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The Effect of Visual Thinking Strategies on Iraqi EFL Students` Communication Skills

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Abstract

The goal of the study is to find out the effect of the visual thinking strategies (VTS) upon the college students` achievement in English language communication skills. To achieve the aim of the study, the experimental posttest design is used. The sample is represented by (70) second stage learners at English Department at the College of Education. They were randomly chosen and divided into two groups: the experimental and control groups (35) students in each group. To achieve the aim of the study, an achievement test for communication skills has constructed and distributed to the sample of the study. The researcher has exposed the experimental group to the VTS, while the control group has taught the conventional way. The results show that VTS learners' scores on the posttest were statistically significant to the development in students ` achievement and in vocabulary and speaking skills. Drawing the conclusion, recommendations and suggestions for further studies are put forward.

Keywords: College students, Communication skills, Visual Thinking, Visualization

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تأثير استراتيجيات التفكير البصري على مهارات الاتصال لدى الطلاب العراقيين دارسي اللغة الإنجليزية ـلغة أجنبية

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المستخلص :

الهدف من الدراسة هو معرفة أثر استراتيجيات التفكير البصري (VTS) على تحصيل طلاب الكلية في مهارات الاتصال باللغة الإنكليزية. ولتحقيق هدف الدراسة تم استخدام التصميم البعدي التجريبي. وتمثلت العينة بـ (٧٠) من طلاب المرحلة الثانية بقسم اللغة الإنجليزية بكلية التربية. وقد تم اختيارهم عشوائياً وتقسيمهم إلى مجموعتين: المجموعة التجريبية والضابطة (٣٥) طالباً في كل مجموعة. ولتحقيق هدف الدراسة تم بناء اختبار تحصيلي لمهارات الاتصال وتوزيعه على عينة الدراسة. وقد قامت الباحثة بتعريض المجموعة التجريبية لنظام VTS، قامت الباحثة بتدريس المجموعة الضابطة بالطريقة التقليدية. أظهرت النتائج أن درجات متعلمي VTS في الاختبار البعدي كانت ذات دلالة إحصائية لتطور تحصيل الطلاب ومهارات المفردات والتحدث. ووضع التوصيات والمقترحات لمزيد من الدراسات وفقا على نتائج الدراسة.

الكلمات المفتاحية: التفكير البصري، التصور، طلبة الكلية، المهارات التواصلية

1. Introduction

Students are stimulated by visual media and communication skills, and they live in a world where visual stimuli from the technology and screen-based environment are all around them. For students in the twenty-first century, visual thinking (VT), a way of visual problem-solving, needs to be encouraged. In the study of Hundhausen et al. (2002) conducted a meta-study and discovered that a crucial element contributing to effective learning outcomes is learners' commitment to involvement or engagement while using visualization (e.g., observing vs. interacting). In actuality, VT is a visual component of constructivism, scaffolding, metacognition, complex learning, cognitive load theory, and critical thinking.

Whenever certain educational initiatives take into consideration students' educational features, it is also optimized in the case of English language learners (Harmer, 2012). Visual Thinking Strategies, which fully utilize the improved aspects of visual learning and combine them with cognitive processes intended to develop students' connected skills when acquiring vocabulary, grammar structures, and syntactic sequences, is one of the most complex concepts that fit such a (educational) environment. This complex process was proposed by (Yenawine & Miller, 2022) and will be covered in detail in the current review. Thus, the purpose of this review is to pinpoint the educational domains where the VTS technique should be implemented, the VTS procedure is rather lacking, although students would highly benefit from it if this were not the case.

Teaching college students via artwork learn how to think, communicate, and be visually literate (Housen & Yenawine, 2002). Visual media of all kinds can aid in the development of language. In the process of development, texts, images in the mind, photos, and videos may all be crucial. Every student has the chance to provide an illustration of what they decode from their point of view during VTS lessons. Students analyze it, share their thoughts, and offer supporting details for their interpretations. Additionally, a supplemental VTS protocol was designed to target teachers and other VTS facilitators in order to increase shy students' engagement, level the playing field, introduce a topic, and scaffold peer-learning abilities. This protocol focused on constructivist actions like helping, encouraging, and achieve, thereby preparing the students for both employment and further college studies.

