



PSYCHOLOGICAL APPROACH TO TEACHING INFORMATION TECHNOLOGIES

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ABSTRACT

The purpose of this paper is to investigate the paradigm role of ICT for education as the case of learners and educator's behavioral and educational psychology's perspectives. I.e., ICT based education is an essential for new emerging information and then after knowledge societies, facilitating large-scale learning needs for social and economic development. The paper focused on ICT's applications and roles in education and the ICT's based learning process, competency, efficient use of a resource, developing innovative and novel ideas ... that could change and advance the learning environment and teaching practices.

KEYWORDS: *ICT, digital technology, psychology, educational systems, educational psychology*

INTRODUCTION

Information Communication Technology (ICT) could be termed as educational technology in education industry. Semantically, it is the study and also ethical practice of facilitating, learning and improving performance by creating, using and managing appropriate technological processes and resources. Therefore, ICT for behavioral and educational psychology is simply referred to the use of modern technology, such as computers, digital technology, networked digital devices and associated software and courseware with learning scenarios, worksheets and Manuscript. Thus, it is vitally important to learners and/or educators anytime and anywhere, business and other settings. The technology encompasses both educational and developmental material objects, such as machines and networking hardware, as well as theories such as instructional theory and learning facilities. ICT for education is an integral part of societies' everyday life, which refers to an array of tools and the principles for their effective application in learning process and facilities. ICT for behavioral and educational psychology is therefore, methodologies and techniques, and skills assessment for learners and educators in their learning provider institutions towards its impacts. ICT as the paradigm of educational and behavioral psychology is a dynamic and multi-factor aspect, including, Internet-based learning and instructional and learning theory, media

perception and human social interactions, fields of study that apply human behavior to educational technology. However, there is a disambiguation about what ICT as educational technology should refer. Especially for young scientists and education experts do have a limitation to define its paradigm roles in education industry. There is a big public debate that refers to all valid and reliable applied education science, such as equipment, as well as processes and procedures that are derived from scientific research.

MATERIALS AND METHODS

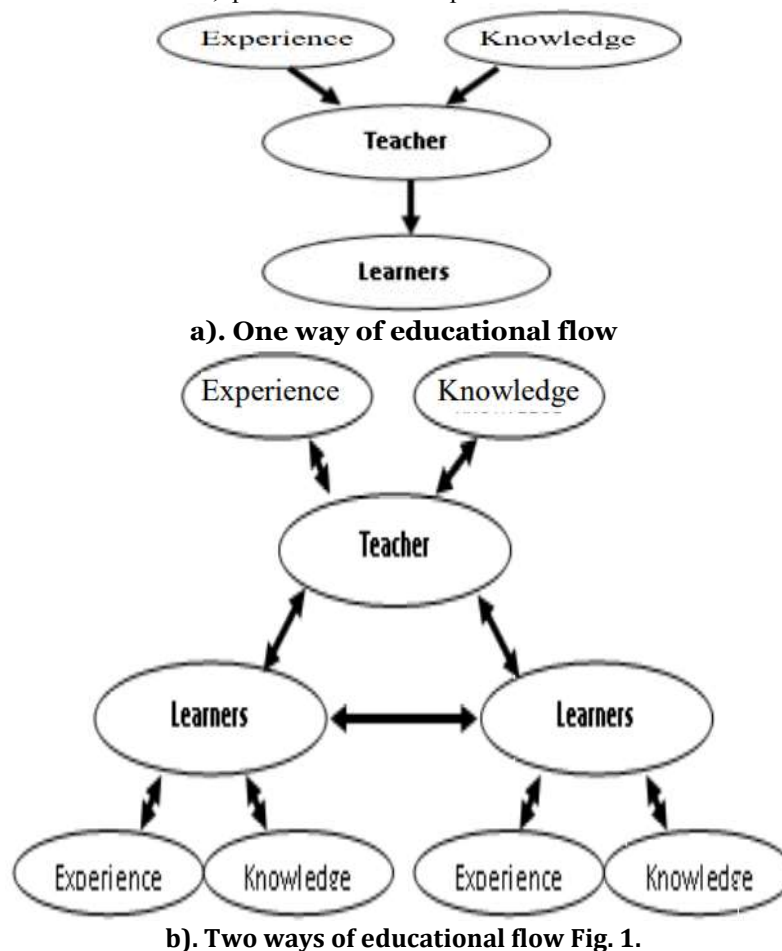
Ict for the emerging of information society

