# Information Technology, Education and Individual Development – A Modern Sociological Perspective

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Abstract

Society is the realm of reciprocal interaction of nodes and ties. Nodes are the individual actors engaged in interaction process but the bond of relationships that exists between the actors or participants can be termed as the ties. The strength of the ties and the intensity of interactions are the determinants of social structure and functions of modern society. Recent sociologists and social psychologists have examined the degree of interrelationship between the individual and society with in the background of different perspectives and ideologies. Education is an agent for inculcating social rights, knowledge and other types of artifacts, both consciously and unconsciously. Different educationalists have examined the current dynamics of educational practices and modalities within the framework of information and communication technology (ICT). Emergence of ICT in educational practices have alerted and re-structured the traditional bondages of teaching-learning process of teacher centeredness to technologically mediated system in to modern learner centered education as a result of the interplay of information communication technology. New interpersonal ties are formed as a result of the effect of information technology in the modern educational institutions which results in the transformation of traditional ties, formalities and procedures. This study is focused to assess the role of technology in modern education system and the subsequent development of social self or social capital among the student communities. This cross sectional study helps to assess the role of technology in catalyzing information for individual and social development. The study clearly reveals that, the modern technological education has been transforming the family roles of the students, the gravity of their social rights and responsibilities and resulted in the formation of new interpersonal proximal and distant ties, or the formation technocratic consciousness to solve all harsh realities of their life. Modern means of education is acting a catalyst for the formation of new technologically mediated social and individual responsibilities and relationships.

Index Terms Technological socialization, Technocratic consciousness, Knowledge society, Virtual world

#### I. INTRODUCTION

Information and communication technology has been conquering almost all aspects of social life. It is most visible in the field of education and teaching learning process today. The widespread deployment and use of Information and communication technologies have paved the way for change in many fields of life of our societies especially in the field of education. The Internet, mobile computing, social networks and many other advanced form of information and communication technology have become essential to promote and boost education, technology and industry. Enormous growth of technological knowledge has caused a high complexity in content and execution of teaching learning process in our society. Information and communication technology have alters the traditional teaching learning process and practices in our class room. The main transformation occurred in is realm is the teacher centered education system has been liquidated in to more learner centered educational practices. Easy accessibility and connectivity of scientific knowledge across the globe is the result the advent of information and communication technology in the modern world. This knowledge is irrespective of time and space which created new outlook and learning style among teachers and students. Knowledge dissemination is an important process in educational process. Scientists generally agree that there are two basic categories of knowledge, explicit and tacit or implicit knowledge. Explicit knowledge can be explained as knowledge that exists in the available and conscious form and it can be articulated or expressed in words and other symbolic representations or gestures. On the other hand tacit knowledge can be explained as knowledge that is not articulated. It may be a hidden from of reality or implicit knowledge transmitting from one generation to another through words and practices In this, explicit and tacit knowledge should be seen as a spectrum rather than as definitive points, because in practice all knowledge is a mixture of tacit and explicit elements. From the aspect of technology education, explicit knowledge is knowledge contained in documents and artefacts which an individual can verbalize or express through abstract symbolism or virtual images. This knowledge has also relationships with socio cultural context of the society. In nutshell information and communication technology has be reformulating the content and structure of both implicit and explicit form of modern epistemological traditions. In process of technological mediated dissemination of knowledge both explicit and implicit knowledge can be articulated and disseminated through technologically mediated artifacts and contents. In this aspects technology can effect in the process of formation of virtual based knowledge among human beings by coveting the structure of psychology of individualization of knowledge or personalization of knowledge. It is modern society technology especially information and communication technology has a great effect in the formation of knowledge by reconstructing the context and execution of learning process by crating technocratic consciousness. This form of psyche or consciousness is created, maintained and controlled by technocratic rationality of or technologically mediated scientific rationality. This knowledge is important and clearly visible in education and learning process, because many standards, rules, procedures, experience indicators, customary practice are inherent in such process. In modern virtual world information is embedded in individual's professional performance and other intellectual activities. However, in technology of education, this knowledge is often found in many standards, rules and empirical coefficients that are not learn "by memorizing" but are used "as needed". Such knowledge is sometimes a product of experiential knowledge, sometimes lacked explanations and are often part of traditions and conventions that are local or regional and are not globally applicable. Information and communication technology has been influencing connectivity, productivity and accessibility of information in modern socio cultural context. In this context, this study is focused to assess the role of technology in modern education system and the subsequent development of social self or social capital among the student Communities. This cross sectional study helps to assess the role of technology in catalyzing information for individual and social development The study clearly reveals that, the modern technological education has been transforming the family roles of the students, the gravity of their social rights and responsibilities and resulted the formation of new

interpersonal proximal and distant ties, or the formation technocratic consciousness to solve all harsh realities of their life. Modern means of education is acting a catalyst for the formation of new technologically mediated social and individual responsibilities and relationships.

