EUROPEAN ACADEMIC RESEARCH
Vol. IV, Issue 8/ November 2016

Impact Factor: 3.4546 (UIF)
DRJI Value: 5.9 (B+)

ISSN 2286-4822
www.euacademic.org

The Influence of Incorporating Multimedia on Developing Reading Comprehension skills from the Experience of Sudanese EFL Learners

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Abstract:

This aim of this paper is to bring out "The influence of incorporating multimedia on developing reading comprehension skills from the experience of Sudanese EFL learners". 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) Sudanese EFL students selected randomly from the first year in different colleges at the International University of Sudan; and the second one is pre and posttest given to an experimental group consists of (30) students representing the same group whom were taught reading comprehension lessons through the use of multimedia. The obtained data from the questionnaire and the two tests have been computationally processed with SPSS program to check the truth of hypotheses, to reflect the students' attitudes towards the influence of integrating multimedia in developing their reading comprehension skills and to see whether there is any significant influence over the incorporation of multimedia on the part of learners' reading comprehension skills.

Key words: Multimedia, Reading comprehension skills, Sudanese EFL Learners

INTRODUCTION

The use of Multimedia and computer in EFL teaching may be regarded as an important factor in determining which countries will be 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 multimedia in teaching and learning of EFL has been the landmark on the educational scene for the last few years.

AIMS AND SCOPE OF THE STUDY

This study aims to pinpointing the influence of incorporating multimedia on developing reading comprehension skills from the experience of Sudanese EFL learners. The scope of the study is limited to fifty (50) Sudanese EFL students selected randomly as an experimental group of (30) students were chosen from the first year in different colleges at the international university of Sudan and whom were taught through multimedia to measure how the influence of

multimedia can be of effectiveness in developing EFL learners reading comprehension skills.

LITERATURE REVIEW

Definition of Multimedia

According to Richard, J. et al (1985) in Long man Dictionary the term "Multimedia" can be defined as the use of several different types of media for a single purpose, e.g. as in a video that uses film, audio, sound effects, and graphic images. In other words, multimedia refers to a collection of computer controlled or computer mediated technologies that enable people to access and use data in a variety of forms: text, sound, and still and moving images

Computer-Assisted Language Learning (CALL)

Coley, (1997) claimed that CALL started in the 1950s and 1960s, mainly in the USA. The early CAL programs were rudimentary by today's standards, with mainly text-based interfaces. Initially, CAL programs simply tried to teach a particular topic without a basis on any particular educational philosophy. The TICCIT (Time-Shared Interactive Computer Controlled Information Television) at the Brigham Young University was based on a specific instructional framework that dictated the actual hardware. The Logo project was probably the first CAL system that was based on a specific learning approach (the experimental, discovery learning approach).

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.

Computer Assisted Instruction and Learning Issues

Coley, (1997) stressed that "Computer Assisted Instruction" (CAI) in general as there are many characteristics in common between CALL and CAI. It also reviews general learning issues such as learning styles and strategies, learner autonomy and the factors that affect the efficiency of the learning process. Where appropriate, reference is made to the EL environment and to how current knowledge of CAI may be applicable to the EL situation.

The Use of Computer in Teaching & Learning Foreign Language Skills

The use of computer in EFL classrooms has many advantages. It develops the EFL learners' language skills. It provides the EFL learners with gateway to various activities for developing their language skills as follows.

Teaching Reading Comprehension skills Via Computer

Kasper, (2000) pointed out that use of computer technology can contribute a lot in developing EFL learners' reading comprehension skill and other sub-skills related to it as well. Using computers, with the use of internet provides a variety of current and authentic reading materials compared to potentially dated reading material sourced from textbooks. The verbal and visual systems in computer programs help students to better understand the text. Most of the CALL programs are filled with graphics and voices and when EFL learners visualize the situation, they can remember the subject better in the long term.

