

# The Impact of the Playing Strategy on the Development of Achievement and Motivation to Learning for Middle School Students

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## Abstract:

The goal of the current research is to design an educational environment based on the strategy of playing, measuring its impact on achievement and development of motivation for learning, and applied the steps of the model 'ADDIE' general model, and to achieve the goal of the research used the one-group experimental approach to a sample of 80 students from the first grade Preparatory in The Jazan region, the researcher prepared the collection test and the measure of motivation for learning, and the tools were applied before and after confirming their sincerity and stability on the sample of the research, then the researcher performed the process of processing the data statistically through a program for SPSS, and revealed the results of the search for the presence of a difference statistically At the level of significance of 0.05 between the averages of tribal test scores and the averages of the after test in the attainment test in favor of the dimensional application test, as well as the results indicated the effectiveness of the strategy of defects in the development of motivation for learning in the dimension application, and in the light of these results the research presented a set of The most important recommendations are the need to generalize the use of the strategy of playing in all curricula scheduled for the preparatory stage.

**Keywords:** playing Strategy, Achievement, motivation to learn.

## Introduction:

The rapid development and massive cognitive explosion has become one of the most important features of our time in which we live, which makes it imperative for us to deal with this progress with all that helps to benefit from its achievements in the educational process, and many countries have done a lot of their budgets in order to improve their education system, With the great technological development of education strategies and theories, it became necessary for the teacher to use strategies suitable for the learner and his needs in the 21st century, and from the modern directions that must be taken into account is the use of the strategy of playing in the process. Educational, in order to provide interactive opportunities in teaching and learning attractively and interestingly in the implementation of certain tasks, and learning skills within the game whether in the form of information or activities,

as well as the games work to provide students with research and exploration skills.

In the face of this new technological advance, which is becoming increasingly emerging today, educators are beginning to use the latest educational methods in education, which help to increase student motivation through serious and enjoyable learning, which may be an effective educational method of what has come to be called The game is the beginning of the integration of the principles of play and educational design in order to take advantage of the ability of the game to improve the results of students ( Medcdonald, 2015); (Sandusky, 2015).

The use of games in education is a bit new, and educational websites also benefit from the use of game elements in order to motivate their users and help them participate more successfully, the use of games applications in general stimulates and improves students' commitment to their

lesson activity, It has helped to improve learners' learning motivation and interest in learning through direct interaction, such as in the playing field, and play has a positive impact on the learning and success process )Aeker, [Azdamli, 2017](#)).

Playing Strategy is a new concept that aims to use elements of video in applications other than games, as education is an area with high potential to apply this concept because it seeks to encourage the motivation of people and their participation, leads to the self-organization of students by providing opportunities for the performance of self-censorship, which Clear expectations are set for the learner, as the game constantly promotes problem solving that can benefit students' motivations and provide second chances of success ([Gressick, Langston, 2017](#)).

It refers to computers/technology used to influence the motivation and behavior of individuals through game-like systems, due to the general proliferation of technological games in contemporary society, and it is believed that individuals who are increasingly involved in game-supported activities are likely to Their motivational status is stimulated, so that the use of computer techniques to change human behavior is aimed at teaching, supporting and stimulating training activities by providing better practices ([Hamari, Koivisto, 2014](#)).

The game has the ability to provoke motivation towards learning among learners, given the possibilities it offers in changing the behavior of learners, the games can serve as a strategy of winning leading to pleasure, self-development at the individual and social level, when carefully designed to create pleasure and joy Joy With a goal close to learners' own desires and values, it is a powerful tool for its ability to attract attention, engage in targeted activity, and influence behavior ([Kim, 2015](#)).

Achievement is one of the concepts that are commonly used in the field of education, because of the importance it represents in the evaluation of the academic performance of learners, where it is seen as a fundamental test in its light and through which the academic level of the learner can be determined, and the achievement of educational production in quantity and type ([Gloss Mustafa Jalali, 2011, 22](#)).

Achievement is an important aspect of mental

activity that the learners in school evaluate, and the educational achievement is seen as primarily a mental process and has classified educational achievement as a cognitive change, and it is also the art of expanding so that it facilitates all that the learner can reach in his learning, and his ability to Expressing what it has learned, it is an important way to ensure that learners progress towards teaching goals, and Playing Strategy plays an important role in raising the level of achievement among learners during their studies using the strategy of learning, which raises the level of achievement ([Kamal Mohammed Al-Astal, 2010, 24](#)).