In the past years, researches on ICT have been investigated how it can influence the education of students, teachers and other communities. Most developing countries such as Uganda, Ethiopia, Kenya and other many African and Asian developing countries have begun to place considerable emphasis on the importance and availability of ICT for education and other sectors dynamically. In this case, China, South Korea and Singapore could be mentioned how ICT made them strong and fast developing countries. Thus, the use of ICT in various fields of society indicates the emergence of the „information society“. The information society is based on the belief that knowledge is the driving force for technology development and also for economic growth and the knowledge works, which provide or from a relatively

large proportion of the employment. ICT for the countries" development and education specifically can do in the provision of media to facilitate communication and learning process. It is the solid foundation of the emerging of the information society entails dramatic changes in production and business activities as a generic term of an integral larger social context. Information society is an agglomeration of both digitized information and electronic networks. The transformation of information society can only be understood if we view it in a broader context where bits, networks and knowledge have a social meaning.

As the traditional education facilities, its context and flow are a single approach or one flow from the one step such as teachers who had experience and knowledge to learners. Therefore, ICT breaks this and made dynamic that can be diversified, powerful and

accessible to most education seekers. The difference is that for the former (traditional) teachers are the only accelerators or pivoted actors (Fig. 1 a)), it is one way from teachers to learners. For the later (modern) approach, the process could be facilitated by both teachers and learners as the matter of ICT's facilities, which is a two-way flow of educational and information flow (Fig. 1 b)). Therefore, ICTs and information society are concerned with the creation, acquisition, sharing, dissemination, delivery, support and recognition of knowledge, which provides an access to and engaging in the continuous learning that becomes necessary for successful participation in the society development of all social groups of population. It is a critical tool for professional training that learners know how to use ICTs, the easier they can find their way to capture the newest methods towards their specific tasks.



Education an information flow from pivoted actors to users or learners.

In Fig. 1 a), education is not supported by ICT and teachers are the key to facilitate the learning process. The distributions and access of education are limited. Whereas in Fig. 1 b), the process is supported by ICT and the process is more dynamic, which lead to attain more accessible and distribution of education. Mean that, ICT creates essential situations that both

teachers and learners could be important acts as a consultant (teachers) for learners and the Vis versa on implementation and feedback learners for teachers where information can be obtained and communicates knowledge and experience in the societies. This is a technology-based paradigm in which learners make extensive use of ICT to obtain information and experiences. The learning responsibilities of the

students here are for „searching“, rather than „receiving“ as of fig.2.

The impact of ICT on emerging of information society is tremendous, which can be visualized and measured in terms of technological, economic, social

and political. ICT as the foundation of information society, it can be evaluated as a dramatic change in production and business activities, culture development, communications in a larger social context.

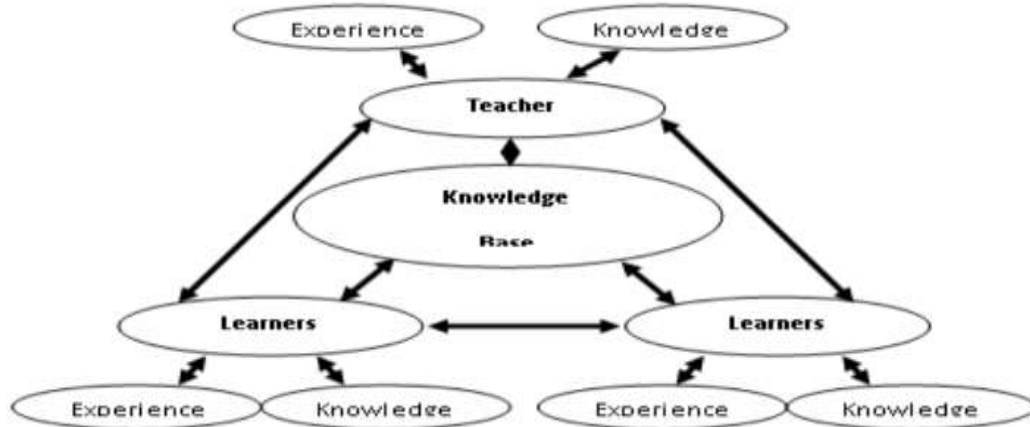


Fig. 2. ICT based learning paradigm.

