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## Exploring the Integration of Multimedia in Teaching EFL from the Perspective of Sudanese EFL Teachers

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### Abstract:

*This paper aims to “Exploring the Integration of Multimedia in Teaching EFL from Sudanese EFL teachers’ perspective”. The researcher has adopted the quantitative and experimental methods using two data gathering tools for the study in question: The first is the questionnaire which is administered to (50) different Sudanese EFL universities and colleges teachers, and the second one is pre and posttest given to an experimental group consists of (30) students from the first year selected from different colleges at the International University of Sudan who were taught reading comprehension lessons through the use of multimedia. The data obtained from the questionnaire and the two tests have been computationally processed with SPSS program to check the truth of hypotheses, to reflect the Sudanese EFL teachers’ perceptions towards the integration of multimedia in teaching EFL and to see whether there is any significant impact for the integration of multimedia on the students’ performance. Finally, Sudanese EFL teacher and this study recommend the integration of multimedia in teaching EFL.*

**Key words:** Multimedia, Sudanese EFL Teachers, Teaching EFL

## **INTRODUCTION**

The effectiveness of the use of computers in education may be regarded as an important factor in determining which countries will succeed in the future. Additionally, the development of a new broadband communication services with computers have created numerous possibilities to use a variety of new technological tools for teaching and learning system. The integration of computers and communications offers unprecedented opportunities to the educational systems with its capacity to integrate, enhance and interact with each other in a meaningful way to achieve the teaching-learning objectives. However, as the case of developing countries, particularly in Sudan, the metaphor of the information age has generated a whole set of speculations about the need for educational system reformation. The reformation will accommodate the new tool. Education, thus, with regard to the use of computers in teaching is to increase teaching-learning gains. Also the necessity of reformation is to prepare the coming generation for mass use of computer and android, too. The global adoption of computer technology has been the landmark on the educational scene for the last few years.

## **AIMS AND SCOPE OF THE STUDY**

This study aims to exploring the integration of multimedia in teaching EFL from the perspective of Sudanese teachers of EFL. The scope of the study is limited to (50) different Sudanese EFL teachers selected on purpose as they have access to multimedia and experience with using modern technology inside and beyond the classroom. Beside an experimental group of thirty (30) students from the first year of different colleges selected from the international university of Sudan and who were taught through modern technology to measure how the

potentials of multimedia integration can be of importance in EFL teaching.

## **LITERATURE REVIEW**

### **Identifying the Role of Technology in Education**

Dwyer, Ringstaff, & Sandholtz, (1991) remarked that technology has become inseparable part of today's world and this is also true with the field of foreign language instruction. The use of technology in teaching and learning of foreign language like English has always dominated the pedagogical debates and discussions and made the luminaries and pedagogues in the field to investigate the possible advantages and implications of this technology for effective and dynamic teaching and learning of foreign language like English. Such debates and studies have often ended on recommending the use of computer technology in foreign language instructions due to several advantages this use can offer both for the EFL teachers and learners.

### **Computer-Assisted Language Teaching CAT**

As Coley, (1997) claimed that today teachers have access to innovative tools with which to enhance their curriculum. One of these technology tools is the computer, which has given students a new way to do research, allowed teachers to offer a wider topic range, and made available an endless amount of information. Additionally, software connects teachers and students from all over the world so they can work collaboratively with other teachers and students anywhere in the world. Interactive whiteboards also allow students to touch the screen and participate in thought provoking activities prepared by teachers. Specifically, special education teachers have access to tools such as a scanner that will read aloud and applications that emphasize reading skills. These tools could be helpful to a blind student listening to a book, learning-disabled

students playing with reading software, and dyslexic students learning how to read with software.

