World Journal of Engineering Research and Technology



WJERT

www.wjert.org

SJIF Impact Factor: 7.029



THE GLOBAL TECHNOLOGY EDUCATION SYSTEMS ANALYSIS

Prof. Dr. Iwasan D. Kejawa*, Ed.D

Department of Computer Science, School of Engineering + Technology, Miami Dade College, Miami, Florida. 33167-3418 U.S.A.

Article Received on 26/10/2024

Article Revised on 16/11/2024

Article Accepted on 06/12/2024



*Corresponding Author Prof. Dr. Iwasan D. Kejawa, Ed.D Department of Computer Science, School of Engineering + Technology, Miami Dade College, Miami, Florida. 33167-3418 U.S.A.

ABSTRACT

In our world today technology has become so important to the wellbeing of individuals. The question is, is the rhetoric of using technology to the fullness undertaking by the populace? Research has shown that certain people in our society are still not utilizing the technology education at their fingertips to achieve their ultimate goals. This paper portrays the usages of technology as related to the advantages derived from computers and artificial intelligent and its disadvantages. Today, Computers are being used to solve both simple and sophisticated tasks encountered by humans. Artificial intelligence has sufficed to eliminate the rigorous tasks performed by individuals in

the society. We must be aware that technological education justifies the way we must use technology to its fullness. The education of all incumbents will have to take place to realize our potential of future endeavors. Since technology will continue to advance, individuals must possess the knowledge of computers and their uses in our society. Computers have led to the development of intelligent systems. In the society today, we have the technology that performs the physical and mental functions of living beings. The advantages of using technology outweigh the doubts of using technology. We have technology of the past, present and the foreseeable future in our hands, therefore it rests on all incumbents to explore all avenues of their uses. The Future technological development depends on both the present and the past, as the present is a derivative of the past. Technology education is how we can explore the uses of computer technologies to better our living in the world of today.

INTRODUCTION

Research has shown the modalities of technology education are the qualitative and the quantitative projections of the results. Since there are various entities of development involved in the evolvement of results, therefore it must be stated clearly at the early stage what is expected of technology education. It has been made known that technological education rests solely on the common awareness of its solitude. It is very important to have innovative goals as to the disposal of the results. Developing a product is an important part of technology education and preparedness of surviving in the society.

Education technology is based on the philosophical ideologies of sociological, economical, psychological and political stability in the society.

The globalization of ethical prowess is an important aspect of technology education in the society. It is a fact that technology education is an important issue that is surrounded by the ideologies of individualism.

The philosophical dwellings of society's well-being depend on technology education. The education institutional involvement is an integral part of commonalities in the development of technology (Geiger-Dumond, & Boyle, 1995). It is very important that justification for philosophical ideologies of individuals is acknowledged by innovative process. In society where there are enormous, sophisticated products and situations, it is very important to simplify the ideologies for the innovative process of technology.

Education planning is based on what constitutes knowledge in the modern society. There is a correlation between what is knowledge of the past and the present. In today's information age products and situations are based on knowledge, values and pragmatic approach. The educational approach is what constitutes knowledge management tools. Management of situations and products is of great importance as well as information management in the globalized arena. The past and present terms are reciprocity of the global markets and communities.

Advantages of Technology Education

Using technology is a way one can attain or improve the ability to survive in society of ours. Without educational training of the mind, it may be impossible to realize the importance of adaptability of living in the environment. Without technological education, it may also be difficult to embellish the use of both the mental and physical attributes possessed by individual beings.

What really is education? Education is the training of the mind to perform desired functions or to perpetuate the modality of obtaining an end or result. Every daily activity of individuals in the society is a form of education derived from technology because one learns from one's actions one way or the others.

Who really are the learners is a controversial prerogative? Technology education of all learners should be designed and formulated according to society perception.