In a cooperative group context, VT uses carefully chosen and organized art images to help students enhance their capacity for critical observation, evidence-based reasoning, and critical thinking while they express their own views and expand on those of others (Housen, 2002). Because of the collaborative nature of utilizing visualizations, learning processes become

more complex and significant when learners go from using them alone to using them in groups. The parts of collaboration in which students effectively instruct one another by bringing new observations to light, presenting opposing viewpoints, and continuously expanding the conversation are greatly enhanced by the use of offering opposing views, and ever widening the discussion (Housen, 2007, 125).

Obtaining communication skills is the foremost complex exercises for students to learn. They incorporate the construction of a planned topic, the recording of mental images associated with knowledge, and prior interactions with subjects. According to Hausen, Kuiken, and Vedder (2012), "language students are frequently viewed to be proficient speakers of another language when they speak their newly acquired tongue with smoothly and in a native-like capacity" . "Being able to speak practices usually concentrate on the interaction of communications, not forms of language, allowing students to do simple duties at faster-than-usual rates" (Nation and Newton, 2009, p. 38). Activities aimed at improving fluency must be message-focused; an error-focused approach hinders fluency since students would slow down in favour of accuracy. "Correctness feedback in a writing course may come from a separate section of the "In a writing course, feedback on accuracy may appear in various areas of the instruction course and may rely on the kinds of tasks that students are engaged in" (Nation, 2014, p.25).

Furthermore, the VTS process is centered around a three-sided unit as proposed by Yenawine (2013): look (looking at the image silently for one minute)–think–talk (debating points of view and responding to open-ended questions). According to Housen's research, the three main VTS questions are: What's going on in this picture? (which speaks to the learner's narrative identity); What do you perceive that leads you to say that?"(Linking language, causation, reasoning, and perceptions) and What more can we find?" Meaningfully expanding the image without instilling in the students the notion that they must provide a predetermined, right response.

A key component of a language learner's aptitude is fluency. According to Lenski and Verbruggen (2010), "the ability to create texts without relying too much on memory" is the definition of fluency. According to Towell (2012, p. 56), a learner is considered fluent if their information is obtainable through routinely used techniques. "The more automatic the recall of a language pattern, the easier and more fluent the production becomes". While the ability to put words on paper without going overboard and to build connections between ideas is what makes a writer deemed fluent. According to recent research, input is crucial for the development of fluency.

"The ability to write/speak rapidly with few delays and wavering's is critical for learners taking planned communication aptitudes exams as well as for those who wish to write / talk down their thoughts almost the subject sometime recently overlooking them" (Chenoweth & Hayes, 2001, p.98). Improving talking and composing fluency is beneath inquiry within the range of remote dialect learning. Agreeing with Chenoweth and Hayes (2001), talking and composing familiarity is particularly critical for moment dialect learners 'victory in their ponders. Investigating fluency, precision, and complexity may be a prevalent point inside the moment dialect procurement thinks about. Writing skill has a few basic components of the remote dialect procurement of the EFL adult learners such as reflection, center and relevance, sentence fluency, visualization, and giving translations, in expansion to mechanics. The analyst handles these writing components as they speak to the setting through which learners' information is reflected clearly. In addition, writing absolutely and concisely, maintaining a strategic distance from dubious or purge expressions; and reexamining and altering content would help to make strides in the texts' coherence, and rightness. (Khalil,2021) "Composing and expanding learner inspiration and engagement toward composing is a vital component in education, in spite of the fact that it isn't seen as a current hot topic"(Cassidy, Valadez, Garrett & Barrera, 2010, p.456.). Applying VTS, which focuses on increasing activity applicability, encouraging learners to establish linkages between ideas, and having them repeat prior information, is thought to play a significant impact in improving students' communication skills. This will help to close the gap in the study. As a result, the study addressed the following question: "Are there any variations in the ways that the experimental and control groups teach visual thinking abilities as methods of instruction with regard to the academic students' improvement in English language communication skills?

The aim of this study is to find out the effect of teaching the visual thinking strategies upon the academic students` achievement in English Language communication skills.

The study's specific hypothesis is that there is no statistically significant difference in mean scores between the experimental group, which is taught visual thinking techniques, and the comparison group, which is taught English language communication skills using the conventional method.

