



ISSN: 1817-6798 (Print)

Journal of Tikrit University for Humanities

available online at: www.jtuh.org/
JTUH
 مجلة جامعة تكريت للعلوم الانسانية
 Journal of Tikrit University for Humanities
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Keywords:

The Effectiveness of Multisensory Approach
 Multisensory Learning
 Activities of Multisensory Approach
 Intermediate School students

ARTICLE INFO**Article history:**

Received 4 Jan 2023
 Received in revised form 9 Jan 2023
 Accepted 10 Jan 2023
 Final Proofreading 20 Aug 2023
 Available online 31 Aug 2023

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The Effectiveness of Multisensory Approach for Teaching EFL on Intermediate School Students

ABSTRACT

The current study aims at finding out the effectiveness of the Multisensory Approach for teaching EFL on intermediate school students through finding out :

1. the average level of students' achievement in English.
2. whether there is any significant difference between the achievement of the experimental group and that of the control group in the posttest.

These aims have been achieved through verifying the following hypotheses:

1. The average level of the students' achievement in the posttest is within the theoretical level of performance in English.
2. There is no significant difference between the mean scores of the experimental group's achievement and that of the control group's achievement in the posttest.

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DOI: <http://doi.org/10.25130/jtuh.30.8.2.2023.21>

فاعلية طريقة تعدد الحواس في تدريس اللغة الانجليزية لغة اجنبية لطلبة المرحلة المتوسطة

نور اركان غالب / جامعة تكريت/ كلية التربية للعلوم الانسانية

ناهدة طه مجيد/ جامعة تكريت/ كلية الآداب

الخلاصة:

تهدف الدراسة الحالية إلى معرفة فاعلية الطريقة المتعددة الحواس في تدريس اللغة الإنجليزية -لغة

أجنبية لطلبة

المرحلة المتوسطة من خلال إيجاد:

1. متوسط مستوى تحصيل الطلبة في اللغة الإنجليزية.

2. فيما إذا كان هنالك أي فرق دال بين تحصيل المجموعة التجريبية وتحصيل المجموعة الضابطة في الاختبار البعدي.

ولتحقيق أهداف الدراسة تم صياغة الفرضيات التالية:

1. إن متوسط تحصيل الطلبة ضمن المستوى النظري للتحصيل في اللغة الإنجليزية.
2. لا يوجد أي فرق ذات دلالة إحصائية بين تحصيل المجموعة التجريبية وتحصيل المجموعة الضابطة في الاختبار البعدي.

الكلمات المفتاحية:فاعلية المنهج المتعدد الحواس,التعليم المتعدد,فعاليات المنهج المتعدد الحواس,طلبة المرحلة المتوسطة.

Section One : Introduction

1.1 Statement of the Problem

Language is the foremost critical gadget which is utilized by people to communicate with each other orally or written .English language is one of the most required language within the world since it is considered the language of knowledge , innovation , science, technology, trade....etc. Learning of EFL is affected by many factors such as, learning achievement ,teacher's proficiency, teaching methods, and language learning materials(White,1988:9).

Teaching a foreign language is a huge challenge for teachers and they are always striving to find and follow the most suitable strategy for their students. Teaching English must be attended effectively to achieve the excellent outcome for students. The effective teaching can be seen from how the teacher determines the appropriate method or technique into the teaching/learning process (Brown,2000:266).

Teachers often find that their students who study English as a foreign Language (EFL ,for short) make many mistakes in learning English from exercises, words and the use of English vocabulary to practice the four Language skills. Moreover those students often complain that they forget new words soon after learning them (AL-Zahrani, 2019:9).

Teaching approaches and strategies are considered one of the factors that affect students' performance since they aim to facilitate the process of learning (Herrell and Jordon,2001:108). However ,traditional teaching methodologies have ignored the role of senses in learning. All too often , traditional teaching has also ignored the different learning styles and sensory preferences through which a student maximizes learning and accelerates learning rates(Haddon and

Torry ,2003:9). Thus, it becomes essential to investigate the effectiveness of Multisensory as a teaching approach that may improve students' performance through linking learning with the practice of using their senses .

1.2 Aims of the Study

The current study aims at investigating the effectiveness of using Multisensory Approach (MA ,for short) for teaching EFL to intermediate school students through finding out :

- 1.the average level of students' achievement in English.
- 2.whether there is any significant difference between the achievement of the experimental group and that of the control group in the posttest.
- 3.whether there is any significant difference between the experimental group's achievement in the pretest and posttest.
- 4.whether there is any significant difference between the experimental group's achievement at the recognition level and that at the production level of the posttest.
5. Whether there is any significant difference between the experimental group's achievement in the oral and written sections of the posttest .