Even though this statement is presently ten years old, it still rings true today. Computer plays great and important role in EFL teaching and learning. It is used in practicing and teaching purposes. It has always been widely contemplated subject among the ELT researchers and pedagogues. Though, the use of computer technology into foreign language teaching, learning and assessment started during 1950s. It was not so widespread practice then. It did not form very important place in teaching and learning process of EFL due to the technology and infrastructure related issues. However, it is observed with the emergence of first generation of the personal computers in the 1980s. The use of computer technology in education, in general, and in EFL classrooms in particular, was accelerated. As this use proved fruitful, producing positive results in teaching, learning and testing processes. It paved the way to further research on possible exploitation of this technology for achieving maximum results. This resulted in people from varied fields like, computer engineers and software designers, applied linguists, academicians, language teachers and assessment specialists to join the hands to use this technology for making teaching and learning of foreign language like English more innovative, dynamic, interactive, interesting, easy and learner-centered. Today, computer technology enjoys a noticeable presence in second and foreign language teaching and learning processes. This is because of infinite benefits. This use has for teaching, learning foreign language like English. The use of computer, in EFL classroom, can offer the delivery of a wide variety of multimedia content, with pedantic and authentic language models, accessed with individual control. It also presents another source of target language knowledge and examples and relieves the EFL teacher as the sole font of target language knowledge in the classroom.

## **Computer and Teaching Methods**

Roshelle, Pea, Hoadley, Gordin, and Means (2000) indicated that computers can be used in collaboration for all subject areas, but teachers must take into account the different styles of teaching and the students' different styles of learning in order to use them effectively. Technological tools, especially personal computers, are often cited by educators and policymakers as magic-workers in literacy programs, providing great access to all students.

Blamires (1999) claimed that technological tools could help overcome skill-level barriers to learning. He went on to say computers could make us smarter, if not wiser.

According to Baker, Gearheat, and Herman (1990) have dedicated pages to the motivational qualities of learning with technological tools. Students are very familiar with how to work computers, which means students are more engaged when using these technology tools. Motivation and engagement are frequently identified as the major benefits of using technological tools to support literacy learning.

Andrews, (2003) suggested that a common view is that in using computers, students are so engaged and motivated by a viewing text they hardly realize they are accessing, reading, decoding, and analyzing information. Why is it so engaging?

As previously mentioned, technological tools are everywhere in society and are part of our everyday lives. Hence, the use of technological tools in teaching and learning experiences directly relates to the real lives of students.

Reading information on a website advertised in a favorite skating magazine, downloading the latest hits from a radio website, and reading the latest gossip about film stars are just some examples that connect with students' real lives yet require active practice and development of literacy skills. Others have suggested using computers for literacy building and literacy practice also allows students to take more risks with their language because of less fear of embarrassing

mistakes The Read180 program that has been implemented in Department of Defense Education Activity schools is a good example. The Read180 software creates games for students while improving their reading skills. This point is similar to that made in referring to the computer as a non-threatening center of attention. Perhaps the highest indication of motivation and engagement is that in studies comparing literacy classes that used technological tools to those that did not, researchers found that truancy levels were much lower in the technological tools-focused classes.

This was especially significant when discussing students identified as "at risk" because one of the major focuses of the Systems Analysis Evaluation and Research (SAER) programs is reducing truancy rates.

Becker (2000) claim that "since computers are everyday and ordinary, students would approach them as simply another tool, like a pen or pencil, and not an extrinsic motivational reward. This point can be true of all the new and innovative technology tools available today. Technology advances daily, and tools that are "new and improved" will always be a factor.

### **Using Computer in Language Instruction**

Swenson & Redmond, (2009) stressed that the idea of incorporating computer technology in EFL has always been the focal point of discussion and debate for a very long period of time. This integration of computer technology into the domain of foreign language education began during 1950s and since then, as the computer technology witnessed drastic changes, this use also has undergone tremendous modifications and became the part and parcel of modern day education system. The result of all these has been evident on all those related to EFL instruction including teachers. The advent of computer technology in EFL instruction has led to significant changes in teachers' approaches, methodologies and strategies to teach

foreign language as English, with many practical benefits both for EFL teachers and learner.

Today, the use of computer technology in EFL teaching and learning has achieved possible implications of this technology for achieving the aims and objectives of EFL teaching and learning and have recommended strongly this use for effective and dynamic teaching and learning of foreign Language like English. Such arguments encourage the use of computer technology in EFL teaching and learning, advantages of the use of computer technology in EFL teachers and learners.

