THE EFFECT OF T.H.I.N.K STRATEGY ON PREPORATARY SCHOOL PUPILS

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Abstract

T.H.I.N.K. is an educational a strategy designed to enhance critical thinking and collaborative problem-solving skills among students. This strategy is particularly effective in language learning contexts, where collaboration and communication are essential. T.H.I.N.K. stands for True, Helpful, Inspiring, Necessary and Kind. This study aims at finding out the effect of T.H.I.N.K strategy on Iraqi EFL pupil`s achievement. Finding out the effect of T.H.I.N.K strategy on improving EFL pupil`s post achievement test. The study includes the following hypothesis, There is no statistically significant differences between the mean scores of the experimental group which is taught by T.H.I.N.K strategy and the control group which is taught by the traditional method in the post achievement test.There is no statistically significant differences between the mean score

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of the experimental group in pre- posttest. The research population consists of 72 students from fifth preparatory schools in city, with a sample of 52, for each group 26 students randomly selected from the fifth preparatory class at Al-Bojwari secondary School for boys at Salah AL-Din governorate / in Baji City. To ensure comparability, both groups are matched on parental educational level, age, previous English scores, and pre-test results. The study employs a post-test consisting of six questions assessing four skills. The data collected from these instrument are analysed statistically using the T-test for independent and paired samples. The findings indicate that the T.H.I.N.K strategy positively influences the experimental group's English learning outcomes compared to the control group. The study end with some conclusions with recommendations for future research to further explore the benefits of the T.H.I.N.K strategy in an educational setting**.**

Keywords: T.H.I.N.K, language learning, educational setting, EFL pupil, strategy

اثر الاستراتيحية T.H.I.N.K على تحصيل الطلاب العراقين في اللغة الانكليزية كلغه اجنبية

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الملخص

تُعتبر استراتيجية .T.H.I.N.K استراتيجية تعليمية تهدف إلى تعزيز مهارات التفكير النقدي وحل المشكلات التعاونية بين الطلاب. وتكون هذه الاستراتيجية فعالة بشكل خاص في سياقات تعلم اللغة، حيث يُعتبر التعاون والتواصل أمرين أساسيين. تشير .T.H.I.N.K إلى الكلمات: صادق(True) ، ومفيد(Helpful) ، وملهم(Inspiring) ، وضروري(Necessary) ، ولطيف (Kind).تهدف هذه الدراسة إلى معرفة أثر استراتيجية .T.H.I.N.K على إنجاز طلاب اللغة الإنجليزية كلغة أجنبية في العراق . تتضمن الدراسة الفرضيات التالية: لا توجد فروق ذات دلالة إحصائية بين متوسط درجات المجموعة التجريبية التي تم تدريسها باستخدام استراتيجية .T.H.I.N.K والمجموعة الضابطة التي تم تدريسها بالطريقة التقليدية في اختبار الإنجاز اللاحق. كما لا توجد فروق ذات دلالة إحصائية بين متوسط درجات المجموعة التجريبية في الاختبارين القبلي والبعدي. تتكون عينة البحث من 72 طالبًا من الصف الخامس في المدارس التحضيرية في المدينة، مع عينة مؤلفة من 52 طالبًا، حيث تم اختيار 26 طالبًا عشوائيًا لكل مجموعة من الصف الخامس في مدرسة البجوري الثانوية للبنين في محافظة صلاح الدين/ مدينة بيجي. لضمان المقارنة، تم مطابقة المجموعتين من حيث مستوى التعليم لدى الأهل، والعمر، والدرجات السابقة في اللغة الإنجليزية، ونتائج الاختبار القبلي. تستخدم الدراسة اختبارًا بعديًا يتكون من ستة أسئلة تقيم أربع مهارات. تم تحليل البيانات التي تم جمعها من هذه الأداة إحصائيًا باستخدام اختبار T للعينة المستقلة والمقارنة. تشير النتائج إلى أن استراتيجية .T.H.I.N.K تؤثر إيجابيًا على نتائج تعلم اللغة الإنجليزية للمجموعة التجريبية مقارنة بالمجموعة الضابطة. تختتم الدراسة ببعض الاستنتاجات والتوصيات للبحوث المستقبلية لاستكشاف فوائد استراتيجية .T.H.I.N.K في البيئة التعليمية.

