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The Impact of 4As on Enhancing EFL Preparatory School Pupils' Achievement

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Abstract

The current study aims at finding out the effect of the 4As (Anchor, Add, Apply, Away) model on EFL preparatory school pupils' achievement in the English language. It also investigates the differences between the mean scores in the pre-test and post-test of the experimental group who were taught according to the 4As model. The study sample consisted of 70 fourth pupils at Al-Alm Secondary School for Boys in Salah Al-Din, Iraq. These pupils were divided into two groups: the experimental group (taught using the 4As model) and the control group (taught using the prescribed model), with 35 pupils in each. The study adopted a quasi-experimental design involving pre- and post-tests to measure achievement in English. Both groups were matched in terms of age, prior achievement in English, and parents' academic background. The experiment

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lasted for ten weeks during the first semester of the 2024–2025 academic year. The statistical analysis, including t-tests, revealed that the experimental group showed significantly higher achievement scores in the post-test compared to the control group. The study finds out that the 4As model has a positive impact on EFL pupils' achievement in English. Based on these results, the researcher provides recommendations for incorporating the 4As model in language instruction.

Keywords: 4As Model, Anchor-Add-Apply-Away, EFL, Preparatory School Pupils, Quasi-Experimental Study.

تأثير نموذج As4 على تعزيز إنجازات تلاميذ المدارس الإعدادية للغة الإنجليزية كلغة أجنبية

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المستخلص

تهدف الدراسة الحالية إلى معرفة أثر استراتيجية 4As (التثبيت، الإضافة، التطبيق، الطلاقة) على تحصيل تلاميذ المرحلة الإعدادية في اللغة الإنجليزية. كما تبحث في الفروق بين متوسطات الدرجات في الاختبار القبلي والبعدي للمجموعة التجريبية التي دُرّست وفقًا لاستراتيجية 4As. تكونت عينة الدراسة من 70 تلميذًا من الصف الرابع الاعدادي في مدرسة العلم الثانوية للبنين في صلاح الدين، العراق. قُسّم التلاميذ إلى مجموعتين: المجموعة التجريبية (التي دُرّست باستخدام استراتيجية 4As) والمجموعة الضابطة (التي دُرّست بالطريقة المقررة)، بواقع 35 تلميذًا لكل مجموعة. اعتمدت الدراسة تصميمًا شبه تجريبي يتضمن اختبارات قبلية وبعدية لقياس التحصيل في اللغة الإنجليزية. تطابقت المجموعتان من حيث العمر، والتحصيل السابق في اللغة الإنجليزية، والخلفية الأكاديمية للوالدين. استمرت التجربة عشرة أسابيع خلال الفصل الدراسي الأول من العام الدراسي 2024–2025. كشف التحليل الإحصائي، بما في ذلك اختبار القيمة التائية، أن المجموعة التجريبية أظهرت درجات تحصيل أعلى بكثير في الاختبار البعدي مقارنةً بالمجموعة الضابطة. وخلصت الدراسة إلى أن استراتيجية 4As

لها تأثير إيجابي على تحصيل طلاب اللغة الإنجليزية كلغة أجنبية. وبناءً على هذه النتائج، تقدم الباحثة توصيات لدمج استراتيجية 4As في تعليم اللغة.

الكلمات المفتاحية: استراتيجية 4As، التثبيت – الإضافة – التطبيق – تلاميذ المدارس التحضيرية، دراسة شبه تجريبية

1.0 Introduction

1.1 Statement of the Problem

The increasing significance of English as a world language and its inclusion in the Iraqi prep school syllabus, it remains challenging for most students in Salah Adin to achieve levels of competence in English as a Foreign Language (EFL). Traditional teaching methods that tend to predispose students to rote memorization and passive learning have failed to inspire learning and establish productive and functional language skills. Hence, most of the students are having difficulties with listening, reading, writing, and speaking English, which hampers their learning achievement and prospective futures (Al-Husseini, 2019).

The new pedagogical models, like the 4As model (Anchor, add, apply, and away), present one likely answer to this problem through active learning, higher-order thinking, and functional language application (Al-Khazaali & Ali, 2021). Nonetheless, little literature has been established as far as the efficiency of the model in the Iraqi preparatory schools is concerned, especially in Salah Adin.

1.2 Aims of the Study

The primary aims of this study is to examine the impact of the 4As model on enhancing the English language achievement of EFL preparatory school pupils. To achieve this, the study aims to:

1. Assess the impact of the 4As model in enhancing EFL Preparatory School Pupils' Achievement.

2. Finding out the differences between the mean scores in pre and posttrst of experimental group whom they taught according to 4As model.

1.3 Hypotheses of the Study

1. There is no statistically significant effect of the 4As model in enhancing EFL Preparatory School Pupils' Achievement.
2. There is no statistically significant differences between the mean scores of the experimental group whom they taught according to the 4As model and the control group mean scores whom they taught according to the prescribes model in post test.

