RESEARCH ARTICLE

CRITICAL STUDY OF THE USE OF INTERACTIVE MULTIMEDIA TECHNOLOGIES IN ENGLISH CLASSES

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ABSTRACT

Use of interactive multimedia technologies (IMTs) and their role in English language classes are highly significant at present days. This interactive technology based language learning is one of the best effective and innovative approaches in English language learning procedures as well as to inculcate and reinforce the opportunities to achieve language learning goals. At present, there are very few education institutions using the interactive multimedia technology for learning experiences that becoming more powerful and easier, and the interactive multimedia technology is advancing at surprising levels. Abundant leaning material and opportunities that are available on interactive whiteboards (IWBs) are some kind of blessing. Learning from efficient technological sources offers the potential for a richer, more practical and necessary understanding of language related aspects. Thus, many language instructors and professionals get to know the significance of using interactive whiteboards to make language learning more productive, effective, and communicative. Exploration of some possibilities to use effectively interactive multimedia technology and its applications for effective learning of English are to be examined. Further, discussion of various merits and demerits of using Interactive Multimedia Technologies for English language learning are presented. Finally the future trends are presented as per the review of literature done.

Key Words: Interactive Multimedia, Education Technology, Language Learning Resources, Interactive White Boards, ICT, Multimedia.

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1.   INTRODUCTION

'Multimedia' is a word that describes various forms of information such as audio, video, graphics, animation, images, and text. Some of the best examples are continuous media such as audio, video and animation that are time-based, i.e., each audio sample or video frame has a timestamp associated with it,

representing its presentation time. So, Multimedia material has to be presented in an uninterrupted mode, as per their connected timestamp. For instance, video is normally rendered at thirty frames per second to provide the viewers the impression of smooth motion. As a product, multimedia based applications in general have the real-time constraint, i.e., media data has to be delivered and rendered in real time. In present days, with the advancement of various communication technologies and networking systems, multimedia has become an essential feature on the internet; and audio, animation and video clips gradually become more popular on the Internet. A great number of various multimedia applications have been produced, such as Internet based calling, online video-conferencing, web collaboration that connects audio, video and interactive whiteboard, Internet television, on demand broadcasting, distance education learning, circulated simulation, entertainment and gaming, multimedia messaging, etc. In multimedia, there is a combination of five basic types of media very useful in the teaching and learning environments i.e. text, graphics, animation, sound and video, as a result providing a potential new means for education. According to Furht (2008), interactive multimedia expands these categories by allowing their users to manipulate and interact with their learning environment, such as the ability to control the progress of a presentation by, fast-forwarding, rewinding or hyper-linking to other parts of the presentation" (Furth 2008 : 68).

Basic elements of multimedia learning environment:
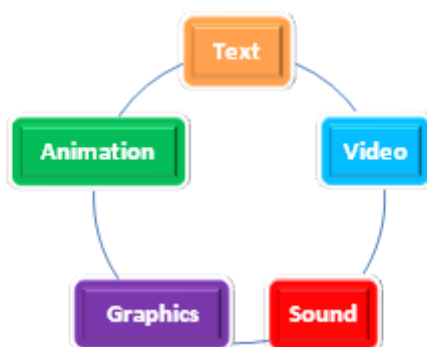
Furht (2008) considered that the interactive multimedia learning method was as constructing a web, with one idea associated to another, providing choices in the learner's path (Furht 2008 : 203). Out of all of the elements, text has the most impact on the quality of the multimedia interaction. Sound is used to provide emphasis or highlight a transition from one page to another where as animations are very useful to show changes in status over time, or to present information slowly to students so they have time to understand it in smaller portions. Multimedia enables students to view various modes of change in course of time depending on a range of variables. Animations are also primarily used to demonstrate an idea or illustrate a concept. Furht said that "Graphics provide the most creative possibilities for a learning session. The media can be photographs, drawings, graphs from a spreadsheet, pictures from CD-ROM, or something pulled from the internet; With a scanner, hand-drawn work can be included" (Furht 2008 : 203).