Even though we have been found to involve themselves with learning per say for different perspectives, this justification lies on the rudiments of what is expected of individual in a society. These perspectives may be due to job advancement, pleasure and the love of learning (Knowles, 1980). It is also true that learning does not solely rest on rewards but merely necessities of life. The impropriety sanctions imposed by the society on technological education are to be viewed by educational establishments as the main reasons affecting lack of interest in education. It is perceived by the society at large that once one has attained success or obtained all the necessary rudiments of living, then it is less important to further educate the mind. The sanctions or belief that technology education is only for the incapable or non-successful individual is an incarnation or insults to education.

Society should view Technology education as improving knowledge. We should realize that knowledge comes from learning and learning comes from trying (Kejawa, 2013). Even though one has reached the highest peak of one's life or career does not mean that one does not have to learn or educate the mind. Since education is perceived by the philosophers such as Plato, Socrates and Darwin to be the usage of the mind to obtain reality or to solve problems, all institutions must be equipped with all the technologies education at all levels.

Motivational enlightenment may be the sole propriety essentials of technology education. It has been heard that not only one individual's needs are to be met but that of the society as whole. The accountability of oneself rest on the society, so is the sustainability. Education Technology is a substantial globalization of security wellbeing.

Individuals who are motivated to seek out a learning experience do so primarily because they have a use for the knowledge and skill being sought. Learning is a means to an end and not an

end itself (Knowles, 1980). As the mission of an individual has become more complex and more significant, its role gradually changed. For many years it was assumed that principles and techniques used in educating would help ones learn (Wlodkowski, 1999). The teachers of classroom are actually solely considered as formal teachers and it was taken for granted that any reasonably well-educated person could assumed the role of educator and know how to do a good job.

Technology education plays an important role in the development of the society. As the society changes so are the people within. The lives of the inhabitants undergo ethical changes as learner progresses through educational activities. The education acquired during childhood is not enough to "sail" through entire life, more knowledge is required since society is not prone to changes, for the benefits of individual within it. Technology education is necessary to survive the efficacies of wellbeing of the society. Through educating the mind, there can be a pathway for political and economic stability in the society. The objectivity of institutions and communities alike depends on the social norms of educational facilities. Technology education as portrayed by society can be the engagements in all sorts of forms or activities. It can take place at anytime and anywhere within our society. It is certain that response to change is dominantly recognized. Both the society and individual educators alike must be aware of the spontaneous adaptability and the objectivity of the characteristics of living. Philosophically, as it is often said "The most dominants are the most response to change" (Darwin).

The perseverance of institutions and their objects solely rests on the society. Their tasks must be obliterated in some way or form. The incumbents in technological education must recognize the security and motivational needs of the society. There is a controversial view as to who are really the educators in our society. Since there is a change in adaptability and objectivity, Educators could really be anyone with capable intensity to change. As it has been established, the learners have control over what they want to learn therefore it is a lifelong learning experience.

The bond between learners and educators is a sophistication of who really is learning in the society. The experience of everyone relied on the substances of the needs of the society. Orientation approach to the needs and security of individual being of the society depends on educational approaches.

Technology education as portrayed by society can be in all sorts of forms. It can take place at anytime and anywhere within our society. It is certain learner response to change is dominantly recognized. Both the society and individual educators alike are the predators of lifelong learning. The preference of both individuals depends on the substance of society connotations. The society connotations are the entities that project benefits for individuals within an educational environment.

The educational facilities are the sole proprietary of the society. It is to the advantage of individual in the society to have all the life endeavors. Technology education can serve a purpose for all learners and educators alike. The absolute predicament of being depends on the social, economic and political aspects of the community and society. The physiological and psychological aspects of reaching maturity rest on the individual itself.

Nevertheless, the institutions of higher learning constitute what is to be perceived as a conglomerate of values in the society. Individuals must engage in all sorts of activities within the establishments of educational facilities. The established scenarios are those with the functionality of the purpose of achieving the ultimate goals of the community as well as the society. It is to the justification of the institutional communities to see that all individual learner adhere to the socio-economic problems of the society.