الكلمات المفتاحية: .T.H.I.N.K، تعلم اللغة، بيئة تعليمية، طالب لغة إنجليزية كلغة أجنبية، استراتيجية

Section One

1.1 The Statement of the Problem

The essential problem in the Iraqi schools is that the Iraqi teachers use the prescribed methods depending on memorization but the most successful classrooms are that encourage pupils to think by themselves, and change pupils abilities not only in memorizing, but also in the ability to ask question, create and resolve. This type of teaching has become widely recognized as best practices (Joyce and Weil, 1996).

In Iraq, English language is considered as a foreign language, thus pupils encounter numerous challenges in learning the language and are unable to develop the higher levels of practice, in which they will not be able to convey their thoughts or communicate easily because they think in their mother tongue. As a result, they do not achieve a high level of proficiency and acquisition in the target language (Hurlock, 1972).

According to Lai (2011), thinking is one of the many abilities required to get pupils ready for both the workforce and post-secondary education. Students must be educated utilizing the T.H.I.N.K. technique since their thinking abilities are insufficient to help them deal with the challenges they face in both their academic and personal lives (Fisher, 2003).

As a result, EFL pupils in general, are unskilled in English and perform poorly. The main problems according to the researcher experience, are most of EFL teachers neglect teaching Active recall**.** They don't focus on this skill, Therefore; most of secondary schools Pupils have lack in participation have anxiety and fear of speaking. in front of others, **so** they have limited vocabulary and lack of Structure and organization of their ideas, So, the researcher tries in this study to focus on T.H.I.N.K strategy for vital role in developing, pupils' achievement

1.2 Aim of the Research

Finding out the effect of T.H.I.N.K strategy on Iraqi EFL pupil`s Achievement

1.3 Hypothesis of the research

There is no statistically significant differences between the mean scores of the experimental group which is taught by T.H.I.N.K strategy and the control group, which was taught by the traditional method in the post achievement test**.**

1.4 Benefit of the Research

It could be valuable for English language teachers in schools, University instructors, curriculum designers, developers and educators.

1.5 Definitions of T.H.I.N.K Strategy

T.H.I.N.K. is a strategy that can be used to improve how you communicate with your audience interpersonally. The T.H.I.N.K. strategy offers an enriching way of understanding the components of thinking. Each of the values of T.H.I.N.K. can be individually explored (Trenholm, 2020).

When students collaborate in groups, they apply the T.H.I.N.K. Strategy to solve problems in a methodical manner. Students gain the ability to recognize and assess an issue, look at previous approaches, generate new ideas, weigh the benefits and drawbacks of those ideas, select the best one, create a strategy to put it into action, and evaluate their collaborative efforts (Sue et al., 2024).

Section Two

2.1 Historical Background

Strategic thinking has developed within the educational field over time:

1. Early Foundations: In ancient times (e.g., Greece, China, India), education included strategic thought through philosophy, rhetoric, and debate. Socrates, Confucius, and Indian Gurukulas emphasized questioning, reasoning, and reflection—early forms of strategic thinking. Some scholars, like in Islamic golden age madrasas and Christian monastic schools, encouraged logical analysis and critical interpretation.

2. Enlightenment Era: Thinkers like Rousseau, Locke, and Pestalozzi emphasized individual reasoning, inquiry-based learning, and education for active citizenship. Strategic thinking was seen as part of preparing people to think independently and solve real-world problems.

3.19th–20th Century : As public education expanded, strategic thinking appeared in curriculum design and pedagogy. John Dewey promoted experiential learning and problem-solving, key aspects of educational strategy. Education systems began using planning, goals, and policy—strategic management ideas borrowed from business.

4. Late 20th – 21st Century : Strategic thinking in education became more formalized:

Strategic planning in schools and universities focus on critical thinking, creativity, and lifelong learning .Use of SWOT analysis, vision-mission-goals models in educational leadership 21st-century skills include systems thinking, collaboration, and innovation—core components of strategic thinking.

2.2 The Concept of T.H.I.N.K Strategy

The foundation of all cognitive processes or activities is thought, which is specific to humans. It entails analyzing and modifying data gathered from the surroundings. Abstracting, reasoning, envisioning, problem solving, judgment, and decision making are some of the ways that such manipulation and analysis take place. It is among the characteristics that set humans apart from other living things. Thinking involves changing or modifying an internal representation (Halpern, 2003).