Achievement has gained a special place among educators, as it is one of the main criteria for determining the success of educational institutions or their failure to achieve their educational goals, and educational achievement is important for the individual and society, the ratio of the individual can be predicted by the level of the learner and his ability in the next educational stage, as Achieving the required level of academic achievement depends on obtaining and obtaining a certificate of study, and for society it reveals the tendencies of learners and their attitudes towards the study of different subjects in the future ([Mohammed Hafiz Abdulaziz, 2011, 28](#)).

Mental motivation varies from student to student and from culture to culture, and entails a certain degree of satisfaction, in situations that include evaluation of performance in the light of a certain level of excellence, as you know that it is a multidimensional system that works to provoke the effort associated with the work and determines its nature, destination, severity and duration (Luai Abu Latifa, 2016, P. 208).

### **Sense of the problem: The sense of the problem of research came through:**

- They prefer to study by combining traditional methods of head-to-head learning with teacher and electronic methods and this is achieved by the strategy of playing, 73 of the students are not familiar with the strategy of computer and information technology, 70 of the students have a desire to deal with The strategy of playing.
- I interviewed (28) computer teachers in some middle school schools in The Jazan

area, where (24) teachers agreed that there was a decrease among the first graders in their motivation towards their course, while (4) teachers disagreed in determining the nature of the low level of pupils in their motivation.

- There are many studies and researches that have been interested in studying the strategy of the defects, including one: (Ibanze, Di-Serio-kloos, 2014; Alex, Zaharescu, Apostol, 2013; Fabricatore, Lopez, 2010), which recommended the impact of the defect in enhancing motivation among learners and its importance in the process. Educational because of its positive effects in improving students' active participation in learning activities with more positive effects on achievement.

- In that specific framework of the problem of current research, the study of: Amima Zahir (2005); Aida Al-Atta (2014); Jodi Abdul Hadi (2004) the importance of educational achievement among students and it helps them to know the strengths and weaknesses in it, and achievement is one of the important aspects of his mental activity. Students, who show the impact of academic excellence, work to achieve progress and eliminate the deposits of underdevelopment, work to know the extent of the benefit sought by the learner and know his level, which is important in the life of the individual because of the decisive educational decisions that result from its results.

- In that specific context of the current research problem, several studies and researches have been recommended for: Sahar Mohammed Abdulaziz, Samah Mohammed Ibrahim (2016); Ali Hasser Shobouhi (2016); Mohammed Asiri (2016); Abdul Wahid Al Kubaisi, Mohammed Fakhri Abdulaziz (2016); Zainab Aziz, Ban Mohammed Mahmoud (2015); Ibrahim Hashim (2013), the need to pay attention to the importance of the development of motivation among learners through teaching the curriculum at different educational stages, using various methods and methods in teaching.

### The problem of research:

In the light of the above, the problem of research can be summarized in the lack of achievement and motivation of learning among preparatory students, which requires a study of

the 'impact of the strategy of learning on the development of achievement and motivation for learning in the students of the preparatory level'. Research Questions: Current research has sought to reveal the impact of infographic use in the development of visual thinking skills.

1. What is the proposed vision for using the strategy of playing for the development of the knowledge aspect associated with collection?
2. What is the impact of the game strategy on the performance aspect associated with collection?
3. What is the proposed vision for using the strategy of playing to develop the cognitive aspect associated with the motivation to learn?
4. What is the impact of the game strategy on the performance aspect associated with the development of a motivation for learning?

### Research objectives:

The importance of research highlights that its results can contribute to: **1.** Directing the attention of curriculum designers to the need for these curricula to include activities that attract students such as learning activities. **2.** Help computer teachers to perform their teaching duties by evaluating lessons using the al-Taib strategy. **3.** To draw researchers' attention to further research, including canning activities, the use of multiple and different methods in the way they are displayed, and to arouse interest in a unique research.

### Assumptions Research:

1. There is a statistically d difference at the level ( $\leq 0.05$ ) between the average grades of the experimental group (who used a learning environment based on the strategy of the game) and the pupils of the control group (who studied the same subjects in the traditional way) in the development of achievement for the benefit of the group Experimental.

2. There is a statistically d difference at the level ( $\leq 0.05$ ) between the average grades of the experimental group students (who used a learning environment based on the game strategy) and the students of the control group (who studied the same subjects in the traditional way) in the development of achievement in

favor of the dimension application.

