

## Science And Technology For Value Education

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### Science:

Science meaning "knowledge". Definition of science is "knowledge attained through study or practice," or "knowledge covering general truths of the operation of general laws as obtained and tested through scientific method and concerned with the physical world." Science refers to a system of acquiring knowledge. This system uses observation and experimentation to describe and explain natural phenomena.

The term science also refers to the organized body of knowledge people have gained using that system. Less formally, the word science often describes any systematic field of study or the knowledge gained from it. Perhaps the most general description is that the purpose of science is to produce useful models of reality.

### Technology:

Technology means ability to create new ideas and inventions and high-tech companies. The definition of technology is science or knowledge put into practical use to solve problems or invent useful tools. An example of technology is the Internet which has made up-to-date information available to anyone with access in a matter of moments and provides real time information about events around the world. An example of technology was during the Stone Age when the first knife or shovel was made from a piece of stone or obsidian.

An example of technology is the products that were invented during the space program, which have allowed engineers and other scientists to use variations of these products and materials in manufacturing.

### Science And Technology For Value Education

The famous scientist Albert Einstein says, "Try not to become a man of success. Rather become a man of value". Nathan Deal "Scientific advancement should aim to affirm and to improve human life". Max plank "Science enhances the moral value of life" because it furthers a love of truth and reverence - love of truth displaying itself in the constant endeavour to arrive at a more exact knowledge of the world of mind and matter around us and reverence, because every advance in knowledge brings us face to face with the mystery of our own being. Solar appliances remind us to use the nature properly. The TFL (Trouble free lighting) bulbs teach us to use the electricity economically.

A solar light reflector (stickers) on the roadsides calls us to go in the right path. The dividers in the middle of the road guide us to keep left always. Statistics given in the internet induce us to help the oppressed people. The historical programmes in the television encourage us to be patriotic. Using the advanced transports, we go to the foreign countries for treatment and accept the foreigners as our brothers. If they come to our countries for treatment, education, etc., we also treat them with kindness. In the world of 21st century, science and technology has reached its peak. In all areas of our lives we use science and technology. So, in educating the values also it is used widely.

In higher education, the universities and colleges follow scientific approach and use all the technologies of science to nature the moral values in students. Parents and teachers encourage the

children to play a musical instrument which ensures the proper usage of time and helps the mind to have concentration and peace. Through television moral values are developed broadly. Religious and political leaders, psychiatrists, social workers, writers etc., give speech in the channels and do their best to inculcate values in the minds of human beings. The plays, game, shows, skits, cartoons, songs, religious programmes etc., will have moral values certainly.

The CDs and DVDs are used widely to give value education for children, youths as well as the adults. To evaluate the values of children, projectors are used in schools for example shows the slides having the list of values. Books play a major role in developing the moral values in man. Especially religious books have ensured turning points to so many people. The sound system especially the mike is used in school assemblies, church prayers, etc., to impart value education. Even the currencies of India, which have truth always triumphs reminds us to be truthful at all times. Through radio, we receive many messages stressing the importance of values. In cell phones, we can store the quotes of great men and read. Computers are used (digitally) to give value education in educational institutions. Above all, the internet is the major source for getting value education in various ways. We can access stories, quotes, songs, poems, plays, letters, proverbs, pictures, sermons, jokes, conversations, etc., from the internet regarding value education. Animation is a wonderful gift to mankind to give values like following the traffic rules. Value education may be given even to the prisoners through video conference. CCTV camera warns people to maintain values. Thus, integrity is developed automatically. Values are nurtured by writing quotations in the places after seen by people. This is a psychological approach. Practice makes man perfect. Many devices are used in companies to make the employees keep punctuality.

The digital audio clocks from church towers proclaim verse of the bible once in an hour. The listeners get boldness, perseverance, firmness, motivation etc., through that technology. Traffic digital signals help the people to follow the traffic rules. The digital token caller in the bank makes the people to be patient and follow proper order. We import electronic appliance, medicines, food items etc., from other countries using technologies and consider the foreign countries as our neighbours. Listening to the programmes on the differently abled people make us to be benevolent to them. In the same way, the value of charity develops when we watch the programmes given by orphanages. When we watch news on Tsunami, flood, cyclone etc., we are intended to help the affected people. Transports such as mono-trains, airplane etc., teach us the importance of time. Reservation for travel also encourages us to be prompt in booking. Globalization makes us think of one world and calls us for unity. The web camera makes us feel closer with people in abroad and think universally. Education to the adolescents about sex may be given through sources like cinema, film magazines, video, parlours, internet, commercial and government advertisements, etc..As the impact of traditional value system has been waning there arises the uttermost need for value based education through modern technologies. Today, modern technologies are accessible to a wide section of the population. These technologies should be used for the benefit of the people. Science and technology may lead a person in the wrong way. We should be very cautious. Uncensored television programmes, easily available videos with unhealthy content, adultery films, etc., are harmful for young minds and should be avoided. Many children are getting addicted to video games. They should be guided to participate actively in some other works. Parents should monitor the websites watched by the children. We see the general erosion of values in our society. Sometimes, even the adults themselves case to be role models for the children. It is the duty of teachers and parents to help the children to earn the importance of values of abstinence and sublimation. As the children lack the support and warmth of elders, they seek the company of modern technologies. Newsletters, magazines, pamphlets, periodicals and newspapers can be the other media of spreading information about the social and moral values. People spend most of the leisure time in

