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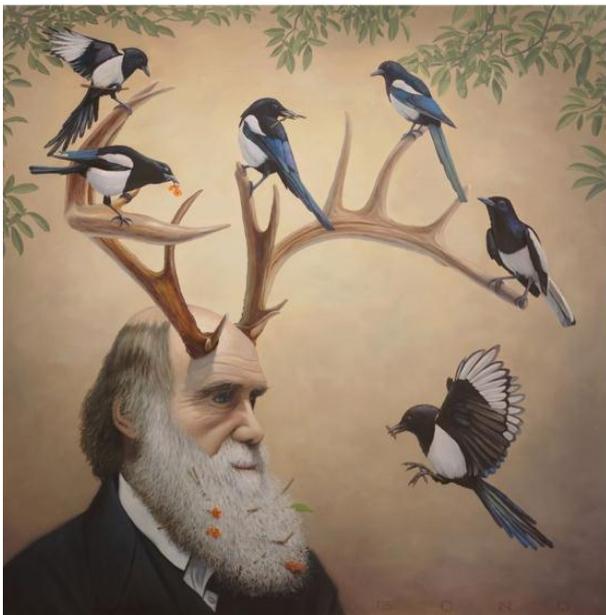
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# **The effect of electronic chapters in the three pictures (interactive - cooperative - integrative) in the achievement of middle school students in the Arabic grammar**

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## **Abstract**

The research aims at the effect of the electronic chapters in the three images interactively cooperative integrative in the achievement of the students of the first medium with the rule of Arabic grammar. The sample of the research consisted of 78 students. The researcher put the null hypothesis. There are no statistically significant differences at the level of 05.0 between the post- Level (remember understanding application) Among the three groups (interactive e-chapter), e-mail, e-learning, e-learning, e-learning, e-learning, e-learning, and e-learning. The researcher made some suggestions - Promoting awareness of the importance of e-learning through training programs. The establishment of specialized training courses in the field of applications of e-learning and educational design through universities and specialized institutes orientation towards consideration of the curriculum

**Keywords: electronic classes, achievement, students, grammar**

## **El Efecto De Los Capítulos Electrónicos En Las Tres Imágenes (Interactivo - Cooperativo - Integrador) En El Logro De Los Estudiantes De Secundaria En La Gramática Árabe**

### Resumen

La investigación apunta al efecto de los capítulos electrónicos en las tres imágenes interactivamente cooperativas integradoras en el logro de los estudiantes del primer medio con la regla de la gramática árabe. La muestra de la investigación consistió en 78 estudiantes. El investigador planteó la hipótesis nula. No existen diferencias estadísticamente significativas a nivel de 05.0 entre el post-nivel (recuerde la aplicación de comprensión) Entre los tres grupos (capítulo electrónico interactivo), correo electrónico, aprendizaje electrónico, aprendizaje electrónico, aprendizaje electrónico, e- aprendizaje, e-learning y e-learning. El investigador hizo algunas sugerencias: promover la conciencia de la importancia del aprendizaje electrónico a través de programas de capacitación. El establecimiento de cursos de capacitación especializados en el campo de las aplicaciones de e-learning y diseño educativo a través de universidades e institutos especializados, orientación hacia la consideración del plan de estudios

Palabras clave: clases electrónicas, logros, estudiantes, gramática.

### Research problem:

The phenomenon of weakness in the grammar of the Arabic language is something we cannot deny or neglect, and we can observe with the slightest listening, and with an easier look at the written sentences and expressions, and perhaps the tragic thing is that you see this phenomenon spread, even among the teachers of the Arabic language, so how is it among the learners. (Beja , 1999, pp. 249-251). And that this weakness and abstention from the Arabic grammar course by students cannot taste their ideas in any case, and their minds storm it and do not accept it or mix it, but rather memorize what they memorize until they cut through it a stage of the study, and eliminate it from its needs. (( Muhammad, 1985, p. 166) Most of the educators pointed to the weakness of the teaching methods used in teaching this subject, because the weakness of the avoidance in the grammar of the Arabic language that we are witnessing today is not due to the nature of this science, because it is complete of the pillars, aspects and