ICT and Learning Psychological Phenomenon ICT is the corner stone to learning facilities, which bring an enthusiastic behavioural and psychological phenomenon. It is a tool to optimize learning performance and access, a means of communication to address the educational factors, a solid foundation of information societies. Therefore, ICT for education is a technology that potentially useful in any aspects depends on both human and non-human actors, which provide a scientific framework. The technology is playing a paradigm role in which considering many

contributions of human and non-human actors, reacting against the idea that characteristics of humans and social organisations distinguish their actions from the inanimate behaviour of technological objects. It offers a socio-technical approach in which neither social nor technical positions are privileged, denying purely social or technical relations is possible. The technology involved in learning facilities, means of communications, strategic development, and future prediction for the better of education paradigms as showed Fig. 3.

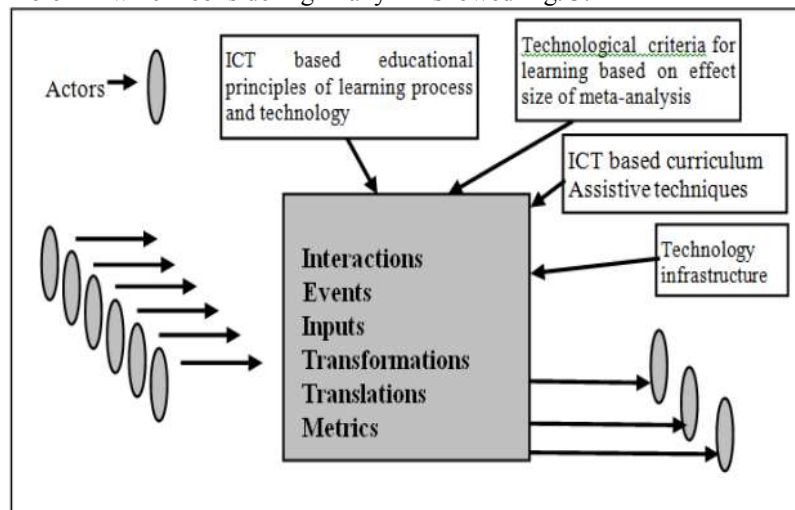


Fig. 3. ICT as the learning phenomenon.

DISCUSSION

Ict in behavioral and educational psychology

ICT for education is a key component for its success, learning competency, creativities, support to create and meet complex demands in a particular context skill development in general. The technology implies the mobilization of knowledge, cognitive and

practical skills, and social and behavioral components, including attitudes, emotions, values, and motivations. For example, it rolling as the key competence and interactivity in the school, which learners are capable to use education technology interactively that requires an awareness of new ways for individual"s creativities and life prosperity, in general. As the countries (developing



countries) have made more attention and dynamic strategies on ICT, their social, economic, and technological changes would be made education and training for all more crucial than ever. Because ICT based educational systems are vitally important to different degrees to optimize educational opportunities and roles for students and learners. It provides fundamental knowledge and skills for evolving marketplaces and sophisticated educational and technological environments, and to prepare societies for lifelong learning. To meet these challenges, countries have to focus concurrently on expanding access, improving internal efficiency, promoting the quality of teaching and learning, and improving system management. It is because ICT is an essential tool to gear the educational constructivism plan as the government or specifically school strategy. ICT based lifelong learning perspective is simply the process of creating computer technology and ICT literacy society. It is the knowledge of renewable supply and to be sustained year to year. Hence, it is a phenomenon of the life wide learning and teaching processes, which involves the different forms of learning during a person's life. It is the integration of ICT in the learning and teaching process that the activities not to be seen as a "finished product." It is two way facilitations and acquiring knowledge as teachers must be prepared to learn the basics of ICT, to incorporate new technology and pedagogical methods to improve their teaching. The ICT based learning process is a model of education facilities and memory deriving from cognitive psychology and information-processing theory. Therefore, educational and behavioral psychology is the process of learning events that comprise both internal and external conditions of learning process. By internal is essentially previously acquired concepts and skills and the mental processes and structures used by the learner to develop new concepts and skills based on the recall of prior skills. The external is the learning process taking the form of instruction designed for the acquisition of particular learning outcomes. For example, McCarty and Schwandt clearly discussed that

the behaviorist rooted pedagogy is accused by constructivists of being authoritarian rather than progressive, teacher-centered as opposed to learner-centered, encouraging passive learning instead of active learning and focusing on transmission teaching rather than discovery learning. It showed that how ICT is essential for semantic educational learning processes. In the past decades, philosophers were having their extreme judgments and also conclusion that derived from their own perceptions. For example, the theorist of instructional design lacks an empirical basis since they relied on the studies designed and conducted within behavioral and cognitive psychology experimental settings. In those experiments, learning components were isolated in order to identify how the human brain functions. The assumption was the learning components could be transferred unproblematically to pedagogic contexts of learning components exist concurrently rather than in isolation.