CALL programs for vocabulary development have positive results. Learning vocabulary, using computers, helps learners to learn vocabulary significantly faster than the traditional way of teaching vocabulary. The varieties of reading materials, available with the use of computer technology and internet can encourage EFL learners and open opportunities to read widely in foreign language like English. This can be highly effective for developing vocabulary through wide reading and in mastering important structures in the target language. That is why it is argued that computers can promote extensive reading; build reading fluency and rate; develop intrinsic motivation for reading; and contribute to a coherent curriculum for student learning.

Learning Style and CALL

Kasper added more that CALL has the potential as an instructional medium to individualize the learning process. It may be more beneficial to all learning styles than others. For example, graphics and visually active instruction helps field dependent learners. Motivated learners who require specific instruction in a sequential format and enjoy frequent feedback, will generally benefit for CAI. Kinesthetic, peer-oriented

learners will not gain as much from CAI as there are limitations regarding what a learner can physically do with a computer (as least with the current technological restrictions). Each model can be used to identify those learner types that will benefit most from CAI. In the Kolb model (Kolb, 1984), it is the concrete learners (i.e. those that learn from direct involvement in a new experience) that benefit. Different techniques can be used to accommodate each type of intelligence (e.g. moving things around with a mouse for bodily intelligence, paint for spatial and telecommunications for interpersonal intelligence). Ideally, the aim is to create an interface that can accommodate all learners, but this may be hard to do. Also, it may be difficult for people that cannot adapt their learning style to CAI. Some degree of style flex (i.e. when the user learning style is adapted to match the CAI application may be required. This is not necessarily a bad thing as it may expand the learner's style range but it should not be such that it causes undue stress on the learner. However, the studies are not conclusive.

Means and et al (1993), stated that the need to cater for a variety of learning styles by providing different modalities. Furthermore, research is required into interface design in order to foster style matching. Theories of learning styles and the testing of the interaction between learning style and CAI have mainly been carried out in developed countries and with learners familiar with traditional educational environments. Most EL community members would have limited formal education. Very little is known about the learning styles of those with minimal exposure to the traditional education setting. Culture may also play an important role. Cultures that have a well-established hierarchical system may foster field dependent learners, for example. People who live in an environment in which learning usually takes place by doing, may tend to have a concrete-sequential mind style. While there may be no specific information about the learning style

preferences of people from EL communities, it cannot be assumed that they have a homogenous learning style. It is more likely that they will probably show somewhat similar variation to people from non-EL communities.

Computer Technology and Learning Strategy

Learning strategies are keys to greater autonomy and more effective learning. Learners use various learning strategies and these strategies are differentially effective depending on the situation. If learners are aware of learning strategies and their effectiveness, they will be able to enhance the learning process. However, if they are not aware of these strategies, they are missing out on potentially useful aids in the learning process. For example, language learners often underestimate how essential practice is.

Computer as a Factor of Motivating Learners

Bates & Sangra, (2011) remarked that motivation is one of the key factors that influences the rate and success of foreign language learning. It provides the primary impetus to initiate EFL learning and later remains the driving force that sustains this long and often tedious learning process. Many EFL luminaries and pedagogues agree that the use of computer technology in EFL instruction provides situations that motivate learners to learn. The use of computer helps in motivating EFL learners to learn through authentic, challenging tasks that are interdisciplinary in nature. Such use also encourages EFL learners' active involvement with the target language and content in a real, authentic situation. With such advantages and benefits for EFL teachers and learners, it is not surprising that the demand for using computer technology to support teaching, learning and testing processes in EFL classrooms is becoming more serious. Thus, integrating computer technology in EFL classroom can help in bringing changes to the

traditional teaching and learning environment in order to create what is termed as more authentic and dynamic learning environment. Students should benefit from the use of technology in the classroom. Research in this area has the potential to prove that when teachers use technology tools in the classroom, students become more motivated to learn the material and are more involved in the lesson. In addition, their attention spans may increase when a teacher uses technology tools. Some of these tools include an interactive whiteboard, email, the Internet, course specific software, and many other options available today. If teachers understand the importance of integrating technology into their lessons and receive the professional development needed in their fields, they could become accustomed to using technology tools; therefore, student learning and motivation could increase.