1.3 Hypotheses of the study

Five hypotheses are supposed to be verified in order to achieve the aims of the study:

- 1.The average level of the students' achievement in the posttest is within the theoretical level of performance in English.
- 2.There is no significant difference between the mean scores of the experimental group's achievement and that of the control group's achievement in the posttest.
3. There is no significant difference between the mean scores of the experimental group's achievement at the recognition level and that at the production level of the posttest.
- 4.There is no significant difference between the mean scores of the experimental group's achievement in the oral and written sections of the posttest.

1.4 Value of the Study

The value of the current study can be summarized in the following points:

- 1.This study could be valuable for EFL teachers through explaining the steps which should be followed through teaching English to intermediate school students in terms of the MA.
- 2.It motivates intermediate schools students and helps them to acquire English skills through involving their senses in the process of learning.
- 3.It helps EFL teachers who are required to change their slack methods in teaching English language and turn to use dynamic strategies.

4.It could help the researchers who are working on improving the performance of EFL learners.

5. It supplies English Syllabus designers with practical information about the role of the MA in the process of learning EFL .

1.5 Limits of the Study

The present study is limited to the second year intermediate school students who are studying **English for Iraq** Student's Book 2nd at Al Marjan Intermediate School for Girls in the City of Tikrit/ Salahuddin Governorate, during the academic year 2021-2022.

1.6 Operational Definitions of Basic Terms

1.6.1 Effectiveness :It means the role of the MA as a teaching approach for improving the achievement of intermediate school students' in English.

1.6.2 Approach : It means a method with a specific direction taken by the teacher to entertain EFL learners and enable them to achieve particular goals easily, quickly, and effectively

1.6.3 Multisensory Approach :It is a way of teaching intermediate school students how to learn EFL by using more than one sense.

Section Two: Theoretical Background

2.1 Multisensory Learning

To understand why multisensory learning is one of the most effective engagement strategies, it is important to get, how our minds work. The human brain has evolved to memorize and grow in a multisensory environment. According to the entire brain learning theory, all brain capacities are interconnected for this reason. We keep in mind how to do things best when the directions we are given lock in multiple senses. Multisensory learning is utilizing the neuroscience behind how we learn the lessons that lock in two or more senses. Most teachers include sounds or visual multimedia into their assignments, but multisensory learning can too incorporate tactile, smell, and taste-related materials (Blomert and Froyen, 2010:195).

Multisensory structured language programs utilize systematic phonics and are popularly utilized as reading interventions for individuals within schools. In multisensory programs, as one sort of a structured language program, direct and explicit instruction based on the structures of English is utilized to teach reading and writing. In addition to structured language principles, these programs utilize multisensory techniques and are therefore called multisensory structured language programs. Multisensory programs present direct and explicit

instruction while simultaneously engaging at least two sensory modalities: visual, auditory, or kinaesthetic (tactile) (McIntyre & Pickering, 2001:110).

The simultaneous engagement of sensory modalities during lesson exercises is believed to enhance learning. In exercises ,a wide extend of manipulatives are utilized to facilitate tactile and kinaesthetic engagement. For example ,students might trace letters on textured surfaces with their fingers whereas naming the letter or select a three-dimensional letter from a pack based on a target phoneme. In addition, students are not required to read a word using letters not introduced, or a spelling of a word they did not done first .Developmental assessments are included in lessons for guidance practitioners in preparing diagnostic and expressive lessons (ibid: 244).

2.2 Classroom activities of Multisensory Approach

Multisensory activities are based in a whole on brain learning, which is the belief that the best way to educate concepts is by including multiple ranges within the brain. By adding auditory or visual components to reading assignments, like illustrations or online activities, it help understudies create stronger proficiency skills(<https://www.waterford.org/education/why-multisensory-learning-is-aneffective-strategy-for-teaching-students-how-to-read>).

Gillingham (2019:1) mentions the following activities of the MA in classroom:

1.Sand

This activity lets students use sight, touch, and sound to connect letters and their sounds. students start with handful of sand on a cookie sheet or a dollop of shaving cream on a table. Then they spread out the sand or shaving cream and use their fingers to write a letter or word in it. As they write, students say the sound each letter makes. They then blend those sounds together and read the whole word aloud.

2. Air writing

Air writing (or sky writing) reinforces the sound each letter makes through “muscle memory”. It can help reinforce commonly confounded letter shapes like b and d. Students utilize two fingers as a pointer to write letters within the air. They say the sound each letter makes as they write it, and visualize the letter in a specific color.

3. Blending Boards

Blending boards are utilized for students to practice portioning sounds and blending the sounds into syllables. This helps get ready students for decoding multisyllabic words. Mixing boards can hold up to three expansive cad stacks that include person letters, as well as mixes and digraphs. These are put in consonant vowel consonant (CVC) arrange on the board. The

teacher places a hand over each card whereas students state each sound. At that point the teacher clears a hand over all of the letters whereas students state the word or syllable. If students struggle with the CVC pattern, try using the CVC pattern. Starting with a continuant sound versus a stopped sound will also help struggling students.