"It is clear that interactive whiteboards are very popular with teachers and pupils; however, many people are questioning whether they represent good value for money or whether alternative projection technologies are more useful" (Moore 2001). It's also commented that the pictures enhances the capacity of recognition memory is so much" (Standing). It is because of the images make use of an enormous variety of cortical abilities including colour, form, line, dimension, texture, visual rhythm, and especially imagination. These multimedia based applications usually enable the users to actively interact with the system rather than being passive entities of information. Interactive multimedia systems provide the users with "the ability to change the presented content, making them the final Authors of the presentation. In interactive multimedia systems, the user is given the ability to vary the order in which the content is presented; in other words, the user can change the narrative" (Furht 2008: 498).

There are many students, teachers or administrators who have still no adequate knowledge about the technology. It is basic to know that an "interactive whiteboard" is a hug display that is connected to a computer then to also a projector. So the projector shows the desktop of the same computer onto the surface of the interactive whiteboard (IWB) and the users of this kind of system can control the computer system with a pen, finger, or any other device. Usually, an interactive whiteboard (IWB) is fixed to a wall or to a floor stand.

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In learning, there are many "accessories, such as student response systems, enable interactivity" (Marcano 2009). Therefore an interactive whiteboard (IWB) is not just a computer, a projector or a screen and its sum is greater than its parts, and when all these technologies are turned off the surface of the interactive whiteboard (IWB) can be used as an ordinary whiteboard should it be required. It enables the teacher to use high-quality teaching and learning material (TLM) that is prepared by a teacher or group of teachers using software packages in order to use multimedia material including electronic media, video clips, board work, data tables, sketches, CD-ROM, or Internet images (Glover 2001). ICT is a complex term in a sense that includes many communication devices or applications, surrounding such as radio, TV, mobile phones, computer and various hardware and software, interactive systems and so on, as well as many application based services associated with them, such as video-conferencing and distance learning. Most of the times, Information Communication Technologies (ICT's) are repeatedly spoken of in a particular context, such as ICT in education, medical care or libraries. There are plenty of useful applications of multimedia technologies available at present, such as "Analog /digital video, audio conferencing, authoring software, CD-ROMs, drives, collaborative utility software, digital signal processors, hypermedia, laserdiscs, e-books, speech processors, synthesizers, animation, video conferencing, virtual reality, video capture, and video cams" (Pagani 2008).

2.   Types of Multimedia Interaction Methods

Interactive Learning: It is described as the procedure of exchanging and distributing of knowledge resources helpful to innovation between an innovator, its suppliers and/or its clients. It may start with a resource-based argument which particularized through introducing challenging and balancing theoretical arguments, such as the complexity and structuring of innovative activities and cross sectored technological dynamics. Interactive Multimedia Method is "a multimedia system in which related items of information are connected and can be presented together. This system combines different media for its communication purposes, such as text, graphics, sound and so forth". (Pagani 2008)

Types of Interaction Methods:

According to Pagani (2008), there are some of the interaction methods tabulated here as follow.

Interaction methods	Media	Advantage	Disadvantage	Further development
Through teachers	E-mail, Usenet, Chat, Conferencing	Quality in teaching	Time consuming	Conferencing Systems, Video processing techniques
Interactive discussions	Interactive Software	Reusability, easier installation	Lengthy development time	High-definition audio and video broadcasts
Collaborative learning	E-mail, Usenet, Chat, Conferencing	Inexpensive, easy access	Less control and supervision	Conferencing systems and discussion tools

3.   Role of Interactive White Boards in Language Education

There are some essential elements of multimedia used in education include text, video, sound, graphics, and animation. The growth in use of multimedia within the education sector has accelerated in recent years, and looks set for continued expansion in the future. The elements used in multimedia have all existed before. Furht mentioned that "Multimedia simply combines these elements into a powerful new tool, especially in the hands of teachers and students. Interactive multimedia weaves five basic types of media into the learning environment: text, video, sound, graphics and animation" (Furht 2008: 549). According to National Council of Education Research and Training (NCERT), "Modern ET has its potential in schools, in the teaching of subjects, in examinations, in research, in systemic reforms, and, above all, in teacher education, overcoming the conventional problems of scale and reach through online, anytime, anywhere" (NCERT 2006).