Student-Centered Technology in the Classroom

Bates & Sangra, (2011) confirmed that computers are being used, in part, to enable teachers to improve the curriculum and enhance student learning. One potential target could be "at-risk" students. Recent findings show that not being challenged and not being given the chance to use complex thinking skills are depriving "at-risk" students of a quality education. They suggested that technology in the classroom could provide authentic learning opportunities to "at-risk" students. Teachers can draw on technology applications to simulate real-world situations and create actual environments for experiments so students can carry out authentic tasks as real workers would, explore new terrains, meet people of different cultures, and use a variety of tools to gather information and solve problems Means et al. Most of these "at risk" students will be entering the work field after high school, and real world experiences could be helpful in fostering these students' success. Several studies have suggested any student, including the "at-risk"

student, who has technology integrated into the curriculum, could potentially see a positive change in classroom grades and attendance. Technology brings about changes to the classroom roles and organization, especially as it allows students to become more self-reliant. Students may use peer coaching and teachers may function more as facilitators rather than lecturers. Students are allowed to work on their own, at their own pace, when working on computer projects. These students may not be afraid to fail when their failure is personal instead of in a large classroom discussion.

This study attempted to show that teachers who use technology tools in their classrooms would improve student learning and motivation. "Today's education system faces irrelevance unless we bridge the gap between how students live and how they learn...Students will spend their adult lives in a multi-tasking, multifaceted, technology driven, diverse, vibrant world and they must arrive equipped to do so.

Learner Autonomy

Learner autonomy is seen as one of the most important elements of CAI. It has been widely discussed in the research literature. It is generally defined as an ability to take charge of one's own learning. Learner autonomy occurs when the learner has the "capacity for detachment, critical reflection, decision-making and independent action". Independence and individual responsibility are core notions of LA. With the increased use of modern communications technology (email, discussion groups) and co-operative approaches to learning, most noticeably in CALL, the notion of learner interdependence (between a group of learners and teacher) has emerged. In the traditional classroom situation, all the learners must follow the teacher and often LA is not encouraged. The task to be learnt is decided by the teacher, who also controls the pace of a lesson. This makes it hard on many learners, whose ideal learning pace is

different from that established by the teacher. With a CAI program, learners can work at their own pace. The learner can spend more time on those topics that are causing difficulty. Information can be reviewed and tasks can be repeated until the learner is happy to move on to a new topic. The learner feels in control and that usually enhances satisfaction levels with the learning process.

Learner-Centered CALL

The concept of learner-centered design is an important one in education. It means focusing on the learner and his/her needs and motivations. The concept of learner-centeredness is also important in the area of curriculum/syllabus design. Various authors have proposed Learner-centered principles. APA (1997) list 14 principles grouped into cognitive and meta-cognitive factors, motivational and affective factors, developmental and social factors and individual difference factors. Hoven (1999) proposed the following five principles for learner-centered CALL:

- A socio-cultural methodology provides a suitable paradigm.
- Learner-centered features include recognition of features and their propensity to change. Depending on its potential to be modified, a feature will either be identified as less amenable to change (e.g. sex or age) or somewhat/more amenable to change (e.g. learning style) and dealt with accordingly.
- Learners must be taught how to manage control in a learner-controlled environment (see next section 2.5.3).
- Task-based pedagogy (e.g. one that recognizes that language learning is a developmental process).
- Models of good practice from SLA and CALL should be used.