3. There is a statistically d difference at the level ( $\leq 0.05$ ) between the average grades of the experimental group (who used a learning environment based on the learning strategy of the game) and the students of the control group (who studied the same subjects in the traditional way) in the development of motivation in favor of the experimental group.

4. There is a statistically significant difference at ( $\leq 0.05$ ) between the average scores of the experimental group students (who used a strategy-based learning environment) and those of the control group (who studied the same subjects in the traditional way) in developing motivation for

**Search Limits:** 1.content limits: computer course and IT first grade first grade first class first unit (basics of computer system, computer operating systems, file handling, computer networks); 2. Human boundaries: A sample of first-graders of (80) pupils. 3.Time limits: The

application of the study experience took the first semester of 2019 / 2020.

**Research Tools:** 1. Experimental treatment material: An educational environment based on the strategy of playing has been produced. 2. Measuring tool: collection, motivation al-Learning measure.

Research Methodology: Current research used the descriptive method to analyze theoretical framework studies and literature that addressed study variables, analysis of study content, and analysis and interpretation of results. The semi-experimental approach to measuring the impact of the independent variable of the game-play strategy on the dependent variable (collection).

**Experimental search design:**

Use the 'one group pre-test' experimental design and the sample is divided into an experimental group and an experimental control group:

**Table (1). Experimental search design.**

Groups	Pre	Processing	Post
G-1	Achievement test + motivation al- Learning measure	the learning environment based on the strategy of gamification of learning	Achievement test + motivation al- Learning measure
G-2		Traditional style	

**Research sample:** The research sample was selected from the first grade students, and the number of members of the sample (80) pupils was divided into the control group (40) pupils, the experimental group (40) pupils.

**Research procedures: First:** Access to books, references, Arabic and foreign scientific studies and previous literature related to research variables and axes and rely on this survey in building the theoretical framework for current research., **Second:** The design of the experimental treatment material represented by the model (ADDIE) general model., **Third:** The preparation of the research tools is: - preparation of the test of achievement measurement (researcher numbers), and the completion of the following, determining the objective of the test, determining the type and vocabulary of the test,

the formulation of the test vocabulary, and the test was presented to a group of specialized arbitrators to measure honesty and stability, access to The test is in its final form. - The preparation of the measure of motivation for learning (researcher numbers), and its completion is reflected in the following, determining the objective of the scale, sources of derivation of the scale, the preliminary image of the scale, the sincerity of the measure, the sincerity of internal consistency, the stability of the scale, the final image of the scale., **Fourth:** Conduct the educational software survey (strategy of learning), as well as research tools, and the adjustment process is done in the light of the results of the survey., **Fifth:** Conduct the basic research experiment of the following: selecting the research sample for the basic

experiment, applying measuring tools in the current research. Sixth: Statistical processing of the data reached, comparing the results of the application., **Seventh:** Discuss and interpret the results, make recommendations and suggested research.

## Theoretical Framework

### 1. playing strategy

Many people have the problem of complaining about work and learning activities, and whether young or old, everyone is bored if it takes too long work or study materials, because we have not heard of the need to link pleasure and learning, or make learning activities fun.

The game 'Gamification' is derived from the word 'Game' gameplay, and is done through the use of the elements of the games and their principles in order to reach a specific goal, the elements of the games are the points collected by the learner, the level he reaches, the challenges he encounters in the game, and the prizes he acquires whenever he achieves Achievement, all of which makes the game more interesting and stimulating (Naim Asaj, Bastian Konings, Mark Poguntk, 2012); (Torsten Reiners, Lincoln woog, 2015, 49:50).

If the education is indicated on the lessons related to the elements of the game, we will not find a clear difference between the interaction of the learner with the games and his interaction with the lessons, and the lessons will only rise to the level of attractiveness of the game. After emerging from the boring stereotype and entering the world of motivation by combining them with attractive elements, this is what the game means: integrating the elements of play into education to give the learner the opportunity to learn using virtual characters (Juhn, Jonna, & Harri, 2014).

After briefing the researcher on the literature, references and studies in education, education technology and educational design in relation to the defects and concepts related to them (Heba Mohammed Hassan, 2019, 996; Zohr Mohammed Suleiman, 2018, 648; Mustafa Joudat, 2016; Hanus, 2015; Halvorsen, 2013)

**The following:** - A new educational trend and application curve, which is interested in motivating learners using game elements. -

Transfer the mechanisms of games from recreational areas to the field of education to improve the level of learners and achieve specific educational goals. - An educational strategy that motivates students to learn using game elements. - A series of design principles, processes and systems used to influence behaviors.