watching television. So, the value education can be communicated easily through the medium. Thanks to the invention of satellite. We should use the satellite communication network, internet and other technological advancement in a positive way. Using these technologies, we can spread the social and moral value accepted by the Indian society. For illiterate people, puppetry is a useful weapon to teach them moral values. Media play a key role to creating awareness about the importance of sexual health education. We are living in a technological age and the cultural and educational value of science is recognized to a great extent. Our aim is not only to stuff the minds of pupils with mere facts of science but also to develop in them the application, ability, skills of experimentation, construction, etc.. The laboratory should inculcate in the children proper scientific attitudes, interest etc.. While using the laboratories the students learn to cope up with their classmates. While using the glasses they learn to be patient. It provides opportunity for training in scientific method. Pupils learn to observe, collect and analyze handle equipment etc.. While performing practical work, they learn to cooperate, become resourceful, take initiative, become self reliant, etc.,.

#### **Science and Technology in schools:**

We have to enable our students how to value, to value, to choose among alternatives and to translate knowledge and skills into practice. This is what is referred to when we speak of values education, neglected component in today's education. Indeed, values education which is the heart of all education should be an integral part of a holistic education that develops all the human faculties of intellect, emotions and will. That it is not simple matter to introduce it in the school curriculum is no reason why we should not try. Since values education required different approaches and strategies, its methodology varies from that of content subjects or skills training. Hence, values educators have to be trained or retrained, administrators re-oriented, curriculum materials developed, research carried out. Universally recognized and shared values have to be situated in the socio-cultural milieu of the learner and adapted to the person's needs and experiences.

#### **School education is shown to be valued when:**

1. Conditions and school culture are conducive to science learning, and include
  - a. Time for an inquiry science program provided for every student on a daily basis;
  - b. Settings for science instruction both inside and outside of the classroom those are safe and adequate.
  - c. Language and mathematical skills that are learned and applied in science;
  - d. Integration of other subject areas (history, art, music, language arts, and mathematics) with science and science with them;
  - e. A science contact person or specialist in every pre-K through elementary school in order to serve as resource and mentor;
  - f. Consistent administrative and community support, including financial support, for the above conditions.
2. Instruction emphasizes inquiry science skills such as
  - a. Tactile experiences in which all students discover scientific concepts and develop basic process skills;
  - b. Identification of assumptions;
  - c. Logical explanations based on natural causes;
  - d. Critical alternative ideas;
  - e. Construction of new mental frameworks.
3. All students are encouraged to
  - a. Take responsibility for their own learning;
  - b. Play a role in decision making;
  - c. Be aware of personal knowledge;

- d. Practice reflective thinking;
  - e. Collaborate and communicate within groups and to the class.
4. Teachers are engaged in research-based learning and instructional techniques where
- a. Strong content and strategies for teaching are addressed in both pre-service and in-service training;
  - b. Professional development is expected, supported, and continual;
  - c. Student activities are developmentally appropriate;
  - d. Student preconceptions are consciously addressed.
5. Assessments are
- a. Multifaceted;
  - b. Consistent with the goals of the science program;
  - c. Aligned with standards;
  - d. Research-based;
  - e. Providing feedback which is acted upon by teachers.

### **Comparison of science and technology for value education Technology:**

When science is applied to create advantage, it is called technology. Armies and businesses have always been interested in such advantage, to the extent that much scientific work is funded this way. It has both advantages and disadvantages. What is science It is the human brain that developed awareness to knowledge. In the course of human evolution, the brain developed memory. While some of our senses sharpened, others dulled. Science has been exercised for hundreds of thousands of years, but has recently been ascending at an exponential rate.

### **The scientific method**

Humans have various ways of thinking, from ancient emotions to new-brain reasoning, and they all interact. Scientific thinking attempts to be objective.

### **How science works**

An insight into the practical workings of science. Not a very nice story. Scientists are in a race, competing with other scientists to be first, and also competing for limited funds. Many of these practices do not benefit science.

### **Hidden types of science**

Although not intuitively evident, all knowledge can be divided into four mutually-exclusive (non-overlapping) types depending on whether we are aware that we either know or don't know.

### **Strengths & weaknesses of scientists**

Scientists are often not aware of their limitations and those imposed by the systems they have created themselves, or the confines placed upon them by society. Strengths & weaknesses of the public Ironically, the public has strengths where scientists have weaknesses, and vice versa, suggesting that synergy between the two is bound to help both.

### **How to communicate science**

Scientists by nature of their specialization have isolated themselves from the public and society at large. Communication is necessary to allow the public to play their part and to make science benefit society. How to do it, is a form of art.

### **Human nature**

In the end, all our problems can be traced back to humans, for without this species there would be no problems. So it would be helpful to understand human nature, however cynical it may sound.

### **Scientific corruption**

The scientific endeavour should be strictly honest, but often scientists are not. Recent revelations known as climate gate have shown the nasty side of science, as always power, funding, beliefs and reputation are involved.