When pupils begin to think, we apply what we've learned to accomplish certain goals. In this way, the ability to think is the foundation of our existence as everyone has a goal to accomplish; thinking is reasoning, and reasoning is a series of basic concepts connected by rigorous logical rules (McGregor, 2007).

By learning to reason both inductively and deductively before coming to a solution, thinking can help people see a situation as though they are learning something new. By improving their cognitive capacities through training, people can strengthen their capacity to filter harmful influences. A person can develop his brain to think coherently and logically through instruction and learning. Furthermore, the stages of thinking occur throughout time and represent both professional and personal development (Van Gelder, 2005).

The THINK acronym is an excellent tool for teaching students to think before they speak. The THINK notion is helpful not only in everyday interactions but in any circumstance where words are used. You may take charge, make wise choices, speak less, and listen more by using THINK. According to Kirkham (2024), T.H.I.N.K. stands for True, Helpful, Inspiring, Necessary, and Kind.

It's crucial to learn to think before you speak in a variety of contexts. It can help you communicate more effectively and enhance your interpersonal interactions. Determine whether what you have to say is True, Helpful, Inspiring, Necessary, or Kind by first applying the T.H.I.N.K. acronym. Next, consider strategies to make your word choice more deliberate, such stopping and seeking clarification. By employing deliberate communication techniques like open body language and concentrating on presenting one idea at a time, you can also consider before you speak. Thinking before you speak will become second nature to you with a little practice (Kirkham, 2024).

THINK can help you take control, make good decisions, talk less and listen more.:-

1.T - Is it True?

The first characteristic 'T', which represents truth. Truth plays a pivotal role in effective and powerful communication. It is the embodiment of truthfulness, integrity, and credibility of the message driver. Truth is not indecisive in communication, particularly in ethical behavior at work, which is a necessity or a luxury(Hameleers,2012).

2.H - Is it Helpful?

The second letter in the acronym T.H.I.N.K. deals with the intention behind the text, including purposes and outcomes that could possibly happen as a result of the text being delivered. First and foremost, any true statement—textual, substantive—is morally different from a lie. Second, truthful statements deliver relevant information that is in excess of what is hitherto known for one purpose or another for the addressee. (Roe & Perkins, 2022)

3. Is it Inspiring?

Is it inspiring? Communication that encourages, motivates, or speaks directly to the audience's goals or dreams has a better chance of capturing listener interest. Inspiration – both your own commitment and passion and even the material you covered – really stands out in communication. Having a message that you think is amazing – that truly inspires you – will make a big difference in how motivated your audience is to listen and care about what you have to say. One of the things that makes talks so compelling is not the novelty of the ideas proposed, but rather the tone and manner in which these talks are delivered (Bailey et al.2021).

4.N - Is it Necessary?

"N" stands for "Necessary." Before you share anything in a conversation, it's essential to consider whether it's necessary to be shared in the first place. Reflect on how relevant your message is to the overall theme of the discussion and what the currency of it could potentially add to it(Brown and Pressley2023).

5. K - Is it Kind?

"K". stands for "Is it kind?" Kindness refers to the act of being sensitive to the feelings of others and careful about offending them. Many etiquette writers believe that kindness and politeness are closely connected and that kindness is included in the rule of politeness. Some suggest that politeness is about company manners or other socially ingrained behaviors, while kindness comes from the heart. Etiquette suggests that all communication is either kind or unkind and that it is our choice which we will participate in. Kindness in communication helps our relationships move smoother. Harsh words may cause a fight, unkind words may cause a hurt feeling, and cruel words can never be erased. People use kind communication to gain agreements and discussions. This can be done in many ways through spoken or written communication. There are different ways to be kind in our communication, and it doesn't hurt to do any of them. (Hamilton, 2021)

2.3 Principles of T.H.I.N.K. Strategy

Kirkham (2024) identify the following principles of this strategy :-

1. Assess the truth of what you wish to convey. Ask yourself if what you are about to say is true after giving it some thought. If you're going to lie, don't say anything, and don't make

something up simply to have something to say. At the very least, change what you're going to say to reflect the truth if you must answer.