The importance of learning: (Kim, Lee, 2015; Qaid, 2015) believes that the importance of the strategy of playing is: giving children the full freedom to own their learning, motivating them to continue self-learning, giving learning opportunities using virtual characters, expanding the margin of freedom in error. Try again without any negative repercussions, multiply the opportunities to increase the pleasure and joy in the classroom, learning by different educational means. Linking education to real life and practical application, providing an appropriate and undefined set of tasks for pupils, inspiring students to discover their own motivations towards learning, promoting a spirit of participation and cooperation between pupils, achieves the most cognitive, emotional, and skilled aspects of the educational process, which trains the self to control and control.

Features of Al-Ta'aib: See (Amani Zakaria Al Madi, 2017, Siham Saud 2015, Zuckerman, Linder, 2010; Deterding, 2012; Hew, 2015; Amima Al-Ahmadi, 2016). That the advantages of the canning strategy are as follows: **A)** encourages participation and interaction: one of the most important advantages of playing is to motivate learners to participate in the activity or task that is designed, and can be used to increase the interaction of learners with the tasks to be accomplished by giving them the incentive to do With it., **B)** Uses prizes (points - badges - levels) as incentives: through the games provide the levels of learners to reach them whenever their assessments are positive elements of the games, through different levels the learner will continue to work hard until he reaches the highest level to the highest levels that indicate the extent of Learner's activity., **C)** Raises the spirit of competitiveness and overcoming challenges: the learning process consists of several skills that the learner can learn and master a certain skill by practicing a set of tasks, and the more the learner accomplishes a task the more skill he skills he exercises, in addition to the badges that the learner gets the more Beat a new challenge., **D)**

Fun and entertaining: Through the game, the learner not only tries to reach a specific goal or solve a problem, but also listens to what he is practicing and the challenges he faces in order to achieve the desired goals.

**The elements of the defects used in the current research:** the current research sought to take advantage of the techniques of playing in the competition, achievement, altruism, collective cooperation, challenge, challenge and many others, and to know the techniques of playing must identify the elements of the game, but there is no single formula for application or service. The educational product that depends on the games but there are common elements and is naturally inspired by the literature of real play known at the level of actual video games, no matter how different the games in their types, objectives, techniques of manufacture and forms, they share a set of fixed elements that make it more interesting and stimulating, see both: (Mustafa Al-Qayed, 2015; Fadi Khoury, 2015; De Byl, 2013, 15), that there are a range of key elements to consider when designing the play, including:

- **Points:** A way to save the result and determine the success of the learner, it is able to modify the behavior of the learner, and can appear on the relative situation, it determines the winner of the learner and for example, may be a win for the learner who achieves 1000 points.
- **Badges:** Represent the achievements of the learner, in the form of drawings indicating that the learner has reached a certain level, or has achieved a set of desired goals.
- **Rewards:** Rewards are awarded with points scored, and rewards are usually associated with earning badges or reaching a partial level of the task, for example, when the learner scores 1,000 points, he gets a bonus.
- **Levels:** The content is divided into topics and lessons and then prepared and divided at the levels, the levels are events reached by the learner by completing specific tasks, and they also provide a logical sequence of the experience of the learner and must pass them to achieve the required goals.
- **Leaders:** A scoreboard that shows the names of the learners applying to know their position for others, it shows who is the first and the grades, which leads the learner to work to develop his level to improve his position among others constantly to top the list and maintain the

lead.

- **Tasks:** A set of challenges from which the learner chooses which challenge he or she will complete, and each challenge is tailored to a set of goals to be achieved.
- **Feedback:** Feedback should be provided as soon as the learner has done the work to see if he or she is on the right track to achieve the goals or needs to adjust his plan.
- **Stories and characters:** an element that makes the game interesting and stimulating for the learner, it means a story that is gradually revealed, stories are an essential way to provide the context in which learners behave, they remember and can apply information better when you make them through a story, but the characters are a key component in The story.
- **Repetition attempts:** Error is one of the basic ways to learn how to master and achieve goals, it cannot be after the first mistake that ends the game, there must be attempts to repeat, as learning from mistakes is a powerful way to learn.

