

Professional Ethics

The importance of teaching ethics to future professionals By Nick Nichols, George V. Nichols Jr. and Patsy A. Nichols

EARLY IN THE 21ST CENTURY, many U.S. corporations faced ethical failures that led to indictments, lawsuits, fines, guilty pleas and even jail sentences for high-profile executives. These disclosures led to the financial failures of many businesses, and the loss of billions in investors' savings and many jobs.

In response to these events, Congress enacted the Sarbanes-Oxley Act in 2002 to create stronger oversight of the nation's major companies. The act created an oversight board to ensure that the same person serving as an accounting firm consultant could not also provide auditor services.

The act had a significant impact on the accounting profession. It not only required that more accountants be hired, it also forced major accounting firms to sell their consulting services in order to eliminate conflict of interest. In addition, many firms were forced to reevaluate their overall business practices and reaffirm their commitment to ethical policies. These highly publicized cases helped many industries realize that a reaffirmation of ethics was in order in every area of business.

The Potential for Ethical Conflicts in Safety

In business and industry, high standards of competence, integrity and fairness are critical in promoting workplace safety and health. Boone and Kurtz (2005) identify ethics as "the standards of conduct and moral values governing actions and decisions in the work environment."

When an SH&E professional completes an audit and corrective actions cited may be interpreted as critical of managerial performance, the safety auditor must hold firm to the standard of truth. The SH&E professional is just that—a professional—and in that role has many constituencies to which s/he must answer. The SH&E professional must not only be true to the employee and strive to promote a safe working environment, s/he also must be true to self—even if that truthfulness may threaten corporate profits in the short run. In the long run, it is only through the veil of truth that any corporation can prevail profitably. More specifically, only through the promotion of ethical practices can one minimize harm and maximize bene-

fits to all stakeholders. Since the management team wants profits, those profits can only be maximized in the long term if all employees are encouraged to avoid or disclose any unethical behaviors.

In its Ethics Litmus Test, Marathon Oil Corp. recognizes that no company is exempt from unethical practices and encourages its employees to be "ever vigilant to ensure that Marathon conducts business with the highest legal and ethical standards."

Can Ethics Be Learned?

No SH&E professional has all the answers needed to solve all ethical dilemmas that may arise. However, such skills can be learned. As students enter the professional world, they will have to make a wide range of decisions; thus, it is important that instructors strive to instill in them a commitment to high ethical standards. Students' ethical beliefs are shaped by their personal experiences, peer pressure, family, and cultural and religious standards. Instructors hope that by the time students enter the world of work they are ready to move beyond self-interest and consider the needs of all groups in an organization. Additionally, supervisors of new employees are obligated to inform

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them of dangerous and unacceptable risks to people, property and the environment, and to encourage ethical practices in recording and disclosing injuries.

Case studies offer a multitude of learning opportunities regarding ethics. A primary example is the online cases offered by the Online Ethics Center for Engineering and Science titled, "Professional Ethics in Engineering Practice: Discussion Cases" (<u>http://on lineethics.org/cases/nspe/index.html</u>). In industry, as in life, a clear-cut choice between right and wrong is not always evident in a given situation. As one considers all the constituents—other employees, managers, customers, investors in the company—one can readily understand that conflicts can arise when trying to satisfy and serve the different needs of each of these individual interests.

Thus, ethics is a topic that must be covered in safety and health curricula. The codes of conduct that businesses support can become a significant part of the total framework of the company. Once the top executives demand high ethical standards and demonstrate allegiance to ethical behavior, all employees will be more likely to follow suit.

How can instructors help students face difficult decisions and understand that ethical dilemmas can lead to negative publicity, regulatory agency fines, injuries and/or fatalities? The answer to this question may lie in professional and technical societies wherein one can find some guidance on handling situations professionally and fairly. SH&E practitioners should be encouraged to respond to all encountered situations—every project, day-to-day in an ethical manner.

Texas Instruments employees receive a reference card to help them make ethical decisions on the job. It is the size of a standard business card and contains these questions:

• Does it comply with our values?