2. Theoretical Framework

2.1 Key Words

2.1.1Visual Thinking Strategies

Students in the twenty-first century are surrounded by visual, technological stimuli all the time, the educational system, whether it be general or

specialized—as in the case of higher education—must find innovative ways to fulfil and satisfy these demands for learning. The idea of Visual Thinking Strategies (VTS), developed by Philip Yenawine and Abigail Housen, has been extremely popular among the plethora of new or updated techniques since it can be applied to a wide range of specialized fields with considerable improvement outcomes. The psychologist Abigail Housen and Philip Yenawine, the director of education at the Museum of Modern Art in New York, created the visual education idea known as Visual Thinking Strategies in the 1980s (Yenawine, 2013).

Housen's stage theory of visual growth serves as the scientific foundation for Visual Thinking Strategies (VTS) (Housen, 2007). Her hypothesis is based on studies on aesthetic development and visual perception as well as constructivism and cognitive developmental psychology. Perception, cognition, and aesthetics are all connected, as demonstrated by Housen's theory of aesthetic development. Baldwin developed a three-stage cognitive development model for students, and he connected this model to the development of aesthetics. According to him, viewers who resemble accountants react instinctively and naively to visually appealing objects. He saw this immediacy as a component of aesthetic feedback resonance (Housen, 2007, p.172). Piaget outlined the concepts of "accommodation," "assimilation," "equilibration," and "disequilibrium," which are relevant to every stage of development. "Disequilibrium" is defined by Piaget as an imbalance between what is known and what is experienced. Education is reliant on this procedure. We have the chance to grow when "equilibrium" is disturbed (Hoppe- Graff ,2014, p.169). Through the application of Visual Thinking Strategies, pupils are able to create a state of "disequilibrium" that facilitates learning processes. The work of Vygotsky sheds light on the close bond that exists between language and thought. It is important to support students' language development so they can think critically and comprehend intricate relationships. In educational settings, targeted instruction ought to be directed toward the "zone of the next development" (Flammer, 2008, p. 235).According to Vygotsky and Piaget, unless the preceding stage is integrated, a learner cannot acquire cognitive concepts of a later level. Both stresses how crucial environmental interaction is to students' intellectual development. Rudolf Arnheim's theory that visual perception is an act of thinking and that art objects may be used to train thinking makes him relevant to Housen's work (Arnheim, 2000, p. 6). Beyond disciplinary borders, the value of visual education for humans has been debated. Digitalization has led to an increase in the cultural importance of images in public as well as private domains. Everyday information processing and communication involve the use of visual aids. To be able to read images, learners must possess image competency. Therefore, for students to learn

how to interact critically and reflectively with images, educational institutions must provide suitable pedagogic environments.

Visual Thinking Strategies provides an example of one methodological strategy. Through intuitive-emotional engagement with visuals, rather than an intellectual-theoretical approach, VTS facilitates students' learning. To encourage learners' visual, cognitive, and social learning processes, VTS starts with questions that are developmentally appropriate and include visuals.

The classroom's practical application adheres to a methodically defined process. In the capacity of a facilitator, the teacher shows an artwork and poses the three fixed VTS questions to it: What is happening in this image? Why do you say that, in your opinion? What else are you able to locate? The facilitator points to the appropriate areas of each picture while paraphrasing each response (also known as "pointing"). Additionally, they place fundamental concepts inside a more comprehensive thematic framework ("framing ") and connect similar or divergent points of view ("linking "). Because every input is objectively paraphrased, children are inspired to engage in active participation, they get the ability to defend their opinions, and they discover that pictures can be interpreted in various ways (Jung & Kraler, 2020, p. 224).

In response to a shift in the criteria for evaluating the achievements of learners in relation to their learning needs and the development of soft skills, VTS (Visual Thinking Strategies) was created. It focuses on elements like analytical thinking, innovative problem-solving, positive listening proficiency, and persuasive language productive skills, such as oral and written communication, as well as mental processes awareness of the contents, and process of information acquisition (Yenawine, 2013) .

According to Yenawine (2013), "permission to wonder" is the fundamental idea behind the VTS-specific and extended activities. It was primarily covered in what he called the most thorough book that documents VTS from both a theoretical and practical standpoint. They developed the theory—which they developed in collaboration with cognitive psychologist Abigail Housen—that effective learning occurs not when teachers give answers to students or learners, but rather when they are allowed the chance and time to go through the process of discovery on their own. This allows them to make meaningful connections and associations on their own that will help them internalize the knowledge they have learned over longer periods of time and can also subject it to extensive application frames, namely, the practical knowledge of visual literacy integrated into any other aspect of the learner's life sequence, without the assistance of a professional guide. As a

result, students are afforded the chance to reap the rewards of acquiring learning autonomy, and VTS is defined as a synthesis of needs (the ability to notice, ponder, comprehend and interpret perceptions, identify and apply them on one's own), approaches, and materials, thereby enabling audiences in general (Housen, 2007).