Warschauer (1996) pointed out that" learners should be more involved in the CALL development process". CAI brings with it several potential benefits as a teaching/learning medium. These include self-paced learning, self-directed learning, the exercising of various senses and the ability to represent content in a variety of media.1 As these topics will be explored in greater detail throughout this document, only a brief overview will be given here. Although CAI has not been studied in the EL community situation, many of the benefits in the general CAI context should also be available in the EL one. With self-paced learning, learners can move as slowly or as quickly as they like through a program. If they want to repeat some task or review some material again, they can do so as many times as they choose. The program will not tire or complain about repetitions. Learners can skip over a topic if information is already known, making the learning process more efficient. With self-directed learning, learners can decide what they want to learn and in what order. As will be shown later in this chapter, learners have different learning styles and use different learning strategies. Various studies have shown that "when learners can learn in a way that suits them, improvements in the effectiveness of the learning process normally ensue. Humans are multi-sensory animals. The more senses through which we receive information, the easier it is to remember". According to Warschauer (1996) "people remember 20% of what they hear, 40% of what they see and hear and 75% of what they see, hear and do. The fact that the computer can exercise various senses and present information in a variety of media can enhance the learning process. Computers encourage learning as they provide a stimulating environment and promote enthusiasm. Computers may help the reticent student who is afraid to make mistakes in a classroom situation. They are good for online reference which useful in a language learning situation (for example, online dictionaries Ancillary benefits, such as freeing

up teacher time, will not be discussed here. and can cater for students of different abilities.

Factors that Affect the Efficiency of the Learning Process

Warschauer, (1996) said that "there are various factors that affect the learning process. Such factors include courseware characteristics (manner of presentation and locus of control and student characteristics (gender, attitude and learning style). The factors can be broken down in to two groups, computer factors and learner factors.

Computer Factors

- Fit with the topic.
- Fit with the target user group.
- Presentation format.
- Locus of control.
- Accessible and reliable technology.

Learner Factors

- General factors (motivation, attitude, stress management and background knowledge.
- Fit with learning style.
- Knowledge and use of appropriate learning strategies.
- Adaptability to the computer environment.
- Sufficient computer literacy.

Determining Learning Outcomes

Warschauer (1996) pointed that "even if students have background knowledge on the computer with the needed applications installed on their computers, they still need guidance on the learning objectives and outcomes for online content.

Some administrators and teachers unfortunately presume that learning with computers will "occur almost by osmosis". In the end, without specific pedagogical practices driving the use of technology, computers are often relegated to a secondary or non-existent role and are often abandoned. At that point, debate ensues on the side of administrators and teachers as to why the lab has failed. However, both the cause and the solution that is still very much applicable: As with the audio language lab 'revolution' of 40 years ago, those who expect to get magnificent results simply from the purchase of expensive and elaborate systems will likely be disappointed. But those who put computer technology to use in the service of good pedagogy will undoubtedly find ways to enrich their educational program and the learning opportunities of their students.

Thus, with reference to the use of the Internet, rather than allowing technology to drive classroom instruction, teachers must clearly identify specific objectives, procedures, and assessment techniques for using online resources. As with all good teaching, teachers must develop a plan of action for using the Internet. We cannot send our students off without specific goals in mind, training on how to use the sites, procedures on how to accomplish the tasks, and an explanation on how students will be evaluated for the activity.

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 conducted with (50) Sudanese EFL students as questionnaire respondents from the first year at the international University of Sudan with students study. A random sample selected for this study includes thirty (30) students as test takers whom were taught through multimedia to measure the impact that multimedia can create on the students' performance.

Tools of the Study

The researcher used test and questionnaire as the tools to collect the data. The questionnaire administered to (50) a random sample of learners in different colleges at the International University of Sudan to yield their attitudes and perceptions towards the experience of multimedia in teaching reading comprehension skills. The test is administered to thirty (30) students who were taught as stated above through multimedia. The method used by the researcher is a blend of the quantitative and the experimental one in carrying out the study.

RESULTS AND DISCUSSION

The researcher used the test and the questionnaire as tools for data collection related to study. The researcher designed the questionnaire to explore students' views and attitudes towards the influence of multimedia in developing reading comprehension skills. The test is used to support students views and to mainly measure the influence in the students' progress that multimedia can bring about developing their reading comprehension skills.