- If you do it, will you feel bad?
- •How will it look in the newspaper?
- •If you know its wrong, don't do it!
- •If you're not sure, ask.

•Keep asking until you get an answer (Boone and Kurtz, 2005).

If professionals act with fairness, impartiality, candor and fidelity to trust, then they are more likely to select the right course of action. However, one survey indicates that as recently as 1998, 80% of engineering graduates attended schools that had no ethics-related course requirements (Stephan, 1998).

Only since 1998 have universities begun to offer coursework in engineering ethics—moving away from the assumption that new professionals will learn ethics on the job or come equipped to handle ethical dilemmas. Among the classes currently offered at Ohio State University is "Real World Ethics"; Massachusetts Institute of Technology offers "Ethics in Engineering"; North Carolina State has "Ethical Issues in Engineering"; Stanford offers "Engineering Ethics"; and the University of Minnesota has a course titled "Engineering Ethics in Historical Perspective."

In addition, many texts are available in this area,

often in electronic format that takes little space on a computer. Ethics texts have been written for most disciplines and one need only search the Internet within a specific area of study to find them. Additionally, many conventional textbooks are available for review.

Professional Ethics

Students just graduating or those who have been working in the field as engineers for many years should stay informed about ethical considerations that apply to their professions. The key is to practice fairness, honesty, impartiality and equity in all questionable situations. In *The Power of Ethical Management*, Blanchard and Peale (1988) provide excellent suggestions and quick tests on how to determine whether an issue or the "ethical dilemma" being faced can be solved ethically. They offer three questions as testing devices:

1) Is it legal? That is, would it violate any law or company policy to proceed with this activity?

2) Is it balanced? Will all the constituencies involved believe the action taken to be fair and serve all in a positive manner—both today and in the future?

3) Is it right? Is the decision made one about which those involved can be proud?

The Code of Ethics and Professional Conduct of the Board of Certified Safety Professionals (BCSP) emphasizes a dedication to the "advancement and betterment of human welfare—the highest standards of conduct—and always placing service before profit." BCSP emphasizes that the SH&E professional is responsible for the safety, health and welfare of all stakeholders affected by the decisions s/he makes. This responsibility extends to serving the safety needs and interests of the public, clients, employers, employees, colleagues and the profession in general. Therefore, the actions of SH&E professionals should be guided by high standards of personal honor and professional conduct.

Compromised Ethics

Making ethical decisions is not easy—especially when the situation involves multiple points of view, conflicting objectives, incomplete knowledge or ambiguity. L.G. Lewis Jr., principal of an engineering consulting firm, believes that a valued safety professional will learn to first recognize the ethical issues, then think through the consequences of alternative solutions. He cites several instances where ethics has exemplified marked "moral decay":

Headline news from Washington recently reported the personal use of government aircraft by ceratin high-ranking military officers. In Arkansas, a well-known counselor to the White House was sentenced to prison for overbilling former clients of his law firm. In South Carolina, several prominent legislators were convicted in a "state-house sting" designed to snare politicians who were willing to sell their votes to special interest lobbyists.

In 1991, Rhode Island newspapers implicated a nationally recognized engineering firm in

tested to determine whether their commitment to ethics would correlate in a positive way with the final grade they earned in a safety course. Results of the study revealed that students who scored at the top of the class academically did not rank in the same place on the ethics evaluation. In fact, those students quite frequently fell at the median or below, which was not the correlation coefficient expected. These observations support the conclusion that safety-related curriculum needs to address ethics to a much greater extent.

Abstract: Students at

two universities were

a \$10,000 bribe of the Pawtucket mayor. In Pennsylvania, one of the largest builders of shopping centers in the U.S. planned a 70,000 sq-ft project in Lower Makefield. At the same time, the company built two larger centers—a 90,000-sq-ft center in Logan Township and a 250,000 sq-ft center in Patton Township. Municipal fees paid in Logan and Patton were \$250 and \$2,500, respectively. In Lower Makefield, the engineer submitted a bill approaching \$70,000.

Unethical conduct occurs not with just a few unscrupulous individuals, but with a host of apparently good, successful professionals who lead what appear to be exemplary private lives (Lewis, 1995).