2.3 Multisensory Stimulation and the principles of the Multisensory Approach

Molholm et al (2004:1) mention that all human experience depends on their capacity to utilize their senses. Everything they do is informed by their senses. Each of their senses gives different types of information, which when processed, collectively gives there with a tremendously rich, multidimensional understanding of what it means to be a human being. Naturally the more multisensory the experience, the more sophisticated understanding is likely to become. Multisensory stimulation not only makes ,it possible for a person to survive but it also enables him to thrive within the environment in which he lives. Multisensory stimulation plays individual wellbeing. Without multisensory stimulation a person is cut off from himself and from the outside world. This is because sensory incitement is the source of all human meaning and enjoyment.

Human begins with their senses are what make life worth living. Over time the way they see sensory stimulation becomes their own recognition of themselves . In many ways their access to this stimulation are just taken for granted. These are because mostly their bodies automatically ensure they get the sensory stimulation they require for personal comfort, development, growth, happiness and ongoing maintenance. As their brain seem to effortlessly become aware of recognize and interpret these stimuli. Just being in the world is usually enough to stimulate multisensory engagement with self, objects, other people and events. Because of their innate genetic programming as babies, they simply learn to use their senses by using them and this is a lifelong process (Molholm et al :2).

Birsh (2018:189) has stated the following principles of the MA:

- Simultaneous, multisensory (*VAKT*)—Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic, tactile) simultaneously in order to enhance memory and learning.
- Systematic and cumulative—Multisensory language instruction requires that the organization of material follow the logical order of the language. The sequence must begin with the easiest and most basic elements and progress methodically to more difficult material. Each step must also be based on those [elements] already learned.
- Concepts taught must be systematically reviewed to strengthen memory.

-Direct instruction—The inferential learning of any concept cannot be taken for granted. Multisensory language instruction requires the direct teaching of all concepts with [continual] student–teacher interaction.

-Diagnostic teaching to automaticity—The teacher must be skillful at prescriptive or individualized teaching. The teaching plan is based on careful and [continual] assessment of the individual’s needs. The content presented must be mastered to the degree of automaticity . In terms of the reviewed literature, it is concluded that multisensory teaching includes as many human senses as possible in order to improve awareness, attention ,and memory. It combines many senses such as, hearing ,seeing, speaking, perceiving, touching simultaneously in the teaching of language structure .Using the MA enables learners to link the new information to the ideas they already know and understand from conducting different types of activities.

There are some essential instructional ways steps, and strategies that motivate the students ,draw their attention ,to understand new information ,remember it and review it later.

Section Three: Methodology

3.1 Population and Sampling

3.1.1 Population

Alvi (2016: 10) states that " a populace refers to all members who meet the particular basis specified for a research examination". Lehman and Mehrens (1971:18) state that “a populace alludes to all the specified groups of subjects usually persons ” . Best (1981:263) mentions that all individuals of population may be of a particular type or part more restrictive than that group, such as, all school teachers, all the female preparatory school students , all students of a practical grade, and so on. The population of the present study includes EFL Iraqi second year intermediate school female students in the City of Tikrit. The total number of those students is 334, as shown in table (1).

Table (1)
The Population of the study

No.	Name of School	Number of students
1	Al-Marjan Intermediate School for Girls	71
2	Al-Saafa Intermediate School for Girls	37
3	Al-khalood Intermediate School for Girls	32
4	AL-Aqedia Intermediate School for Girls	32

5	Al-Mustansiriya Intermediate School for Girls	31
6	Al-yousar Intermediate School for Girls	30
7	Al-Zhoor Intermediate School for Girls	29
8	Um Al-Muammneen Intermediate School for Girls	28
9	Al-Aseel Intermediate School for Girls	26
Total		316

3.1.2 Sample

Fry, et al (2000:125) define the sample as a subgroup of a population. Sampling has been characterized by Richards and Schmidt (2010: 506) as “ the procedure of selecting a sample ”. AL- Marjan Intermediate School for Girls has been randomly selected . The students are grouped into two sections,A and B whose total number is seventy-one . Section (A) and (B) are randomly selected to be the experimental and control groups of the study. Section (A) consists of thirty-three students ,and section (B) consists of thirty -eight students .Eight students are excluded from section (A) and thirteen students are excluded from section(B) to be employed in the pilot study .Thus ,fifty students who represent 15.82 of its original population ,are involved in the current study ,i.e. twenty-five students for each of the experimental and control groups, as shown in table (2) .

Table (2)

The sample of the study

Group	Sections	No. of Students	No. of pilot study	No. of sample
Experimental	A	33	8	25
Control	B	38	13	25
Total		71	21	50

Both groups of students have been equalized in their ages, parents' academic attainment, and their scores in the pretest.