### **Incorporating Computer Technology in EFL Teaching**

Barron & Goldman, (1994) stated that teachers who reportedly value the integration of computer technology changed their teaching in order to better incorporate technology approaches. Software availability and teacher willingness to use the software can have positive effects on the teachers' attitudes towards the adoption of computer technology in the classroom. Interactive venues and discussion boards can help teachers to learn with technology instead of solely using it to teach. Additionally, teachers who report a strong commitment to computer teaching as well as their own professional development have been found to integrate technology tools more readily.

According to Norum, Grabinger and Duffield (1999) studied the thoughts, perceptions, beliefs, experiences, knowledge and growth of teachers studying and attempting to integrate the use of computers in their classrooms. The important theme they found running throughout this research was teachers' strong assertion that they needed to change personally and take on new roles if technology was to be effectively integrated into their classrooms. Most of the teachers involved in this study saw themselves as the place where change efforts needed to begin. Experiences with computer technology planning highlight the well-documented

observation that teacher attitudes toward computer technology and computer integration seriously impact the success of professional development programs. They thus need to be seriously considered.

Albion, (1999); Ross, Hogaboam-Gray, & Hannay, (1999) argued that positive attitudes toward computer integration enhance learning to use technologies in teaching and learning; negative attitudes constrain it. This does not necessarily mean that only teachers with positive attitudes should be included in computer technology training activities. It does mean that negative attitudes among participants need to be valued and addressed, and that positive attitudes should be encouraged and developed. Teachers often recognize that their students do indeed need additional input and output activities to help them continue to improve their language skills, particularly pronunciation skills.

### **Implications for EFL Teachers and Learners**

Blake (2008) argued that if computer technology is used wisely and creatively, it could play a very significant role in enhancing EFL learners' contact with the target language, particularly in the absence of the study abroad option. Such views signify the importance of computer technology in overcoming many prevailing problems in EFL situations and have many implications both for EFL teachers and learners. If EFL teachers and learners cooperate and use this technology wisely, it can play wonders in achieving the aims and objectives of teaching and learning of foreign language.

### **Teachers and Computer Literacy**

In Asan's (2003) study, primary teachers' perceptions and awareness level about specific technologies, and about the role of technology in education, and how they see the technological problems that are faced by basic education school systems. The results showed that many teachers were not computer users



and lacked a functional computer literacy background upon which to build new technology and skills. The study also indicated that the use of computer and related technologies was not routine part of their teaching and learning environment.

Cavas and Kesercioğlu (2003) investigated the teachers' attitudes toward computer assisted learning (CAL). The results showed that the majority of science teachers had positive attitudes toward CAL and no gender difference exists between science teachers' computer-assisted learning attitudes.

Ocak and Akdemir (2008) expressed that teachers' computer literacy level is related to their computer use. And also computer literacy level of the teachers increases their integration of computer applications in their teaching. In the study, most of the teachers use Internet, email, and educational software CDs as computer applications in the classrooms. They found statistically differences in the integration of computer applications as an instructional tool. Teachers' attitudes toward computer technologies are related to teachers' computer competence.

In their study of the correlation between teachers' attitude and acceptance of technology, Francis-Pelton and Pelton (1996) maintained although many teachers believe computers are an important component of a student's education, their lack of knowledge and experience lead to a lack of confidence to attempt to introduce them into their instruction. A large number of studies showed that teachers' computer competence is a significant predictor of their attitudes toward computers.

### **Teachers and Computer Anxiety and Interest**

According to the report of International Society for Technology and Education (ISTE) (2001), relatively few teachers (20%) report feeling well prepared to integrate technology into classroom instruction. Although computers have been put in the classroom, many teachers are still skeptical of the value

computers have provided for teaching and learning. Studies indicate that the level of feelings teachers have toward computer use range from euphoria to uncertainty, to hostility and fear.

