



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 30, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

Technology and their negative impact on students

Meaad Alajmi

Shaqra University, Saudi Arabia

malajmi@su.edu.sa

Abstract. The paper studies the effect of technology on students ability to learn. It starts with an analytical framework of the main stages of learning: 1- experiencing, 2- conceptualizing, 3- analyzing and 4- applying. Then, it applies the framework on the use of technology in the Saudi Arabian educational environment. In addition, the paper suggests the possibility of a positive impact of technology on learning alongside the negative effects. The paper does so using the Saudi educational system as example. It finally concludes the potential of technology in improving the learning stages through better use of it.

Keywords. negative effects, technology, conceptualizing, knowledge, Saudi educational system, teacher in a universty in KSA, study of Islam, study of Islam

Introduction

Learning pertains to the state of coming to know. The state of knowing is not only limited to what one thinks. It also pertains to what one does and how he is. Knowing requires a holistic approach when dealt with, rather than just merely taking it in the context of subdivided areas of capabilities. It is not just a set of mental capacities as commonly perceived by people; rather, it is a set of interrelated capacities and capabilities taken in its entirety. It is composed of numerous actions. It does not only pertain to mental activities, but also to performatives as well (Kalantzis & Cope 2012).

Numerous perspectives are associated with learning per se. There are many approaches to knowledge processes, among which is the approach presented by Mary Kalantzis and Bill Cope. The science or pedagogy of multi-literacies should always be taken correlatively with the approach of Kalantzis and Cope (2012). The term ‘Multi-literacies’ is a multiple-form of learning that mainly refers to the proliferation of communication connected specifically to mass media, multi-media and the Internet (Mills 2006). This pedagogy also strongly emphasizes the vital role of teachers as innovators of learning processes and environments. In connection to this, an analytical framework was devised and presented by Kalantzis and Cope (2012) to aid in the successful acquiring of knowledge. It makes the knowledge-making process easier and less complex. The different analytical stages of learning are as follows: (1) experiencing, (2) conceptualizing, (3) analysing and (4) applying. These knowledge processes were originally formulated as situated practice, overt instruction, critical forming and transformed practice.

Discussion

Analytical Framework

The 'experiencing' stage pertains to concrete experiences. It is subdivided into two: Experiencing the known and experiencing the new. With 'experiencing the known', learners at this stage bring together their own experiences and existing knowledge. We learn from our own experiences. As they say, life experience is the best teacher. The knowledge process of experiencing the known adds more depth and meaning to what one has experienced already. Experiencing the new, on the other hand, pertains to new information or situations. Learners at this stage acquaint themselves with new information and unfamiliar situations. They only not come to know with what they have experienced already, but they also learn by experiencing new things. They learn by making themselves open to new ideas, situations and objects (Kalantzis & Cope 2012).

In discovering the new and exploring the unfamiliar, experimental or empirical science uses a systematic approach in reference to this particular stage of learning. A scientific method is often used to prescribe knowledge action. The methods or actions are as follows: focus, research, hypothesize, observe and/or test, record, analyse and corroborate (Kalantzis & Cope 2012). These methods or actions are discussed in detail to fully understand and appreciate the importance of these so-called actions. Focusing equates to deciding or highlighting on what one wants to know more of. Researching, on the other hand, pertains to knowing what other people already know with regard to a particular topic. Hypothesizing focuses on the suggestions or probable scenarios one may encounter in the learning process. Observing and/or testing action refers to the application of experiments and observations in gaining more knowledge. Recording refers to the quantitative and qualitative preservation of facts. Analysing means drawing conclusions. Lastly, corroborating pertains to justifying the outcome of one's research and/or fact-finding activity (Kalantzis & Cope 2012).

The 'conceptualizing' stage makes use of comprehension and acquired knowledge. These conceptualizing processes go hand in hand with the experiencing processes. Conceptualizing by naming and conceptualizing with theory make up this particular analytical stage. Conceptualizing by naming pertains to the grouping of things into categories and discerning similarities and differences. It probes deeper into a certain information or situation. Conceptualizing with theory, on the other hand, dwells more on generalizations. It connects concepts and theories into interpretative frameworks (Kalantzis & Cope 2012).