RESULT

Constructivism: it is a focus on how learners construct their own meaning from new information, as they interact with reality and with other learners who bring different perspectives. ICT as the aspects of constructivism is the process or learning environments requires students to use their prior knowledge and experiences to formulate new, related, and/or adaptive concepts in learning. Under this framework the role of the teacher becomes that of a facilitator, providing guidance so that learners can construct their own knowledge. In this approaches, educators must make sure that the prior learning experiences are appropriate and related to the concepts being taught in which they are utilizing a constructivist perspective may emphasize an active learning environment that incorporates learner centered problem-based, inquiry-based, and project-based learning processes. The novelty of the method is ideally involving real-world scenarios, in which students are actively engaged in critical-thinking activities, as it is shown on Fig. 4.

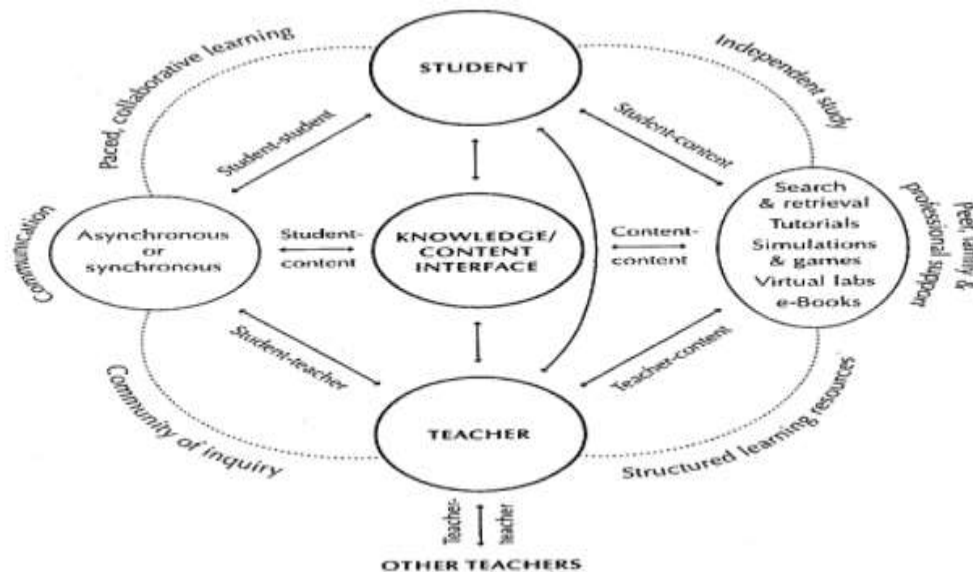


Fig. 4. Technological based instructional design of learning process.

As the paradigm role of ICT, There is a big difference of learning process as the traditional and modern systems. As it is shown on Fig. 4, modern learning system is ICT based constructivism that provides learners would have critical thinking about the situations, make wide for their educational behavior and cognitive and so on. Development on ICT is capital intensive and complex, which need to be systematic and strategic. On the other hand, its outcomes in the school can never be measured clearly by giving exams for students or learners. It should be known that ICTs potentially offer a powerful dimension to transform the way the young generation prepares for further learning. Thus, the main focus as well as the role of ICTs is to act as a catalyst for the learner's interest to get acquainted with the "unknown" as it is characterized in Table I.

CONCLUSION

ICT is a technological phenomenon of educational and behavioral psychology towards the emerging of information society. It is dynamic, which can be serving as tools of communications and educational instructions' design. Thus, ICT for development and education, specifically vitally important to facilitate jobs, efficient allocation and use of resources. ICT as the context of educational communication, the phenomenon should be developed, applied, and analyzed by all educators, especially to create the instructional communication quality in every lesson. This paper is discussed about the paradigm role of ICT in education industry more emphasizing on learning process. In-depth analyses focused on the effect of ICT as behavioral, cognitive and constructive nature has been discussed in details. The learning process is stimulus packaged in the form of computer-based instruction (CBI). The analysis and verification of learning interaction phenomenon is taking into

account the great power of human action and memory that leads the emergence of information society. Moreover, the comparisons between traditional and modern or ICT based constrictive education system has also discussed and presented in the tabulated form.

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