3.2 Instructional Material and Students' Instruction

The instructional material of the present study includes units three, four and five "English for Iraq 2nd Intermediate Student's Book". The Instruction of both experimental and control groups started on the 16th December 2021 and lasted for twelve weeks, at a rate of four lectures per week. The experimental group is taught English by using the MA , whereas the control group is taught without this approach, i.e. according

to the traditional method .The following teaching aids are used with the experimental group.

- Laptop
- CD
- Data show
- Text and/or pictures on paper
- color cards
- white board
- images letters

3.2.1 A Lesson Plan for Teaching the Experimental group:

Date: 16th December / 2021

Class and section: 2 nd (A)

Time: 35 minutes

Unit: three

Topic: The sports center

Steps of presentation:

The experimental group has been taught English according to the MA, as follows :

1. Illustrate the lesson by giving information about the MA before involvement in teaching.
2. Explain what the students would learn from the topic presented explicitly at first.
3. The teacher has previously prepared supportive instruction as an activity of "before teaching " such as, smart board , read-aloud technique, charts ,color markers and tape assisted teaching to be used throughout the lesson.
4. The teacher begins to teach the intended subject of the lesson . The teacher writes the words of the subject on the board and/or cards, then the students saying each syllable as it is followed. This is repeated until the learner feels competent of composing the word from memory.
5. The teacher encourages the students to memorize the words such as, play , go, football, do, and swimming through studying their visual appearances and then writing them from memory. Words are written on cards and put away for afterward revision.
6. The teacher asks the students to define each word based upon background knowledge.
7. The students listen to the recorded audio topic from the CD.The teacher reads the topic again then, asks the students to answer the

questions of the Activity Book on page 36 lesson 1 ,the questions: what sports would you like to do ? ,where were the Olympic games of 2012? would you to work football in the evening ?

8. The teacher asks students to say each word or each letter to read or check spelling. When a student is reading a difficult word, she is required to trace the letters as she says the sounds Also, the teacher encourages students to check their spelling by pointing and saying each letter to help them identify and correct common errors like forgotten letters or omitted words.

9. The teacher uses magnetic letters (paste letters) . The use of magnetic letters to pronounce the words and words formation on the board.

10. The use of sky write (air write) for spelling or handwriting. When working on introducing new spelling words or giving direct instruction in letter formation, use of sky writing incorporates gross muscle memory. Have students hold their arm out straight in front of them using two fingers as an imaginary pencil. Describe the movements for letter formation or say the letters (S-A-I-D) as the students write the letters in the air in front of them. A straight arm, moving from the shoulder is the most effective way of using this strategy because it changes it from a fine motor to a gross motor activity.

11. The teacher encourages student-student and student-teacher interaction in terms of discussion, participation, take turns in the form of small groups or the whole class. For example ,Liz: Hello. Is that the spots center? Sorts officers :Yes. Can I help you? Liz: Well, I would like to play volleyball .

12. Identifying the specific steps of the MA, there are three main steps to accommodate multisensory learning: First, it is necessary to understand the different ways of learning or ways of processing information before planning the MA . Second, one must consider a number of direct instruction strategies that can accommodate the many ways students learn information. Third, students' skills should be assessed or evaluated using a variety of task options. Allowing students to choose comfortable ways to express their knowledge can increase motivation and attention and improve long-term memory capacity.

3.2.2 A Lesson Plan for Teaching the Control Group:

Class and section: Second (B)

Date: 16th December / 2021

Time: 35 minutes

Unit: three

Topic: The sports center

Steps of presentation:

The control group has been taught the same topic which has been taught to the experimental group ,but according to the communicative method ,as follows:

- 1.Students' attention is drawn to the title of the presented passage and to the given image, which reflects the content of the passage(**The sports center**) .
- 2.Students are asked to discuss the idea of the passage.
- 3.The teacher reads the text and then asks the students to read each paragraph.
- 4 .The teacher explains the meaning of the new vocabulary and writes them on the board.
5. Individual students read the passage (The sports center).The Teacher discusses with the students any difficulty raised by them to be simplified and understood well .
- 6.The teacher assigns students' homework from the Activity Book.

3.3 Construction of the Achievement posttest

An achievement test ought to support the teaching materials to which they relate. The primary role of an achievement test is to decide the achievement of the course goals. It can serve as an indicator of the features that a student must work on in the future (McNamara,2000:6). It is subdivided into written and oral sections as follows :

3.3.1 Written Section of the Achievement posttest

The achievement posttest of the current study is constructed by considering the content and behavioural objectives of the teaching material. It contains five questions, as shown in appendix (A). The first question includes an unseen passage and five True /False items. The testees are required to read the passage and identify the true and false items. This question is scored out of ten, i.e. each correct item tasks two marks whereas the wrong one takes zero. The second question consists of ten items. Each item is given one mark and the total mark is ten. The aim of this question is to measure students' comprehension of grammar in the given items.