borders (Al-Labadi, 1999, p. 92) There is no doubt that there are several reasons for this weakness, as the method may be a reason for this weakness A core rather than the rules themselves, as the difficulty is old and relative (Al-Azzawi, 1988, p. 126). Traditional methods spend most of the lesson time listening to the teacher and are considered the center of activity, work and thinking, and the student is considered an empty container in which the information that the gathering of the teacher pours into, and this is not consistent with the philosophy Modern education, as the learner is the center of effectiveness and information is a way to expand the learner's perceptions and form directions to solve his problems (Al Yassin, D., p. 87). Thus, traditional methods are not feasible and impractical and do not go with the requirements of the times or the needs of learners, they do not create the motivation For the educated, grammar rules are good Dry way when students do not evoke longing and attention. (Ruslan, 2008, p. 266). Therefore, it became necessary to find educational strategies in the field of teaching Arabic grammar. Due to the lack of research and specialized studies in the field of teaching Arabic grammar through the electronic classes in its three forms (interactive - cooperative - integrative), the researcher sought to know whether there is a positive or negative impact of the three electronic classes (interactive - cooperative - integrative) in the achievement of middle school students In the Arabic grammar course.

Research importance:

Language is one of the ways in which individuals and peoples are connected, and through which human society is organized, and Lewis states in his book "Language in Society" that language is deeply applied to people's thoughts, feelings, and work, as members of society and that language unites thought, feeling, and action among its speakers. (Lewis, 2003, p. 21) The importance of the language leads us to talk about the Arabic language in particular: it is the language of the Holy Qur'an, the language of the Arab heritage in general, and the language of official use in the Arab countries, and by which they write down their literary and intellectual product (Suleiman et al., 2000, p. 16) As the Arabic language has many characteristics in its letters, vocabulary, Arabic, and accurate expression To summarize it, and these features attracted the attention of orient lists and historians such as the American oriental's (William Worl) and the Italian oriental's (Guidi) , and the German scientist (Freinbakh). New, and by the types of formulas, names, verbs, and adjectives, and in those templates that accuse you of all expressions, and with their inherent willingness to quote and localize (Al-Mady, 1991, p. 102).

One of its characteristics is that it is the most abundant of all languages when measuring the Arabic tongue by the standards of linguistics. Arabic uses the human pronunciation system completely and completely, and it does not neglect one of its functions as it happens in most alphabets, so there is no confusion in one of its letters between two directors or one of its exits between two letters ( Al-Dulaimi and Kamel, 2000, p. 28). In fact, the importance of grammar comes from the importance of the language itself. Reading can not be a sound reading free from mistakes and we do not write a correct writing except with the knowledge of the basic rules of the language, and that the mistake in the expression affects the transfer of the meaning to the recipient and there is no doubt that each language has rules based on it and that The Arabic language has multiple and varied rules. However, despite the importance of each rule in it, the grammatical and morphological rules remain the main pillar and due introduction to the rest of the other rules. We cannot go into those rules unless we are able from these two sciences, and it appears that their use of the rules of the Arabic language is a metaphor for the reason only These two fully Allenbaan who Arphian the rest of the science Arabic language (al-Dulaimi, 2004, p. 25). Therefore, teaching Arabic grammar requires a measure of abstract thinking and mental skills that help in analysis and deduction, because it is linked to the psychology of growth among students (Al-Sulaiti, 2002, p. 57). The method that promotes teamwork that depends on interaction and cooperation and leads to a more successful exploration of the method that relies on memorization and acquisition, and this is whatIt is in line with the fundamentals of modern targeted education in which the learner has an active role in the education process. Moreover, exploration is more permanent and authentic than acquisition. The active method is not a process of understanding, but providing an atmosphere for the learner to understand automatically, there is a difference between understanding and automatic understanding. In the process of understanding, the teacher is the subject and the influencer, and the learner is the passive and responsive, while in the process of automatic understanding the learner is the active subject and the teacher is a precursor and a guide only (Zayer, p. 235). With the advent of the technological revolution in the information technology that made the world a small village, the need to exchange experiences with others increased, so the concept of e-learning emerged, which is one of the methods of education in communicating information to the learner, relying on modern computer technologies and the global network and their multimedia. As the need for such strategies has become urgent to guide the path

of education in the modern era due to the explosion of knowledge, and the speed of change that the contemporary world is witnessing and that affects education, which imposes burdens and requirements, both on the level of individuals, to develop themselves in the attainment and acquisition of skills, and at the level of states Human rights in learning and knowledge which contribute to the efforts of sustainable national development (Cook, 2005, p. 104).