2. If it's helpful, speak out; if not, keep quiet. If you have anything that could be useful to someone else, then speaking up can be helpful to them. If this is the case, then by all means do so. However, if you're thinking about saying anything harmful to someone, it's best to keep quiet because it can damage your connections with other people.

3. Determine whether the comments you have made could inspire others. It's always beneficial to say anything that will uplift, inspire, or encourage others. Don't hesitate to commend someone, offer encouragement to continue pursuing a goal, or share an inspiring anecdote with them.

2.4 The Important of T..H.I.N.K Strategy

Kadora (2023) identify the following important of using T.H.I.N.K. strategy :-

1. Words Have Power: Words are more than just sounds or written symbols; they hold significant meaning. They can uplift someone or bring them down. In heated moments, you might say something hurtful without meaning to. Once spoken, those words cannot be taken back and can leave lasting scars. It's important to remember that your words can impact someone's day, self-esteem, or even their perspective on life.

2. Misunderstandings and Miscommunications: A comment that seems harmless to you might be taken differently by someone else. This can lead to misunderstandings and conflicts that could have been easily avoided with some careful thought. It's essential to think about how your words may be perceived by others.

3. Building Better Relationships: Thinking before you speak can greatly enhance your relationships with friends, teachers, and family. People are naturally attracted to those who are considerate and mindful of their words. This behavior demonstrates maturity, respect, and empathy—qualities that are highly valued in any relationship. By communicating thoughtfully, you create a safe environment where others feel comfortable expressing themselves openly.

4. Self-Reflection and Growth: Pausing to think before you speak promotes self-reflection. It helps you become more aware of your thoughts and feelings, as well as the reasons behind your desire to express them. This self-awareness is crucial for personal growth, as it allows you to understand yourself better and manage your emotions more effectively.

5. Professional and Academic Success : Thinking before you speak is beneficial not only in personal relationships but also in academic and professional settings. In classrooms, group projects, and during college interviews or job applications, the ability to communicate thoughtfully and clearly is essential. It demonstrates that you consider the impact of your words, a quality that teachers and employers highly appreciate**.**

2.5 Six Strategies for Quick Thinking

You need some advice on how to get better at making judgments because you know that you should do it more quickly. These methods will help you think more quickly by lengthening your processing times. When it comes time to make little judgments, keep these pointers in mind. Consider everything you've put off. Refrain from putting off doing little tasks. Of course, you should still exercise caution while making important life decisions.

1.   Make small, unimportant decisions as soon as possible.

   Try to select your entrée in less than a minute the next time you and your family are at a new restaurant. Don't take ten minutes to go over the menu and then have the wait staff return. Take a chance, make your choice of foods items, and go with it.

2. Turn a Coin If the decisions are not crucial, try flipping a coin and calling heads or tails, as it helps you think faster.

3. Put a Timer on Try setting a timer to help you move more quickly if you find yourself dragging your feet on simple activities. You will constantly be conscious of the due date and develop the ability to react promptly.

4. Avoid Falling Into the Multitask Trap

   Because they can handle multiple tasks at once, many people believe that multitasking is advantageous. This cognitive pattern is unhelpful. You cannot give many things your whole attention at once, and your brain can only truly focus on one at a time. Therefore, give up trying to multitask and focus on the current issue.

5   Get Enough Sleep Sleep
   is one thing that slows down how quickly your brain processes information. You won't be alert the following day if you don't get at least six hours of sleep every night. You must prioritize rest if you want your brain to work at its best.

6. Try a Mental Exercise

   There are several ways to keep your brain sharp, including playing games like word searches, sudoku, and doing puzzles.

2.6 The Challenges of Think Strategy

As with any new strategy introduced into the classroom, teachers may face a number of challenges when implementing the T.H.I.N.K strategy. Many educators find that students resist critical or creative thinking, especially when the questions being asked or work being undertaken doesn't have one right answer. Furthermore, students can hold instinctive views about critical thinking. For instance, when speaking to students about what critical thinking might look like, they commonly assume that such thinking might involve arguing, disagreeing, and perhaps even shouting at each other! A number of students can also hold the view that they are not capable of critical thinking because they don't see themselves as intelligent (Bozkurt & Sharma, 2023).