1.4 Limits of the Study

1. **Participants**: Fourth preparatory School's pupils in Al-Alm Secondary School for boys.
2. **Skills and Content**: Focus on both productive (speaking, writing) and receptive (listening, reading) language skills, specifically covering Units 1, 2, and 3 of the *English for Iraq* textbook.
3. **Academic Year**: Conducted during the 2024–2025 academic year at the first semester.
4. **Study Models**: The specific models of teaching and learning applied within the scope of this study, is the Anchor, add, apply, and away (4As) as a Model.

1.5 Definition of Terms

1.5.1 Impact

Impact is defined as the observable and provable difference that a particular activity, policy, or intervention creates over time on targeted individuals or systems (Weiss, 1998: p. 4).

Impact refers to the degree to which an educational program or model produces significant changes in learners' knowledge, skills, attitudes, or behaviors (Guskey, 2000: p. 17).

Impact is the measurable effect or influence that a specific factor, model, or intervention has on a given outcome or condition (Cohen & Morrison, 2018: p. 7).

(Operational Definition): In this study, impact is operationally defined as the measurable difference in the mean scores of EFL preparatory school pupils on a post-test of English language achievement after being taught using the 4As model, compared to a control group taught using traditional models. It is determined through statistical analysis of performance data.

1.5.2 4As Model (Anchor, Add, Apply, Away)

The 4As model is an instructional model designed to enhance student understanding by guiding them through four progressive stages: Anchor (connecting to prior knowledge), Add (introducing new content), Apply (using the new knowledge), and Away (extending learning to new contexts) (Silver & Perini, 2007: p. 32).

The 4As instructional model provides a scaffold for active learning that enables learners to connect prior and new knowledge in a meaningful sequence, fostering engagement and retention (Marzano, 2007: p. 65).

The 4As is a structured model to teaching that promotes deeper learning by anchoring concepts in familiar contexts, adding new material, applying knowledge through practice, and helping pupils carry learning away to novel situations (Jackson, 2009: p.43).

(Operational Definition): The *4As model* is operationally defined as an instructional model implemented in four structured stages during English lessons:

- **Anchor:** Connecting new content to pupils' prior knowledge or personal experiences.
- **Add:** Introducing new vocabulary or grammatical structures.
- **Apply:** Engaging pupils in practice activities that require using the new knowledge.
- **Away:** Encouraging learners to transfer their knowledge to new, real-life, or communicative contexts.

1.5.3. Achievement

Achievement is the successful accomplishment of learning objectives and outcomes that reflect the cognitive and skill development of a learner (Bloom, 1956: p. 12).

Achievement is defined as the extent to which a learner has attained specific goals that were the focus of activities in instructional environments (Tuckman & Monetti, 2010: p. 155).

Achievement in education refers to the measurable performance of a student in academic tasks, often assessed through standardized tests, grades, or teacher evaluations (Slavin, 2018: p. 4).

(Operational Definition): In this study, achievement is operationally defined as the score each pupil obtains on a standardized English language test designed by the researcher to measure knowledge and skills in vocabulary, grammar, reading comprehension, and sentence construction. It reflects the extent of learning as a result of the instructional intervention and is used to compare the performance of the experimental and control groups.

2.0 Literature Review

2.1 Historical Background

2.1.2 The Concept of Anchor, add, apply, and away(4As)

4As model (Anchor, Add, Apply, Away) is a pedagogical model for supporting active and student-centered learning. The model is built around four processes that facilitate students from elementary knowledge to authentic application and autonomous use of language capability. The model relies on constructivist learning theory, which emphasizes the fact that learners actively construct knowledge through interaction with the world, their existing knowledge, and their experience (Piaget, 1973; Vygotsky, 1978).

Anchor is the first step where new learning is connected to existing experience or prior knowledge of the learners. This makes the learning relevant and applicable,

providing a foundation for future learning to be developed (Bransford, Brown, & Cocking, 2000). Add is a step where new information or more advanced ideas are added progressively, depending on the basis knowledge acquired in the Anchor step. This step-by-step incremental approach enables students to develop their knowledge in stages, instead of being flooded (Tomlinson, 2003).

The Apply stage challenges students to apply their new learning in daily, real-life situations, which deepens the ability to transfer knowledge to new problems (Brown, 2007). Lastly, in the Away stage, the learners are challenged to assume responsibility for learning by having control of their knowledge on their own in various situations, which allows additional deepening of knowledge and the consolidation of long-term memory (Jonassen, 1999).

The model guarantees that learning is not merely theoretical but it is also converted into practices that are meaningful and practical, resulting in improved understanding and greater retention. The 4As model places strong focus on developing critical thinking, problem-solving, and independent learning skills, hence making it extremely effective to acquire a language, particularly in English as a Foreign Language (EFL) contexts.