Knowledge of innovative tools in teaching would enable faculty to be better prepared for courses outside their specialization and would ease the burden of teaching overload when educating the learners. The encouragement of faculty to use technology to teach their courses allows faculty to enhance their skills and knowledge to perform in their subjects and courses outside the field of their specialization. The researchers have learned from personal experiences and theoretical observations of the use of technology rather than manpower at some institutions that the use of technology education makes people capable mentally, physically, and emotionally of achieving their goals (Salem, 2000). Considering these benefits, it may make faculty resistant to fatigue and distraction and embellish their performance when teaching.

The field of education is indeed becoming a technology-based focus, looking at the ways in which intelligence can be used in building educational software. Many instructors and lecturers in universities, such as New York University, Colombia University, and Harvard, are presently using various technology and electronic media to help facilitate their lectures

(Salem, 2000). As Salem pointed out, intelligence systems can provide an excellent methodology for learning from human experiences.

The use of technology software agents within the computer-mediated learning environment has become an important focus of research educational context (Wilson, 2002). The development of instructional methods using technology is very important to further strengthen awareness of a subject. The use of technology in education has become the most challenging area in the last several years. It includes the use of many disciplines, such as cognitive and social psychology, artificial intelligence, computer science, empirical psychology, and software engineering. According to Salem (2000), the goal of technology in education is to deliver computer-based systems (or knowledge-based software) that can be used in real teaching, learning, and training situations. Salem further stressed that there is intelligence software (or educational-based software) that are a knowledge base and an inference system. The knowledge-based software is made up of facts, concepts, theories, procedures, and relationships representing real-world knowledge about objects, places, events, people, and so forth. The inference system or thinking mechanism is a method of using the knowledge base, that is, reasoning with it to solve problems, according to Salem (2000) and Gains and Leonard (2001).

Technology is very important for the development of intelligence-based educational software. The topic dealing with case-based reasoning receives a great deal of attention in education community. Case-based reasoning is a general paradigm for reasoning from experience. It, according to Salem (2000), assumes a memory model for representing, indexing, and organizing past cases and process model for retrieving and modifying old cases and assimilating new ones. Case-based reasoning has already been applied in a number of application areas, such as legal reasoning, dispute mediation, and customer support. There have been computer-based reasoning systems built in education, one of such was Schank's systems (Ferguson as cited in Salem), which takes on the role of expert and guides a user dialog in which the system tells stories to make its point. Others include the Design Muse authoring tool which is used in classes as well to build useful case libraries for engineering classes and to give students the opportunity to learn more about other areas by preparing and indexing well-articulated cases.

Technology education is a process in which adults acquire knowledge or skills through cognitive learning experiences (Kejawa, 2013). It is an extension of what has been learned in

childhood. Rather than following a specific theoretical approach, adult learning is based on the practical approach of learning methods (Knowles, 1980). The adults themselves determine what it is they want to learn; it is not the paraphernalia of technology that determines what is to be learnt. The adult learners learn or try to acquire more knowledge about a situation because of the economical, sociological, psychological, and physiological impacts that can be derived from learning the process at a certain time. This is to say that adult education is primarily based on the sociological and economical changes in the society. It is also based on the psychological and physiological changes of individuals.

Most people try to acquire new knowledge or brush up the old skills due to changes in their life or environmental changes. The reasons why we learn may be due to the socioeconomic conditions of society. According to Merriam and Caffarella (1999), even self-directed learning rarely occurs in splendid isolation from the world in which learners live. It is intimately related to that world and affected by it. As was pointed out earlier, what one want to learn, what is offered to them, and the ways in which one learns are determined by one conciseness and to large extent by the nature of the society at any time (Wlodkoski, 1999). It can also be said that the nature of society at any point in time determines the relative emphasis exerted on learners. One tries to acquire knowledge about their environment because there are always innovative processes that take place in the society. As we grow older, we tend to learn more, and there is always a call for more education because of the changes in our lives.

