

## The Impact of Adopting Technology in Teaching English Vocabulary at Sudanese Universities.

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### Abstract

The paper aimed at investigating the impact of adopting technology in teaching English vocabulary at Sudanese universities. The paper adopted experimental and descriptive methods. The data for this paper was collected by means of a test. The test consist of (5) questions distributed to (60) students. The data was analyzed by the SPSS programme. In addition to that (60) of students divided in to two groups (30) as experimental group and (30) as control group. The result reveals that there are significant different between the means of the degree of the control group and experimental group, was noticed that the mean of the experimental group 43.8 is greater than the mean of the control group 25.63 and showed significant difference between the degree of control group and experimental group at T test. The study recommends that English language lectures and teachers, should use technology when teaching English vocabulary properly.

**Key words:** vocabulary, overhead projector, information communication technology (ITC).

### المستخلص :

هدفت الورقة إلى التحقق من أثر استخدام التكنولوجيا في تدريس مفردات اللغة الإنجليزية في الجامعات السودانية. استخدمت الدراسة المنهج التجريبي والتحليلي الوصفي وجمعت وسيلة الدراسة عبر الاختبار. و احتوى الاختبار على عدد خمسة أسئلة. وقد تم تحليل البيانات باستخدام برنامج التحليل الإحصائي. بالإضافة إلى ذلك (60) من الطلاب تم توزيعهم إلى مجموعتين (30) طالبا مجموعة تجريبية و(30) طالبا مجموعة ضابطة. و أوضحت النتيجة بان هنالك اختلاف بين متوسط درجات المجموعة الضابطة والمجموعة التجريبية. أوصت الدراسة أستاذة اللغة الانجليزية بوجوب استخدام التكنولوجيا عند تدريس مفردات اللغة الإنجليزية بالشكل الصحيح.

### I. Introduction

In fact, technology is very important in teaching and learning English or any language process particularly at the recent age. So, a researcher is going to focus on impact of adopting technology in teaching English vocabulary at Sudanese universities. So, through it learners will get more information quickly. Also it will facilitate teaching process in different situations, so technology in education is

becoming more popular and it has proved to be the best method of teaching in many subjects, which can be used by both teachers and learners. For example multimedia, videos, emails...etc, will find many educational applications which can allow learners and teachers exchange academic information at any time, this has made teaching open at any place and time.( Nahum:2013).

### 1-1 Problem of the Study

A real problem some teachers need training courses in basic computer applications and other programs related work. Computers labs are rare in some situations .Whereas many learners neglecting technology roles in different points such as playing and chatting with friends for long time.

### 1.2 Objectives of the Study :

The main aim of this paper is to investigate the impact of adopting technology in teaching English vocabulary at Sudanese universities.

### 1.3 Questions of the Study :

The study attempts to answer the following questions:

- 1.How do teachers and learners use technology perfectly?
- 2.What are the effective strategies for teaching vocabulary?
- 3.What are the principles of teaching and learning English vocabulary?

### 1.4 Hypotheses of the Study

- 1.Modern devices are useful in teaching vocabulary.
- 2.Using technology help students to translate item correctly.
- 3.Technological means enhance teaching English vocabulary.

### 1.5 The limits of the Study :

The study takes place in East Darfur state at Eddaein university faculty of Education. Eddaein University goes to be the centre for the study setting.

### 1.6 Methodology of the Study

: The researcher adopted the experimental and descriptive analytical method to conduct this study.The population of the study English students in Eddaein University. The researcher uses one tool for data collection, a test for students. The sample of the study consists of second

level Edeain university students for the academic year 2020-2021. The sample of the research community is selects randomly from Eddaein University boys and girls, second level, for the university year 2020—2021. The total number of the students is going to be (60) including both boys and girls .The above groups are going to sit for a vocabulary test.

### 1.7 Significance of the Study :

Technology has also begun to change the roles of teachers and learners, it is a powerful tool that can transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for both teachers and learners to learn and work together. Therefore the study is considered of a paramount importance both for students and teachers as well.

## II. Literature Review

### Introduction

Technology is important in teaching and learning English or any language process particularly at the recent time. Through it learners will get more information easily. It saves both teachers and students time, and reduce teachers' physical effort.