Berson, (1996) and Saye, (1998) noted that “some teachers show little interest in using instructional technology, while others are obviously resistant to its use. Some positively accept the concept, but feel somewhat bound by lack of training for effective integration”. Still some teachers have ambivalent feelings toward technology. Feelings of uncertainty, hostility and fear naturally lead to many teachers’ reluctance or resistance to technological innovation. They will continue to adhere to their traditional practices with which they feel more confident and comfortable.

Teo, Lee and Chai (2008) showed that “the effective use of technology enables teachers to facilitate and adjust their instructional strategies to optimize students’ learning. In this respect, when teachers’ role and activity in the process is taken into account; it is important to know teachers’ interest in technology and their attitudes, affective features towards technology.

Erkan, (2004); Rohaan, Taconis & Jochems, (2010) and Kagan (1992) noted that “teachers' attitudes appear to lie at the heart of teaching and tend to be associated with a congruent style of teaching. Teachers’ attitudes and emotions also build the meanings they bring to innovations such as technology integration. Hence, changes to teaching style, as might be required by working with technology, may necessitate changes to teachers' attitudes.

Anderson, (2008) claimed that despite the clear demonstration of the benefits of using technology in education, there continues to be a marked reluctance by academics to engage with online learning.

### **Barriers to Teachers' Use of Computers**

Greener, (2009) stated that new and improved models of teaching are often considered the best way to teach students; however, they change regularly, just as technology does. Other barriers to using technology in education include lack of teacher time, training, and support; limited access; high costs of equipment; lack of vision or rationale for technology use; and assessment practices that may not reflect what is learned with technology. In particular, the lack of teacher training and expertise is a major barrier to using the computer and related equipment.

### **Sifting Through Computer Content**

Consideration must be given to how well the topic maps onto the computer environment. Tasks that demand a lower-cognitive level (e.g. simple exercises) are well suited to CAI applications, as they are good for reinforcing basic fact-oriented learning. It is important that the CAI software fits well with the target user group. CAI is usually beneficial to lower achievers and those from lower economic strata. This is due to the fact that features that are offered by CAI applications are those which suit these types of learners including drill and practice, privacy and immediate feedback and reinforcement. The target users of the template would typically share these characteristics.

In order to cater for different learning styles, different presentation formats and multimedia formats should be used where appropriate. Learners who live in developed countries and are used to traditional learning methods, may like to see textual information, along with visual and audio elements in CAI material. However, EL community members may have low literacy levels and thus may prefer the visual and audio elements over the textual information. Moreover, different cultures may prefer different presentation styles, with some preferring loads of information on the screen while others may

prefer less information, presented in a more spacious manner. CAI can offer the learner control over the learning process. The degree of freedom or control available to the learner must be considered. Sufficient guidance must be provided for the lower-ability learner.

### **Testing the Effectiveness of CALL**

Clarke, (1987) claims that to evaluate the effectiveness of CAI usually follow the psychometric tradition. This involves using standardized proficiency tests to measure the effects of instructional programs or methods on student learning outcomes and comparing the results. In the psychometric tradition, there will typically be two groups of students: one group will use a CAI program and the control group will be taught in the traditional classroom setting. Sometimes a pre-test is carried out whereby each group is examined on knowledge before partaking in the learning process. At the end of the instruction period, the two groups undertake a test to determine what has been learnt. This type of evaluation of the CAI process is perhaps the most common because it follows traditional methods and is easiest and least labor intensive to perform. However, it has been recognized that the psychometric tradition alone cannot fully analyze CAI effectiveness as it is often too simplistic. With interaction analysis, the interaction between the learner and the CAI program is observed. Interaction analysis can be either pedagogically motivated or psycholinguistically-motivated.

Pedagogically-motivated research tries to determine what works. What resources does the learner use? Is the program being used in the way that the designer intended? Psycholinguistically-motivated research aims to find out what learning strategies learners use. Clark, however, argues that any learning gain cannot be unambiguously attributed to the use of computers. He claims that it is very difficult to separate the computer from the other variables such as practice and

reinforcement that affect the learning process. However, as it is generally agreed that CAI programs are at least as effective as traditional methods, it will be assumed that they are of benefit, especially where the traditional methods may not be available.