The 'analysing' stage may be loosely associated with critical reflection. It involves two processes: (1) analysing functionally and (2) analysing critically. It uses analysis in acquiring knowledge. Analysing functionally refers to analysing connections, structures and functions and cause and effects. It includes reasoning, deducing, establishing relations and analysing connections. With analysing critically, learners closely compare and evaluate their own perspectives with those of other people's. It evaluates the viewpoints and interests of both the learner and the people around him (Kalantzis & Cope 2012).

The 'applying' stage makes use of application, evaluation and synthesis. It is subdivided into two which includes applying appropriately and applying creatively. Applying appropriately implies the application of one's knowledge to the real world in order to test its validity. Applying creatively, on the other hand, speaks of innovativeness and creativity. It seeks to transfer one's ideas or knowledge to a different context (Kalantzis & Cope 2012).

These knowledge processes are greatly dependent on each other. They cannot be separated and may also occur concurrently (Bezemer, et al. 2010).

Application of the Analytical Framework

As a teacher in a university in Saudi Arabia, the specific context I would like to focus on is technology and the negative impacts that they have on students. It is my belief that the technology in teaching and educating can be used in a positive way. Using Kalantzis and Cope's (2008) framework is very useful.

The successful acquiring of knowledge, or literacy for that matter, is closely linked to technology. So the question now arises, how does one acquire learning or knowledge in the context of technology if one is to apply the analytical framework? To provide a specific case study of this linkage or interrelationship, the topic 'Technology and its negative impact on students' may be used. The use of technology in teaching in, say, formal educational institutions in Saudi Arabia and educating students on how to use it in a positive way will also be tackled thoroughly to gain better understanding and knowledge of the case study.

It has been said time and time again, that the only thing that is constant in this world is change. As they say, change is inevitable. Institutions and societies are becoming more advanced and exposed to development and progress. Hence, there is also a need for literacy education to keep up with the changing times. As an effect of the rapid growth and development of multi-literacies, technology is now finding its way into the literacy structure. It has gone mainstream when it comes to literacy education.

In the field of education, technology is now being utilized in the teaching profession. Technological approaches to learning entail new literacy perspectives and viewpoints. Taking these technological approaches in the academic setup, technology brings the world into the classroom. However, as with everything else, technology also has its downsides. It is but fitting to dissect the chosen case study if one wishes to get more comprehensive on the matter. The Kalantzis and Cope's (2012) analytical framework is called upon in this particular dissection.

In essence, technology per se is an art—a form of art that is prevalent in many aspects of one's everyday life. Technology has a huge impact on society and its surroundings. It is being felt and experienced by everyone, enjoyed by many. It helps make life easier and more enjoyable. It aids in the communication process and provides tools such as televisions, computers, radios, telephones and many others. People have electricity at homes or in their offices because of technology. It also enables people to travel or transport people and goods (Kubesh, McNeil & Bellotto 2009). It can be said that technology covers just about anything—from machines and appliances to running water to movies. The list can just go on and on. Technology has a hand on almost everything the eyes can see. The benefits and effects of technology are just too important to be ignored. Technology is very important. Hard evidences are right before the people's eyes, surrounding them.

Technology is also vital in scientific and social fields, such as but not limited to medical, transportation, communication, food production, industry, military, energy, management, psychology and education. Even the teaching profession has already started adapting technology in teaching. In an academic setup, students become dynamic recipients of information relayed by their teachers, textbooks or broadcasts. Technology turns unenthusiastic students into proactive students in terms of obtaining information, making choices and executing skills. The application of technology in the academe aims to stimulate the minds of students. It is widely used by the teaching profession in almost all educational institutions in the world. Even in Saudi Arabia, their universities make use of this.