2.1.4 The Advantages of Anchor, add, apply, and away(4As)

The 4As (Anchor, Add, Apply, Away) model has several benefits in teaching languages, especially in making learning more efficient through more engagement, improved comprehension, and improved long-term retention (Krashen, 1982). Below are some of the main benefits attributed to this instructional model:

1. Promotes Active Learning

The 4As model is intended to involve students in the learning process, with active participation at all levels. The 4As model removes the component of passive listening and creates a space for students to take an active role in building their own learning, which has been shown to enhance retention and comprehension (Bransford, Brown, & Cocking, 2000). The Anchor stage triggers the students' current knowledge,

and the Apply stage offers a chance for students to actively utilize and reinforce their abilities.

2. Facilitates Meaningful Learning

By connecting new knowledge to existing knowledge at the Anchor stage, and requesting students to connect the learning to everyday situations at the Apply and Away stages, the 4As model facilitates meaningful learning. The model allows students to understand how what they are learning may be applied in everyday circumstances, hence making learning significant and relevant to their lives and future needs (Krashen, 1982).

3. Encourages Higher-Order Thinking

The model lays stress on problem-solving and critical thinking via the Apply and Away phases. The students are tasked with working alongside sophisticated tasks, making choices, and examining learning. This encourages higher-order skills like analysis, synthesis, and assessment (Jonassen, 2000).

4. Supports Differentiated Learning

The 4As model supports different instruction as the Add and Apply phases can be aligned to cater for different needs and styles of learning for students. Teachers can differentiate the level of challenge of the activities and give support or enrichment based on the accomplishment of students, promoting inclusive learning (Tomlinson, 2003).

5. Improves Student Motivation and Engagement

The 4As model enables students to take responsibility for learning. In involving students in every step and permitting them to reflect and utilize their learning, the model instills a sense of accomplishment and self-efficacy. This intrinsic motivation is very vital in guaranteeing long-term success in language acquisition (Schön, 1983).

6. Enhances Transfer of Learning

The Away stage, in which there is focus on independent use of learned content in new situations, supports transfer of learning. Learners are able to utilize what they have learned beyond the classroom through this stage, so learning does not have to be limited to theory but can be practiced in real-life scenarios (Bransford et al., 2000).

7. Fosters Collaborative Learning

Incorporating collaborative exercises in the Apply and Away steps promotes peer-to-peer and team work that could reinforce social learning and ease communication skills acquisition. The interactive nature brings about a sense of community and joint responsibility by class learners (Duffy & Jonassen, 1992).

2.1.6 Procedures of Anchor, add, apply, and away(4As)

The *Anchor, add, apply, and away*(4As) model follows a structured model to enhance pupils' learning experiences through active and engaging pedagogical strategies. The model emphasizes four key phases—Anchor, Add, Apply, and Away—which guide both the teacher and pupils through a comprehensive learning process (Black & Wiliam, 1998). Below are the typical procedures involved in each phase:

1. Anchor Phase

The first phase, *Anchor*, is focused on connecting new information to pupils' prior knowledge and experiences. In this phase, the teacher helps pupils activate their existing knowledge base, setting the stage for the introduction of new content.

Procedure:

- Activate Prior Knowledge: The teacher begins by asking questions or prompting discussions that connect the new lesson to what pupils already know.
- Provide a Context: Teachers provide relevant real-life examples or experiences to create a foundation for the lesson.

- Introduce the Topic: The teacher introduces the new content in a relatable and engaging way, often using multimedia, visuals, or hands-on materials to make the material more accessible.
- Engage Students: Activities such as think-pair-share or brainstorming sessions are used to encourage student participation and engagement (Harmer, 2007).

2. Add Phase

In the *Add* phase, new information or skills are introduced and added to the pupils' existing knowledge. This phase emphasizes teaching the core concepts and details of the lesson.

Procedure:

- Introduce New Concepts: The teacher presents new information, concepts, or skills that build on the prior knowledge established in the *Anchor* phase.
- Provide Scaffolding: Strategies such as modeling, guided practice, and think-alouds may be used by teachers to inform students of how to use the new knowledge.
- Add Active Learning: Discussion, group work, or problem-solving activities enable students to actively interact with the new information.
- Monitor for Understanding: Teachers monitor students' understanding of the new information through questioning, formative assessment, or feedback (Fullan, 2007).

3. Apply Phase

The Apply stage enables students to apply the newly learned knowledge and skills in realistic, practical situations. The stage focuses on experiential, practice-based learning.

Procedure:

- Encourage Independent Practice: Students work on activities that necessitate them to apply what they have learned, e.g., project, experiments, case studies, or written work.

- Collaborative Learning: Group work or peer-to-peer collaboration is usually employed to prompt the application of concepts to various situations.
- Real-Life Situations: Teachers facilitate students to understand how the information can be utilized in real-life situations to make learning more practical and meaningful.
- Give Feedback: Teachers provide constructive feedback to the students immediately on application of knowledge so correct understanding is confirmed.