## **MATERIALS AND METHODS**

This study was mainly carried out with different Sudanese EFL teacher and students of EFL from the first from at the international University of Sudan. A purposive sample selected for this study includes (50) Sudanese teachers due to their use and experience of multimedia in teaching EFL beside (30) EFL students whom were taught through multimedia to examine to what extent multimedia can have an effective impact on the students' performance.

### **Tools of the Study**

The researcher used test and questionnaire as the main tool to collect the data which is delivered to fifty (50) a purposive sample of Sudanese teachers in different Universities. The test is administered to thirty (30) students who were taught as stated above through multimedia. The researcher adopted the quantitative and the experimental methods as to conducting this study.

## **RESULTS AND DISCUSSION**

The researcher used the questionnaire and the test as tools for data collection related to this study. The researcher designed the questionnaire to explore teachers' views and attitudes towards the use of multimedia in teaching EFL. The test is used to support teachers' views and to mainly measure the influence in the students' performance that multimedia can bring about. The tables and percentages below illustrate what has been stated above.

## **The Analysis of the Questionnaire and the Test in Relation to the Hypothesis**

The first part of the questionnaire is an introductory section seeking information about the teachers. In fact, the items in this division elicit information about the targeted teachers in terms of their gender, qualifications, and years of teaching EFL experience through multimedia. The teachers were requested to indicate their answers by ticking (√) one of the five options: “Strongly agree”, “Agree”, “Neutral”, “Disagree”, “Strongly disagree”.

**Table (1) Gender: This table classifies the teachers questioned in terms of gender.**

Gender	Frequency	Percent (%)
Male	16	32
Female	34	68
Total	50	100

**Table (2) Qualifications: The table below classifies the targeted teachers in terms of their qualifications.**

Qualification	Frequency	Percent (%)
PhD	13	26.0
MA	1	2.0
BA	31	62.0
other	5	10.0
Total	50	100.0

**Table (3) This table illustrates the targeted teachers according to their years of experience of using multimedia in teaching EFL.**

Years of Experience	Frequency	Percent (%)
1-5 years	23	46.0
6-10 years	4	8.0
11-15 years	7	14.0
16-20 years	14	28.0
more than 21 years	2	4.0
Total	50	100.0

## H1: Sudanese English teachers are enthusiastic about incorporating multimedia in teaching EFL.

Table (4) S1: “I prefer using multimedia in teaching reading skills”.

Statement	Frequency	Percent (%)
Strongly disagree	6	12.0
Disagree	5	10.0
Neutral	5	10.0
Agree	18	36.0
strongly agree	16	32.0
Total	50	100.0

The teachers' responses are displayed in table (1) above. The table shows that 32% strongly agree with the statement, and 18% agree, whereas 10% were neutral. Thus, the teachers almost unanimously agree that they prefer using multimedia in teaching reading skills. This absolute unanimity on the part of the teachers is in line with the first hypothesis of the research which reads: ***“Sudanese English teachers are enthusiastic about incorporating multimedia in teaching EFL”.***

Table (5) S2: “ My performance is satisfactory when using multimedia in teaching reading skills”.

Statement	Frequency	Percent (%)
Strongly disagree	5	10.0
Disagree	4	8.0
Neutral	11	22.0
Agree	17	34.0
strongly agree	13	26.0
Total	50	100.0

The teachers' replies are revealed in table (2) above. The table shows that 26% of the teachers strongly agree with the statement, 34% agree, 22% of the teachers are neutral, 8% disagree, and 10% strongly disagree. The results indicate that this statement has aroused much controversy, as the teachers' responses range from 'strongly agree' to 'strongly disagree'. Nevertheless, those who agree, 56% (26% strongly agree, 34%

agree) are much more than those who disagree, 18% (8% disagree, 10% strongly agree). This statement is also in support of the researcher's hypothesis one above.