#### **Mechanisms of the strategy of playing,**

**Mechanics:** The mechanisms are the procedures, functions and rules provided by the designer to the user of the environment of the game and includes all types of interaction and context surrounding the learner during the game, (Robson, 2015) has divided the mechanisms of play into three types of mechanisms: Preparations, procedures and laws mechanisms, interaction mechanisms from sailing tools, progress in game levels, assistance and feedback.

- **Learning Material:** The research finds that the nature of the environment of the game imposes on the pattern of the organization of educational content to be in the form of levels in terms of the degree of difficulty governed by the level of abstraction and the transition from simple to complex and then the logical organization of content is reviewed in front of the organization of the mycological as desired. The learner and his freedom to move between the elements of the content, as well as the content organizations must be smart organization of content, which means that the content is presented and its elements organized according to the follow-up and evaluation of the cognitive status of the learner and the appropriate context for the presentation of the content, whether official or informal.

- **Modes:** Modes play modes according to the current research trends are divided into two basic situations, namely the competitive individual and the collective cooperative according to the desire of the learner in the stage of joining the environment of play, and allows the learner to change the status of the play provided the completion of the requirements of the current situation of play.
- **Game Management:** This element refers to the organizational aspects of interaction processes in terms of entry and exit of interaction interfaces, transition to sub-menus, storage of levels of progress at each stage of the game as well as requesting assistance and support.
- **Portfolio money:** Incentives appear in the points obtained by the student and result in the reward of obtaining the activity grades in the computer course, for example, as well as obtaining titles to be installed or withdrawn according to the performance of the learner.
- **Moral:** The moral basis is to establish the ethics of competition during play and not to deviate to any form of conflict with the other away from the environment of the games, as well as to help learners to control emotions in the positions of competition and lesson or experience that the learner must gain from the practice of Playing, the ethical basis of the proposed game environment is based on the fact that practices reflect morality and therefore behavior is guided by the values of communication with the other in terms of mutual respect and individual responsibility towards the group.
- **Metaphor:** The Interface of the Windows File Manager, or the most common control panel on the naked interfaces where the functions of the learning environment are represented by the interaction interface in the form of a set of drawings, actions and events in the environment of the game Enable simpler to know instantly the tasks related to those functions.

**The educational value of the strategy of playing.** Adopting some boring work to more manageable entertainment, transferring hard work procedures to more fun tasks, helping to be able to focus more easily, increasing participation, providing motivation and satisfaction in business, helping individuals to increase the use of media tools in order to achieve some Goals, helping learners to be more

active and participate all, help individuals to be more aware and able to easily use media tools to satisfy their needs (Aeker, Azamli, 2017).

**2. Motivation for Learning:** The Concept of Motivation: After reading the pedagogical literature on the concept of 'motivation', the researcher found a variety of definitions that addressed the concept of 'motivation', including (Mason Jamil Mahmoud, 2019, 917; Aoun Moin Shaheen, 2017, 146; Abu Latifa, 2016, 2017; Kyndt, Kyndt, Dochy, Struyven & Cascallar, 2011 ) : The power of movement for a person's behavior in order to achieve a goal or satisfy a particular need, - an internal motor that activates behavior and works to draw attention to the educational situation, - the degree to which the pupil receives the paragraphs of the scale.

**The importance of developing motivation towards learning:** motivation represents the emotional aspect of thinking, it is no less important than the cognitive aspect of thinking, it prepares the learner to carry out serious creative work and achievements and solve problems with a variety of lightning, achieve the principle of learning for pleasure, where the learners are happy during the implementation of the tasks assigned They have, increases the skill of learners in controlling their abilities, which makes them choose the activities they can adapt and address successfully, participate effectively in educational positions and integrate into learning activities, show the positive self-concept of the learner and highlight the importance of his role in the learning process, raise The level of achievement of learners and the trend towards learning and the desire to increase knowledge, increasing the desire of the learner to persevere and challenge and face difficulties and complex knowledge, prompts the learner to think in a certain way, and classified de Bono motivation as one of the sources of serious creativity if there is a state of motivation The individual has the motivation to consider multiple alternatives and that the state of attention, focus and look at things that no one has noticed is a hidden source of creativity.

### **Research procedures and steps:**

**First - design of the experimental treatment material:** the experimental treatment material was represented in an educational environment based on the strategy of defecting in the students

of the preparatory stage, and in order to design an educational environment that was viewed on the models of educational design, the model (ADDIE) has been selected. The design and production process is comprehensive, with five stages, each of which includes clear, detailed steps.