Unethical practices can have far-reaching effects. Supervisors have been known to use corporate gift cards inappropriately and take advantage of personal reimbursements involving third-party invoices and expense reports. Moral values also are severely compromised when a supervisor takes credit for another's work; accepts an undeserved discount by a supplier if safety products or other items are purchased from that dealer; takes corporate PPE for personal use; or becomes involved in workplace relationships that could be labeled sexual harassment.

Students should be made aware that as professionals they will have special obligations to themselves and their stakeholders. Safety personnel are always cautioned to keep accurate accident reports and to avoid falsifying OSHA recordable records. They will face many decisions regarding the harm or benefit the decisions they make will have on stakeholders. The SH&E professional must consider whether s/he would want the choice to be published in a newspaper; whether s/he would think the decision is sound if s/he were affected directly by it; whether the decision making meets the professional's personal ethical standards and the standards of the SH&E profession; and whether time, economic, technical and legal constraints will allow the decisions made to be implemented.

Once possible ethical solutions have been identified, the SH&E professional needs the self-confidence to seek different points of view and decide what is right. All the information about a situation may not be known at the time the decision must be made, but the professional must have the strength to make the best decision at the time.

In addition to the test created for this study, other tests are available through professional organizations such as National Society of Professional Engineers (NSPE, which has a test found at <u>www.nspe.org/</u><u>ethics/eh1-test.asp</u>). Technical and professional societies have provided well-defined ethics rules recognized as "points of light for ethical conduct." Knowledge of the rules associated with NSPE's Code of Ethics can be determined quickly and a rating has already been created by the organization: 23 to 25 (92% to 100%) answered correctly yields a rating of "superior"; 20 to 22 (80% to 88%) answered correctly yields a rating of "good"; 17 to 19 (68% to 76%) yields a rating of "fair"; and 16 or below (0% to 68%) yields a rating of "poor."

SH&E professionals may be involved in many other functions that can affect a corporation's profitability, efficiency and future. For example, the policies and procedures for maintaining a safe and healthy work environment may demand terminating employees who refuse to comply with the rules; purchasing new and/or expensive equipment to bring a site into compliance; and funding employees' educational and professional pursuits. Thus, SH&E professionals must be encouraged to make choices that are consistent with each other and with the organization's stated and operational values.

A Study of Students

Students at both Southeastern Oklahoma State University (Durant) and Murray (KY) State University who aspire to become practicing SH&E professionals were examined to determine whether their commitment to ethics would correlate in a positive way with the final grade they earned in a safety course. The students were asked to respond to 30 true/false questions to determine their level of commitment to and knowledge of the BCSP Code of Ethics and Professional Conduct as it pertains to safety in the workplace.

Each question constructed by the authors is embedded in the standards purported in the BCSP code and was subjected to peer review. The BCSP code sets forth a commitment to honesty, applicable laws, an adherence to the protection of safety and health in the workplace, and the maintenance of safety in professional actions and behavior.

The authors sought to learn how students would react to various ethical questions and dilemmas in the form of true/false questions (Figure 1). The correct answers (p. 41) were based directly on the content of the BCSP code itself. More specifically, the validity of the test is supported by the soundness of the standards established under the code and reflects those principles.

Once the test was administered, results were analyzed to determine whether a correlation existed between the test score and the final grade the student received. (The authors acknowledge the fact that the test was administered to college students, most of whom have had little real-world experience on which to base their responses.)

What the Study Found

The authors examined the results to assess the possible correlation between the grade received in the course and the grade received on the ethics test. As noted, the answers to the test were based on the BCSP Code of Ethics and Professional Conduct which was approved in October 2002. The formula used to compute the correlation coefficient of these two arrays (score on test and class grade) was:

Correl (X, Y) = $\frac{\sum (\mathbf{x} \cdot \bar{\mathbf{x}})(\mathbf{y} \cdot \bar{\mathbf{y}})}{\sqrt{\sum (\mathbf{x} \cdot \bar{\mathbf{x}})^2 \sum (\mathbf{y} \cdot \bar{\mathbf{y}})^2}}$

Students should be made aware that as professionals they will have special obligations to themselves and their stakeholders.