It can be reiterated that the use of electronic media/technology is surely the path to acquire and apply Knowledge in technology education. It is the path to perceive and manipulate things in the physical world? Indeed, these paths are part of what technology is. The use of technology excites people who want to uncover principles that all intelligent procedures must follow, not just those made of wet neural tissue (Salem, 2000). Consequently, there is neither an obsession with mimicking human intelligence nor prejudice against using methods that seem to involve human intelligence (Winston 2001). Just as psychological knowledge about human information processing can help make computers intelligent, theories derived purely by using computers suggest possibilities about methods to educate people better, according to Winston (2001). Said another way, the methodology involved in making smart programs may transfer to making smart people. It is perceived that rather than eliminating the jobs of qualified adult education faculty, it is in the best of institutions to undergo faculty development processes. Faculty development may justify the implementation of action planning, thereby yielding to education of the adults and educators.

CONCLUSION

According to Merriam and Caffarella (1999) in their book titled, "Learning in Adulthood", even self-directed learning rarely occurs in splendid isolation from the world in which learner lives; it is intimately related to that world and affected by it. As it was pointed out earlier, what one wants to learn, what is offered to them and the ways in which we learn, is determine by us and to large extent by the nature of the society at any time, Ross-Gordon (2002). It can also be said that the nature of society at any point in time determines the relative emphasis exerted on them. One may articulate that one will try to acquire knowledge about their environment since there are always innovative processes that take place in the society (Wlodkowski, 1999). I think that as we grow older, we tend to learn more, and there is always a call for more education because of the changes in our lives.

There is always a question that comes up when addressing the topic technology education; Do one really learn differently from children? The answer to this question is not far-fetched. Over thirty years ago Malcolm Knowles (1968, p. 351) proposed "a new label and a new technology" of adult learning (Andragogy) to distinguish it from pre-adult schooling (Pedagogy). As Knowles (1980) pointed out, andragogy which means the art and science of helping adult learn is quite different from pedagogy which means the art and science of helping children learn – as a person mature, his or her self-concept moves from dependent towards one self-directing human being, Merriam (2001). It is further stressed that one accumulates a growing reservoir of experience which is a rich resource for learning, Merriam (2001).

From my point of view, the readiness to learn may closely be related to the developmental tasks of one's social activities. One is motivated to learn by internal factors rather than external ones, Knowles (1980, pp. 40-50). The rewards of acquiring new knowledge are the basis of learning. The satisfactions attained from learning may depend on how well a subject is delivered and how motivated the learners are... Learning spent using technology can prevent and generate outcomes if we are aware of obstacles. As a result of learning too much, a diminishing learning experience may occur which may be re-learned at a certain point of life. There is a correlation between technological education and streamline education.

REFERENCES

- Various academic materials were explored in writing this paper including: Kejawa, I.D (2013) Raw and Pure Education, Baltimore, MD: Publish America, LLLP.
- 2. Knowles, M. (1980) Modern Practice of Adult Education. Chicago: Follet.
- 3. Merriam, S. B., & Caffarella, R. S. Three models of development. Adult, Human Development Journal, 1999; 39(3): 135-149.
- Merriam, S. B., & Caffarella, R., S., (1999) Learning in Adulthood, San Francisco: CA, Jossey-Bass Publishers.
- Merriam, S. B., (2001) The New Update on Adult Learning Theory, San Francisco: CA, Jossey-Bass Publishers.
- Gains, M., & Leonard, J. Educating the Mind, Journal of Education Technology, 2001; 2(1): 45-50.
- Salem, A. M. Potential Usage of Technology in Education. Journal of Computing in Higher Education, 2000; 5(4): 9-13.
- 8. Winston, P. H. Intelligence education. Journal of Scientific World, 2001; 12(3): 16-25.
- Wlodkowski, R., J., (1999) Enhancing Adult Motivation to Learn, San Francisco: CA, Jossey-Bass Publishers.
- Geiger-Dumond, A. H and Boyle, S. K. (1995) "Mentoring: A Practitioner's Guide." *Training and Development*, Mar. 1995.