4. Away Phase

Away phase stimulates learners to implement learning in new contexts and explore how the learning can be transferred outside the classroom arrangement. The phase stimulates critical thinking, independent problem-solving, and lifelong learning commitment.

Procedure:

- Facilitate Transfer: Teachers motivate learners to think critically about how the learning or skills gained can be implemented outside the classroom. This may include transferring the learning to home, other courses, or everyday life.
- Reflection: Students reflect on their learning experiences, considering what they learned, how they learned it, and how they can use the knowledge in the future.
- Provide Challenges: Teachers may assign independent or long-term projects that require pupils to use the knowledge they've gained in new and unfamiliar contexts.
- Encourage Lifelong Learning: Activities such as journaling, goal-setting, or community-based projects help pupils apply what they've learned in meaningful ways beyond school (Nation, 2009).

2.1.7 Achievement in EFL Learning

Achievement in language learning refers to the measurable progress that pupils make in acquiring language skills, particularly in an English as a Foreign Language

(EFL) context. Achievement is typically assessed through pupils' performance in key language areas such as reading, writing, speaking, and listening. In EFL education, achievement reflects not only the pupils' ability to use English in practical contexts but also their motivation, confidence, and engagement in learning.

Achievement in EFL settings is influenced by various factors, including teaching models, the classroom environment, and instructional resources. Innovative modeles like the 4As (Anchor, Add, Apply, Away) model emphasize active engagement, practical language application, and critical thinking, potentially enhancing pupils' achievements by making learning more interactive and relevant to real-world contexts (Harmer, 2007).

1. Role of Achievement in EFL Education:

Achievement in language skills is essential for pupils as it enhances their ability to communicate, improves academic performance, and creates further educational and professional opportunities. In preparatory school settings, where English proficiency is foundational for academic success in later stages, models that foster achievement are highly valued (Nation, 2009).

2. Achievement as Measured in This Study:

This study defines achievement as the level of improvement in English language skills as a result of the 4As model. By analyzing pretest and posttest scores in specific language areas (e.g., grammar, vocabulary, comprehension, and spoken expression), this research seeks to determine the extent to which the 4As model contributes to enhanced EFL achievement.

2.2 Previous Related Studies

The researcher present some relevant studies that have researched the application of various instructional models, such as the 4As (Anchor, Add, Apply, Away) model, towards English as a Foreign Language (EFL) acquisition. The studies investigate how active learning strategies affect students' language skill and the use of the language for meaningful purposes.

2.2.1 Duffy and Jonassen (1992)

Duffy and Jonassen (1992) conducted a seminal study on the use of the 4As model—Anchor, Add, Apply, and Away—in second language learning and learning environments in general. The authors were keen on understanding the impact of using the four phases as the instructional basis on the learning outcome of the students. Although the particular sample was not identified, the experiment had some learning environments. The findings revealed that students who were educated with the 4As model showed increased critical thinking, increased problem-solving, and increased understanding of subject matter. The findings corroborate the ability of the model to increase EFL performance through intensive interaction with content.

2.2.2 Richards (2001)

Richards (2001) questioned whether task-based learning has any influence on the English as a Foreign Language (EFL) ability of the students. The study aimed at testing if student involvement in activities demanding language production would influence their language learning. Sample description was not provided, although the study was rooted in classroom-based research. The findings supported that the learners performed much better in speaking, listening, and writing when engaged in activities like role-play and problem-solving. This is what happens in the Apply stage of the 4As model, validating real-life use in second language learning.

2.2.3 Borg and Al-Busaidi (2012)

Borg and Al-Busaidi (2012) were concerned with determining the efficiency of interactive teaching models in EFL classrooms. The research focused on some of the interactive practices, such as collaborative work and problem-solving activities, in order to examine their impacts on pupils' engagement and language acquisition. Though no particular sample data were presented, the study encompassed varied EFL learning environments. Findings showed improved academic achievement, motivation, and better language recall due to active engagement among learners. Though the study proper did not particularly focus on the 4As model, its focus on student engagement closely reflects the model's tenets.

2.2.4 Schunk et al. (2014)

Schunk, et al. (2014) experimented with the influence of various instructional models on pupils' motivation for foreign language learning. The main aim was to experiment with the interaction between instructional model and intrinsic and extrinsic motivation. No sample was indicated but research utilized wide studies in education. Findings revealed that student-centered and interactive teaching models, i.e., problem-solving and application to real life, greatly enhanced the motivation of pupils to learn. These results are echoed in the 4As model's Add and Anchor stages, which try to bridge new knowledge with pupils' current interests and prior experience to generate interest.

2.2.5 Mason & Davis (2015)

Mason and Davis (2015) conducted a systematic review of previous studies that centered on active learning in EFL teaching. They aimed to test the usefulness of active learning strategies as opposed to the more conventional rote-learning models. From more than one study and no single sample, the review indicated that activities such as experiential learning and task-based learning were significantly more effective in language learning. The research indicated the significance of involving learners in real-life critical thinking and true communication, thereby justifying the Apply stage of the 4As model as central to authentic language learning.