Based on the foregoing, the use of electronic classes at this stage and in the Arabic grammar course may be appropriate and beneficial in increasing students' achievement and skills acquisition, so the researcher decided to conduct this research to experiment with this method in teaching this subject, which is a method of cooperative, interactive and complementary learning that goes out of style The traditional in receiving and memorizing information for students by the teacher, which makes the student work without interest, to a method that works to develop the ability to collaborative, interactive and complementary learning in the manner of electronic classes, freely and independently of that. The importance of research lies in:

- 1- The importance of grammatical rules because it is a method that helps in evaluating the students' tongues, avoiding them from mistake in speech and writing, accustoming them to using the vocabulary correctly and training them in thinking and continuous and organized work among them.
- 2- The importance of the Arabic language as it is the language of the Holy Qur'an, our official and national language, and it is the responsibility of its children to maintain and preserve it.
- 3- This research is useful for designers and curriculum developers in planning to design more effective lessons to keep pace with the current era in their application using modern technologies, including the most effective electronic classes.
- 4- It helps the officials of the Ministry of Education and Private Schools to choose the most effective type of online class to implement e-learning.
- 5- No previous study was conducted according to the researcher's knowledge of teaching in electronic classes (cooperative - interactive - integrative) in any subject of the Arabic language.

Research hypothesis:

There are no statistically significant differences at the level of 0.05 between the intermediate averages of the levels of cognitive achievement in the rules of Arabic language for first grade middle school students at the level of remembrance between the three groups (interactive electronic

class, cooperative electronic class, integrated electronic class) after adjusting the pre-test for The three.

There are no statistically significant differences at the level of 0.05 between the mean averages of the levels of cognitive achievement in the grammar of the Arabic language at the level of understanding between the three groups (interactive electronic chapter, cooperative electronic chapter, integrated electronic separation) after adjusting the pre-test for the three groups.

There are no statistically significant differences at the level of 0.05 between the mean averages of the levels of cognitive achievement at the level of application between the three groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation) after adjusting the pre-test for the three groups.

There are no statistically significant differences at the level of  $\alpha$  0.05 between the intermediate averages of the degrees of total cognitive achievement in the Arabic grammar rules for the first intermediate class students of the three groups (interactive electronic class, cooperative electronic class, the integral electronic separation of the three dimension of the dimension of the three dimension).

Research goal:

The current research aims knowledge: To the effect of the electronic classes in the three images (interactive - cooperative - complementary) in the achievement of middle school students in the Arabic grammar.

search limits:

The current research is determined by:

1- Students of the first intermediate class for three averages from the second Karkh Education Directorate in the district of Mahmudiya, which are:

Intermediate knowledge for boys

Al-Mi'raj School for Boys

Intermediate House of knowledge for boys

2- The first semester of the academic year 2018-2019

3- Arabic grammar topics, which are determined in the textbook

Pronouns

- verb
- the subject
- object
- was and her sisters

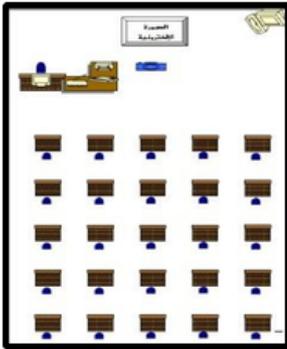
Defining terms: The researcher defined the following terms:

1- Electronic classes defined:

Ghribi (2008) / as the regular classrooms in which learning occurs in which students meet with the teacher face to face and spend most of their study period in it, and these classes are equipped with the necessary technologies according to the type of electronic class (Ghribi, p. 12, 2008).