Question three consists of ten items and each item is given one mark ,so the total mark is ten. Students are required to fill-in the blanks with the correct options. Question four (A) consists of ten items and each item is

given one marks. students are required to match the items of list (A) with their suitable ones in list (B). Question four (B) consists of ten items and each item is given one mark. Students are required to write the missing letters of the given words. Question five includes writing a paragraph. students are required to describe their friends in about 50-70 words. The total score of this question is ten, as shown in table (3).

Table (3)

The Specifications of the Contents, Behaviours, Items, and Marks of the Written Section of the posttest

Level	No. of Questions	Content	Behaviors Objectives	No. of Items	Marks
Recognition	1	Unseen Passage	to write (T)for a true sentence and (f)for a false one.	5	10
Recognition	2	Grammatical Items	to rewrite the given items by doing what it is required	10	10
Recognition	3	vocabulary	to fill in the blanks with the correct options	1	10
Recognition	4 A	Vocabulary	to match between the words of List (A) and the pictures List (B)	10	10
Production	4 B	Spelling of words	to write the missing letters of the given words	10	10
Production	5	A written paragraph	to describe your friend in about 50-70 words	1	10
Total	5			37	60

3.3.2 Oral Section of the Achievement Posttest

The oral achievement posttest includes two questions ,and scored out of forty, as shown in appendix (B). The first question includes a recorded short story and five questions. The students listen to the recorded story and answer the related questions orally. The second question includes some coloured pictures .The students look at the pictures and then answer the questions about them.

3.3.3 Scoring Scheme of the Achievement posttest

A definite scoring scheme is utilized to realize the analytic method of the test. Madsen (1983: 121) and Heaton (1988:148) state that the analytic method depends on the scoring scheme which has been carefully drawn up. Thus , a scoring scheme for the two sections of the test has been developed.

The whole posttest is scored out of 100 , i.e. . sixty scores for the written section and forty scores for the oral section, twenty scores for each question.

Written Section:

- 1- Question one consists of 5 items and scored out of 10 marks .The correct answer gains two scores and the incorrect answer gains zero.
- 2- Question two includes ten items and scored out of 10 marks .One mark is specified for each correct item and zero for the wrong one.
- 3- Question three includes ten items and scored out of 10 marks, one mark is specified for each correct item and zero for the wrong one.
- 4- Question four(A and B) includes ten items and scored out of 20 marks ,so one mark is specified for each correct item and zero for the wrong one.
- 5- Question five includes writing a paragraph and scored out of 10 marks . Students' responses are assessed in terms of five criteria ,namely: vocabulary, spelling, grammar, punctuation marks and handwriting. Each criterion is marked as; good, fair, and weak. Two marks are given for "good", one mark for "fair", and zero for "weak" ,as shown in table (4).

Table (4)
The Scoring Scheme of Question Five

No. of Question	Criteria	Qualities	Scores
5	Vocabulary	Good Fair Weak	2 1 0
	Spelling	Good Fair Weak	2 1 0
	Grammar	Good Fair Weak	2 1 0
	Punctuation	Good Fair Weak	2 1 0
	Handwriting	Good Fair Weak	2 1 0

Oral Section :

The oral section includes two questions and scored out of forty , i.e. twenty scores are given for each question. The first question includes a recorded short story and five short questions . The second section includes, the students look at the pictures and then answer the questions about it . Testees' ability is assessed in terms of four categories , namely :Vocabulary , grammar , pronunciation , and fluency . The scale of each criterion includes five levels of performance which range between 1-5. Thus ,poor level =1 , fair level=2 , good level =3,very good level =4, and excellent=5,as shown in table (5).

Table (5)

The Scoring Scheme of Oral Test

Questions	Criteria	Qualities	Scores
1	vocabulary, grammar, pronunciation fluency	poor fair good very good excellent	1 2 3 4 5
2	vocabulary, grammar, pronunciation fluency	poor fair good very good excellent	1 2 3 4 5

The constructed posttest has been validated ,its reliability obtained and its items analyzed.

3.3.4 Final Administration of the Achievement Posttest

The posttest has been administered to both groups, the experimental and control groups , on the same day, and at the same time on the 2nd of March, 2022.The test papers have been distributed to the whole testees who are required to read carefully the given instructions of the written section and write down their responses clearly on their test papers within a period of 40-50 minutes. Finally, the test papers have been collect to be scored in terms of the designed scoring scheme . As the testees finish responding to the written section of the test, the oral section starts .The two oral questions have been administrated individually by the researcher herself, and in collaboration with one of the EFL teachers at the same involved school of the testees .Testees' responses have been recorded on a CD to be scored at the end of the test on five-point scale and in terms of the already identified criteria ,i.e. vocabulary ,grammar, pronunciation ,and fluency.