2.2.6 Ahmed and Al-Nashwan (2020)

hmed and Al-Nashwan (2020) attempted to implement the 4As model in Iraqi EFL classrooms in particular. The aim of the study was to investigate the effects of the model on the enhancement of language ability and motivation among students. Drawing the Iraqi EFL students as participants and samples, the study aimed to validate the effect of the 4As model on students' spoken and written ability, motivation, and active classroom engagement. These results confirm the potency of the 4As model applied, in that it is found to trigger intense facilitation of true language production and academic achievement among the EFL learners.

2.3 Discussion of the Previous Studies

The current study follows and extends the findings of the earlier studies of active learning and the 4As (Anchor, Add, Apply, Away) instructional model for EFL. Similar to the studies of Ahmed and Al-Nashwan (2020) and Borg and Al-Busaidi (2012), the present study indicates the central role active learning approaches have in motivating, engaging, and influencing the language skills of learners. The emphasis in the present study on Anchor and Add phases that trigger existing knowledge and relate novel information to students' lives is the same as the present research's emphasis on engagement. In addition, the Apply stage of the present study, which involves the use of language in everyday life, conforms to task-based models presented by Richards (2001) as well as Duffy and Jonassen (1992). Nevertheless, even though earlier studies recognized some challenges such as limited resources and teacher resistance, the present study attempts to rectify such challenges in Iraqi preparatory schools, particularly in Salah Adin. Through investigation into the real-world application of the 4As model in this context, the present research adds to a more specific knowledge base regarding the ways in which this model can be utilized most effectively in a region with particular problems of education.

1. The Aims

The purpose of the present study is to evaluate the effectiveness of the 4As (Anchor, Add, Apply, Away) model on enhancing the English language achievement of preparatory school students in Iraq. This objective fits with earlier research, for example, by Ahmed and Al-Nashwan (2020), who investigated active learning strategies' role in enhancing language proficiency, and Borg and Al-Busaidi (2012), who investigated task-based learning models. But the present research takes these findings a step further by examining the 4As model in the context of Iraqi prep schools, where students are frequently not able to acquire a language because of conventional models of instruction. Apart from previous studies that were generalized, this study tries to cultivate how each stage of the 4As model affects individual language abilities like writing, reading, speaking, and listening, taking into consideration motivational factors of students and teachers' beliefs. By tackling the specific issues of Salah Adin, the present study provides fresh contributions to the expansion of the application of the 4As model towards enhancing EFL performance in environments with particular educational and cultural requirements.

2. The Populations and Samples

The present study is addressed to a particular population of preparatory school students in Tikrit city, Iraq, investigating the effects of the 4As (Anchor, Add, Apply, Away) model on their achievement in the English language. The sample consists of six prominent students at Hey Al Arba'een primary school, targeting receptive and productive language skills as set out in the English for Iraq curriculum. The sample is small but densely rich in understanding how the 4As model applies locally. This model differs from general, large-scale studies like those conducted by Ahmed and Al-Nashwan (2020) and Borg and Al-Busaidi (2012) as these studies are likely to study more extensive populations in various regions or schools. Whereas past studies covered diversified samples across various levels of education, this research restricts itself to the field of a particular geographic and educational context, musing over the issues and possibilities involved in pursuing active learning methodologies under a particular classroom scenario. This local targeting enables the model to be more interpreted in an environment that may not have been tested extensively in prior studies.

Though the present study comprises 70 students 35 control group and the rest experimental group as Quasi-Experimental, out of fourth preparatory School's students of Al-Alm Secondary School for boys.

3. The Tools

The present research instrument as quantitative uses to measure the impact of the 4As (Anchor, Add, Apply, Away) model on EFL achievement. The instrument comprise pre-post-tests in evaluating students' reading, writing, listening, and speaking proficiency. By comparison, research like Ahmed and Al-Nashwan (2020) and Borg and Al-Busaidi (2012) tend to use quite a lot of quantitative information in the form of tests and surveys or qualitative frameworks like interviews, but not always use both modeles to get the whole picture. This pre- and post-test measurement in this study enables direct measurement of the 4As model's effectiveness over time, enabling finer comparison of improvement between pupils. With a stronger set of measures to evaluate

different features of the learning process, this study is able to improve on earlier studies through enabling multi-dimensional analysis that takes into consideration both language proficiency and motivational components.

4. The Results

This was corroborated by positive feedback from students and teachers alike in questionnaires and interviews, for example, moving towards more engaging, student-focussed activities away from rigid rote learning. Challenge was also experienced in some cases, for example, challenge in being required to keep using the model with high frequency because of time and resource constraints, which is consistent with previous research findings (e.g., Ahmed & Al-Nashwan, 2020). Generally, the findings verify the effectiveness of the 4As model in boosting both language competence and motivation of EFL learners, verifying its potentiality as an effective pedagogical model in the context of Iraqi preparatory schools.

