not have the insights or skills to arrive at ethical resolutions. Second, subjects who had participated in service learning programs were more likely to make ethical choices, although they were not able to describe the conflict any better. Do our results imply, therefore, that being subjected to a strict honor system during four undergraduate years better prepares one to recognize a dilemma but not deal with it ethically? Similarly, does participation in a service-learning project fundamentally mold one’s values in a more ethical direction? The rather obvious answer is, “Maybe.”, which means the proverbial jury is “still out”.

<table>
<thead>
<tr>
<th>Table 2: Ordered Probit Results for Identification Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario 1</strong></td>
</tr>
<tr>
<td>n=278</td>
</tr>
<tr>
<td>Honor Intensity</td>
</tr>
<tr>
<td>-.048</td>
</tr>
<tr>
<td>(.037)</td>
</tr>
<tr>
<td>Service Program</td>
</tr>
<tr>
<td>.173*</td>
</tr>
<tr>
<td>(.129)</td>
</tr>
</tbody>
</table>

* Significant at the 10% level, 1 tailed test  
** Significant at the 5% level, 1 tailed test

<table>
<thead>
<tr>
<th>Table 3: Ordered Probit Results for Resolution Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario 1</strong></td>
</tr>
<tr>
<td>n=278</td>
</tr>
<tr>
<td>Honor Intensity</td>
</tr>
<tr>
<td>.032</td>
</tr>
<tr>
<td>(.037)</td>
</tr>
<tr>
<td>Service Program</td>
</tr>
<tr>
<td>.028</td>
</tr>
<tr>
<td>(.128)</td>
</tr>
</tbody>
</table>

* Significant at the 10% level, 1 tailed test

**CONCLUSIONS**

Given results that provided less-than-overwhelming support for our hypotheses, it would be premature to make strong assertions. At this point, we can only argue that service-learning experiences and honor systems may be important factors in a student’s education in ethics. And, while our significant results were not resounding, at
least they were in the predicted directions. Identification was more likely in Scenario 1 with service-learning experience and in Scenarios 2 and 3 when immersed in an honor system. However, only service-learning made an ethical resolution for Scenarios 2 and 3 more likely. A resolution for Scenario 1 was affected by neither factor. Initially, we were disappointed and discouraged with these results. Astounding significance would have verified our preconceptions and professional biases. Upon reflection, however, we realized these results were entirely consistent with the overall models of Figures A and B.

We recognize the questions we asked our subjects have complex answers. In Figure A, we argued that various personal and organizational factors would impact a manager’s ethical choices. In Scenarios 2 and 3, subjects were asked to assume the roles of employees, whose careers were at risk and whose superiors preferred a profit maximizing outcome. We must assume they understood the competing forces impacting their decisions.

Figure B depicts only the ethics portion of the educational contribution to managerial background characteristics, a subset of a subset. Certainly, a student’s major field and general education curricula might also play a role. Human Resource majors with a minor in religion might see things differently than a Production or Finance major. Similarly, subjects involved in student government, residence life or peer counseling might have better understood the competing responsibilities and loyalties of the Resident Advisor in Scenario 1, for instance. Therefore, perhaps our independent variables explained as much of the variance in the Identification and Resolution variables as they could. By our own arguments, service-learning experience and honor system immersion during one’s college years constitute only a fraction of a much broader experience.

LIMITATIONS AND FUTURE DIRECTIONS

It became painfully obvious in the preparation of this piece that the literatures on ethics in general, business ethics and ethics education are voluminous. We did not attempt a comprehensive literature review, as that was not our purpose. Rather, we sought to add service-learning and honor systems as contextual elements of the “puzzle”.

Further, our multi-dimensional model in Figure B contains four elements. We do not contend that there may not be one or more that could be added. For instance, internships, foreign study or leadership positions on athletic teams or in student organizations have obvious benefits. Also, we scrutinized only a limited subset of the honor codes and systems in place across academia, because our own backgrounds lent more than passing familiarity with those included. We are certain that there are nuances and variations of which we are unaware.

In a study of this nature, the dependent variables are commonly a concern. Did the researchers measure what they intended to measure and do so accurately? Our business scenarios were based on Management text vignettes and the dilemmas identified therein. The academic dilemma was drawn from one of the author’s personal experience. The resolution scales were developed from student responses in consideration of well-known ethical frameworks. But, as noted earlier, we are “blessed” with a multitude of ethical “lenses” with which to view such situations. A 2007 AACSB sponsored publication on ethics describes eight “classical” approaches to ethics and lists eight other possible approaches. (pp. 6-8) If the lens for viewing a dilemma is changed, its resolution might be as well.

This study answered a few questions, but many more remain for future endeavors. Perhaps ethics can be taught effectively by traditional classroom methods without the constant scrutiny of an honor system. Perhaps a school’s size, type and location have an impact. Or, perhaps the ability to sort through ethical issues is a function of a student’s age, emotional maturity or religious background.

Certainly, these are important considerations, inasmuch as business programs are mandated by current AACSB Assurance of Learning standards to have some ethical content in their curricula. If there are factors which moderate our success in teaching ethics to undergraduates, it is imperative we discover and include them in our assumptions and models. In the short term, our accreditation-driven assessments should accurately reflect our effectiveness as educators. And, in the long term, we are better off as a society, if our students are truly aware of the myriad stakeholders affected by the difficult decisions they will make during their professional lives.
AUTHOR INFORMATION

Dr. H. Francis Bush is a Professor in the Department of Economics and Business at Virginia Military Institute (VMI) and the current holder of the John and Jane Roberts Chair in Free Enterprise (Business). He received a B.A. in Mathematics from the State University of New York at Buffalo, a Masters of Accountancy from The Ohio State University and the Ph.D. from the University of Florida. The focus of his doctoral work was human information processing, and he is currently finishing studies related to Enron-Anderson. At VMI, Dr. Bush teaches Principles of Accounting and Statistics.

Dr. Karen Gutermuth is a Professor in the Department of Economics and Business at VMI. She received a B.S. and the Ph.D. in Economics from Louisiana State University. Her research interests are in health care policy, quantitative analysis of dichotomous variables and, most recently, ethics and educational honor systems. At VMI, Dr. Gutermuth teaches Econometrics, Money and Banking, Industrial Organization and Health Economics. She also serves as the Superintendent’s faculty advisor to the VMI Honor Court.

Dr. Clifford West is a Professor in the Department of Economics and Business at VMI. He received a B.A. in History from the University of California, San Diego, an M.B.A. from the University of Notre Dame and the Ph.D. in Management from Indiana University. His current research efforts are in the areas of leader development and ethics education. At VMI, Dr. West teaches various Management courses.

REFERENCES