2.1.2 Communication Skills

Those who work in the field of teaching English language skills would contest the advantages of developing students' skills within an integrated framework in ESL/EFL classrooms or the necessity of encouraging authentic, meaningful communication as opposed to just practicing language for the sake of its contents. Studies in Communicative Language Teaching have demonstrated that when language is utilized for authentic reasons, without the need for formal instruction, vigorous correction, or practice, human competence in spoken and written language increases. Students learn naturally as they take part in creating their coherent worldviews and understanding of the language that people use to communicate with one another and the world. (Kazi et al, 2012).

The abilities required for clear speaking and writing are known as communication skills. An effective speaker is one who can speak effectively while keeping eye contact with the audience, who can articulate their speech to meet the needs of the audience, and who uses a variety of terminology. Similar to this, skilled writers should be able to convey their ideas and messages to readers through a variety of writing styles and strategies. In every circumstance, one should be able to write, speak, and listen intently. Consequently, proficient abilities in reading, writing, speaking, and listening is necessary for efficient communication. (Hampton,2022).

The importance of communication in students' capacity for clear communication and the sharing of ideas, feelings, and thoughts will benefit them in all of their interactions. For instance, you can use communication to influence people or to tell them about something. Communication skills are necessary for the following tasks: • Inform: You might have to provide someone with facts or information. For instance, telling a friend when an exam is scheduled. • Influence: You might need to modify or influence someone in a subtle but typically significant way. For instance, bargaining with a store owner to lower the cost or offering support to a buddy who is stressed out over an exam or for any other cause. Face-to-face interactions and the communication required between the participants in the classroom to guarantee that learning occurs are included in classroom communication. (Kogut & Silver, 2009).

Teachers use communication in the classroom to do three things, they describe their shared classroom experiences with students, they elicit

pertinent knowledge from students, and they respond to what they say (Khalil, 2018).

2.2 Related Works

A study of Gauri, et al, (2020) using a pretest–posttest experimental study design, the impact of (VTS) on first-year medical students were examined in order to gauge the usefulness of VTS in medical education curricula. The study, which involved analyzing clinical photographs and measuring word count, amount of time spent analyzing images, and quality of written observations of clinical images, was performed by 41 intervention students and 60 comparative students. The amount of time spent analyzing the photos, the total number of words used to describe the images, and the number of observations that were clinically significant all rose with VTS training. Analyzing the images, and the number of clinically relevant observations.

Several educational researchers have found that students who complete topic-related VTS activities in high school go on to get other VTS class activities or lessons, which are then incorporated into higher education. Cappello and Walker's study (2022) offers a novel viewpoint on teachers as visual literacy facilitators across disciplines. It emphasizes how teachers support the integration of VTS into vocabulary and reading instruction and help students develop their speaking abilities while also fostering a comfortable environment in which students can learn and practice 21st-century communication skills. (Cappello, & Walker,2022)

Moreover, the study of Anderson (2022)is in favour of the theory that VTS plays a major role in oral language acquisition. It emphasizes the relationship between oral language development and ELLs (English language learners) and the ways in which VTS can support ELL oral language development while also encouraging higher order thinking and developing deeper comprehension. Furthermore, research has been done on VTS and CLIL (subject and language integrated learning), particularly in the context of scientific classrooms.

Writing workshops are another ESL/ELL-related area where employing VTS Hampton (2022) has shown to be effective. Stephanie Hampton provides a thorough explanation of how to use VTS in writing workshops for English Language Learners on her website, Writing Mindset. She primarily focuses on specific applications that target VTS in a setting where written communications are produced. Examples of these applications include writing captions for images, making newspaper articles, accounting for various points of view, and describing characters, storylines, and sensory details. She lists a few benefits, including assisting pupils in developing specific questions, illustrating different viewpoints and drawing attention to them, and exchanging ideas through a communicative medium.

