

# 19GE107- PROFESSIONAL ETHICS AND HUMAN VALUES

## HUMAN VALUES

### **The Story of a Carpenter**

*An elderly carpenter was ready to retire. He told his employer-contractor of his plans to leave the house- building business and live a more leisurely life with his wife enjoying his extended family.*

*He would miss his paycheck, but he needed to retire. They could get by. The contractor was sorry to see his good worker go and asked if he could build just one more house as a personal favor.*

*The carpenter said yes, but in time it was easy to see that his heart was not in his work. He resorted to shoddy workmanship and used inferior materials. It was an unfortunate way to end his career.*

*When the carpenter finished his work and the builder came to inspect the house, the contractor handed over the house key to the carpenter. "This is your house," he said, "it is my parting gift to you."*

*What a shock! What a Shame! If only he had known he was building his own house, he would have done it all so differently. Now he had to live in the home he built none too well.*

*(Modified from LIVING WITH HONOUR by SHIV KHERA)*

*Do we find ourselves in similar situations as the carpenter?*

Moving through our work hours fast paced, driven to "get the job done", without much thought to moral values.

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*How do we regain our focus as individuals and organizations?*

This is the challenge for the employee and the employer.

Ethics are fundamental standards of conduct by which we work as a professional.

## **VALUES**

- Values are individual in nature.
- Values are comprised of personal concepts of responsibility, entitlement and respect.
- Values are shaped by personal experience, may change over the span of a lifetime and may be influenced by lessons learned.
- Values may vary according to an individual's cultural, ethnic and/or faith-based background.

*“Never change your core values.”*

In spite of all the change around you, decide upon what you will never change: your core values.

Take your time to decide what they are but once you do, do not compromise on them for any reason.

*Integrity* is one such value.

## **MORALS**

- Morals are guiding principles that every citizen should hold.
- Morals are foundational concepts defined on both an individual and societal level.
- At the most basic level, morals are the knowledge of the difference between right and wrong.

## **PERSONAL ETHICS**

- Simply put, all individuals are morally autonomous beings with the power and right to choose their values, but it does not follow that all choices and all value systems have an equal claim to be called ethical.
- Actions and beliefs inconsistent with the Six Pillars of Character - trustworthiness, respect, responsibility, fairness, caring and citizenship - are simply not ethical.

### **PERSONAL ETHICS - everyday examples**

- Software piracy
- Expense account padding
- Copying of homework or tests
- Income taxes
- “Borrowing” nuts and bolts, office supplies from employer
- Copying of Videos or CD’s
- Plagiarism
- Using the copy machine at work

## **RELIGION AND ETHICS**

- The “Golden Rule” is a basic tenet in almost all religions: Christian, Hindu, Jewish, Confucian, Buddhist, Muslim.
- “Do unto others as you would have others do unto you.”
  - “Treat others as you would like them to treat you” (Christian).
  - “Hurt not others with that which pains you” (Buddhist)
  - “What is hateful to yourself do not do to your fellow men” (Judaism)
  - “No man is a true believer unless he desires for his brother that which he desires for himself” (Islam)

## **MORALITY AND ETHICS**

- Concerns the goodness of voluntary human conduct that affects the self or other living things
- Morality (Latin *mores*) usually refers to any aspect of human action
- Ethics (Greek *ethos*) commonly refers only to professional behavior
- Ethics consist of the application of fundamental moral principles and reflect our dedication to fair treatment of each other, and of society as a whole.
- An individual's own values can result in acceptance or rejection of society's ethical standards because even thoughtfully developed ethical rules can conflict with individual values.

## **ASPECTS OF ETHICS**

There are two aspects to ethics:

- The first involves the ability to discern right from wrong, good from evil and propriety from impropriety.
- The second involves the commitment to do what is right, good and proper. Ethics entails action.

An ALGEBRA course will teach you ALGEBRA.

A HISTORY course will teach you HISTORY.

A MANAGEMENT course will teach you principles of MANAGEMENT.

But, Will an *ETHICS* course teach you to be *ETHICAL*?

Think !

## **ENGINEERING ETHICS**

“Technology can have no legitimacy unless it inflicts no harm”-Adm.H.G. Rickover, father of the US nuclear navy.

- *What does Adm. Rickover mean by this?*
  - *Should engineers avoid technology that has the potential for inflicting harm on a society or its members?*
- 
- Engineers have an ethical and social responsibility to themselves, their clients and society.
  - Practically (although there is much debate about this), engineering ethics is about balancing cost, schedule, and risk.

**ENGINEERING ETHICS** is:

- the study of moral issues and decisions confronting individuals and organizations involved in engineering and
- the study of related questions about moral ideals, character, policies and relationships of people and organizations involved in technological activity.