### 2.1 Impact of Information and Communication Technologies

There are two kinds of reasons for using computer technology in English. First there are the benefits to teachers and students from including computer technology in any learning area:

- For students technology can :
  - a.Be very motivational.
  - b.Be the source of a significant amount of reading material.
  - c.Be fun – and when it is fun you learn!
  - d.Help students to produce excellent published work.

- For teachers technology can:
  - a. Allow for the easy production, storage and retrieval of prepared materials such as certificates and work required sheets.
  - b. Free up communication with other teachers.
  - c. Help teachers to find information easily.
  - d. Assist good teaching but not replace it! (Satya: 2016).

## **2.2 Challenges against applying Multimedia Technology to English Teaching**

As concluded by (International Conference on language, Media and Culture in Singapore 2012, PDF online version. In spite of advantages of application of multimedia technology to English class teaching has to improve teaching effect and university students' overall capacities, there are many problems existing in practical teaching such as:

- Major means Replaced by the Assisting One:
- Loss of Speaking Communication
- The restriction of Students Thinking Potential.
- Abstract Thinking Replaced by Imaginable Thinking. (Abul-Qasam: 2016).

## **2.5 What skills and knowledge are provided to enable teachers to implement ICT aided teaching and learning?**

In many schools today, and probably for a time into the future, the only teachers with everyday access to ICT are teachers of a special subject called Information Technology, or Computer Science, or Informatics (Pelgrum & Anderson: 2001).

### **2.5.1 Staff Development**

Educational changes, especially those implied by the discourse of the information society, create a need for staff development and training. Therefore, staff development is considered to be an important issue when dealing with implementation of an innovation (Pelgrum & Plomp, 1999). In some conditions, teachers may not wish just to use new technology in education and such a case, it is better to organize a systematic professional development program. This will ensure that these teachers are prepared for the implementation of technology in education.

### **2.5.2 Teacher Support**

In the everyday use of technology, teachers need to be able to get fast and reliable technical advice and have the help of suppliers of technology, technology resource centers and other teachers and students within the school. Special kinds of educational support are even more important because they affect the new model of teaching (Semenov, 2005). Such support can be provided both personally and online to a special member of the school staff by a technology resource centers, or by universities. In addition, teacher support may include face-to-face and distance interaction, and all types of workshops and publications (Semenov, 2005). Thus, the integration of government, foundations, non-governmental organizations, and informal grass-root efforts is the most effective strategy in implementing ICT in education. (Mohamed: 2009).

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## 2.7 The Over head projector (OHP)

Despite modern computer-based presentation equipment and programs, the OHP (and the transparencies we use with it) still retains a unique versatility, and except for problems with electricity or a bulb is much more likely to be problem-free than other more sophisticated pieces of equipment. Just about anything can go on overhead transparencies (OHP); we can show whole texts or grammar exercises, pictures, diagrams or students' writing. Because transparencies can be put through a photocopier or printed from any computer, they can be of very high quality.

One of the major advantages of the overhead projector is that we don't have to show everything on an OHT all at once.

By covering some of the transparency with a piece of card or paper, we can blank out what we don't want the students to see.

Overhead projectors are extremely versatile, but they can pose some problems, too. They need electricity of course and bulbs do fail from time to time. Some models are quite bulky too. They are not that powerful either especially when they are up against natural light coming in from windows and doors. When images are projected onto shying surfaces, such a boards, they can be uncomfortable to look at and when they are projected onto some other surfaces, it can be very difficult to make out details.

A lot depends on how big or small the projector square is on the wall or screen and whether the image is in focus. A mistake that some users make is to put too much on the transparency so that when they ask Can people see this at the back? The answer they get is a frustrated shaking of the head. However, if all these potential problems are taken into account and overhead, the OHP is an extremely useful resource. (Harmer: 2001).

## 2.8 What is vocabulary?

Vocabulary can be defined, roughly as the words we teach in the foreign language. However, a new item of vocabulary may be more than a single word: for example, post office and mother-in law, which are made up of two or three words but express a single idea. (Ur: 1996).

