



REVIEW ON USES OF ICT TOWARD IMPROVING

DECISION MAKING AMONG STUDENTS

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ABSTRACT

The utilization of ICT has rendered a significant contribution in bringing about improvements in decision making by students. In educational institutions at all levels, individuals are required to implement number of tasks and functions. In putting into operation various tasks and functions, the individuals are required to make use of ICT. Through the use of ICT, individuals are able to generate awareness and augment their knowledge in terms of various aspects. When the educators need to enrich the teaching-learning methods and instructional strategies, then they make use of ICT. On the other hand, when students need to work on assignments and projects, then they make use of ICT to carry out their task in a well-organized manner and in accordance to the desired expectations. This paper reviews the uses of ICT toward effective decision making among students.

Keywords: ICT, Decision making

1.INTRODUCTION

Decision making in educational view can be considered as the act of making use of the individual intellectual ability to select a course of action or develop a positive ability toward executing a particular idea among several other ideas put in place as to achieve a desired goal or objectives in any organization. It has been argued that a good outcome is a product of good decision making among group of individuals. This is in conformity with work of Kahneman^[1] who viewed decision making as “a lifelong process, every day we make decisions and based on the decisions we arrived at alternative solutions, however, a good and effective decision making leads to a good and effective solution. The author posits that, for a decision to be reliable one ought to project a good choice out of various alternatives.

In the modern world of technology today student’s uses different ICT tools in decision making, the use of computer by students has greatly improved and enhanced the decision making by students. Online examinations are



conducted by students; online applications for interview are also done using ICT apparatus. However, students across the world everyday uses ICT tools in making decisions regarding their studies and other extra - curricular activity. Therefore, with these submissions there is a great bond or influence of the use of ICT in helping to reach at the decision making of students.

This segment intends to digest on different literatures that discuss on decision making, ICT and studies that identify the role of ICT on decision making among students. According to Kahneman^[1], viewed decision making as “a lifelong process, every day we make decisions and based on the decisions we arrived at alternative solutions, however, a good and effective decision making leads to a good and effective solution.” from the above we can see that decision making constitutes larger part of our activities and we reach a solution after making decisions. There is the need to be sensitive and careful when making decisions because a bad decision may have a negative effect on the people. Decision making is a vital life skill at all phases of human existence. Additionally, and significantly, education is a way of selecting an action involves logical step: determine the difficulty in choosing numerous options and selecting the finest substitute based on specific condition. Adequate number of talents in decision making requires intellectual rationality which contains numerous options

Each decision making makes a last option. The result can be act or a view of selection, when making effort to make worthy conclusion; an individual must consider the good and bad side of each option and reflect all the options. For good decision making, an individual must be able to project the results of each choice as well and based on these issue, decide which alternative is good for that specific condition

Harris^[2], on his study of identifying and choosing alternatives based on the values and preferences of the decision maker. Making a decision implies that there are alternative choices to be considered, and in such a case we want not only to identify as many of these alternatives as possible but to choose the one that best fits with our goals, objectives, desires, values, and so on”

According to Kahneman^[1], asserted that decision making “as the thought process of selecting a logical choice from the available option” therefore, when making worthy decision, an individual must consider the good and bad of each choice and study the options. For good decision making an individual must be able to project the result of each alternative as well and based on all these issues consider the alternative which is the finest for that specific condition. As such, decision making can be considered as a situation where by individual tries in his ability to make a selection of his priority to enable him achieved a successful result toward the end of any course of action taken.

Eisentuhr^[3], stated that decision making “Is a process of making a choice from a number of alternative to achieve a desired result” There are three key features, “first decision making consist of selecting an option from several alternatives, second decision making is a method from among options, finally “the desired result” stated in the meaning it consist of a reason or goal coming from the intellectual action that the decision maker involve in to teach a concluding decision”.



According to Loo^[4] the following are the decision making styles, namely:

“Rational decision style”, “there are many stages of process for making choices between options. The process of balanced decision making favors logical, fairness and examination over bias and insight. It is a technique for scientifically selecting among possible choices; this is based on reasons and fact.”

“Intuitive decision style”, “involves being able to gather information that other peoples may miss. It is the opposite of rational decision making style”.

“Spontaneous decision style”, “spontaneous as quick, hasty or impulsive acts; therefore, spontaneous decision making style is a process of instantaneous selection from available alternatives. It is characterized by making rapid, hasty and impulsive decisions.

“Avoidant decision style”, “the tendency to avoid decisions whenever possible, it works well when conditions are highly uncertain and the benefit of taking action are unclear.”

“Dependent decision style”, “the dependent one is characterized by the search for and reliance on the advice of others”.

According to Baker et al.^[5], all decision making should be started with the involvement of the decision maker(s) in making the decision, dropping the probable dissimilarity about problematic meaning, necessities, aims and standard.