Section Four: Analysis of Data , Discussion of Results, Conclusions, and Recommendations

4.1 Analysis of Data

4.1.1 Students' General Level of Performance in the Achievement Posttest

In order to verify the first hypothesis, the mean scores and the standard deviation of the students' achievement in the posttest have been obtained, which are 69.52 and 16.49 respectively T-test formula for one sample is used. The

calculated t-value is 8.36, whereas the tabulated t-value is 2.00, at (0.05)level of significant and (49) degrees of freedom, as shown in the table (6). Since the calculated t-value is higher than the tabulated t-value, it means that there is a significant difference between the students' general level of achievement which is 69.52 and the theoretical level of achievement which is 0.50 and in the favour of the former, thus the first hypothesis is rejected.

Table (6)

The Mean Scores, Standard Deviation and T-value of Students' Performance in the Achievement Posttest

No. of students	Mean Scores	SD	Theoretical Mean	T-values		DF	Level of significance
				Calculate	Tabulated		
50	69.5	16.49	0.50			49	0.05
				8.36	2.00		

4.1.2 Comparison between the Achievement of the Experimental Group and that of the Control Group in the Posttest.

In order to verify the second hypothesis, the mean scores as well the standard deviations of the two groups of students have been obtained. Results indicate that the mean scores of the experimental group is 76.52 and that of the control group is 62.52. By using the t-test formula for two independent samples, the calculated t-value is found to be 3.28, while the tabulated t-value is found to be 2.01 at the degree of freedom(48) and level of significance(0.05) ,as shown in table (7). This means that there is a significant difference between the achievement of the two groups and in favour of the experimental group.

Table (7)

Means, Standard Deviation, and t-Values of the Two Groups in the Achievement posttest

Groups	No. of students	Mean Scores	SD.	T-Value		DF	Level of Significance
				Calculated	Tabulated		
Experimental	25	76.52	16.03	3.28	2.01	48	0.05
Control	25	62.52	14.00				

4.1.3 Comparison between the Experimental Group's Achievement in the Pretest and that in the Posttest

In order to verify the third hypothesis ,the mean score and standard deviations of the experimental group's performance in the pretest and the posttest have been calculated . It is found that the mean scores in the posttest are 76.52 with a standard deviation 16.03. Whereas in the pretest is 45.92 with a standard deviation 23.14. The calculated t-value is 5.88 , which is found to be higher than the tabulated t-value which is 2.06 at 0.05 level of significance when the degree of freedom is (24), as shown in table (8) .The obtained results indicate that there is statistically a significant difference , between experimental group's performance in the pretest and their performance in the posttest, and in favour of the posttest. Thus, the third hypothesis is also rejected.

Table (8)

The Mean Scores , Standard Deviations and T-Values of the Experimental Group's Performance in the Pretest and Posttest

Test	No. of students	Mean Scores	SD.	T-Value		DF	Level of Significance
posttest	25	76.52	16.03	Calculated	Tabulated	24	0.05
Pretest	25	45.92	23.14	5.88	2.06		

4.1.4 Comparison between Students 'Achievement at the Recognition Level and that at the Production Level of the Posttest.

The mean scores of the students' achievement at the recognition level and that at the production level of the experimental group in the posttest are calculated and compared in order to verify the fourth hypothesis . The obtained results show that students' mean scores at the production level are found to be 40.14 and that at the recognition level they is 36.38. The t-test formula for two related samples is used, and results show that the calculated t-value is 5.53 , and the catenulated t-value is 2.06 at the degree of freedom (24) and level of significance (0.05),as shown in table (9).This means that there is a significant difference between students' achievement at the recognition level and that at the production level and in favour of the recognition level. Therefore, the fourth hypothesis is rejected.

Table (9)
The Mean Scores, Standard Deviation, and T-Value of the
Experimental
Group Performance at the Recognition and Production Levels

Test	No.of students	Mean Scores	SD	T-Value		DF	Level of Significance
				Calculated	Tabulated		
Recognition	25	40.14	9.00	Calculated	Tabulated	24	0.05
Production	25		7.30	5.53	2.06		

4.1.5 Comparison between Students' Achievement in the Written Section and that in the Oral Section of the Posttest

In order to verify the fifth hypothesis, the mean scores of the experimental group's achievement at the written section and that at the oral section of the posttest are calculated and compared to find out whether there is any significant difference between them. The obtained results show that students' mean scores at the written section are found to be 42.20 and that at the oral section they is 34.32. The t-test formula for two paired samples is used, and the results show that the calculated t-value is 3.01, and the tabulated t-value is 2.06 at the degree of freedom (24) and level of significance(0.05), as shown in table (10) .This means that there is a significant difference between students' performance in the two sections of the posttest, and in favour of the written section. Therefore, the fifth hypothesis is rejected.