Vocabulary was defined as: "the total number of words in a language", and "a list of words with their meaning", and "the knowledge of words and words meaning". (Abdellrady: 2018).

Sanhori (2019) reveals that learners who acquire vocabulary communicatively score significantly high and can easily acquire vocabulary incidentally when they interact with each other. Incidental word learning enhances students' ability to acquire word meaning incidentally from written texts.

### 2.9 Strategies for teaching and learning vocabulary:

Vocabulary is crucial in maintaining a successful communication or in comprehending others viewpoints. So, there are several ways, techniques and strategies for the acquisition learning and teaching vocabulary. Below are the following strategies:

#### 2.9.1 Using context to infer word meanings

Using this strategy, the reader uses the words and sentences surrounding an unknown word to make an educated guess about its meaning. Although context rarely yields a precise word meaning and although it usually takes meeting a word in context several times to arrive at the word's full meaning, most words are indeed learned from context and the better a reader becomes at this strategy, the more words he or she will learn. (Sadek : 2007).

#### 2.9.2 Using words parts to infer word meanings

Sometimes parts of words-roots prefixes and suffixes-can be used to infer word meanings. The most valuable word parts are prefixes because they tend to be highly generative. Have a consistent meaning, and are often variously spelled. Suffixes are often the least valuable word parts for determining word meanings, because they typically have a grammatical function that doesn't really reveal lexical

meaning or an abstract meaning that is difficult to work with. (Sadek : 2007).

#### 2.9.3 Using the dictionary to determine or verify word meanings

It is useful to think of the dictionary as differentially effective for two different tasks. It is quite effective for verifying the meaning of a word for which the reader has alternative meaning. But it is often less effective for getting the full meaning of a totally unknown word. Using the dictionary effectively requires several skills and understandings. It requires that the reader consults an appropriate dictionary, one that doesn't define the unknown word in string more difficult items. It requires that the reader consider all of each definition provided and not simply apart of each definition. And it requires that the reader realize the limits of dictionary definitions. (Sadek : 2007).

#### 2.10 Ways to present vocabulary

There are lots of ways of getting across the meaning of a lexical item.

- Illustration

this is very useful for more concrete words (dog, rain, tall) and for visual learners. It has its limits though, not all items can be drawn.

- Mime

This lends itself particularly well to action verbs and it can be fun and memorable.

- Synonyms/Antonyms/Gradable items using the words a student already knows can be effective for getting meaning across.

- Definition

Make sure that it is clear (maybe check in a learner dictionary before the lesson if you are not confident). Remember to ask questions to check they have understood properly.

- Translation

If you know the students' L1, then it is fast and efficient. Remember that not every word has a direct translation.

- Context

Think of a clear context when the word is used and either describe it to the students or give them example sentences to clarify meaning further.

Again which you choose will depend on the item you are presenting. Some are more suitable for particular words. Often a combination of techniques can be both helpful and memorable. (Frost: 2004).

### 2.11 The Principles of Teaching and Learning Vocabulary

We have seen in the last chapter how learning vocabulary is a rather more complex process than it might at first sight appear. To 'know' a word in a target language as well as the native speaker knows it may mean the ability to:

- Recognize it in its spoken or written form;
- Recall it at will;
- Relate it to an appropriate object or concept;
- Use it in the appropriate grammatical form;
- In speech, pronounce it in a recognizable way;
- In writing, spell it correctly;
- Use it with the words it correctly goes with, i.e. In the correct collocation;
- Use it at the appropriate level of formality;
- be aware of its connotations and associations. (Wallace: 1989).

## III. Methodology

### 3.1 Introduction

This chapter provides a full description of the research methodology adopted as well as the research tools

employed by the researcher to conduct this study.

### 3.3 Research Setting

The study takes place in East Darfur State at Eddeain University, faculty of Education. The period in which study is academic year (2020 – 2021).

The educational academic environment lacks learning motivation and there are no language contexts in order to assist students to practice communication. The academic environment needs a lot of effort from the stake-holders so as to facilitate the process of teaching properly. However the students require modern instruments such as computer labs in order to practice other activities easily.