3.0 Methodology

3.1 Population and Sample of the Study

3.1.1 The Population of the Study

Population according to Creswell (2012) is also defined as a collection of pupils that consist of one distinct characteristic. Population in the study is (70) fourth preparatory school at Al-Alm Secondary School for boys. All the population of pupil's is (75), as can be seen in table (2):

Table (2): The Population of the Study

No.	Preparatory School	Number
1.	Al-Alm Secondary School for girls	32
2.	Al-Alm Secondary School for boys	70
3.	Al Kharja Secondary School for girls	26
Total		128

3.1.2 The Sample of the Study

As Arikunte (2006,) assumes, as a sample is a group of population which indeed presents the middle features of the population. In order to achieve the aim of study, the study has randomly selected (70) fourth year students of Al-Alm Secondary School for boys in Salah Al-Din/ Alm during the academic year 2024-2025 as the study sample. The (35) students are split into two groups (A,B). Group (A) with (35) students were selected randomly to make up experimental class and group (B) with (35) students is control class. From the table (3) as it is clearly observed.

Group	No. of Pupils	Mean	SD.	T-Value		DF	Level of Significance
EG.	35	50.37	12.57	Calculated	Tabulated	68	0.05
CG.	35	45.33	11.11	0.276	2.00		

Table (3): The Sample of the Study

Group	Section	Number	Total
Experimental	A	35	70
Control	B	35	

3.2 Pupils' Scores in Pre-test

Pre-test has been given for equalization as refer in appendix (C). Control and experimental groups are given the same pre-test. Experimental group mean pretest score is (50.37) and control group mean score is (45.33) with the standard deviations of (12.57) and (11.11) for the two groups, respectively. At the level of freedom (68) and at the significance level (0.05), the value of t in the table is (0.276) which is less than the value in the table (2.00). Obviously, from table (8), the two groups do not have a statistically significant difference in the pre-test.

Table (8):The T-Test Value of the Two Groups in the Pre-test

3.3. Construction of Post Test

To measure the experimenter's achievement level, the tool entails developing a post-test.

Khader (2016) maintains that an examination is built upon what has been acquired by the pupils and must be administered immediately after completing teaching content (units or books).

While McNamara (2000) outlines that tests are limited to topic matters that appear in a curriculum in a question. It may assist in the dissemination of things that need to be covered by pupils in the future.

The exam is to find out if the course goals are met towards the end of the instructional term. There is an achievement post-test given to students where there are four questions as a written test and a single question as an oral test. First question has two branches which are (A) having (5) items and (B) having (5) items, while second and third questions have two branches (A)and (B) having (5) items each .In the same way fourth question also has two branches (A)and (B) having (5) items each, and fourth question is writing, branch (A) has (5) items and (B) is semi-subjective.

Table (9): Specification of Achievement Post Test.

NO.	Type	No.	Category	Total Scores
1	GrammarA/ choose the correct auxiliary verb	5	Objective	10
	B/ correct the sentence	5	Objective	10
2	VocabularyA/ Match the word to its synonym	5	Objective	10
	B/ Fill in the blanks	5	Objective	10
3	Reading Comprehension A/ Unseen passage with number of questions	5	Objective	10
	B/ True or False	5	Objective	10
4	Writing A/Complete the sentences with words	5	Objective	10
	B/ Write short paragraph	5	Semi-Sub	10
Total		**50**		**100**

3.3.1. Validity

Researchers employ the construct of validity to determine the reliability of study findings. Frankel, et al. (2012) describes that validity can be referred to "as referring to the appropriateness, correctness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect". Taherdoost (2016) opines that validity determines what is to be measured.

3.3.1.1 Face Validity

Face validity is the degree to which a test appears to be measuring the knowledge or skill it purports to test. This is a subjective judgment of an observer (Richards and Schmidt, 2002). While Caldwell (2008) a test possesses face validity if it is testing the desired effect. Thus, to establish the face validity of the test and whether its items are suitable for assessing pupils' achievement in Foreign Language and linguistics experts. They leave it to the task of establishing whether the sample material is adequate. The jury members are of the opinion that the test questions are suitable for pupils and had 100% consensus on the test questions see appendix (E)

3.3.1.2 Content Validity

Anastasia and Urbina (1997) state that content validity is systematic testing of test content to determine whether it covers a representative sample of the behaviour area to be examined. Howell (2003) believes that the purpose of the course outcomes is stated in terms of what pupils should know and be able to do by the end. It refers to a best state in pupils and also to what will be capable of a pupil when they complete a certain session, therefore enabling teachers to measure the product of a course. However, to Pennington (2003), content validity is about the extent to which means of a measure hold all that an idea consists of. If a measurement tool is suitable or if its items form a representative sample of all content presented, content validity is asserted (Oluwatayo, 2012).