Table (10)
The Mean Scores, Standard Deviation, and T-Value of the Experimental
Group's Performance in the sections of the posttest

Test	No. of students	Mean Scores	SD	T-Value		DF	Level of Significance
				Calculated	Tabulated		
Written Test	25	42.20	10.83	Calculated	Tabulated	24	0.05
Oral Test	25	34.32	6.57	3.01	2.06		

4.2 Discussion of the Obtained Results

The current study attempts to investigate the effectiveness of the MA for teaching EFL to intermediate school students .The obtained results show that the performance of the experimental group who has been taught by using the

MA, is better than that of the control group who has been taught by using the traditional method. This means that the MA has proved to be more effective in teaching EFL to intermediate school students. The improvement of the students' performance in English could be attributed to the role of the MA , as follows:

- 1.The MA led to the improvement of students' achievement by creating independence activity and motivating students' minds to communicate creatively.
- 2.Students have enjoyed learning through the application of the MA and motivate them to use all of their senses.
- 3.The MA is flexible and interesting in use.
- 4.The MA encourages creativity, helps students to understand, memorize and retrieve better.
- 5.The MA encourages students to create, organize and better connect relationships between ideas. As well as improves effectively the way students' record information, enhance their retention. Further, students can participate actively inside the class since they are motivated to take part in-class activities and tasks.
- 6.Using many activities in the classroom such as ,matching the number of words with the letters of different pictures of animals ,things ,children etc., and writing on board , enable the students to comprehend the lesson material.

4.3 Conclusions

According to the obtained results of the current study, the following points are concluded

1. The MA has an effective role in improving intermediate school students' achievement in English .
- 2.Usin the MA for teaching EFL, encourages student-student and student-teacher interaction in terms of, discussion, participation, take turns in the form of small groups or the whole class.
- 3.The MA is more effective with the learners and better than the traditional method, for teaching EFL .
- 4.Using the MA helps the students to mix all their senses at one time in the lesson.
- 5.The MA develops cooperative learning within the same group and competition with other groups.
- 6.The MA appeals to EFL students through auditory, visual, and tactile senses.

4.4 Recommendations

In term of the obtained results and drawn conclusions, the following recommendations are put forward:

- 1.Teachers are advised to use the MA in teaching English to improve their students' achievement.

2. Teachers should move from the traditional method in teaching EFL into a modern method , such as, the MA that creates a new learning environment and changes their role from instructors who dominate the class situation into educators who helps ,guides and supports their students to acquire English effectively .

3. Teachers are recommended to use technology tools to create active lively lessons and facilitate the students' learning process .

4. Schools should use modern technology in teaching EFL such as, videos , recorders, showing pictures, touch screen, web sites....etc.

References:

- Alvi ,M. H. (2016): “A Manual for Selecting Sampling Techniques in Research”. Online at <https://mpira.ub.uni-muenchen.de/70218/> MPRA Paper, 70218 , 1-56.
- Al-Zahrani, M. A. B. (2011) The Effectiveness of Keyword-Based Instruction in Enhancing English Vocabulary Achievement and Retention of Intermediate Stage Pupils with Different Working Memory Capacities.(Online Submission M.Ed. Thesis) Taif University.
- Best, John W.(1981) **Research in Education** .(4th ed.) . Englewood Cliffs, New Jersey : Prentice – Hall,Inc.
- Birsh ,R. Judith (2018) **Multisensory Teaching of Basic Language Skills**.(4th ed.),London: Paul H. Brookes Publishing Co.www.brookespublishing.com .
- Blomert,L and Froyen, D. (2010) “MultiSensory Learning and Learning to Read”. **International Journal of Psychophysiology**,77(3)September PP-195-204[3].
- Brown ,H. (2000) **Principles of Language Teaching and Learning**, (4th ed.). New York: Addison Wesley Longman.Inc .
- Fry , Lawrence R.; Carl , H. Boton; and Gnry L. Kreps. (2000) **Investigating Communication : An Introduction to Research Methods** (2nd ed.). Boston : Allyn and Bacon .
- Gillingham,Oarton(2019)**Multisensory Instruction in the Classroom Activities to Use**.25,2019 122 38.
- Haddon,Robinson and Torrey Robinson (2003) It’s All in How You Tell It: Preaching First-Person Expository Messages (Grand Rapids: Baker, 9).
- Heaton, J. B. (1988) **Writing English Language Test** (2nd ed.). New York: Longman Group UK Limited.
- Herrell ,A. and Jordan,M.(2001) “Collecting and Processing Words :Strategies for Building Vocabulary in Young Children . **Kindergarten Education : Research and Practice** , 3 , 17-25.
- Lehman, Irvin and Mehrens, A. (1971). **Educational Research Reading in Focus**. USA.: American Winston, Inc.
- Madsen, H.S. (1983). **Techniques in Testing**. New York and Oxford: Oxford University Press.
- Majeed ,N .T. and Jasim K. “An Evaluation of the English Teacher -Made Tests for the Fifth Preparatory Class of Iraqi Schools”**Journal of Tikrit University Vol (29) No (3) Vol (2) Mars 2022**.
- McIntyre, C., & Pickering, J. (2001) “Clinical Studies of Multisensory Structured Language Education”.**International Multisensory Structured Language Education Council**, Dallas.
- McNamara, T. (2000). **Language Testing**. Oxford: Oxford University press.
- Molholm; Sophie ;Walter Ritter; Daniel C. Javittand and John J. Foxe(2004) “Multisensory Visual-Auditory Object Recognition in Humans: a Highdensity Electrical Mapping Study.” **Journal of Cerebral Cortex** vo14,no.4 ,pp 452–65.
- Richards, J .C. and Schmidt, R. (2010) **Longman Dictionary of Language Teaching& Applied Linguistics** (4th ed.) UK :Longman Publishing Group.
- White, V.R. (1988) **The ELT Curriculum**. Oxford University : Basil Blackwell Ltd.