In fact there are many factors that cause problems for the academic environment such as electricity, private machine for faculty of education, English language lab and electronic dictionaries and smart boards. In addition to that, there is neither audio nor audio-visual library at faculty of education so as learners to practice listening skills properly, the researcher found many students have difficulties in pronouncing words correctly, specially words that consists of more than two syllabus, the meaning of some lexis were misunderstood due to their previous knowledge so-called schemata since they were at secondary schools. Others were unable to communicate with one another because of insufficient language practice in their spare time. The language used in the community affects on students English level, the only place that learners find the language is lecture halls. On the other hand; many teachers do not encourage students to use the language inside university campus

### 3.4 The Study Population and Sample

Population as defined by (Al-Samawi: 2000) "is a group of people or documents of special features used for collecting data or represented by a sample selected from among this group." The population of the current study (60) students from Eddaain University, faculty of education major in English language.

#### The Study sample:

One sample of the study was identified for carrying out the study, (60) students represent the second-year undergraduate majoring in English at Eddeain University - faculty of education was taken as one sample. The sixty (60) students divided into two groups (30) experimental (post test) have four lectures and the researcher taught them by adopting technology tools such as computer, power point, overhead projector, pointer, colors and animations. While the other (30) students as control group (pre test) without being taught any lecture, including both male and females, all of them have responded to the test as well.

### 3.5 Data Collection

Under this sub-title the researcher discusses the steps followed when collecting data, thus; it include the following procedures:

#### 3.5.1 Data collection instruments

The data of the research collected from the participants via administration of one instrument of data collection, Namely a test.

#### The test:

The test is designed by the researcher to gather data from students' sample, there are two types of test namely pre and post test (see appendices). This technique was used to support the data from the other

instruments, the researcher sets a close question type, it means that the researcher give the students some questions followed by some possible answers. They are asked to choose an appropriate answer from the options, and in other questions the students are required to provide answers according to their own viewpoints.

The test is consists of five questions:

- Question1- Choose the correct answer A, B, C or D
- Question2- Draw a circle around the correct letter a, b or c
- Question3 - Match (A) with (B) in (C).
- Question4- Write the meaning of these words.
- Question5- Put the following words in their correct places.

#### 3.5.2 Data collection procedures

The test was distributed to students with one hour to response, and then the researcher collected the test from the students.

The ultimate aim of making test is to discover the impact of adopting technology in teaching English vocabulary at Sudanese universities (a case study Eddeain university second year).The researcher followed the experimental method and makes two tests pre-test and post-test for the two groups control group and experimental one who have the same linguistics level. The researcher gave the experimental group four fair lectures by adopting modern tools such computer, overhead projector, PowerPoint, pointer, colors and animations. While the second group controlled group was not given any lecture.

### 3.6 Reliability and Validity

#### 3.6.1 Reliability

Reliability is the consistency of a set of measurements or of a measuring instrument, often used to describe a test. Reliability is inversely related to random error.(Gasm Alsied:2013).

Table (3.1) reliability statistics of the test

Group	Test	Reliability	N of items
Controlled	Pre	0.84	5
Experimental	Post	0.90	5

Table (3.1) shows that the value of pre test is (0.84), while the value of post test is (0.90) which indicate that the tests are reliable.

#### 3.6.2 Validity

Validity of the research instrument usually evaluated for force content and constructs validity. The content validity of the test used in the study by judgments promoters who were consulted by researcher to guarantee the correction of the content and its relevance. Therefore, the researcher consulted a number of experts for administrating the test before piloting. The test judgment committee recommended changes and amendments about the test.

#### 3.7 Data Analysis

After receiving the students' responses to the tests, the responses were marked and entered into computer using the Statistical Package for Social Science programme (SPSS).

### IV. Discussion & Data Analysis

#### 4.0 Introduction

This chapter analysis the data of the tests of the study. The researcher used one tool for data collection for this study: a test. The test consists of "5 questions", as the following:

- . Question1- Choose the correct answer A, B, C or D
- Question2- Draw a circle around the correct letter a, b or c
- Question3 - Match (A) with (B) in (C).
- Question4- Write the meaning of these words.
- Question5- Put the following words in their correct places.

The analysis of the obtained data showed significant results.