 From my experiences working with educators around the world, there is a list of common challenges that might be raised by teachers when asked to implement a new approach such as T.H.I.N.K. These include but are not limited to: Students are not confident enough to question themselves and others. Time pressures from being pressured to 'teach to the test' as a result of high-stakes testing towards the end of their schooling. A lack of resources to assist in pedagogical change. Unsure as to where additional time can be found in the term to commence such an approach. Students previously labeled as 'bad' or 'difficult' who learn differently are capable of doing this approach. They continue to demonstrate an evidenced reluctance to try. Students remain unreceptive to taking risks as this can carry a negative stigma. When considering addressing these challenges, it is important to be just as proactive as teachers implementing the T.H.I.N.K strategy (Moreno-Guerrero et al.2020).

2.7 The Advantages of Think Strategy

This T.H.I.N.K strategy encourages a deeper, visible thought process. Thinking about our thinking and justifying responses promotes deeper thinking and thoughtfulness. The need to provide evidence for their choices encourages a culture where more analytical reasoning may be required. The technique of sharing and evaluating more than one idea fosters effective collaboration or group work, as participants see varied perspectives and logic from team members. Using this strategy can improve a quality of decisions and their outcomes if it encourages a structured decision-making process as the team is supported in providing, sharing, and using information to work through the identified options. (Ritchhart & Church, 2020)

By using the T.H.I.N.K prompts, a norm of open communication can be developed as team members want to know the details behind a point of view or proposal. In the educational setting, T.H.I.N.K promotes holistic and critical thinking and encourages students to reflect on both learning and responses in activities. As lecturers, the use of the T.H.I.N.K strategy helps us embed critical thinking with students. When using it within meetings at work, we found that it brings a reflective approach to decision- making and communication. The promotion of reflective practice allows growth both professionally and personally for the individual (Sari et al.2021).

2.8 The Effect of T.H.I.N.K Strategy on Pupils

is a comprehension strategy designed to enhance students' understanding of texts by encouraging them to think critically about what they read. The T. H. I.N.K strategy promotes active reading by requiring students to engage with the text on multiple levels. This active engagement helps students to monitor their comprehension and identify areas where they may struggle. By prompting students to think about their thinking, this strategy fosters metacognitive awareness. Pupils learn to recognize when they do not understand something and can apply strategies to resolve these comprehension issues . (Duke & Pearson ,2002).

The strategy emphasizes identifying the main idea, which is crucial for understanding the overall message of a text. This aligns with research indicating that teaching students to identify main ideas significantly enhances their comprehension skills .(Pressley ,2002).

T. H. I.N.K, leads to significant improvements in students' understanding of texts. By requiring students to analyze and evaluate information, T. H. I.N.K promotes higher-order thinking skills. This is critical for academic success across subjects. The strategy encourages students to take ownership of their learning process, fostering a sense of agency. The T. H. I.N.K strategy can be effectively integrated into the four primary language skills: listening, speaking, reading, and writing. Here's how it can enhance each skill:(National Reading Panel ,2000).

Students listen to a passage or a lecture and then use this strategy to process the information. Here listening, students predict the content based on the title or context. While listening, they jot down key points or important details. After listening, they summarize the main idea of the passage. Students relate what they heard to their own experiences or other knowledge. They write down any questions that arise during the listening activity and seek answers in discussion. This promotes active listening and helps students retain and understand auditory information**.**

2.9 Previous Studies

2.9.1 Olaniyi & Lucas (2016)

"Strategic Thinking and Organization Performance: Study of Nigeria Firms" is the title of this research. It looks at how strategic thinking impacts business performance in Nigeria.

Sample

For this study, a representative sample of 300 businesses from two distinct Nigerian states was selected. A questionnaire that was personally administered served as the major data gathering strategy for this investigation.

Results

The findings indicate that strategic thinking and company success in Nigeria are significantly correlated. In light of this, the study accepts the alternative hypothesis, which claims that there is a substantial correlation between strategic thinking and Nigerian firms, in accordance with the decision rule and the explanatory reasoning.000.