Figure 1

Ethics in Safety: Test Constructed by Authors

Class

Name

Date

Instruction: Please answer each of the following demographic questions, being completely honest in your response. 1) Age

- Gender (circle one) MALE FEMALE 2)
- 3) Classification (circle one) FRESHMAN SOPHOMORE **JUNIOR** SENIOR AGE:
- 4) GPA:
- 5) Have you had actual experience in safety? (Circle one) YES NO
- If yes, how many years of experience have you had? 6)
- Do you have any immediate family in safety? (Circle one) YES NO 7)

Instructions: Please indicate whether the following statements are true or false, and MARK THAT ANSWER BY PLACING AN "X" OVER THE CORRECT RESPONSES ON THE ANSWER SHEET.

- 1) Safety professionals must hold paramount the safety and health of all of the individuals they oversee (both inside and outside of their organizations).
- 2) Safety professionals may publicly make subjective statements if made in the best interests of their employer and employees.
- Safety professionals may do work outside of their area of competence as long as they inform their supervisor. 3)
- 4) Safety professionals may inform their employer and/or other authority when appropriate if they believe their judgment is overruled and the results could endanger life or property.
- 5) Safety professionals may not be required to follow the provisions of state or federal law when such action could compromise their employer's or client's interests.
- Safety professionals should report any alleged acts of bias in regard to religion, age, or disability to employers, employees, 6) colleagues and appropriate authorities.
- Safety professionals should not exaggerate their degree of responsibility in prior work settings for the purpose of enhancing 7) the qualifications of their work.
- Safety professionals should adhere to high standards of ethical conduct with the primary interest of the employer held 8) highest.
- Safety professionals should not solicit but may accept financial or other valuable consideration from outside agents in 9) connection with the work for which they are responsible if such compensation is fully disclosed.
- 10) Safety professionals should seek opportunities to be of constructive service to their community by sharing their knowledge and skills.
- 11) Safety professionals should adhere to high standards of ethical conduct and avoid all practices that force the company to accept risks to people or property.
- 12) Safety professionals should embellish education and/or experience in specific technical responsibilities in past employment when it enhances their reputation.
- 13) Safety professionals owe it to their employers to keep only those records that will not discredit the company or deceive the public.
- 14) Safety professionals should act in a manner free from bias with regard to gender, age and sexual orientation.
- 15) If paid on the basis of the number of recordable incidents in my facility, I would record those that are questionable.
- 16) If traces of a hazardous chemical discovered in the manufacturing process would result in the loss of thousands of jobs, it would not have to be reported as long as it was below the toxic threshold.
- As a safety engineer, it is my responsibility to instruct each employee to wear personal protective equipment to compliment 17) their various tasks.
- If the consumer of our products buys only those items made or grown in the USA, and our company has purchased from a 18)third foreign seller, as a safety professional, I would reject the cheaper goods and forfeit a substantial bonus.
- 19) As a safety professional, I have the right to view whatever website I wish at work when I am on my own time.
- 20) As a safety professional, I may send e-mails to whomever I wish while at work.
- 21) As a safety professional, I may send quick safety jokes to whomever I wish while at work
- 22) Upon finding information concerning a competitor's confidential safety audit bid in a meeting room, I owe it to my company to reveal the information that would be advantageous to my company.
- 23) As a safety professional, I follow unwritten rules based on respect for what is safe and fair.
- 24) As a safety professional, I would report any known safety violations to OSHA.
- 25) It is acceptable to give gifts to OSHA compliance officers.
- 26) Because of the nature of the work, it is acceptable for the safety engineer who works overtime until 10:15 to sign out at 10:30.
- 27) As safety professional, I can realistically omit previous citations if the employee is a good worker.
- 28) As a safety professional, I would report all the results of the safety audit—including the negative ones—to special clients.
- 29) As a safety professional, and personal friend of the compliance officer, I should be able to ask for special consideration.
- 30) As a safety professional, I would instruct my supervisor that s/he should be wearing personal protective equipment in special areas.