The tables and percentages below illustrates what has been stated above.

The Analysis of the Test in Relation to the Hypothesis

The test is the first part of the methodology used by the researcher which is composed of two questions examining the students skills and ability of reading comprehension.

Table (1) Gender: This table classifies the students as questionnaire respondents in terms of gender.

Gender	Frequency	Percent (%)
male	21	42.0
female	29	58.0
total	50	100.0

Table (2): One Sample T-test for the First Hypothesis
H1: 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 (2) 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 (3): One Sample T-test for the Second Hypothesis
H2: Multimedia enhances students' ability to develop reading skills.

Expected mean	Observed mean	St.d	t-value	d.f	p-value
11	14.26	2.46	4.60	45	0.00

As table (3) above shows, it is clear that the p-value (0.00) is less than significance level, the observed mean (14.26) is bigger than the expected mean (11). Thus, these results in fact confirmed the researcher's hypothesis number two which is *"Multimedia increases students' motivation to develop reading skills".*

Table (4): Independent Sample T.test between the 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.

The Analysis of the Questionnaire in Relation to the Hypothesis

The second part of the methodology adopted by the researcher is the questionnaire whose first part is an introductory section seeking information about the students. In fact, the items in this division elicit information about the targeted students in terms of their gender. The students were requested to indicate their answers by ticking (√) one of the five options: "Strongly agree", "Agree", "Neutral", "Disagree", "Strongly disagree".

Table (5) S1: "Computer, smart board and projector make the reading passage understandable".

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	1	2.0
Neutral	4	8.0
Agree	12	24.0
strongly agree	31	62.0
Total	50	100.0

The students' answers are shown in table (5) above. The table shows that 62% of the students strongly agree with the statement, 24% agree, 8% of the students are neutral, 2% disagree and 4% strongly disagree. Thus, the students' agreement with this statement is almost unanimous, 86% (62% strongly agree, 24% agree) agree about the statement. In fact, only three students disagree.

Table (6) S2: "Computer programs help to get the meaning from texts easily".

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	2	4.0
Neutral	10	20.0
Agree	15	30.0

strongly agree	21	42.0
Total	50	100.0

The students' answers are shown in table (6) above. The table shows that 42% of the students strongly agree with the statement, 30% agree, 20% of the students are neutral, 4% disagree and 4% strongly disagree. Thus, the students' agreement with this statement seems to be unanimous, 72% (42% strongly agree, 30% agree) agree about the statement. In fact, only four teachers disagree.

Table (7) S3: "Smart board helps to scheme texts in short time".

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	4	8.0
Neutral	12	24.0
Agree	10	20.0
strongly agree	22	44.0
Total	50	100.0

The students' replies are tabulated in table (7) above. The table shows that 44% strongly agree with the statement, 20% agree, 24% are neutral, 8% disagree and 4% strongly disagree. Thus, a reasonable number of students 64% (44% strongly agree, 20% agree) are in support of the statement.

Table (8) S4: "Computer is helpful in developing EFL reading skills".

Statement	Frequency	Percent (%)
Strongly disagree	-	-
Disagree	5	10.0
Neutral	3	6.0
Agree	15	30.0
strongly agree	27	54.0
Total	50	100.0

The students ' attitudes are tabulated in table (8) above .The table reveals that 54% of the students strongly agree with the statement, 30% agree, 6% are neutral, 10% disagree and 0%

strongly disagree. Thus, this absolute consensus by the teachers is in complete agreement with the above statement.

Table (9) S5: "Multimedia increases students' interest in reading comprehension lesson".

Statement	Frequency	Percent (%)
Strongly disagree	4	8.0
Disagree	2	4.0
Neutral	5	10.0
Agree	21	42.0
strongly agree	18	36.0
Total	50	100.0

The students' answers are shown in table (9) above. The table shows that 36% of the students strongly agree with the statement, 42% agree, 10% of the students are neutral, 4% disagree and 8% strongly disagree. Thus, the students' responses to this statement are unanimous, 78% (36% strongly agree, 42% agree) agree about the statement.