2.9.2Thu and Vien (2022)

"The effects of think-aloud strategy on EFL young learners' reading skill practice" is the title of this study. It seeks to determine how the think-aloud technique affects the reading skills practice of EFL young learners and how they feel about the teacher's use of it in a foreign language center in Can Tho, which is located in the Mekong Delta region of southern Vietnam.

Sample

Twenty-five students between the ages of ten and twelve were among the participants. instrument. Pre and post achievement tests were used to gather data for this investigation.

Result "

Following the intervention, the students' reading comprehension performance significantly improved, according to the pre-test and post-test findings.

Section Three

3.1 Experimental Design

Experimental design is the process of carrying out research in an objective and controlled fashion so that precision is maximized and specific conclusions can be drawn regarding a hypothesis statement. (Bell, 2009)

Experimental Design is "that portion of research in which variables are manipulated and their effects upon other variables observed" (Campbell & Stanley, 1963, p. 171). Or stated another way, experiments are concerned with an independent variable (IV) that causes or predicts the outcome of the dependent variable (DV). Ideally, all other variables are eliminated, controlled or distributed in such a way that a conclusion that the IV caused the DV is validly justified as in table (1).

Table (1)

The Experimental Design of The Research

Group	Independent Variable	Dependent Variable
Experimental group	T.H.I.N.K Strategy	Pupils' Achievement
Control group	Traditional Method	Pupils' Achievement

3.2 Population and Sample of the Research

According to Triola (2018) Population refers to the total number of individuals of a particular species living in a specific geographic area at a given time

The population of the current research consists of preparatory students of the fifth scientific stage for boys in AL-Bojwari The total number of the fifth grade pupils' population is(80) .

A sample is a smaller, manageable version of a larger group, used to infer characteristics about the whole population (Creswell, 2014).

Al-Bojwari Secondary School for Boys was chosen at random by the researcher to serve as the study's sample for the 2024–2025 academic year in order to fulfill the study's objectives. Two divisions (A and B) comprise the fifth preparatory students from the scientific branch. Section (A), comprising 26 students, has been selected at random to serve as the experimental group. Additionally, Section (B), which consists of 26 students, was selected at random to serve as the control group. As a result, there are 52 male students in the sample overall, who account for 72% of the initial population.

3.3 Construction of post-test

To measure the experimenter's level of achievement, the instrument includes preparing a post-test.

Khader (2016) says that a test is constructed on what pupils have learned and should be provided rapidly after the teaching material is completed (units or textbooks).

While McNamara (2000) clarifies that exams are confined to subject that taught in a curriculum inside a question. It can aid in the assignment of aspects that pupils should work on in the future. The purpose of the test is to assess if the course goals have been accomplished at the end of the instructional time. An achievement post-test has been given to pupils in which there are sis questions. The first question consists of two branches which are (A) contains (6) items and (B) that contain (5) items , while the second is about paragraph and third questions consist of two

branches (A)and (B) that contain (5) items .The forth question consists of (6) words and the students should write full sentence for each word. The fifth question is divided into two branch A and B , branch (A) there is an event inside the picture; students should describe in a paragraph what happen in the picture, While the branch (B) contains of (5) items. The sixth contains of(5) items.

3.4 Validity

Researchers utilize the concept of validity to assess the reliability of a study's results. According to Frankel, et al. (2012), validity can be defined "as referring to the appropriateness, correctness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect" .Face Validity is the extent to which a test seems to measure the knowledge or abilities it claims to examine. This is dependent upon an observer's subjective assessment (Richards and Schmidt,2002).. As a result, to determine the test's face validity and if its components are appropriate for assessing pupils' achievement in teaching English, the exam is given to a jury member of Teaching English as a Foreign Language and linguistics experts. They assign the task of determining whether or not the sample material is suitable. The jury members believe that the exam questions are acceptable for pupils and had 100% agreement on the questions of the test . Content validity, according to Anastasia and Urbina (1997), is the methodical review of the test material to determine whether it includes a representative sample of the behavior area under study. A content analysis of the test items using Bloom's Taxonomy of the Cognitive Domain is used to establish the behavioral objectives. The cognitive domain begins at the lower level of cognition, while creativity marks the end of the higher level of cognition.