Decision making styles can assume characteristics form which individuals use in decision-making. Individual process of observing and answering to decision-making responsibilities. Some researchers explain decision-making styles as “the learned habitual response pattern exhibited by an individual when confronted with a decision situation. It is not a personality trait, but a habit-based propensity to react in a certain way in a specific decision context”. Two types of decision-making styles and thinker styles are most often used interchangeably.

The “intuitive style” is characterized by notice to feature and a tendency to rely upon feelings, while the “dependent, ” one which is considered by the chase for which they belief on the advice of others. “Avoidant style” is the propensity to stay away from decisions whenever is not needed and “spontaneous style” is characterized by use of intelligence of nearness and the interest to complete the decision-making process as at when due. The connection between decision making style and the following four personal characteristics; self-worth, self-regulation, educative skill and social desirability Decision making style is an idea meaning individual differences in making choice concentrating on features of the person making the decision^[4]. Differences mean how much information the person making decision has collected or he process in collecting the relevant data. The idea has been used especially in the area of professional growth and occupational conduct but not so much on the bases of decision making.



According to Deniz^[6], the following are the styles of decision making, namely;

“Directive Style, an individual has this style if they have a little acceptance for uncertainty and are effective, sensible and rational in their ways of thoughtful. They pay attention on the short term and are fast to make decisions, usually occasionally in a decision that has been made with minor information and not wisely examining other alternatives”.

“Analytic Style, as opposite to the directive style, an individual with an analytic decision making style has better patience to uncertainty. They are good decision makers that like to be well inform and carefully assess their choices. They usually have the courage to manage with exceptional and inspiring situations”.

“Conceptual Style, are very extensive in their method and deliberate all necessary aspects. They are extended oriented and are usually skillful of expressing ingenious alternatives to difficulties”.

“Behavioral Style, a behavioral decision making style work with others, are exposed to recommendations and are concerned about the success, try to avoid disagreement and place priority on their recognition by others.”

2.FACTORS INVOLVED IN DECISION MAKING

Obviously, there are factors involves in decision making process that are considered to be unavoidable when taking decision. Loo^[4] in his contributions identified some factors for decision making styles, where he argues that in every decision making process certainty, risk and uncertainty most be reflected. He maintains that, Certainty is the decisions done under situation of certainties that is when a person has enough information to know the result or outcome of the decision before it is made. In this regards an individual knows the available solutions as well as the situations and circumstances of those actions; Loo sees Risk as part and parcel in taking decision where an individual has some information but not adequately enough therefore, he may not know the full consequences of the outcome; while Uncertainty, decisions are made under the possibilities of the results are completely unknown, there is no awareness of all the alternatives and also the outcome as well. Said^[7] in an article entitled “Strategic decision making: Process perspectives” has pointed out factors responsible to be considered before embarking in any decision. Said in his effort argues that environmental and human complexity needs to be considered and place at fore front. The scholar hears means to say that decision making in this regard need to be treated rationally; looking at variety of cultural heritage across the globe also requires a decision making process to make some judgments on the basis of norms and values of a particular society as what is obtainable and acceptable in one society may be unacceptable in another society; In-depth and thorough investigation of complexity of problem militating against an organization also speaks louder when talking about decision making as failure to look into such problem may render the decision a failure.



3. USES OF ICT IN DECISION MAKING

The ICT usage could be seen in different aspects; it is found in economic activities and also in the arena of politics like it reflect in the work of Sæbø, et al^[8] who justifies the use of ICT in politics. The author regards technological device like cell phones and its application (twitter and face book) as communication tool to electoral which in nowadays happening becomes to be part and parcel of politics, through which politicians win the heart of electoral. However, the major concern of the present study is to determines the impact of ICT towards student's decision making

In the modern world of technology today student's uses different ICT tools in decision making, the use of computer by students has greatly improved and enhanced the decision making by students. Online examinations are conducted by students; online applications for interview are also done using ICT apparatus. However, students across the world everyday uses ICT tools in making decisions regarding their studies and other extra - curricular activity.

Information and Communication Technology (ICT) refers to technologies that give right to use information through telecommunications, this includes the use of Internet, wireless networks, cell phones, and other announcement gadgets.

Institutions use a varied set of ICT apparatus to talk, create, circulate, store, and manage information. In some contexts, The use of ICT has also become essential to teaching-learning situations by interaction, through such approaches as replacing the traditional usage of chalkboards with interactive digital whiteboards, using students' own Smartphone's or other strategy for knowledge acquisition during class point in time, and the "flipped classroom" representation where the learners watch on their lectures at their various home on their computer and use their classroom time for more interactive workout.

When the school teachers are digitally educated and skilled to use ICT, through this means it can show the way to advanced order thinking skills that will provide creative and individualized ways for learners to state their understandings, and help learners better prepared in other to deal with continuing technological modification in the public and the place of work.