Further NCERT set some essential objectives of using Educational Technology through some systematic reforms ('position paper national focus group on educational technology'); they are as follow:

- Ensure that technology is used in an equitable and democratic manner to enhance the self-worth and self-image of the poor and the disadvantaged.
- Counter the tendency to centralise; promote plurality and diversity.
- Ensure opportunities for autonomous content generation by diverse communities.

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- Shift focus from fixed to flexible curricula with competencies and skills identified rather than specific factual content.
- Deploy ET to enhance open education, which implies openness in curriculum transactions.
- Work towards transforming all schools into ICT-rich environments.
- Create opportunities for administrators and educational leaders in the school system to become ET savvy and to be able to use ICTs competently.

4. Collaborative Multimedia for English Language Pedagogy

According to Furht (2008) the notion of collaborative multimedia combines presentational, conversational and interactive multimedia into a single, unified and integrated approach. Thus, rather than relying on "disjoint parallel technologies", collaborative multimedia supports participants freely moving between the types of expression, information and interaction as desired and appropriate for the collaborative effort.

Interactivity: It is also clear that a computer based multimedia requires the same level of interactivity just like a school exercise book or a laboratory experiment has for to remain trustworthy as a means of learning. Many educationists also shown that certain forms of learning becomes easier, and is retained more permanently if the learner participates in some way with the learning material. Multimedia is also helpful to a lecturer as it provides many benefits such as satisfying educational objectives, increasing students understanding, demonstrating events, showing places, conducting experiments in most possible ways. According to Furht, "Real-time multimedia refers to applications in which multimedia data has to be delivered and rendered in real time; it can be broadly classified into interactive multimedia and streaming media" (Furht 2008:757).

5. Advantages of using Interactive Multimedia in English Language Classes

It is evident that the use of multimedia technology in classroom practices is certainly beneficial to a teacher as well as to students. Marcano asserted that the interactive whiteboards (IWB's) have great impetus as a technological tool to enhance pedagogical practices in the classroom and eventually improve learner achievement (Marcano 2009). Nevertheless, simply assuming that using this kind technological tool can automatically improves student achievement would be a great mistake. As it is a matter of many powerful tools, language teachers need to use interactive whiteboards cleverly according to the principles of a good classroom practice. Interactive Multimedia Technologies provides various advantages to the users in many ways, such as providing learners an opportunity to create multimedia documents of their own gives several educational advantages. Further, the learners of language work with the same information in the following ways: (1) learner as a researcher, one must identify and choose useful information to understand the selected topic; (2) learner as an author, one must consider his/her expected audience and decide the amount of information which is needed to give his/her readers an understanding of the topic; (3) as a designer, one must select the suitable media to share out the concepts selected; and (4) as writer, one must find a way to fit the information to the container including the manner of linking the information for others to retrieve. Some of the major benefits of using interactive multimedia technologies are that such use: Interactive White Board supports more variedly creative and seamless use of teaching materials. Jones distinguished that the use of interactive technology from conventional teaching. He said that the technology "engages pupils to a greater extent than conventional whole-class teaching, increasing their enjoyment and motivation; it facilitates pupil participation through the ability to interact with materials" (Jones 2004).

6. Interactive Multimedia Technology and its future in language education

Many innovative technologies have established esteemed standing in education, especially in language education, and training despite various shortcomings in their performances. Technological innovations have been applied to improve the quality of language education for the past few years. At present, there are many instances where applications of interactive multimedia technology had the potential to completely revolutionize the educational systems. Some of the reformed usage of devices like radio, television and video recorders are among many as the starter. Interconnected computers with internet are the non-concatenated connection between the traditional and innovative technologies. "The recent addition of gadgets like personal digital assistants, and software like virtual libraries could be some ways out to advanced researchers in many innovative methods on interactive learning"(Pagani 2008).

7. Conclusion

It is obvious that, on the basis of the review of related literature, the use of interactive whiteboards in language teaching As the interactive whiteboards have great potential as a tool to enhance pedagogical practices in the classroom, they are most assistive in improving student's achievement. On the other hand,

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simply assuming that using interactive whiteboards or any other technological tools can automatically enhance student achievement would be certainly a mistake. It is true with all powerful tools that teachers must use interactive whiteboards very thoughtfully, as per the knowledge teachers have about an effective classroom practice.

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