Table (10) S6: "Multimedia increases students' motivations to develop reading skills".

Statement	Frequency	Percent (%)
Strongly disagree	2	4.0
Disagree	6	12.0
Neutral	8	16.0
Agree	14	28.0
strongly agree	20	40.0
Total	50	100.0

The students' responses are tabulated in table (10) above. The table shows that 40% of the students strongly agree with the statement, 28% agree, 16% of the students are neutral, 12% disagree and 4% strongly disagree. As revealed by the results, this statement seems to have created some controversy among the students. Nevertheless, those who agree 68% (40% strongly agree, 28% agree) greatly outnumber those who do not agree, (16%).

Table (11) S7: "Multimedia is highly required in EFL classes".

Statement	Frequency	Percent (%)
Strongly disagree	-	-
Disagree	4	8.0
Neutral	5	10.0
Agree	14	28.0
strongly agree	27	54.0
Total	50	100.0

The students ' answers are displayed in table (11) above .The table reveals that 54% of the students strongly agree with the statement 28% agree, 10% are neutral, 8% disagree and 0% strongly disagree. Thus, there is nearly unanimous agreement on the part of the students as regards the idea conveyed by the statement above.

Table (12) S8: "Multimedia triggers EFL learning environment interactively"

Statement	Frequency	Percent (%)
Strongly disagree	1	2.0
Disagree	3	6.0
Neutral	9	18.0
Agree	22	44.0
strongly agree	15	30.0
Total	50	100.0

The students' opinions are illustrated in table (12) above. The table shows that 30% of the students strongly agree with the statement, 44% agree, 18% of the students are neutral, 6% disagree and 2% disagree. Here, the table shows that most of the students, 74% (30% strongly agree, 44% agree) are in support of the statement above. This almost unanimity by the students, agree with the statement above that multimedia triggers EFL learning environment interactively.

Table (13) S9: "Multimedia arouses EFL learners' interest".

Statement	Frequency	Percent (%)
Strongly disagree	3	6.0
Disagree	3	6.0
Neutral	7	14.0
Agree	21	42.0
strongly agree	16	32.0
Total	50	100.0

The students' opinions are tabulated in table (13) above. The table shows that 32% of the students strongly agree with the statement, 42% agree, 14% of the students are neutral, 6% disagree and 6% disagree. Here, the table shows that most of the students, 74% (32% strongly agree, 42% agree) are in support of the statement above. This almost unanimity by the students, agree with the statement above that multimedia arouses EFL learners' interest.

Table (14) S10: "Multimedia keeps EFL learning up to date".

Statement	Frequency	Percent (%)
Strongly disagree	1	2.0
Disagree	4	8.0
Neutral	9	18.0
Agree	15	30.0
strongly agree	21	42.0
Total	50	100.0

The students' attitudes are tabulated in table (14) above. The table shows that 42% of the students strongly agree with the statement, 30% agree, 18% of the students are neutral, 8% disagree and 2% strongly disagree. What is remarkable about these results is that agreement on the part of the students is almost unanimous 72% (42% strongly agree, 30%), with 10% of the students expressing their disagreement.

In conclusion, it is noticed that all the above discussion of the hypotheses and statements are in support of the study's objectives that investigate the influence of incorporating

multimedia on developing reading comprehension skills of Sudanese EFL learners.

REPORT DISCUSSION

The data has been gathered with the test and the questionnaire analyzed according to the hypotheses of the research in which it was proved that multimedia can strongly be influential if incorporated to develop the skills of reading comprehension of Sudanese EFL students due to their scores in the pre and posttest. Finally, this study call urgently for integrating multimedia not only in developing reading comprehension skills but also in EFL teaching inside Sudan as its profound impact that could create in the performance of both learners and teachers of EFL in Sudan as well.

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