3.5 The Post-Achievement Test's

Dependability According to Joppe (2000), dependability is: Reliability is the degree to which the findings are constant over time and accurately reflect the entire population being studied. A research instrument is deemed reliable if its findings can be replicated using a comparable approach. (page 1) Reliability: When a test can be utilized by multiple researchers in stable settings and yield consistent results without changing, it is considered dependable. Consistency and reproducibility across time are characteristics of reliability. Additionally, a test's reliability is determined by how free it is from measurement errors; the more measurement errors there are, the reliable the test (Fraenkel & Wallen, 2003).

3.6 Difficulty and Discrimination Level

The percentage of people that properly answer a test question is a measure of the item's complexity. The difficulty of an item is determined by dividing the number of right answers by the total number of respondents (Crocker & Algina, 1986).

According to Alderson (1995, p. 80), discrimination power is defined as "calculating the degree to which the results of a particular item correspond with the results of the entire test." This indicates that if both high-skilled and low-skilled students accurately score an object, it is considered to have poor discriminatory power. The degree to which an item distinguishes between competent and incompetent testers is known as item discrimination. If an object gathers the correct answers from the good students and the incorrect ones from the week students, it has good discriminating power. As noted by Brown and Abeywickrama (2010) on page 71, the high power of discrimination will be near 1.0, while the no power of discrimination will be zero.

Section Four

4.1 Findings Associated with the Hypothesis: Comparison of the Experimental and Control Groups' Mean Post-Achievement Test Scores.

To examine the data pertaining to the first hypothesis, which states that there are no statistically significant differences between the experimental group's mean scores on the post-achievement test—which is taught using the T.H.I.N.K. strategy—and the control group's mean scores, which are taught using the conventional technique. The same pre-test is administered to the experimental and control groups. With standard deviations of 9.39 and 9.12 for the experimental and control groups, respectively, the mean post-test scores are 78.47 and 67.17, respectively. The computed t-value for the two groups is 4.40, and the tabulated t-value is found to be 2.00 at the degree of freedom (50) and level of significance (0.05). This indicates that the experimental group's performance differs significantly from that of the other two groups. As seen in table (2), the first hypothesis, according to which there is no statistically significant difference between the experimental group's and the control group's mean scores on the post-accomplishment test, is thus rejected.

Table (2)

Means, Standard Deviation, and T-values of the Two Groups in the Post Achievement Test

Groups	No.	Mean	SD.	T-Value		DF	Level of Significance
				Calculated	Tabulated		
EG.	26	78.47	9.39	Calculated	Tabulated	50	0.05
CG.	26	67.17	9.12	4.40	2.00		

4.3 Discussion of Results

This study provide compelling evidence regarding the effectiveness of the T.H.I.N.K strategy compared to traditional teaching methods. The primary hypothesis posited that there would be no statistically significant various in the mean scores of the experimental and control groups in the post-achievement test. However, the analysis revealed a significant difference, leading to the rejection of this hypothesis. The experimental group's mean post-test score of 78.47 was considerably higher than the control group's mean score of 67.17 as show in figure 1. This difference of approximately 11.3 points suggests that students taught using the T.H.I.N.K strategy performed better academically than those taught through traditional methods. The calculated t-value of 4.40 far exceeded table t-value of 2.00 at a significance level of 0.05 with 50 degrees of freedom. This indicates not only a statistically significant difference but also supports the efficacy of the T.H.I.N.K strategy as an instructional method. The findings highlight the potential advantages of implementing the T.H.I.N.K strategy in educational settings. the significant improvement in post-test scores suggests that this instructional approach may facilitate deeper understanding, critical thinking, and better retention of knowledge among students.

5.1 Conclusions

1-   The application of this strategy had a significant positive impact on improving students' language skills, especially in reading comprehension, vocabulary acquisition, and critical thinking .

2-   Through guided thinking strategy, students became more engaged, reflective, and confident in using English both inside and outside the classroom.

3-   The study demonstrated the effectiveness of the thinking strategy used in developing students' thinking skills, helping motivate them to analyze, interpret, and make decisions more independently and consciously.

4-   A clear improvement was observed in students' ability to approach academic problems in a systematic and organized manner, reflecting the pivotal role of this strategy in developing higher-order thinking skills.

5- For the advantage of the experimental group, there are statistically significant variations between the mean scores of the control group, which is taught using the traditional approach, and the experimental group, which is taught using T.H.I.N.K.