Hu (2022) offers a VTS inventive context, stressing the value of creating

mindful, active listening skills as a VTS facilitator as well as a knowledge facilitator of any kind. Her explanations depend on responses to the question of effective learning (how to learn), and they are mediated by the VTS function of (enabling students to learn throughout the process) while maintaining their (freedom of expression).

3. The Analytical Part

3.1 Methodology of the Study

3.1.1 Research Design

According to Creswell (2012, p. 21), research design refers to "procedures in quantitative research where the investigator determines whether materials of an activity make a difference in the results of students. "A "non-randomized pretest-posttest control group design," or "quasi-experimental design," is employed to meet the aims of the current investigation. To explore the study's hypotheses, a nonrandomized control group pretest-posttest approach is employed. Two groups are chosen at random to be the experimental group, which receives instructions in visual thinking as the independent variable, and control group following the dependent variable conventional way of teaching communication skills.

3.1.2 Population

The sample consisted of second-stage college students from the English department at the University of Baghdad's College of Education. Four groups comprise the 150 people in the population. The sample for this study consists of (70) students divided into two groups: group (A) consists of (35) randomly selected students who are exposed to traditional teaching methods; group (B) comprises (35) students who are exposed to VL Strategies as an experimental group. The achievement exam was given to the two groups both before and after instruction.

3.1.3 Equalization

The equalization of the two groups in the mother's and father's educational backgrounds, the students' ages, and the pre-test results are the variables of the study. Every variable between the two groups is equal. The Test statistics Data of the Equalization of the Two Groups at the Academic Level of the mother and Father In the age-related pre-Test statistical analysis of equalization between two groups, variables are indicated as being non-significant at level of (0.05).

Both the experimental and control groups' students completed the pre-test, the t-test formula for two independent samples has been used. The computed t-value (0.162) from the t-test for two independent samples is less than the tabulated t-value (2.00) with a 0.05 level of significance and(68) degrees of freedom. The computed t-value for the experimental group was (8.065), with

a standard deviation of (2.380), whereas the computed t-value for the control group was (7.970), with a standard deviation of (2.061). The results show that there is no statistically significant difference between the experimental and control groups on the communication skills test. This means that the two groups are equal when it comes to the communication skills variable. The test of communication skills student equalization statistics data, is shown in table (1)

Table (1)

Pre-test of the Two Groups in the Communication Skills

Group	No. of Students	Mean	Std	T - value		Df	Sig.
				Computed	Tabulated		
Control	35	7.970	2.380	0,162	2,00	68	0.05
Experimental	35	8.065	2.061				

3.2 Research Instrument

This study used a pre-posttest as its instrument. It has given to both groups after they completed three lessons per week of rigorous English language training for fifteen weeks. A test with four questions is given following instructions in VTS to the experimental group. The first two questions in the test, which relate to receptive skills, they are made up of (10) multiple-choice items and (10) true/false items. These are meant to evaluate the ability to identify key ideas, and comprehend language. The remaining two questions measure students' productive skills in communication, as well as their ability to increase their self-esteem and model language use, communicate orally and mental processes. They consist of two categories: completion of sentences (10 items) and matching (10 items). The question items are drawn from student materials entitle "Teaching English as a Foreign or Second Language" by Gebhard (2009).

3.3 Validity and Reliability of the Instrument

The key aspect of a successful test is validity, or how well the test truly measures what it is intended to assess (Brown and Lee ,2015). "The extent to which it meets the expectations of those involved in its use, test authors, administrators, teachers, and candidates" is the face validity for an instrument (McNamara, 2000, p. 138). The study's face validity is confirmed by a panel of experts, consisting of six university professors and supervisors of English language instruction, who examine the post-test. The instrument's face validity was approved by the jury, who also provided outstanding feedback.

Shaughnessy et al. (2012) state that a reliable instrument may be determined by looking at its consistency. To guarantee the consistency of the post-test, two methods are used. First, there is the inter-scorer dependability. Inter-

scorer reliability is indicated by the consistency of points given to the same performance by two different scorers (Johnson and Christensen, 2012). The Pearson method is used to calculate the correlation coefficient when two raters who are familiar with the rubric grade identical student performances. The result is 0.89. It's a high figure that suggests that the scoring results are highly certain. The other method is called intra-scorer reliability. Students' performance is initially evaluated, then after a certain amount of time, it is reviewed in a random sequence to establish intra-scorer reliability (Bachman, 1990). To achieve intra-scorer reliability, the researcher evaluated the speaking abilities of twenty students in a sample once, and then again two weeks later. Using the Pearson method, the correlation coefficient comes out to be (0.92). It's a high figure that suggests that the scoring results are highly certain.