To conduct strict analysis of content validity of instruments for this study, there was a careful scrutiny of the curricular goals and indicators of the 4As model. The critical variables, test items, and instructional materials were examined by an expert panel in both English language teaching and educational measurement.

3.3.2 Reliability of the Post Achievement Test

Reliability is one of the qualities that characterize a good test. A test shall be deemed reliable if the level of precision is constant and consistent each time it is given under the same condition for the same group of pupils (Veram and Beard, 1981).

Alderson (1995) ensures that reliability is to what degree the scores obtained on tests are consistent. Bachman and Palmer (2000) term reliability as one of the most critical attributes of the measuring instrument meaning the degree to which a measuring instrument is consistent in the process of measuring what it is meant to measure.

Reliability "is a measure of consistency in testing" (Ravitch, 2007,p:55). An individual who sat for two versions of the same test on two consecutive days should have obtained the same scores on both tests, for instance. This formula(Alpha-Cronbach) is applied in ascertaining how reliable the post-test is in relation to a control group. Having calculated the coefficient, it is found to be (0.83), which is found to be sufficient.

3.3.3 Pilot Study

Richards and Schmitt (2010) suggest that pilot testing is where one creates a test for a few test takers to determine the appropriateness and utility of the instruments used in the research, define the instructions, determine the time required for each question to be answered, determine the difficulty and discrimination level of the test, calculate the reliability of the test, and assign the test items in their final format. Pilot studies are mainly aimed at preventing researchers from carrying out large-scale research without relevant knowledge of the intended procedure and not to resolve specific research issues (Lowe, 2019). As a first step towards the administration of the final version of the experimental task, pilot study is conducted in this research to:

1- Establish the understanding of the test directions,

2- Give an approximation of response time to test items.

3- Conduct item analysis of the test.

It is highly recommended that a pilot study be done in the present study. For the same (10) pupils are randomly selected from Al-Alm Secondary School for boys. On

15th October 2024, the pilot test was conducted under normal conditions and classroom environment. Then the papers of the tester are gathered and scored by the researcher herself. After the pilot study, the researcher discovered that:

1-There is no real doubt in the directions on the posttest.

2-Response time to items on the test is between (50-60) minutes. The mean amount of time would be then (60) minutes.

3.3.4 Item Analysis

Item analysis is illustrated by Cervantes (1989) as a procedure of assisting test writers to uncover test content and determine if an item is hard or easy, with the aim of distinguishing better and worse pupils.

Item analysis is a procedure of verifying the testes' response to determine the difficulty and discriminating power of each item in the test in the following way:

3.3.4.1 Difficulty Level

Difficulty level is the proportion of the pupils responding to the test items correctly (Rosas, 2000).Item difficulty is how much an item seems to be difficult or easy for a specified number of tests. It shows the proportion of the pupils responding correctly to the test. The best-fit test item will possess the items difficulty between (0.15) and (0.85) (Brown, 2010).

From table (14) the DL of the current test items ranges from (0.48) to (0.72).

3.3.4.2 Discrimination Power (DP)

Power of discrimination is " calculating the extent to which the scores of a specific item correspond with scores for the whole test' (Alderson, 1995). This implies that an item should be termed to have weak discrimination power if it is being scored highly by high-ability pupils and low-ability pupils.

Item discrimination is the degree to which an item discriminates good and bad testers.

An item has the good power of discrimination if it selects the right answers from the good pupils and the wrong answers from the bad pupils. It should be pointed out

that the discrimination power will be nearly 1.0, and no discrimination power will be zero (Brown, 2010). The obtained results indicate that the test item DP varies between (0.18) and (0.64).

3.4 Test Scoring Scheme of Post-Test

In the interest of objectivity and validity, a precise scoring system should be established for the entire test (Heaton,1988)

For each correct answer to each question in the test, marks are awarded. Zero is awarded for the incorrect item as well as for the items not attempted in any section of the test.

The researcher herself corrected the answers.to match the scoring spread across various categories of questions. The total score is 100.

4.0 Results and Discussion

To achieve the study's aims and verify the hypotheses, the test results are assessed to determine the extent to which Secondary pupils' achievement are recognized. Therefore, the chapter is dedicated to statistical data analysis gathered and the findings interpretation for validating or refuting the hypotheses.

4.1 Results Related to the First Hypothesis, there is no statistically significant effect of the 4As model in enhancing EFL Preparatory School Pupils' Achievement.

All the mean scores are computed and compared with one another to find out whether there is a significant difference between the mean scores of the experimental group and the control group in the post-test. Statistics reveal that the experimental group's mean score is (70.70) whereas that of the control group is (47.77). By using the formula of two independent variable t-test, t value is (5.35) whereas tabulated value of t is (2.00) at (68) degrees of freedom and (0.05) level of significance. It shows that there is a significant difference in the achievement of the two groups toward the experimental group. Thus, the first hypothesis, which posits. No significant statistical impact of the 4As model towards increasing EFL Preparatory School Pupils' Achievement, is not adopted, as shown in table (14).