1/1 Phase I - Analysis: This phase is the starting point in the model steps, the analysis phase includes several tasks, starting with the analysis of content, analysis of the characteristics of learners, and analysis of the technique to be used.

1/2 Phase II - Design: An important stage of the educational design process, where the design of the learning defect was designed where the researcher formulated the goal to flaw learning, special objectives and procedural objectives.

3/1 Phase III - Development: At this stage the materials and educational media that have already been identified and selected in the design phase were obtained by obtaining them ready or by producing new elements and materials, and the researcher has produced these elements.

1/4 Phase IV - Implementation 'Implementation': The researcher produced the learning defect through an educational environment in its initial form and reviewed with the aim of ascertaining the sequence of screens, links and elements, and the absence of errors in production, in addition to making sure the availability of all sources to be used in The application process.

1/5 Phase 5 - Evaluation: The final stage of verifying the performance result.

**Preparation of research tools.**

**1. (preparation of the attainment test):**

2/1 The goal of the test is to measure the abilities of students in the levels of memory, understanding and analysis of the educational content scheduled for the first grade students.

2/2 Preparation of the test specification table: The researcher categorized the test questions to measure the three cognitive aspects of the concept (remember- understand- analysis), table (2). Shows the specifications for the achievement test:

**Table 2: The relative weights of the collection test**

General topics.	The relative importance of objectives.	targets and their proportion in the world.	Distribution of collection test items to goal levels.			Total questions.	Relative weight.
			Remember	Understand.	analysis		
The basics of the computer system.	25.53%	12	5	3	4	15	31.91%
Computer operating systems.	27.65%	13	6	4	3	12	25.53%
Handle folder files.	23.40%	11	4	5	2	10	21.27%
Computer networks.	25.53%	12	6	3	3	10	21.27%
<b>Percentage.</b>			21	15	12	47	
	100%	47	44.68%	31.91%	25.53%		100%

**2, Motivation measure for learning:**

2/1 The goal of the scale: the goal of the scale is to identify the level of motivation for learning among middle school students towards studying

with the strategy of playing in an educational environment.

2/2 The final picture of the scale: After making the adjustments recommended by the arbitrators



and calculating the honesty and stability of the scale, the researcher reached the final picture of the measure of motivation for learning, which consisted of (53) words, divided into two sub dimensions: (29) words concerning internal motives, (24) words concerning motives Foreign affairs in its final form.

**Conducting the exploratory study:** applying the test to a survey sample of the first grade preparatory grade, the sample consisted of (30) students and the researcher benefited from this in: determining the test time, calculating the coefficients of difficulty and discrimination, calculating the internal consistency of the test, and ensuring the stability of Testing, determining the clarity of the test terms and instructions.

**Conducting the basic experiment of research:** - holding a training session with the teachers of the material at the school in order to clarify the goal of the educational environment based on the strategy of play, how to deal with students,

and how to apply the achievement test and the measure of motivation to learn, - maintenance work for the laboratory devices, as well as downloaded Drivers needed to run the learning environment, - view the time plan for the content of the course for students.

## Results and Discuss:

1. For the first assumption of the research assumption, which states: 'There is a statistically d difference at the level ( $\leq 0.05$ ) between the average grades of the experimental group (who used a learning environment based on the strategy of the game) and the pupils of the control group (who studied the same subjects in the same way) In order to validate this hypothesis, the researcher calculated the value of (t) to compare the average grades of the students of the experimental group and the control group in the remote application of the achievement test, as evidenced by the following table:

**Table3. The value (t) and its statistical significance between the average degrees of the experimental group and the control in the dimensional application associated with the defined aspect of collection.**

group	average	DF	Degree of freedom	Tabling "T" value	Calculated "T" value	Level of significance
Experimental Group	22.15	1.97	78	1.99	31.62	0.01
Control Group	10.00	1.52				

Table 3 shows that the calculated (t) value (31.62) and the (t) tablitvalue (1.99) at the level (0.01) at the degree of freedom (87), from the above, show that the calculated (t) value is greater than the (t) tablit value, indicating that there are statistically significant differences in favour of the experimental group, thus accepting the imposition.