6-   Students' abilities and knowledge might be enhanced within the classroom through practical exercises and exercises that help them overcome any obstacles or problems by using T.H.I.N.K strategy .

Questions of Posttest for 5th Grade

Q1. A/ Read this text carefully then answer of the questions that follow.   (10 M.)

The computer is one of the most important inventions of the modern world. Computers were huge and very expensive so no one could buy them. Now they are much smaller and there is a computer in almost every house. The strange thing about computers is that they are developing all the time. Computers help doctors to know the diseases in order to decide the best medicine. They also help scientists to solve complicated problems. Pilots use computers to help them know their directions. Teachers also use them to make lessons interesting. Students can use computers to find the information they need. However, most young people use them for playing games.

Now answer (5) of the following questions.

1. How do computers help doctors?

2. How were computers in the past different from computers now?

3. How do computers help scientists?

4. Pilots use computers to know directions. (True/False)

5. Computers are developing all the time. (True/False)

6. Give the passage a suitable title.

B / Answer these questions from your textbook.   (10M.)

 1. Which animal is eaten by some people?

2................................... connect to the internet.

3. Is it easy to imagine modern life without cars?

4. The Aswan Dam is 30 years old. (True / False)

5.......................... and.......................... are the main industries in Iraq.

Q2/ Write about in not more than (70-100) words by using the picture below.(15M.)

These notes may help you:-

-use the first mobile

-small, light and easy to use.

-can be very useful and even save lives.

-cause problems as well.

Q3/ A/ Choose the correct answer   (15 M.)

1. My cat (looks / looks like) a tiger.

2. She (was wearing / were wearing) a new dress now.

3. Last year, my sister (write / wrote) a letter.

4. Are you excited (about / of) the holiday?

5. The test was (so / such) easy that everyone got 100%.

B / Answer the following questions (10 M.)

 1- If you knew you were vital to your organization's success, how would you approach your work?

 2- If things could be exactly right for you in this situation, what would need to change?

3- If you knew you were as intelligent as your manager/boss, how would you present to them?

 4-If you trusted that your success will not put others in your shadow, what would your goals be?

 5- If you were not to hold back in your life, what would you be doing?

Q4/Choose the necessary information from the box to complete the sentences. (10 M.)

   (Hurt / crowded / rough / generous / easy – going / sociable)

1-My Aunt Farida invites her friends round all the time. She also loves meeting new people .she is very ………………….

2-Adel always helps people and gives to charity. He is a very …………………………..person.

3-My sister is very ………………….. She never gets angry.

4-The sea was so ……………………that we couldn`t go swimming.

5-Did you ……………………yourself when you fell over.

Q5/ A/ Describe these photo with a suitable word or phrase. (10Mark)

1- …………………..   2- ………..……….   3- ………………   4-…………………   5- …………………..

Q5/B/ Listen and circle the word you hear. (10M.)

Fareed: Why are you writing to your mother? You live in the same house. And you see her every day.

Alex: I know, but it's Mother's Day tomorrow.

Fareed: Tell me more about it.

Alex: Well, it's a day in the spring when you say thank you to your mother for everything. Most people give their mother a card and a present.

Fareed: Really? What have you got for her?

Alex: Flowers and chocolates.

Fareed: Is there a poem in your Mother's Day card?

Alex: Yes. Listen to this. 'On this special day, I'm writing to say, you're the best mother in every way?

Fareed: That's nice.

Alex: Don't you send Mother's Day cards in Iraq? Birthday cards and Eid cards

Fareed: Are you joking? We send but we never send Mother's Day cards.

Alex: Where are you going, Fareed?

Fareed: To buy a Mother's Day card for my mum. She's also the best!

Q5/B/Choose the correct answer in your answer sheet

1-It`s (mother`s / father`s / brother`s) day tomorrow.

2-it`s a day in (spring / winter / summer).

3- Have you got for her a (plant / flower / clothes)?

4-Most people give their mother a (letter / box / card).

5-There is a (poem / poetry / story) in your mother`s day card.

Q6/ Speak about your self .(10 M.)

1-What do you want to be when you are older?

2-What sport do you like?

3-What is your favorite hobby?

4-What are the advantages and disadvantages of the internet?

5-What is a healthy diet?

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