

Enhancing Learning throughout Technology: Case of Teaching English to Scientific Students throughout Skype

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Abstract:

The rapid changes happening in the world have brought about new areas of education represented in the marriage between this latter and technology for the purpose of bringing new methods for the learner community. Contrary to traditional teaching, which was restricted to indoor spaces, technology has contributed to shrink time and space and moved to outdoor areas and other space sites due to the growing number of people seeking different goals. The purpose of this work is to throw light upon the strategy used in distance learning where a descriptive method and a practical survey relying upon Skype as a means of communication have been used. The results show that distance learning can motivate students towards learning, lighten administration load, and increase the flow of information. As a conclusion, distance learning can be suggested as a perfect solution for returning students who find it very hard to attend courses in the classroom and require further training.

Key words: Technology, Education, Distance Learning, Strategy, Skype

1. INTRODUCTION

The ubiquity of technology is seen clearly everywhere nowadays and has influenced several domains. Education is one field

which is no exception. It was linked to technology and as a result has led to the emergence of four areas of technological education; distance learning, virtual learning, electronic learning and blended learning, where each field aims to leverage learning.

The crux of our study is distance learning where an experimentation is done to teach English to scientific students from different regions in Algeria using Skype as a means of communication. So can distance learning bring best quality to learning or is it just one game used for entertainment?

In this research we would justify that:

- Distance learning has a positive impact on the learner
- It can bring best quality to learning
- It can help in lightening administrative load.

The purpose of this study is to throw light upon the teaching strategy used in distance learning. To this effect a theoretical part and a practical survey have been used. The theoretical part deals with Technology, Distance learning, Impact of distance learning on teaching strategies, and Advantages of distance learning. The practical survey describes an experimentation used with ten adult learners of different specialities using Skype as a means of communication, then data analysis, and then results. This survey ends up with a conclusion where some suggestions are made.

2. TECHNOLOGY

The advent of technology has bewildered many people. There was a debate about whether technology is a threat or a benefit and whether will have a positive or a negative impact on morality, attitudes, control and power; however the debate is no long about its threat, benefit or impact, but how to get ready to cope with change, because change is supposed to be inevitable. (Cullingford C. and Haq.N, 2009p.1).It is due to the invention of

computer; one technological tool which is fascinating in its development and applications, including other technological tools whose production has reached the edges of the world.

The increase of number of the aforementioned tools has permeated everyday life (Cullingford C. and Haq.N, 2009). People became more interested in these technological tools to the point that every person could possess a computer, a laptop and mobile phone including the internet and other free programmes such as Skype; a free computer programme where telephonic calls are made via the internet (Sheppard. A, 2006p.3). It joins the power of email, telephony, telegrams, and letters providing a way for text, data, voice and even video communication (Loren, and Abdulezer.S and Dammond.H, 2007p.1).So communication with people in very distant localities became very easy; people can communicate with each other at any time irrespective of geographic location exchanging information trying to thread new relationships with different people over the globe and can see each other virtually by webcam. This way of communication has pushed specialists to think about new ways of learning, so as to give the opportunity to different types of people (to attend courses) such as old people , people with a disability, employees who have family ties, instructors wanting further training etc... (Keegan.D, 1993p.143)

3. DISTANCE LEARNING

Before embarking on explaining the term distance learning, it is advisable to define learning. According to H. Douglas, learning is the fact to get or acquire knowledge of a particular domain or skill via study, experience or instruction. It is also defined by psychologists as a change in behaviour of an individual by experience. Specialists argue that learning mentioned in the above definition stands for acquisition,

memorization of information, cognitive organization, activity, practice and change in behaviour (Brown.D.H, 2007p.8).