### **TRAINING IN PREVENTIVE ETHICS**

- Stimulating the moral imagination
- Recognizing ethical issues
- Developing analytical skills
- Eliciting a sense of responsibility
- Tolerating disagreement and ambiguity

### **IMPEDIMENTS TO RESPONSIBILITY**

- Self-interest.
- Fear.

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- Self-deception.
- Ignorance.
- Egocentric tendencies.
- Microscopic vision.
- Groupthink.

### **QUESTIONABLE ENGINEERING PRACTICES**

- Trimming – “smoothing of irregularities to make data look extremely accurate and precise”
- Cooking – “retaining only those results that fit the theory and discarding others”.
- Forging – “inventing some or all of the research data...”
- Plagiarism – misappropriating intellectual property.
- Conflicts of interest (such as accepting gifts.)
  - actual
  - potential
  - apparent

### **CLEARLY WRONG ENGINEERING PRACTICES**

- Lying
- Deliberate deception
- Withholding information
- Failing to adequately promote the dissemination of information
- Failure to seek out the truth
- Revealing confidential or proprietary information
- Allowing one’s judgment to be corrupted.

### **SENSES OF EXPRESSION OF ENGG. ETHICS**

- ⇒ Ethics is an activity and area of inquiry. It is the activity of understanding moral values, resolving moral issues and the area of study resulting from that activity.

- ⇒ When we speak of ethical problems, issues and controversies, we mean to distinguish them from non moral problems.
- ⇒ Ethics is used to refer to the particular set of beliefs, attitudes and habits that a person or group displays concerning moralities.
- ⇒ Ethics and its grammatical variants can be used as synonyms for ‘morally correct’.

## **VARIETIES or APPROACHES OF MORAL ISSUES**

*MICRO-ETHICS* emphasizes typically everyday problems that can take on significant proportions in an engineer’s life or entire engineering office.

*MACRO-ETHICS* addresses societal problems that are often shunted aside and are not addressed until they unexpectedly resurface on a regional or national scale.

## **MORAL PROBLEMS IN ENGINEERING**

(SOME EXAMPLES)

4.1. An inspector discovered faulty construction equipment and applied a violation tag, preventing its use. The supervisor, a construction manager viewed the case as a minor abrasion of the safety regulations and ordered the removal of the tag to speed up the project. When the inspector objected to this, he was threatened with disciplinary action.

4.2. An electric utility company applied for a permit to operate a nuclear power plant. The licensing agency was interested in knowing what emergency measures had been established for humans safety in case of reactor malfunctioning. The utility engineers described the alarm system and arrangements with local hospitals for treatment. They did not emphasize that this measures applied to plant personnel only and that they had no plans for the surrounding population. When enquired about their omission, they said it was not their responsibility.

4.3. A chemical plant dumped wastes in a landfill. Hazardous substances found their way into the underground water table. The plant’s engineers were aware of the situation but did not

change the method of disposal because their competitors did it the same cheap way, and no law explicitly forbade the practice.

4.4. Electronics Company ABC geared up for production of its own version of a popular new item. The product was not yet ready for sale, but even so, pictures and impressive specifications appeared in advertisements. Prospective customers were led to believe that it was available off the shelf and were drawn away from competing lines.

## **TYPES OF INQUIRIES**

### **1. NORMATIVE INQUIRY**

These are about ‘what ought to be’ and ‘what is good’. These questions identify and also justify the morally desirable norms or standards.

Some of the questions are:

- A. How far engineers are obligated to protect public safety in given situations?
- B. When should engineers start whistle blowing on dangerous practices of their employers?
- C. Whose values are primary in taking a moral decision, employee, public or govt?
- D. Why are engineers obligated to protect public safety?
- E. When is govt justified in interfering on such issues and why?

### **2. CONCEPTUAL INQUIRY:**

These questions should lead to clarifications on concepts, principles and issues in ethics. Examples are:

- A) What is ‘SAFETY’ and how is it related to ‘RISK’
- B) ‘Protect the safety, health and welfare of public’-What does this statement mean?



- C) What is a bribe?
- D) What is a 'profession' and who are 'professionals'?

### **3. FACTUAL (DESCRIPTIVE) INQUIRIES**

These are inquiries used to uncover information using scientific techniques. These inquiries get to information about business realities, history of engineering profession, procedures used in assessment of risks and engineers psychology.

#### **Why study *ENGINEERING ETHICS***

ENGINEERING ETHICS is a means to increase the ability of concerned engineers, managers, citizens and others to responsibly confront moral issues raised by technological activities.