## Information Technology and Educational Development

In education and research field the use of internet technology is fast increasing. The internet can be used as a supplement to traditional instructional methods and transforms the traditional class rooms into smart rooms. Today, universities and colleges are designing a number of courses and popularizing their course materials with the help of internet technology. According to Checkering and Gamson (1991), the internet technology results in good practices in undergraduate education, encourages student-faculty contact and increase cooperation among students. Rapid improvement in information technology helps the availability of vast and free contents of data for academic and non-academic communities. Internet has caused information revolutions in society, allowing people all over the world to communicate and express their ideas and feelings. It also changes the way society treat the people and balance of power and is an information resource that helps to equate information as well as power dynamics of modern society by providing adequate information resource (BBC Home Page 2009). The content of the information and communication technology is oriented towards the practical side of the outside world, which has a significant educational impact and orientation. In modern learning process information and communication technology support and develop creative thinking. In philosophically information technology provides technocratic consciousness and outlook among students and learners. As an important part of human culture, technology has always been closely connected with the creative people's work activities. It is a main initiator of any technological innovations and changes that ever more intensively enter the professional and private lives of adults and children as well, sociologically information and communication technology has a pivotal role in the socialization of individual in modern life. In contemporary society a child is born as technically orientated child. In different stages of his development technology has a Great role in molding personality and attitude of children towards life. The development of thinking in preschool age is significantly affected by handling operations with different types of toys. First, there are different simple puzzles. In the primary phases of socialistaion a baby starts looking for more complex toys. He/she finds technical toys based on composing or decomposing activities, e. g. game of building blocks in which a child designs real objects – models corresponding to reality. As a part of technological socialization the child is becoming a part and parcel of information and communication technology. Development of Technical spatial imagination of child is very much affected by information and communication technology which creates or mediates technical creative thinking for Understanding of the applications of scientific knowledge in the operation of Technical equipment like mobile phones and computer and other technical gadgets.

Social Evolution is significantly influenced by technological progress, which creates technically trained and educated individuals. Applying technical knowledge in practice is a prerequisite for a successful society. It is necessary to educate creative people and technology is a medium that makes it possible. On the basis of the nature, degree and distance of communication, present technologically mediated relationships can be classified into **Personal or Professional ties**. The personal ties are intimate close kin ties based on the sympathy affection and love. These personal ties can be divided in to **Personal Proximate ties** and **Personal Distant Ties**. Personal proximate ties are with the relatives and family members living away from the home but near to the scientific communities. The personal distant ties are the family members and relatives living far away from the home or mother land.

Technical education is based on the recognition that technology paves the way for the present as well as the future of human existence. Daily life brings a lot of new information, problems, practical activities and tasks for pupils at school to communicate in an integrated form, for example as model situations. Teaching experience confirms that the practical creative activity is important for healthy and natural development of children, allowing them to be authentic and objective in learning about the outside world and giving them a good feeling, the necessary self-confidence, self-realization, new attitudes and values in relation to people, work, technology and the environment. Technical education at primary schools is the first opportunity of professional choice for children. It is a chance to become familiar with the most common tools, the basic procedures of working with different materials, with common problems of practical life and possible solutions. Technology create opportunity for children to decide which activities are most interesting, so that they can focus on them in their further study and professional work and individual development.

The modern form of communication devices like mobile phones and internet has reconstructed the traditional forms of communication and relationships into most modern and sophisticated dimensions. Internet and related technology has created more rational types of interpersonal linkages than the face-toface intimate one. In that way the Technocratisation of knowledge catalyzed by subsequent relationships can be visualized as a profit-making device controlled by bureaucrats and capitalists. The mobile and internet has becomes one of the major sources of profit-making drive for modern entrepreneurs. This modern electronic gadget has strong effect on the structure and functions of the society. It also determines the basic of human values and attitudes. In the modern society, the interpersonal relationships are mainly mediated by utilitarian motives. Recently internet has penetrated into people's mind and home, and has become a pivotal factor for human communication. The internet has become the way people prefer to meet or seek their soul mates, confidants, and friends and for romantic interests. People are using the internet and spending hours for online chatting and instant messaging. In nutshell information and communication technology has been restricting the emotional and intellectual and aesthetic aspects of modern individual's attitudes and values.

### **Conclusions**

Information and communication have been revolutionizing the current system of education and knowledge. The major internet technology like web provides more accuracy and liability for tapping of information, which helps all educational organization to improve their technological and educational competence and quality assurance. They use websites to certes new virtual realities in education. In Kerala internet technology reconstructed the science and scientific practices. In distance learning programmes internet has facilitated different websites for teaching learning process.

In education it has helped the formation of new interpersonal contacts between the family members who are staying far away from their home lands. Communication within and between the members of the educational institutions has been seriously altered by the effect of internet in Kerala. It has developed new forms of interpersonal ties fundamentally conditioned by the information and communication technology. These websites are also providing new information and assistance to the learners. The video conference and monitor chatting is generally a great help to the students and researchers.

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