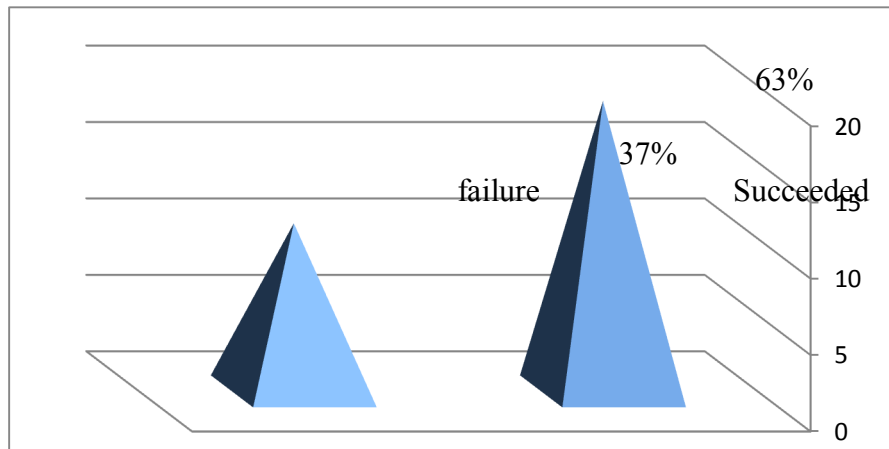
#### 4.1 Results and analysis of student's Test

Table (4.1) illustrates the frequency and percentage for the pre and post test:

Valid	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Succeeded	19	%63	30	100%
Failure	11	37%	0	0%
Total	30	100%	30	100%



Figure (4.1)



The above table (4.1) illustrates the results of the pre test and post test for the experimental and control group samples. The success rate in pre-test is (%63) and the Failure rate in pre test is (%37). Whereas, the success rate in post test is (%100).

Table (4.2) Independent Sample T test:

Group	N	Mean	STD	T-Value	DF	SIG
Controlled	30	25.63	5.09	12.12	58	0.000
Experimental	30	43.8	5.48			

The above table (4.2) illustrates that there is a significant different between the means of the degrees of the control group and experimental group, it has been noticed that the mean of the experimental group is (43.8), it is greater than the mean of the control group that is (25.63), and showed a significant different between the degrees of control group and experimental group at T. test equal (12.12) at the sig. value equal 0.000 less than 0.05 and this in line with the impact of adopting technology in teaching English Vocabulary at Sudanese universities.

## V. Conclusion

### 5.0. Introduction

In this conclusive section of the paper the researcher is going to present a summary of the study, enumerate the most important findings, list a number of pertinent recommendations and propose some appropriate topics for future relevant researches. All these will be done in light of the information obtained from the discussion and analysis of the data collected via a test.

### 5.1 Summary

This paper which deals with the impact of adopting technology in teaching English vocabulary at Sudanese universities is an attempt to throw light upon an important issue in teaching and learning English. Through a constructed test the researcher managed to investigate the benefit that technology can provide for the improvement of the teaching and learning processes. The information gathered from the respondent have supported the hypothesis of the study and provided answer to the questions of the paper.

**5.2. Main findings :** The main findings of this study are as follows:

1. Teaching vocabulary is easy when teachers use modern aids.
2. Technology assists students to interoperate new items properly.
3. Technological devices develop teaching English vocabulary.

**5.3. Recommendations :** Due to the paper results the researchers have come to illustrate the following the findings of the study as well as the respondents' feedback helped the researchers forward the following recommendations:

1. English lectures ought to simplify teaching vocabulary by adopting modern devices.
2. Students must use technology when translating new items.
3. Teachers should use technological aids to ease teaching vocabulary.
4. Lectures and teachers must use smart boards to present new words effectively.

#### **5.4 Suggestions for Further Studies**

1. The role of teaching aids in teaching English vocabulary at Sudanese universities.
2. The impact of using videos in teaching English vocabulary at Sudanese universities.
3. Investigating the effectiveness of using social media in teaching English new items at Sudanese universities.
4. The role of multimedia in developing L2 learners' productive skills at Sudanese secondary school.

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