Answers to Ethics Test

The standards referenced are from the BCSP Code of Ethics.

- 1) True (Standard 1)
- 2) False (Standard 3)
- 3) False (Standard 4)
- 4) True (Standard 6)
- 5) False (Standard 6)
- 6) False (Standards 3, 7 and 2)
- 7) True (Standard 5)
- 8) False (Standard 2—Balanced care for the interests of the public too)
- 9) False (Standard 6-Avoid compromise of professional judgment by conflicts of interest)
- 10) True (Standard 8)
- 11) False (Standard 1—The standard says unacceptable risks to people, the environment or property)
- 12) False (Standard 5-Misrepresent their academic or professional qualifications)
- 13) False (Standard 6)
- 14) True (Standard 7)
- 15) False (Standard 3)
- 16) False (Standard 3)
- 17) True (Standard 1)
- 18) True (Standard 1)
- 19) False (Standard 6—Highest standards of integrity)
- 20) False (Standard 6-Highest standards of integrity)
- 21) False (Standard 6-Highest standards of integrity)
- 22) False (Standard 6-Highest standards of integrity)
- 23) True (Standard 1—Advise constituencies of unacceptable risks)
- 24) False (Standard 2—Balanced care for interests of constituencies)
- 25) False (Standard 6-Avoid compromise of professional judgment)
- 26) False (Standard 6-Highest standards of integrity)
- 27) False (Standard 6-Highest standards of integrity)
- 28) False (Standard 6-Highest standards of integrity)
- 29) False (Standard 6—Highest standards of integrity)
- 30) True (Standard 1—Advise constituencies of unacceptable risks)

studied: 1) Construction Safety, Spring 2006, Class size 20:

interesting results in the classes

The study revealed some

Spring 2006, Class size 20: Correlation coefficient of 0.470 (moderate correlation); 2) Product Liability Spring

2) Product Liability, Spring 2006, Class size 18: Correlation coefficient of 0.36 (moderate correlation);

3) Engineering and Technical Aspects of Safety, Spring 2006, Class size 14: Correlation coefficient of 0.141 (some correlation);

4) Engineering & Technical Aspects of Safety, Spring 2006, Class size 10: Correlation coefficient of 0.071 (some correlation);

5) Industrial Hygiene, Spring 2006, Class size 8: Correlation coefficient of -0.022 (little or no correlation);

6) Legal Liabilities in OSH, Spring 2006, Class size 19:

Correlation coefficient of 0.417 (moderate correlation); 7) Legal Liabilities in OSH, Fall, 2006, Class size 11: Correlation coefficient of 0.421 (moderate correlation).

Focus on Ethics Is Needed

Although the sample was small (compared to the total number of safety students in the U.S.), the results suggest the need for ethics training. Topics covered in an ethics course might include:

•ethics and safety;

• theories of ethics relating to family, group and community;

- ethics in the workplace;
- valuing diversity;
- modern-day ethical challenges;
- product liability and risk;
- •whistle-blowing and loyalty;
- •rewards versus greed;
- conflict of interest;
- •ethical applications in student mock trials;
- •international ethical safety practices;
- •research in ethics.
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The authors initially hypothesized that they would find a high positive correlation between the two variables examined. It was presumed that students who are conscientious about their grades would also be meticulous about professional ethics and pursue only the highest ethical decisions. However, as those widely publicized cases in 2001 illustrate, some intelligent individuals do not practice work ethics in their professions to the highest degree. Observing the scores on an individual basis reveals some correlation between student grades and the ethics test, yet as a group overall, the correlations fell dramatically.

An SH&E professional should strive to always put "safety first" and to prevent work-related injuries.

Management and employees must practice continuous vigilance in controlling the exposure to significant hazards inherent to the industry in which they work. The SH&E professional must constantly seek to identify the cause of each recordable injury, then implement improvements and corrective actions to prevent any recurrences. However, "successful" implementation and accomplishment of these endeavors must occur within an atmosphere of not only commendable, but exemplary professional ethics in order to yield and sustain maximum desired results.

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