#### **MORAL DILEMMA**

There are three types of complexities.

- ⇒ VAGUENESS: This complexity arises due to the fact that it is not clear to individuals as to which moral considerations or principles apply to their situation.
- ⇒ CONFLICTING REASONS: Even when it is perfectly clear as to which moral principle is applicable to one's situation, there could develop a situation where in two or more clearly applicable moral principles come into conflict.
- ⇒ DISAGREEMENT: Individuals and groups may disagree how to interpret, apply and balance moral reasons in particular situations.

Steps in confronting MORAL DILEMMAS:

- i) Identify the relevant moral factors and reasons.
- ii) Gather all available facts that are pertinent to the moral factors involved.

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- iii) Rank the moral considerations in the order of their importance as they apply to the situation.
- iv) Consider alternative course of action, tracing the full implications of each, as ways of solving dilemma.
- v) Talk with colleagues, seeking the suggestions and perspectives of the dilemma.
- vi) Arrive at a carefully reasoned judgment by weighing all the relevant moral factors and reasons in light of facts.

All the above steps are distinct, even though they are inter-related and can often be taken jointly

### **MORAL AUTONOMY**

- This is viewed as the skill and habit of thinking rationally about ethical issues on the basis of moral concerns independently or by self-determination.
- Autonomous individuals think for themselves and do not assume that customs are always right.
- They seek to reason and live by general principles.
- Their motivation is to do what is morally reasonable for its own sake, maintaining integrity, self-respect, and respect for others.

“One who breaks an unjust law must do so openly, lovingly, and with a willingness to accept the penalty. I submit that an individual who breaks a law that conscience tells him is unjust and willingly accepts the penalty... is in reality expressing the highest respect for the law.”

*Rev. Martin Luther King, Jr. in Letter from a Birmingham Jail, 1963.*

A person becomes morally autonomous by improving various practical skills listed below:

- i) Proficiency is recognizing moral problems and issues in engineering.
- ii) Skill in comprehending, clarifying and critically assessing arguments on opposing sides of moral issues.

- iii) The ability to form consistent and comprehensive viewpoints based upon consideration of relevant facts.
- iv) Awareness of alternate responses to issues and creative solutions for practical difficulties.
- v) Sensitivity to genuine difficulties and subtleties
- vi) Increased precision in the use of a common ethical language necessary to express and also defend one's views adequately.
- vii) Appreciation of possibilities of using rational dialogue in resolving moral conflicts and the need for tolerance of differences in perspective among orally reasonable people.
- viii) A sense of importance of integrating one's professional life and personal convictions i.e. maintaining one's moral integrity.

### **KOHLBERG'S THEORY**

#### **STAGES OF MORAL DEVELOPMENT**

- ***Pre-conventionalLevel***  
 Whatever benefits oneself or avoids punishment. This is the level of development of all young children. -Avoid punishment & Gain Reward
- ***ConventionalLevel***  
 Uncritical acceptance of one's family, group or society are accepted as final standard of morality. Most adults do not mature beyond this stage. -1.Gain Approval & Avoid Disapproval & 2. Duty & Guilt
- ***Post-conventionalLevel***  
 Motivation to do what is morally reasonable for its own sake, rather than solely from ulterior motives, with also a desire to maintain their moral integrity, self-respect and the respect of other autonomous individuals. They are 'Morally autonomous' people.  
 -1. Agreed upon rights & 2. Personal moral standards

## **GILLIGAN'S THEORY**

- ***Pre-conventional Level***

This is the same as Kohlberg's first level in that the person is preoccupied with self centered reasoning, caring for the needs and desires of self.

- ***Conventional level***

Here the thinking is opposite in that, one is preoccupied with not hurting others and a willingness to sacrifice one's own interests in order to help or nurture others (or retain friendship).

- ***Post-conventional Level***

Achieved through context-oriented reasoning, rather than by applying abstract rules ranked in a hierarchy of importance. Here the individual becomes able to strike a reasoned balance between caring about other people and pursuing one's own self-interest while exercising one's rights.

## **Differences between the TWO THEORIES**

<b><u>KOHLBERG</u></b>	<b><u>GILLIGAN</u></b>
<i>I. Ethics of rules and rights</i>	<i>Ethics of care</i>
<i>II. Studies based on well educated, white male's only, tending male bias.</i>	<i>Studies included females and colored peoples</i>
<i>III. Application of abstract rules ranked in the order of importance</i>	<i>Application of context-oriented reasoning.</i>
<i>IV. Studies were hypothesized for both the genders even though the study was conducted mostly on males</i>	<i>Study was conducted on both genders and it was found, men based their reasoning on 'justice' and women based theirs on 'care'</i>