**Table (6) S3: "Adding multimedia to teaching reading skills is time consuming".**

Statement	Frequency	Percent (%)
Strongly disagree	6	12.0
Disagree	14	28.0
Neutral	14	28.0
Agree	7	14.0
strongly agree	9	18.0
Total	50	100.0

The teachers' responses are grouped in table (3) above. The table reveals that 18% of the teachers strongly agree with the statement, 14% agree, 28% of the teachers are neutral, 28% disagree and 12% strongly disagree .The fact that the teachers' responses range from 'strongly agree' to 'strongly disagree' implies that this statement is really divisive. However, those who disagree, 30% (12% strongly disagree, 28% disagree) do not support the statement.

**Table (7) S4: "Power Point helps effectively deliver reading skills lessons".**

Statement	Frequency	Percent (%)
Strongly disagree	3	6.0
Disagree	5	10.0
Neutral	11	22.0
Agree	8	16.0
strongly agree	23	46.0
Total	50	100.0

The teachers' opinions are revealed in table (4) above. The table illustrates that 46% of the teachers strongly agree with the statement, 16% agree, 22% of the teachers are neutral, 10% disagree and 6% strongly disagree. Thus, the results show that this statement has been supported, 62% (46% strongly agree, 16% agree) Those who agree greatly outnumber those who are



against the statement, 16% (10 disagree and 6% strongly disagree).

**Table (8) S5: “Teaching reading skills using multimedia is required”.**

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	3	6.0
Neutral	11	22.0
Agree	21	42.0
strongly agree	13	26.0
Total	50	100.0

The teachers' attitudes are grouped in table (5) above. The table shows that 26% of the teachers strongly agree with the statement, 42% agree, 22% of the teachers are neutral, 6% disagree and 4% strongly disagree. The results indicate that the agreement by the teachers is almost unanimous, 68% (26% strongly agree, 42% agree); 10% disagrees. These results signify the requirement of multimedia in teaching reading skills.

**Table (9) S6: “I am enthusiastic to try the interactive multimedia’s tools in EFL classroom”.**

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	7	14.0
Neutral	17	34.0
Agree	16	32.0
strongly agree	8	16.0
Total	50	100.0

The table above shows 16% of the teachers strongly agree with the statement, 32% agree, 34% of the teachers are neutral, 14% disagree and 4% strongly disagree. The results indicate that this statement has highly, if not sharply, split the teachers' opinions. However, those who agree 48% (16% strongly agree and 32% agree) outnumbered those who disagree 18%.

**Table (10) S7: “Computer applications can be utilized in teaching reading skills”.**

Statement	Frequency	Percent (%)
Strongly disagree	7	14.0
Disagree	4	8.0
Neutral	10	20.0
Agree	16	32.0
strongly agree	13	26.0
Total	50	100.0

The teachers' opinions are shown in table (7) The table shows that 26% of the teachers strongly agree with the statement, 32% agree, 20% are neutral, 8% disagree and 14% strongly disagree. As such, the above statement seems to be very controversial, as the teachers expressed different attitudes towards it. However, the teachers who agree with the statement 58% (26% strongly agree, 32% agree) outnumber those who disagree, 22%.

**Table (11) S8: “EFL teachers are capable to administer Power Point Presentations”.**

Statement	Frequency	Percent (%)
Strongly disagree	3	6.0
Disagree	9	18.0
Neutral	9	18.0
Agree	17	34.0
strongly agree	12	24.0
Total	50	100.0

The teachers' views are gathered in table (8) above. The table shows that 24% of the teachers strongly agree with the statement, 34% agree, 18% of the teachers are neutral, 18% disagree and 6% strongly disagree. Despite the fact that the teachers expressed different opinions about this statement, most of them, 58% (24% strongly agree, 34% agree) support the statement.

**Table (12) S9: “EFL teachers are prepared to use smart board to teach reading skills”.**

Statement	Frequency	Percent (%)
Strongly disagree	4	8.0
Disagree	6	12.0
Neutral	12	24.0
Agree	15	30.0
strongly agree	13	26.0
Total	50	100.0

The teachers' opinions are shown in table (9) above. The table shows that 26% of the teachers strongly agree with the statement, 30% agree, 24% of the teachers are neutral, 12% disagree and 8% disagree. It is clear that despite the controversy created by this statement, most of the teachers, 56% (26% strongly agree, 30% agree) hold the same view expressed by the statement.