Of further importance to learning is the notion that distance can enhance learning. So what is distance learning? There is a controversy among specialists in defining the term distance learning. Some of them say that it is a discipline in its own right, others say that it is a different and coherent educational endeavour, while others argue that it is a unique field which is very different in terms of goals, conduct, students, and activities. However, the common point between them is that there is a quasi physical separation between the teacher and the learner (Keegan.D, 1993p.51); i.e., the learner and the teacher are separated during the process of instruction. (Johnson. L. J, 2003p.1)

The physical separation and distance are the focal point of ideas of Peters, Moore, Holmberg, and Keegan, who see it as a positive point to strengthen the autonomy of the learner (D.Keegan, 1993) and focus on the students 'performance. In addition to the physical separation between the teacher and the learner, Keegan adds four characteristics of distance learning; institutional influence on materials design, availability of resources, monitoring and feedback facilities; reliance on technology of any type; and finally learner and teacher interaction of some sort and group interaction.(Bertin. C.J, Gravé.P and Combes N. P. J., 2010 p.40)

Distance learning requires first and foremost accessibility and hinges upon three key elements: agents, hardware, and software i.e. internet, broadband connection, teacher and learners, computer, head phones, a microphone, and a course. These elements may have a strong influence on the presentation of the course. (White.C, 2003p.103) The most significant element in all this is accessibility, which was proved as very important by Temperton for the success of students. He states that the students who succeeded in their study were the students who had accessibility, .i.e. they had networks in place

to back up their study where the networks derive from family or friends, work colleagues, other students or their tutors (Simpson.O, 2003p.22)

4. IMPACT OF DISTANCE LEARNING ON TEACHING METHODS

The use of technology had also an impact on teaching strategies. Before the emergence of technology the focus of teaching methods was upon pedagogy; the art and science of teaching children. However, the advent of technology has pushed teachers to move from pedagogy to andragogy; the art and science that help students to learn (Wang C.X.V,2012 p.44).

Instructors applying Pedagogy see the learner as a computational device which can calculate, store, collect, and retrieve information, so knowledge is incomplete. This approach focuses on the instructor but not the student. The former is considered as a depositor, whereas the latter is regarded as a depository i.e. education has become an act of depositing. This is Freiere's banking model, where the only job of students is to receive, fill and store the deposit. (Wang C.X.V, 2012).

Unlike pedagogy, which focuses on the instructor, andragogy puts its emphasis on the learner and not the teacher and hinges upon six principles; self-directed learning, prior experience of the learner, motivation to learn ,the learner's need to know, readiness to learn, orientation to learning and problem solving. These principles can work well in case of distance (Lawrence A. Tomei2010 p.13), where the teacher is a facilitator and his role consists in taking part with participants in the learning process and eases the task for them to learn (Lamy.N.M and Hampel.R, 2007p.61).The teacher also does not intervene except in case he has a reaction to what students say in their discussion, because his opinion will be taken as the ideal way of thinking (Johnson. L.J,2003p.83).

The six principles can be felt in the theory of motivation of cognitive school, where motivation focuses first and foremost on the personal decision, that is, internal forces push the learner to learn. According to Ausubel there are six drives for motivation: curiosity to know about the other part of the topic, which can be referred to as exploration, the desire to manipulate things in the environment to make change, referred as manipulation; the desire for making activity; the desire to be pushed by the environment, people, thought, ideas, and feelings known as stimulation, the desire to know, which embraces processing of obtained results due to exploration, manipulation, activity, and stimulation so as to be used for testing, comparison, and problem solving (Brown.D.H, 2007p.168).

5. ADVANTAGES OF DISTANCE LEARNING

Distance learning has many advantages which can be summarized as follows: It eases the task for the teacher to transfer knowledge immediately to the students and helps in collaborative and self directed learning (Kats.Y, 2010p.83), it increases communication and interaction between students anywhere and everywhere, because interactivity is the centre of educational technology, that is, dialogue between the teacher and students and even among student is the core of the learning environment (Cullingford C. and Haq.N, 2009). It also gives the opportunity to shy students to express their opinions and participate without anxiety and embarrassment (Judith. L. Johnson, 2003 .p2). Anxiety vanishes because of anonymity and distance, and as a result big opportunities for collaboration are offered to students (Lamy.N.M and Hampel.R, 2007p.77).

In addition, the instructor has the possibility to control the number of all participants who are known in advance; thus their level is tested quickly (Ortega.M and Bravo.J, 2002 p.94). Lea and Spears compare distance learning to the central tower

of a prison where prisoners can be controlled at one time (Lamy.N.M and Hampel.R, 2007).