3.4 Procedure

Visual thinking strategies have been used to teach students visual literacy, communication skills, and critical thinking via the using of pictures (Housen & Yenawine, 2000). Observing pictures that gets more sophisticated, answering questions that are based on developmental stages, and taking part in guided by teachers group discussions all support improvement. All students have a chance to express what they perceive in the artwork they study, share their opinions about it, and offer supporting details for their interpretations of it throughout VTS courses. Three questions are used in VTS:

1.What is happening in this image? The conversation is started by this question. It means that there is an aspect about the picture. It invites to think of activities or stories and offers opinions about colours, emotions, details, and personal connections, among other things. It is expected of the students to think and speak for themselves.

2. What observations led you to make this claim? The question requires students to collect additional proof to back up their claims and writing them on their dairies journal. Their points of view are supported by actual visual evidence.

3. What more do you discover? This query effectively starts a conversation. more comprehensive. Students can discover information through reading more and listening to video recording to write down the note that would have been overlooked when they are requested that more be looked for.

Students were encouraged to silently examine the artwork for one minute while learning about the intervention process (VTS) and to reflect on what they saw and the story depicted in the painting. One minute later, the class as a whole spent ten minutes discussing each work under the guidance of the

teacher. The two groups were then given the accomplishment test. In this method, the researcher's job was to lead the conversation using the following three questions: What is happening in this image? Why do you say that, in your opinion? What else are we able to locate? Throughout the process, the researcher/teacher linked comments from different sources, correctly rephrased remarks, and called attention to items the students had used as references. The teacher's role was to serve as facilitator, not as an expert on the piece. The target language was used throughout the entire procedure. Following the ten-minute talks, students had five minutes to write on lined paper about their ideas and beliefs. The VTS procedures weren't distributed to the control group. Additionally, the instructor used a video recording and data show of the lesson to examine student engagement in whole-class discussions. Following fifteen weeks, the test group—who had been taught the VT strategy—and the control group—who had received traditional instruction—were given the posttest. The exam consists of four questions, and students have 45 minutes to complete it. They must answer each question.

4. Results and Discussions

4.1 Data Analysis

The purpose of this study is to investigate " effect of teaching the visual thinking strategies upon the college students` achievement in English Language communication skills. " And the study's hypothesis is that "There are no statistically significant difference between the mean score of the control group and the mean score of the experimental one' in terms of students' communication skills in visual thinking strategies".

To find the effect of VTS of the students' levels on communication skills, the researcher has distributed the posttest on students, by calculating the result of two independent T-Test Sample (Control/Experimental Groups), the students' responses on posttest to the experimental and control groups in terms of the communication skills (Receptive and productive skills). On the VTS, there are substantial differences between the students in the experimental and control groups as shown in (Table 2).

Table (2)

The Results of the Post -Test Productive and Receptive Skills` Means Score (M), Standard Deviations (SD) in the (Control/Experimental Groups) according to VTS

Communication skills	Groups	N	Mean	SD	Df	T-calculated	T-tabulated	Level of significant

productive	Experimental	**35**	3.52	0.75	68	14.33	1.96	0.05
	Control	**35**	2.78	0.62				
Receptive	Experimental	**35**	3.41	0.67	68	12.27	1.96	0.05
	Control	**35**	2.45	0.54				

The level of productive skills in the table (2) shows that the means score in experimental group (3.52) and the standard deviation (0.75) which are higher than the mean of control group (2.78) and standard deviation (0.62), and the t – test value (14.33) at the significant level (0.05). The calculated t-test (14.33) is bigger than the tabulated of t-test (1.96). This shows that there are statistically significant differences in speaking and writing skills developed according to the using VTS. To be clear, VTS does lead a meaningful difference among the scores of the experimental and control groups in term reading and writing skills.

As for receptive skills, the t-test value of the experimental and control group T= (12.27), at the significant level (0.05). In posttest a significant increase was appeared in the mean score and SD of the experimental group (3.41) (0.67) respectively, while in the means score of the control group was (2.45) with SD (0.54) . The calculated t-test value (12.27) is bigger than the tabulated of t-test (1.96).in the post-test experimental students revealed significant differences compared to those in the control group at level of significant (0.05). The VTS plays a vital role in their success in listening and reading skills.

