



MORAL DILEMMAS

Why study engineering ethics?

Engineering ethics is not only teaching moral behaviour in knowing about immoral and amoral in a set of beliefs, but also increasing the ability of engineers and other professionals to face boldly with the moral problems arising from technological advancements, changes and other related activities. This can be possible be imparted among the engineers, only through college courses, seminars, etc. which are involved individual study.

Moral Dilemmas

Dilemmas are certain kind of situations in which a difficult choice has to be made. Moral dilemmas can also be called moral problems. Moral dilemmas have two or more foldings - moral obligations, duties, rights, goods or ideals come into disagreement with each other. One moral principle can have two or more conflicting applications for a particular given situation. Moral dilemmas can be occurred in so many ways. For example, suppose one gives a promise to his friend that he will meet him on the evening of a particular day, but unfortunately on the same day his brother has met with an accident and he has to take him to hospital. The dilemma here consists of a conflict between the duty to keep promise and obligations to his brother. In this situation, to solve his moral problem, he can make a phone call to his friend and make apology for his inability to come. So, from the above it is clear that the duty to keep promise always has two different and conflicting applications.

The moral dilemmas cannot easily be addressed or resolved always. It requires an elaborate searching which sometimes causing extreme suffering and reflection of a situation. The modern engineering practice compels that all the engineers have to face boldly about the moral dilemmas in their careers.

To find a simple and clear solution to the moral problems in the field of engineering, there must be some provision to allocate time to for learning ethics in engineering courses. But at the same time, it should not be ignored in the following three categories of complex and gloomy moral situations:

The Problem of Vagueness

The problem of vagueness is related to individuals. The individuals may not know how to moral considerations or principles in resolving a moral problem at a particular situation. For example, an engineer in a higher position of a company, is responsible and having the sole right to make purchases on his own and behalf of the company. There may be many suppliers for supplying materials. In this situation, a sales representative from one of the suppliers approaches him with a moderating gift. In this case, the engineer may have some doubts like (i) Whether this is an acceptance of a bribe? (ii) Does it create a conflict of interest? The solution is only with that engineer. He can also discuss with his colleagues about the problem. The colleague may find the solution on the basis of previous experiences, - it may not be a kind of bribe, but at the same time it should not be encouraged in future because there is the possibility of supplying



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

substandard materials. It is difficult to arrive at the conclusion whether the gift is an innocent amenity or an unacceptable bribe.

The problems of Conflicting reasons

These occur more frequently. In a difficult situation of a moral problem, an individual may clearly know about what moral principle has to be applied to resolve the problem. When it arises, there are two or more principles with clear solutions lead into conflict with one another or one particular moral principle. Simultaneously there can be of two different directions. In this case, that individual has to choose a better one among them on the basis of the importance and the applicability. For example, an engineer has given a promise to his employer and another one to a colleague. If it is difficult to fulfill both the promises, he can drop off one promise which is of least importance. If he explains the situations to his colleagues, it can be understood.

The problems of disagreement

The individuals and groups in engineering companies may disagree with resolving moral problems in difficult situations. The disagreement will be normally about how to interpret, apply and balance the moral problems. In this situation they have to use the following steps to resolve the problems.

Steps / Procedures in facing / confronting moral dilemmas

All the above said three problems pave the way for the need of several steps in resolving the moral dilemmas. All the steps are interrelated and they can also be used jointly.

1) Identifying the relevant moral factors and reasons: i.e. Finding solutions for (i) the conflicting responsibilities (ii) the competing rights and (iii) the clashing ideals involved.

2) Collecting and gathering all the available facts which are relevant to the moral factors while resolving.

3) Ranking the moral considerations or principles on the basis of importance as applicable to the situation. But sometimes it is not possible when the objective is to find a way to meet equally urgent responsibilities and to promote equally important ideals.

4) Considering alternative courses of action for resolving the problems and tracing the full implications of each. i.e. conducting factual inquiries.

5) Having talked with the colleagues, friend about the problem getting their suggestions and alternative ideas on resolving that dilemma and

6) Arriving at a careful and reasonable judgment or solution by taking into consideration of all important moral factors and reasons on the basis of the facts or truths. But it seems to be difficult.

To conclude, only the study of Engineering Ethics can help in developing the skills and attitudes to follow the above steps in resolving a moral problem among the engineers and other professionals by means of case studies, class room discussions and debating.