The core of their education may still revolve around the study of Islam, but these universities have started embracing the modernization of their educational system (Royal Embassy of Saudi Arabia 2013). It increases their motivation, heightens self-esteem, sharpens

technical skills, increases ability to handle complex tasks and enhances student's inclination to work cooperatively with others. Moreover, technology does not only pertain to hardware and software, but it also covers systems, processes, procedures and patterns of use. It also has notable huge impacts on information flows, human communication and thought processes (Wright 2000).

Other notable advantages of the use of technology in teaching are as follows: (1) increases accessibility to higher education, (2) increases the potential for lower textbook prices and tuition fees, (3) helps geographically isolated students, (4) decreases overcrowded classrooms and (5) equips students with new technological skills that can later on be used in their chosen fields of work. It helps in making knowledge-making process easier for students. Moreover, information and knowledge, for that matter, are presented in various ways. They are not only limited to the Internet but they also pertain to handheld dictionaries, smart boards, iPads and the like.

However, if there are good sides, there are also bad sides. The negative impacts should be highlighted in reference to the case study in hand. Technology may have helped in revolutionizing the educational structure, but it is not without disadvantages. The problem not lies in its use, but rather in what its use replaces. It should be noted that educational institutions may be modified to accept technology, but then again, nothing beats the old methods of teaching. First, technology increases the chances of losing communication and interaction skills. The interactive abilities between students and teachers and students to peers are put in peril. Second, some students also cannot afford this so-called modern technology. The use of computers and other technological gadgets may prove to be expensive for some. Third, with the use of technology, it also poses great difficulties in motivating students and requires self-motivation and discipline. Fourth, the use of technology in the teaching profession may result to increased chances of corruption since it is difficult to regulate. It is more prone to cheating incidents and students are more exposed to the opportunity of using technology in a negative way. Hence, the need to guide students properly is fitting. Technology is oftentimes misused in these following scenarios: (1) when it is used as a tool to keep students busy and (2) when it is used to do what can be done without it. It should always be borne in mind that technology should always be used for doing good things in better ways. It should be for connecting and for sharing and for accessing what was once inaccessible.

Conclusion

The use of Kalantzis and Cope's (2012) analytical framework in dissecting the case study mentioned above helps people gain a better understanding and knowledge of technology and its impact, more on the negative, on teachers and students, alike. One has to bear in mind that the different analytical stages do not strictly conform to the chronological order that the stages have been presented. More often than not, the actual order may vary depending on the kind of knowledge or learning one wishes to acquire.

The main key in every knowledge-making process is the appropriate mixing. This is one of the most essential factors in the learning-acquiring process. The 'mixing' is vital in determining the proper transition of knowledge processes that will help in successfully acquiring knowledge (Kalantzis & Cope 2012). The different analytical stages as enumerated in the framework devised by Kalantzis and Cope (2012) should be studied thoroughly to better gain insight on the matter of interest on hand, Technology and its impact in the teaching profession. Suffice it to say, that the knowledge-making or learning-acquiring process has been

successfully completed. Sufficient knowledge on the use of technology and its impact on students, both negative and positive, have been gained.

References

- [1] Bezemer, J, Kress, G, Lundvall, S, Maivorsdotter, N, Snyder, K, Panichi, L, Lindberg, O, Davidsen, J, Georgsen, M, Maier, C & Lindstrand, F 2010, 'Fostering environmental knowledge and action through online learning resources', *Designs for Learning*, vol. 3, no. 1-2/10.
- [2] Kalantzis, M & Cope, B 2012, *New Learning: Elements of a Science of Education*, 2nd edn, Cambridge University Press, New York, USA.
- [3] Kubesh, K, McNeil, N & Bellotto, K 2009, *Technology in the Hands of a Child*, Coloma, MI.
- [4] Mills, K 2006, 'Critical Framing in a Pedagogy of Multiliteracies', *QUTePrints*, p. 2.
- [5] Royal Embassy of Saudi Arabia 2013, *Education*, viewed 29 August 2013, <<http://www.saudiembassy.net/about/country-information/education/>>.
- [6] Wright, C 2000, *Issues in Education & Technology: Policy Guidelines and Strategies*, Book Design and Production, London, UK.