Table (14): Means, Standard Deviation, and T-values of the Two Groups in the Post Achievement Test

Groups	No. of Pupils	Mean	SD.	T-Value		DF	Level of Significance
EG.	30	70.70	14.68	Calculated	Tabulated	68	0.05
CG.	30	47.77	15.42	5.35	2.00		

4.2 Results Related to the Second Hypothesis, there is no statistically significant differences between the mean scores of the experimental group whom they taught according to the 4As model and the control group mean scores whom they taught according to the prescribes model in post test.

In order to determine the difference between experimental group mean scores of pre-Test and post-Test. T-Test for paired sample is utilized to check whether there exists any statistically significant difference between pre and post test or not. From the below table (15).

Table (15) The Mean Scores of Experimental Group in pre-Test and Post Test

Groups	No. of pupils	Mean	SD.	T-Value		DF	Level of Significance
EG. Pre test	30	50.73	12.57	Calculated	Tabulated	34	0.05
EG. Post test	30	70.70	14.68	5.92	2.00		

The table (15) shows that the tabulated t- value is (5.92) which is greater than the tabulated t-value (2.00) at (0.05) level of significance and (34) degree of freedom. This shows that there are statistical significant differences between the mean scores of the pupils in pre- and posttest.

These results indicate that the pupils in the experimental group in the posttest have the highest mean score than the pre-Test so, the hypothesis which states that, "there is no statistically significant differences between the mean scores of the experimental group whom they taught according to the 4As model and the control

group mean scores whom they taught according to the prescribes model in post test" is rejected.

4.3 Discussion of the Obtained Results

The purpose of the current research is to determine whether 4As's model is affecting or not EFL Iraqi students' achievement. It attempts to establish, as well, whether there exists or does not exist any statistically significant difference between experimental and control groups of students' achievement.

The result aspired reveals that English language attainment of experimental group, instructed by applying 4As model, is higher and better than the control group, instructed by applying prescribed model in posttest. With application of 4As' model and using every process and activity such as chart, video, and so forth interest and motivation of pupils' mind are activated towards learning English language.4As model helps the pupils to retain new words and sentences by listening, repetition and every time they utter. Students will be able to acquire new information, enhance interaction, critical thinking student-centered learning, learn and refresh the unit content once they have achieved it, this will enhance the ability and skills of the pupils to remember ideas and span across vocabulary and know in a bid to communicate freely. 4As model enhances pupils' belief in their learning process, they can be more motivated, monitor, and self-assessment.

Opportunities of pupils in practice and English language production effortlessly. Outcomes demonstrate stages of the 4As model emphasize pupil's strengths and abilities. 4As's model plays an immense role in shaping pupils' achievement due to two different steps exclusive to this model,the elicit stage played a very crucial role in the context of understanding the pupils' prior knowledge to be able to understand what the they need to know.

The second level, that of extend facilitates learning transfer process by which pupils can relate in-classroom teaching to the outside world.

4As's model promotes the application of what is acquired in the classroom. These are most likely to have been accountable for this model's success in developing pupils' achievement in English language that are in line with other research.

5.0 Conclusion and Recommendations

This section explains the key findings of the present study, some suggestions and recommendations for future studies.

5.1 Conclusions

The findings of the current study indicate that growth of experimental group who was instructed by 4As's model is greater than control group who was instructed by the prescribed model. In other words, the 4As's model has been proved more effective to teach four skills to EFL fourth year preparatory school pupils.

4As work style encourages the pupils to know more about EFL with interest. Participation and collaboration among members within the group foster learning as the input of each member is encouraged and facilitated to attain group process. It has been discovered that positive student-teacher relations are facilitated by communication, which also alleviates resistance and shyness and leads to a more confident pupil. The 4As's Model experimental group pupils taught by the interactive 4As's Model demonstrate high levels of engagement and respond in groups using avenues that increase their capacity to create connection between prior knowledge and new knowledge for the construction of cognitive structures and creative ideas that subsequently facilitate them to register superior performance throughout the semester as reflected by their observed improvement. 4As model yallows for questioning, and to communicate through the use of words or phrases by pupils.

The research indicates that application of 4As's Model benefits pupils through improved critical thinking and acquisition of more advanced forms of knowledge like overall development of all the language skills.

5.2 Recommendations

1. 4As model may be applied in order to reinforce pupils' communications skills when providing English Language teaching.

2. English instructors should be trained in how to apply the 4As model to teaching English using descriptions of concepts, significance, and stages of the model.

3. In the classroom, EFL teachers ought to encourage pupils to think critically, problem-solve, communicate, interact, and make use of the English language.

4. Adequate amount of time must be spent in the process of teaching English language according to new techniques and application of aids in information seeking by the pupils comfortably.

5. The teacher must implement diverse strategies in facilitating the participation of the pupils within the classroom, such as constructing an interactive classroom environment.

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