6. PRACTICAL SURVEY

The use of technology on the part of students as a means of communication may reduce their face to face verbal and non verbal communication, and communication works more, with non verbal signs instead of actual words. Face to face communication can undergird and enhance social relationships compared to internet communication except for Skype, which has the characteristics of adding these nonverbal signs to the conversation (Wang.X.C.V, 2012 p.65).

The experimentation made in this survey relies first and foremost upon Skype with ten adult students of different specialties; five of them are doctoral students working in different fields such as Agriculture, Photovoltaic, Civil engineering, and Biology, and five others are master students in Electricity and Architecture, are parts of the research. Table 1 shows the number of participants, field of study, location, level and age. Courses were about general English of different themes taken from a Cambridge programme entitled "*The New CAMBRIDGE English Course*" They were sent to students through Skype in a scanned format one hour before starting teaching.

Table 1.

Participant	Field of study	Location	Level	Age
1	Agriculture	Jijel	Doctoral student	23
2	Photovoltaic	Algiers	Doctoral student	30
3	civil engineering	Msila	Doctoral student	30
4	Biology	Batna	Doctoral student	32
5	Photovoltaic	Djijel	Doctoral student	34

6	Electricity	Djijel	Master student	24
7	Architecture	Annaba	Master student	25
8	Architecture	Tlemcen	Master student	25
9	Electricity	Algiers	Master student	24
10	Electricity	Msila	Master student	35

The screen in Skype shows ten windows, where each window displays the name of the student; this can help in knowing the number of students in advance. As for the webcam, only two cams can work because of the speed of the broadband connection.

The teaching strategy adopted in this work is a combination of pedagogy and andragogy, where pedagogy consists of warming up, presentation of the course and exercises, while andragogy relies on communication.

7. DATA ANALYSIS

Once dealing with pedagogy to transmit codified and written knowledge, students seem to have a great deal of confidence, despite the inability to retrieve information related to the text in the right moment, thus the students' volition related to the participation in communication appears very high, which proves that they do not have anxiety in terms of communication, and interaction between students and the teacher was considerable, therefore students are very satisfied. As for motivation, students were very motivated because all of them sent me messages in advance to meet for lectures, so we can deduce that all students had personal decisions and internal drives that push them to learn. And after three months student were able to express themselves fluently.

Students also suggested avoiding courses dealing with friendships, dancing, drinking wine ...etc; an element which is

found in the first principle of andragogy called self-directed learning, i.e., they are aware of what they want to do, and want to know only things that they are interested in.

As for documents, it should be pointed out that there is no need for many documents in distance learning, because only messages, e-mails and courses of scanned formats are required for this type of education to be sent to students by internet, and this may lighten the load in the office, because only one book is needed, while courses are all sent to students by internet at the same time.

8. CONCLUSION

This survey was about enhancing learning through technology using Skype as a means of communication to teach students English. It dealt with technology, because it is the hinge of our work, since distance learning requires learning through distance, that is, internet, then talked about distance learning, which is one important field of education nowadays and its impact on the learner and the teaching strategies as well as the advantages of distance learning. A practical work was done afterwards to test the effectiveness of Skype to provide the proof of the benefits of distance learning.

The goal of this paper was to shed light upon the teaching strategy used in distance learning, which is a mixture between pedagogy and andragogy, where the learners found it very easy to cope with courses. The analysis of data may show this via the satisfaction of the learners, who were very confident in dealing with either exercises of written knowledge or communication. Furthermore their will towards participation in communication appeared very high, which indicates that they were freed from anxiety and were very motivated. They also succeeded in expressing themselves fluently during a short period of time and had a big awareness towards the subjects that should be learned, and others that should not. In this

respect we may say that distance learning can have a positive impact on the learner, it can help in leveraging the students' level, and can lighten the administrative load. This discussion is intended to encourage learners who want to develop their skills, thus to suggest the use of distance learning in some institutions, in order to exploit this new method of teaching at any time.

Finally this work is just a thumbnail sketch which can help in understanding one part of distance education, hoping from other searchers to endeavour in order to find better ways of teaching throughout technology using other free programmes such as Google talk or Raidcall or other programmes to ease the task for learners.

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