This finding is consistent with the results of the [Cheong, Filippou & Cheong, 2014 study](#); [Ibanez, Di.Serio & Delgado,2014](#)); [\(Tvarodo & Brzekza,2014\)](#); [\(Urrutia, 2014\)](#); [\(Rouse. 2013\)](#). As important as the strategy of defects in raising the level of achievement in the mental activity carried out by students and in which shows the effect of academic excellence, the achievement works to achieve progress and eliminate the

deposits of underdevelopment from it, works to know the extent of the benefit sought by the learner and know his level, is important in The life of the individual because of the decisive educational decisions that result from its results.

For the second assumption of the research assumption, which states: There is a statistical lye difference ( $\leq 0.05$ ) between the average grades of the experimental group students (who used a learning environment based on the strategy of the game) and the students of the control group (who studied the same subjects in the same way) Traditional) in the development of achievement in favor of the dimensional application' and to verify the validity of this hypothesis the researcher calculated the value (t) to compare the average grades of students of the

experimental group and the control group in the application of the dimension of the achievement test, and it is clear from the above that the value of (t) calculated is greater than the value (t) Scheduling indicates that there are statistically significant differences in favor of the dimensional application, so that the imposition is accepted.

This finding is consistent with the results of the study of: [Amima Zahir \(2005\)](#); [Aida Al-Atta \(2014\)](#); [Andy AbdulHadi \(2004\)](#), who recommended the impact of the games in enhancing motivation among learners, and its importance in the educational process because of its positive effects in improving students' active participation in learning activities with More positive effects on collection.

**table(4). The value (t) and its statistical significance between the average degrees of the experimental group and the control in the dimensional application associated with the motivation al-Learning scale.**

group	Sample	average	DF	value 'T'
Experimental Group	30	153.2	3.5	8.1
Control Group	30	115	3.4	8.1

It is clear from table (4) that the average grades of pupils experimental group 153.2 and the value of deviation 3.5 and the average score of the pupils of the control group 115 and the standard deviation 3.4 and the value of 'T' was 8.2 i.e. statistically at 0.01, and the results shown in the table indicate acceptance of the second hypothesis, and the interpretation of the imposition That students who were educated using traditional teaching methods had low levels, and the motivation of pupils during their studies using the strategy of playing was high.

This finding is consistent with the results of the study of ([Alex, Zaharescu, Apostol, 2013](#), ([Fabricatore, Lopez, 2010](#)); ([Salem Al Sayed, 2011](#)); ([Sahar Mohammed Abdulaziz, Samah Mohammed Ibrahim, 2016](#)); ([Hasser Shobhi, 2016](#)) on the positive impact of student motivation during their studies using activities The confusion within the educational environment.

For the fourth assumption of the research assumption, which states: 'There is a statistically d difference at the level of ( $\leq 0.05$ ) between the average grades of the experimental group

As for the third assumption of the research assumption, which states: 'There is a statistically d difference at the level of ( $\leq 0.05$ ) between the average grades of the experimental group students (who used a learning environment based on the strategy of the game) and the students of the control group (who studied the same subjects in the same way) Traditional) in the development of motivation to learn for the benefit of the experimental group' and to verify the validity of this hypothesis the researcher calculated the value of (t) to compare the average grades of students of the experimental group and the control group in the dimensional application of the visual thinking test, as evidenced by the following table:

students (who used a learning environment based on the strategy of the game) and the students of the control group (who studied the same subjects in the same way) Traditional) in the development of motivation in favor of the dimensional application' and it is clear from the above that the calculated value (t) is high, which indicates the existence of statistically significant differences in favor of the dimensional application, and thus accepts the imposition.

This finding is consistent with the results of the [ibanze, Di-Serio-kloos, 2014](#); ([Mohammed Asiri, 2016](#)); ([Abdul Wahid Al Kubaisi, Mohammed Fakhri Abdulaziz, 2016](#)); ([Zainab Aziz, Ban Mohamed Mahmoud, 2015](#)); ([Sarah Ibrahim Hashem, 2013](#)) during the teaching of the curriculum.

**Recommendations:**

In the light of the results of the current research and its interpretation, some recommendations can be formulated as follows:

1. Use the game strategy which has been used in

the current research process in the process of learning subjects other than computer material.

2. Research and studies should be conducted using the canning strategy and integrated with educational courses.

3. The need to hold workshops and train teachers on how to design lessons using the activities of the games and integrate them with educational content.

4. The need to develop a systematic plan organized by the Ministry of Education to update all educational courses and be addressed in educational activities for the canning strategy meet the needs of learners and take into account individual differences.

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