**Table (13) S9: “EFL teachers are prepared to use in focus projector to teach reading skills”.**

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	7	14.0
Neutral	9	18.0
Agree	16	32.0
strongly agree	16	32.0
Total	50	100.0

The teachers' answers are shown in table (9) above. The table shows that 32% of the teachers strongly agree with the statement, 32% agree, 18% of the teacher are neutral, 14% disagree and 4% strongly disagree. Thus, the teachers' agreement with this statement is almost unanimous, 64% (32% strongly agree, 32% agree) agree about the statement.

**Table (14) S10: “Multimedia use keeps EFL teaching up to date”.**

Statement	Frequency	Percent (%)
Strongly disagree	7	14.0
Disagree	6	12.0
Neutral	10	20.0
Agree	13	26.0

strongly agree	14	28.0
Total	50	100.0

The teachers' opinions are shown in table (4.24) The table shows that 28% of the teachers strongly agree with the statement, 26% agree, 20% are neutral, 12% disagree and 14% strongly disagree. As such, the above statement seems to be very controversial, as the teachers expressed different attitudes towards it. However, the teachers who agree with the statement 54% (28% strongly agree, 26% agree) outnumber those who disagree, 16%.

**Table (15): One sample T-test for the Hypothesis**

**H1: Sudanese EFL teachers are enthusiastic about incorporating multimedia in teaching EFL.**

Expected mean	Observed mean	St.d	t-value	d.f	p-value
11	14.86	2.03	14.93	48	0.00

As table (15) above shows, it is clear that the p-value (0.00) is less than significance level, the observed mean (14.86) is greater than the expected mean (11). Consequently, these results in fact verified the researcher's hypothesis number one which reads: "*Sudanese EFL teachers are enthusiastic about incorporating multimedia in teaching EFL.*"

**Table (16): One Sample T-test for the Second Hypothesis**

**H2: Using multimedia in teaching reading skills is prerequisite for Sudanese EFL teachers.**

Expected mean	Observed mean	St.d	t-value	d.f	p-value
11	13.48	2.31	6.40	48	0.00

As table (16) above shows, it is clear that the p-value (0.00) is less than significance level, the observed mean (13.48) is bigger than the expected mean (11). Thus, these results in fact confirmed the researcher's hypothesis number two which is

*“Using multimedia in teaching reading skills is prerequisite for Sudanese EFL teachers”.*

**Table (17): Independent Sample T.test Between Pre & Posttest**

Test	Means	STD	T.test Value	Df	Sig
Pre test	4.33	2.26	4.81	58	0.00
Post test	7.03	2.07			

The result in above table shows that there is significant difference between the means of the students’ performance in the pre test and posttest. It is noticed that the expected means in the posttest is greater than the expected means in the pretest which reflects significant difference between the students’ performance in both tests where the sig value 0.00 is less than 0.05.

In conclusion, it is noticed that all the above discussed statements and hypotheses are in support of the track of the study which calls for the integration of multimedia in the field of teaching English as a foreign language in Sudan.

## **REPORT DISCUSSION**

The collected data via the questionnaire and the test was analyzed in the light of the study’s and the researcher’s hypotheses which proved that multimedia can successfully be integrated into the domain of teaching EFL as viewed by the Sudanese EFL teachers and proved by EFL students scores in the performance test. Finally, this study recommends strongly the urgent integration of multimedia in EFL teaching inside Sudan as its vital role that can play in promoting the overall standard of English in both universities and schools.