4.2 Discussion of Results

The results of the study show that the effect of the VTS instruction on improving communication skills as shown in the table (2). This table showed that the significant difference between the mean scores of the study participants on the experimental and control groups in the post test, more clarifications are in the following discussion.

Results in productive skills that clarified in table (2) show that the calculating t-test (14.33) is bigger than the tabulated of t-test (1.96) This shows that there are statistically significant differences in speaking and writing skills developed according to the use VTS. This indicate that the effect of the VTS on developing the productive communication skills.

In addition, those who are enrolled in the experimental group are as high as those who are enrolled in control group in term the effect of VTS on the speaking and writing skills.

It could be concluded that from the present results and as shown in previous studies in the study of Anderson (2022) supports the idea that oral language acquisition the learners' overall speaking and Hampton (2022) writing skills was developed due to the VTS instruction.

Results in receptive skills clarified in the same table (2) show that through using t-test of overall calculating t-test (12.27) is bigger than the tabulated of t-test (1.96).in the post-test experimental students revealed significant differences compared to those in the control group at level of significant (0.05). The VTS plays a vital role in their success in listening and reading skills.

The same effect goes in line with the previous studies Cappello and Walker's study (2022) and Hu, (2022), in receptive skills The majority of English language training programs focus primarily on helping students acquire and retain vocabulary as well as explicit grammar rules—even if they are not yet proficient in their application. Some educators must adapt their teaching strategies to support students in using the newly taught vocabulary, considering the new vocabulary in the context of the intended essay, and understanding implicit grammatical rules to build proper sentence structures.

5. Conclusions

Based on the results of the present study, visual thinking strategies are developed learners' abilities on both recognition and production skills, and they are often used in combination to enhance the effectiveness of the VTS process. As shown in the table (2) the results of the productive skills the t-test (14.33) is bigger than the results in receptive skills t-test (12.27) in the post test, this indicates that the productive skills more developed than receptive skills in using VTS inside the classroom.

Recognition skills involve the ability to identify and interpret visual elements such as colors, shapes, lines, patterns, and textures. These skills are important for understanding visual information and identifying patterns or relationships within the information.

Production skills, on the other hand, involve the ability to create visual representations of information or ideas. These skills can include drawing, sketching, or using digital tools to create visual images or diagrams. Production skills are as means for communicating ideas and information visually and for generating new insights through the act of creating.

Both recognition and production skills can be developed and improved with practice and training. Ultimately, the most effective visual thinking strategies involve a combination of both skills, as well

as the ability to use them in a flexible and creative manner to solve problems and generate new ideas. The VT uses carefully chosen and arranged visual images to let students express their own perceptions and expand on those of others in a cooperative group environment. This helps students become more perceptive, critical thinkers, and reasoners with evidence. The VTS protocol helps individuals and groups grow in the following ways: it deepens thinking, boosts involvement and engagement, strengthens language skills, writing and speaking abilities, and visual literacy; it also enhances listening and cooperative problem-solving abilities.

6. Recommendations of the Study

Based on the previous results and findings, the following recommendations are elicited:

1. All teachers in all educational institutions ought to have time and funding for VTS instruction.
2. There should be more chances for language learners to collaborate on projects.
3. To enhance learning in a positive learning environment, educators should employ a variety of VT-based strategies.
4. Teachers should support students' autonomy and provide them the freedom to express their opinions and views about the learning process. In light of the demands of the students, this aids in improving the educational process.
5. VT should be used to improve the language fluency of other students in other scientific fields of education.
6. It is more beneficial to teach English language and grammar implicitly rather than explicitly using VT settings. This facilitates learning how to apply grammar principles without wasting time or effort on recalling the rule, which leads to speaking and writing improvement through listening and reading comprehension.

7. Suggestions of the Study

The following suggestions may be taken into consideration, researchers write further on:

1. investigating the way VT works to improve students` grammar for EFL learning
2. Studying the effect of language proficiency on VT instructions.
3. evaluating how VTS programs impact instruction and learning in sustainable developments.
4. Examining the impact that VT methods have on improving

learning outcomes.

5. Creating a training curriculum to teach teachers how to use VTS tactics to the college students.

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