The application of ICT in pedagogy has put out some certain criteria for the integration of ICT into the knowledge process as the method to bring about improvements in the quality of education in specific social frameworks. The use of ICT in enriching learning environments within institutions has been affectionate in identifying the circumstances in which ICT can be applied in an effective manner to enhance the quality of teaching-learning processes and instructional strategies. It renders a significant contribution in creating social payoffs, which could be favorable to sustainable increase and fair growth. In order to improve the quality of education, the factors such as, infrastructure, well-qualified and experienced teachers, facilities, appropriate teaching materials and adequate classroom environmental conditions are considered important but are not enough. It is necessary to integrate ICT



tools into the curriculum and instructional methods. In a study by Ertmer^[9] shows the confidence and positive notion of many teachers that the ICT usages helps in inculcating knowledge unto students

Within the procedure of integrating the use of ICT, into the curriculum and instructional processes. The instructors are the ones, who render a significant contribution. It is necessary for them to possess adequate knowledge and information in terms of modern and innovative methods. The utilization of ICT and modern and innovative methods within the system of education is facilitating towards the achievement of educational goals. Research has shown that the result of computer assisted learning is more beneficial in primary schools as compared to secondary schools. It was however, the combined effect of big increases in ICT financial support and a productive backdrop for creation of an efficient use of it. This has led to optimistic effects in educational spending on educational presentation. Therefore, the increase rate in ICT financial support is not sufficient to make sure that there is improvement in quality education. The successful implementation of ICT depends upon the human resources and financial resources within the educational institutions.

ICT has distinctive importance within the system of education and in the implementation of social transactions. The use of ICT has brought about immense improvements in the ways of working of teachers as well as the other members of the educational institutions. The approach of ICT within the teaching-learning processes and instructional strategies has a positive effect upon the system of education. In other words, the members of the educational institutions are able to carry out their job duties in a well-ordered and manageable manner and feel pleasurable and contented. The use of ICT promotes a favorable learning environment. Within the favorable learning environment, the students and teachers are able to render a satisfactory participation and work in collaboration and integration with each other in the achievement of academic goals. The use of multimedia makes the learning environment within the classroom lively and suitable to the needs and requirements of the students.

Within the process of conventional learning, emphasis is put upon contents. The contents and syllabus are regarded as significant. It is vital for the teachers to prepare themselves well, before they come to class to deliver their lectures. The use of ICT promotes independent learning and also takes into consideration, alternative theories of learning. The conventional learning process puts emphasis on planning the teachers and leads the students through a series of structural sequences to achieve the desired outcomes. With the help of technologies, transformations are facilitated from teacher centered to student centered instruction. Technology renders an important contribution in supporting and augmenting cross-disciplinary research and teaching programs. Furthermore, collaboration and integration is also promoted between research and development units within industries and higher educational institutions. Through the implementation of ICT, educational institutions are able to establish communication terms and generate knowledge and information in terms of approaches and strategies that are put into operation in other educational institutions.



Despite the relevance and role of ICT in decision making process especially and particularly in our present day schools, it also affects decision making in some schools negatively. Lack of knowledge and conversant with usage of computer among some teachers become a problem in school decision making. As such, it cause delay, inconsistencies and invariably affecting the performance academically; Inadequate computer literate teachers also cause a hike to impart knowledge unto students in regards to computer operations; Insufficient computers and ample time to teach the students the best way to use the system also identified to be one of the major challenges; There has been no specific place designed for computer training in many schools in order to ensure a conducive atmosphere of learning for both teachers and students; Last but not the least is financial constraints confronting many institutions to install and maintain the ICT facilities^[10].

4.CONCLUSION

The review focuses on the positive impact of Information Communication Technology (ICT) in schools which indicates it's significant role toward effective decision makings among students. In today's happening the use of the tool across various schools has justifies an effective decision making. The world today has become a global village and this was as a result of the emergence of Information Communication Technology. Information's are received and processed day in day out through the use of ICT devices, and students make good use of these ICT apparatus toward achieving and ensuring effective decision making, provision of infrastructures, school materials and students are not that reliable and essential means for a qualitative education. The authors posit that, system need to be switched from local approach to advanced means to effects the system, like the usage of ICT which can serve as stirring motive to move the educational system forward. It is further understood that the performances of schools that adopt the use of ICT is of utmost pronounce as compared to those yet to adopt it. However, the review helps to understand the challenges confronting some schools in the cause of adopting ICT usage in the light of decision making as shortage of computer literate teachers; conducive atmosphere of learning computer among students; poor knowledge of computer and financial constraints are set to be the major challenges affecting the use of ICT in decision making process across some schools. Against this background, it is recommended that proper installation and use of ICT in schools especially in rural areas where we have a serious challenge academically; identifying suitable learning ground; availability of facilities; provision of adequate and train computer literates and supply of enough facilities for the appropriate use of ICT in decision making across schools

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