## REFERENCES

- 1 Andrews, R. (2003). Where next in research on ICT and literacies? *English in Education*, 37(3), 28-41. Retrieved February 18,2008, from <http://www3.interscience.wiley.com/journal/I19823129/abstract>.
- 2 Albion, P. R. (1999). Self-efficacy beliefs as an indicator of teachers' preparedness for teaching with technology. Paper presented at the 1999 annual Society for Information Technology in Teacher Education conference, San Antonio, TX.
- 3 Asan, A. (2003). Computer Technology Awareness by Elementary School Teachers: A Case Study from Turkey. *Journal of Information Technology Education*, 2, 150-163.
- 4 Baker, E., Gearhart, M., & Hennan, J. (1990). *The Apple classrooms of tomorrow: 1990 UCLA evaluation study (Report to Apple Computer)*. Los Angeles: UCLA Center for the Study of Evaluation.
- 5 Barron, L., & Goldman, E. (1994). Technology and education reform: The reality behind the promise. In B. Means (Ed.), *Integrating technology with teacher preparation* (pp. 81-110). San Francisco: Jossey-Bass.
- 6 Becker, H. (2000). *Findings from the teaching, learning, and computing survey: Is Larry Cuban right?* Revision of paper written for the School Technology Leadership Conference of the Council of Chief State School Officers, Washington, DC.
- 7 Blamires, M. (1999). Developing literacy. In M. Blamires (Ed.), *Enabling technologies for inclusion* (pp. 27-34). London: Paul Chapman.
- 8 Berson, M. J. (1996). Effectiveness of computer technology in the social studies: A review of the literature. *Journal of Research and Computing in Education*, 28(4), 486-489.
- 9 Blake, Robert, J. (2008). *Brave New Digital Classroom*, Washington, D. C.: Georgetown University Press.
- 10 Cavas, B., & Kesercioglu, T. (2003). Primary Science Teachers' Attitudes toward Computer Assisted Learning. *Ege Journal of Education*, 3(2), 35-43.
- 11 Clarke, Mark A. & Silberstein, S. (1987) "Toward a Realization of Psycho linguistic Principles in the ESL Reading Classroom", in

- Michael Long and Jack Richards (Eds.) *Methodology in TESOL* , P.233-247). Boston: Heinle & Heinle Publishers.
- 12 Coley, R. (1997). Technology's impact: A new study shows the effectiveness-and the limitations---of school technology. *Electronic School*. Retrieved March 12, 2007, from <http://www.electronic-school.com/0997f3.html>.
  - 13 Dwyer, D., Ringstaff, C., & Sandholtz, J. (1991). Changes in teachers' beliefs and practices in technology-rich classrooms. *Educational Leadership*, 48(8), 45-52.
  - 14 Francis-Pelton, L., & Pelton, T. (1996). Building attitudes: how a technology course affects pre-service teachers' attitudes about technology. Retrieved on 16 April 2004 from: <http://web.uvic.ca/educ/lfrancis/web/attitudesite.html>.
  - 15 Erkan, S. (2004). An analysis on teachers' attitudes towards computer. Manas University, *Journal of Social Science*, 17(12).
  - 16 Greener, S. (2009). e-Modelling - Helping learners to develop sound e-learning behaviours. *Electronic Journal of e-Learning*, 7(3), 265-272.
  - 17 Ocak, M. A., & Akdemir, O. (2008). An Investigation of Primary School Science Teachers' Use of Computer Applications *The Turkish Online Journal of Educational Technology*, 7(4),6.
  - 18 Norum, K., Grabinger, R. S., & Duffield, J. A. (1999). Healing the universe is an inside job: teachers' views on integrating technology. *Journal of Technology and Teacher Education*, 7(3), 187-203.
  - 19 Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. (2000). Changing how and what children learn in school with computer-based technologies. *The Future of Children, Children and Computer Technology*, 10(2), 76-101.
  - 20 Swenson, P. W., & Redmond, P. A. (2009). Online, hybrid, and blended coursework and the practice of technology-integrated teaching and learning within teacher education. *Issues in Teacher Education*, 18(2), 3-10.
  - 21 Teo, T., Lee, C. B., & Chai, C. S. (2008). Understanding pre-service teachers' computer attitudes: applying and extending the Technology Acceptance Model (TAM). *Journal of Computer Assisted Learning*, 24(2), 128-143.