- <https://www.orton-gillingham.com>.
- <https://www.waterford.org/education/why-multisensory-learning-is-aneffective-strategy-for-teaching-students-how-to-read>.

Appendix (A)

The Written Section of the Achievement Posttest

Q1/// Read the following passage carefully (10m)

My friend's name is Mustafa .His father's name is Ahmed. They are Egyptians. Mustafa is a student and his father works in a hospital. Mustafa gets up early at seven o'clock morning. Mustafa goes to school by bus but his father goes by his car. Mustafa can play tennis brilliantly and he can do the long jump. His father cannot play any sport and he cannot jump or run.

Write(T) for a true sentence and (F) for a false sentence :

1. Mustafa is from Egypt .
2. Mustafa's father is Ahmed.
3. His father can jump and run .
4. Mustafa and his father get up at seven o'clock morning .
5. Mustafa cannot do the long jump.

Q2 / Do as required : (10m)

1. I haven't eaten anything (fore –since) last night (choose and correct word).
2. I (walk) in the park for two weeks (correct the verb).
3. suggest to your friend to write the homework (use: why).
4. She (like , dislikes)her home (choose the correct verb)
5. There (is , are) some books (choose the correct auxiliary)
6. An old woman suitcase was lost (use: possessive)
7. They have a (white, Scottish, big) house . (Re- arrange the adjectives)
8. when.....(do ,does) he play football ? (choose the correct verb)

9. They tell lies (use: I do not like).

10. pain- her- has – ear – Nadia - In – a (Reorder).

Q3// Fill in the blanks with the correct options. (10m)

1. If I drink ... coffee, I cannot sleep. (too much, too many , a few, a little)
2. I get up four o'clock (at, in , for)
3. He is a..... . He works in a hospital. (Pilot, doctor, policeman.)
4. If I get good marks ,I will..... the exam.(pass -take -fail)
5. Ahmed judo every Tuesday evening (does, go, do).
6. Muna was for her Math test (study, studied , studying).
7. Don not eat sweets. You will feel ill.(a few ,many, much).
8. I live ----- Baghdad .(on, in).
9. Sara always to bed at ten o'clock ,she is ninety years old .(go ,goes ,will go).
10. she is than her bother .(young , younger, youngest).

Q4/A/ Match the number of the words in list (A), with their suitable pictures in list (B)

(10M)

(A)

1-Watch

a-

2-computer

b-

(B)



3-Biscuit

c-



4-

d-

Fruit



5- Hotel

e-



6- Gift

f-

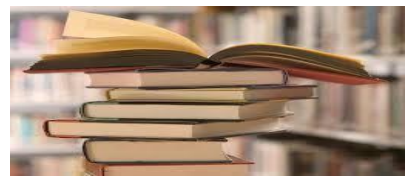


7-Frog

g-



h-



8-Books i-

9.Fish

j-

10.Friends

Q4/B/ write the missing letters of these words : (10m)

1- T— — m

2- P— — try

3- Cart— — n .

4- S— hool .

5- Teach— — .

6- Ri— — T .

7- — rong

8- Med— cin —.

9- St— ma _ _ .

10- Su— prised

Q5//Write a Paragraph (50-70 words) to describe your friend . (10m)

Appendix (B)

The Oral Section of the Achievement Posttest

Q 1. Listen to the recorded story and answer the questions. (20m)

These girls are sick .They have gone to see a doctor .

- 1- What are wrong with Noora and Rasha ?
- 2- What do the doctor put in their ears?
- 3- How many times a day should they use the medicine ?
- 4- How many drops should they use each day ?
- 5- What shouldn't they do ?

Q 2 . Respond to the following questions from the pictures. (20m)

What are the people doing in this picture ?



2. Give a suitable title for this picture.

