

Importance of Value based Education for Technical students and Professionals

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Abstract Values are the foundation stone for development, sustainability and progress of any individual and of society. Technical professionals serve the society through their different technological activities. But it has been observed that technical students, being mostly confronted by environment governed by machines, computers and logical thinking, fail to understand the importance of values in their attitude, behavior and actions. Because of this they also fail to take justified decisions in ethically critical situations resulting in failure to discharge their duty properly towards society. This paper highlights the importance of intrinsic values for technical students and emphasize on incorporating values in the curriculum of our technical education. It also advocates regulative model for teaching practices in technical education.

Key words: Society, Values, Judgments, ethical critical situation, technical activity.

I. INTRODUCTION

Human values play important role in the development, sustainability and the progress of any individual personally and also professionally. A professional with human and social values contributes towards building a better society. Social values become even more important to technical students because the complete technical environment that is working with machines and computers diverts the attention of technical students from soft skills, social ethics and human values as a result problems such as self centeredness, acute competitiveness, corruption attraction towards consumerism has become common in society and there is a need to find a solution to overcome such problems. Inculcation of social, moral and professional values in curriculum can help to overcome these issues.

Role of values for technical students:

Technical students, when enter their professional field, face complex problems that have involvement of clients and stake holders with different values, knowledge and contentious opinions.

Professionals come across situations where they are not in a situation to choose best option from amongst different available solutions to a problem. In such circumstance inherent values, imparted during education, guide professionals to take decisions which can be used at appropriate place with justified reason and in interest of the technology as well as whole society. Professionals are expected to follow relativistic approach while taking decisions.

Values provide a base to professionals for making decisions, choices and taking action in wider context.

Decisions in such situations express individual values connected to his own integrity and identity.

In order to become effective professionals of the society, technical students must develop abilities to manage ethical issues surrounding the fractions and problems in their profession.

Hence there is need to impart social and human values and ethics to technical students by inculcating value related topics in their curriculum so as to enable them to face challenges in professional life.

Values have three components:

1.Cognitive:Cognitive values are those that have been accepted by an individual during interactions and different activities within society. The individual observes the certain action and its consequences and on this basis sets frame of values for himself. These values become his underlying beliefs.

2.Affective: Affective domain is related to the feelings, emotions, degree of acceptance and rejection towards the object of a value of an individual.

3.Behavioral: Behavioral aspect of value is related to how a technical professional acts or behaves in a particular situation. His act and behavior originates out of values accepted and assimilated in his character.

Values are categorized as :

Intrinsic values : Those goals and satisfactions which individual and society internalize during the process of growth of life and which are inherent in behavioral attitude and are end-in-themselves such as equality, freedom, happiness, inner harmony, self respect, social recognition, true friendship and wisdom.

Extrinsic values: Those values which are taken by individual and society as a means to achieve or to improve the intrinsic values such as health, property, security, status, profession, honesty, intellectual and logical responsibility, imaginative and open mindedness along with self control

II. VALUES IN TECHNICAL EDUCATION

Technical teachers in general give importance to values that act as means to achieve intrinsic values. Such values are known as instrumental values. Rotech(1973) has categorized values into two types :

1. Moral values: These values guide individual to follow that ought to be done and to keep himself safe from guilt of wrong doing and pangs of conscience. They refer to mode of behavior.
2. Values related to excelling and achieving the object of value and focus on behaving in logical and intellectual manner.

What are moral values?

Moral values are grounded beliefs that guide the preferences and criteria for selection of behavioral pattern of an individual in a specific critical situation. Values that bring contentment and satisfaction of doing welfare to others and giving them good and happy life. Moral values have relative importance with reference to situation.

Moral values in technical education:

Objective of technical education is to produce professionals capable for designing and implementing technology for betterment of society. Teachers and students in technical institutions have to play important role to achieve the objective of technical education.

Teacher needs to understand moral values related to his/her profession. It is the duty of a teacher to create environment where students can realize that while implementing technology they (students/professionals) should consider three important questions

1. What is being implemented?
2. Where it is implemented?
3. Why it is being implemented.

It is important for technical students to refine their technical skills and to implement it for the betterment of society by making their judgments based on values.

Present scenario related to value education:

Realizing the need, various steps have been taken to impart values in technical education. Department of Humanities offer different courses to train students in soft skills as well as to imbibe in technical students qualities of love, kindness, professional ethics, courtesy and other social and moral values to improve their overall character.

AICTE has made it mandatory to organize orientation programmes for first year students and to make them realize importance of social values. Rural outreach program

has also been introduced with an intention to apply technical skills for rural areas and make students realize their responsibility towards less developed section of society.

Professional morality:

Moral values in profession are characterized by actions that enable the professional to analyze the positive and negative consequences of his technological activity that directly or indirectly effects the society. Technical professional needs to maintain a balance between succeeding in implementation of technical knowledge and the moral means to achieve his goal.

No act of a technical professional should be guided by the idea of achieving success by just functional criteria.

III. RESPONSIBILITY OF A TECHNICAL TEACHER

Teachers have a responsibility to raise awareness and increase understanding of social, ethical, -environmental, economic values and issues involved in design in order that pupils can attempt to make informed, considered and sensitive value judgments.(McLaren 1997,P.259).

Teaching should be effective and responsible. Oser 1994 has given four models useful for teaching practice in technical education.

The interpretive model: It assumes that teaching with good intention will impart values to students.

Additive model: It is believed that technical teacher should focus on methodology that bring success but ethical issues should be considered and taken care of.

Complementary model: states that responsibility of a professional and his being effective depends on each other. Effectiveness of an individual is judged and measured on the basis of his intentions, need of the act to be implemented and possible consequences.

The regulative model restrict effectiveness of an act of a professional by making him realize the responsibility. Teacher should make student/ professional capable of understanding how to resolve any issue involving effectiveness conflicts and to anticipate outcomes by balancing important moral issues.

Regulative model is more acceptable for technical teachers. As teaching is a moral act it is important that in technical education apart from imparting knowledge based on proven facts, moral subject matters related to rules, justice etc. should also be imparted to students that will help them to inculcate ethics and morality in personal and professional life. By inculcating moral subject matter teachers will also understand that morality contributes to build a better society and good interpersonal life.

Technical teachers through their education should teach morality and make students capable to solve ethically problematic situations. Appropriate environment to inculcate values in attitude, behavior and act should be provided to students.

Role of technical students with regard to values:

Technical students should refine their abilities to take value judgments in designing, implementing and evaluating technology and in their social and professional activities.

IV. CONCLUSION

It is concluded that along with scientific and logical education, technical students should also be imparted education related to ethics, values, and responsibilities towards their profession and society. They should be given good and practical sense of values through curriculum so as to enable them to contribute towards fruitful development of society. Technical teachers need to understand professional morality to help technical students develop as a professional capable of taking value judgments in all spheres. Technical students should refine their abilities to take value judgments in designing, implementing and evaluating technology in their social and professional activities. There is a necessity to realize that in order to build a better society it is important to understand the relationship between effectiveness and responsibility in making social and professional judgments. Hence imparting education to technical students should have in background the basis for social, ecological and cultural responsibility. Value based education along with technical aspects should necessarily be imparted to technical students. Technical students and teachers have their own role towards building a society based on value judgments.

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