Procedural definition: classrooms enhanced with computers and this electronic environment is used to activate the learning process, as each electronic class contains: a computer for the teacher, a computer for each student, and a variety of educational materials.

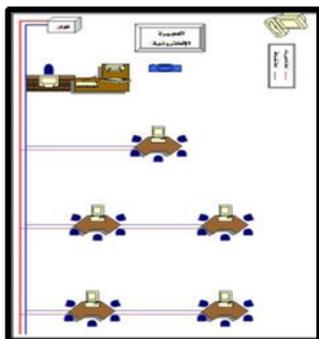
Interactive electronic classroom: It consists of (1) a computer + a data show + an electronic whiteboard and the students learn by way of explaining the teacher on the electronic whiteboard by importing the educational software prepared and e-book and commenting on that and the interaction and participation of students in the solution. Figure (1) shows the form of the electronic chapter



Cooperative electronic classroom: It consists of (6) computers + data show + electronic whiteboard.

At a rate of (5) students on a computer, and a computer for the teacher. Students learn through cooperative learning through the computers in front of them on which the electronic book and educational software prepared. The teacher observes and controls the students' devices through his device using the net program after giving Each group is one of the axes of the lesson and has been answered by them according to their groups and by the end of the time allotted for that, the teacher comments on the electronic board using the educational software and the e-book to explain what happened to the students and To confirm the information with the students' participa-

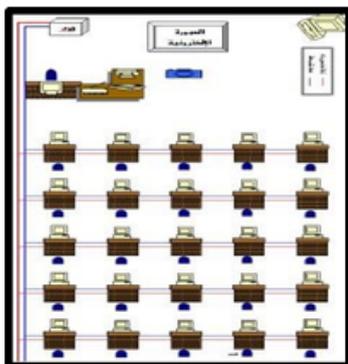
tion in what I deduce, Figure (2) shows the form of the cooperative online class:



Integrated electronic classroom: It consists of (26) computers + Data Show device + electronic whiteboard + documentary camera. That is, at the rate of one device for each student and a computer for the teacher.

Students learn each student individually through the computer in front of him

Which the prepared educational software and e-book exists on, and the teacher notes and controls the students' devices through his device using the internet program and directs each student in the event that the student stops his understanding of the parts of the lesson. For students and to establish information with the participation of students and Figure (3), the form of an integrated electronic class is shown:



Theoretical framework and previous studies:

The concept of e-learning: It is a method of teaching and learning, and since the emergence of this concept until the present day, there is no single meaning or definition agreed upon for the term e-learning in the literature of this type of education, as there are dozens of different and different definitions of it. As a result of the constant change in the world in all its aspects, the view changes to the requirements of development. Each age has its ingredients and skills. What is characteristic of the present day is called the epoch of knowledge economy, where the knowledge industry and its applications have become the basis and path for all aspects of development, whether economic or societal.

Among the most important goals that must be achieved from e-learning:

Providing a rich educational environment that serves the educational process in all its educational aspects.

- Re-writing the roles in which the teaching and learning process is carried out in line with developments in educational thought.

Encouraging communication between the educational process system through communication between the home and the school, the school and the surrounding environment (MacDonald, 1996).

Preparing a generation of teachers and students who are able to deal with technology, age skills and the immense developments the world is witnessing.

)Salem, 2004, p. 295)

Benefits of e-learning:

A - Benefits for the learner:

- 1- He learns what he desires to learn at the time he chooses and at the speed that suits him.
- 2- He can pass some of the stages he sees as easy or difficult.
- 3 - Make a vast amount of information within reach.

(35, 2004, lunts).

B- Benefits for the teacher:

- 1- Not to have to repeat the explanation multiple times.
- 2- It gives time to prepare more programs.
- 3- Focusing on the skills that the learner needs.
- 4- He has a greater chance to develop different abilities.

) Attwell, 2003-15) (The Raven, 2003, pp. 28-29)

Types of e-learning:

- Direct (simultaneous) e-learning: that type - which requires the presence of the teacher and the student at the same time and in the same place within the school (e-classes) and learn through their research in the sources available to them, whether the Internet or multimedia, provide visual presentations or use the e-blackboard under And guidance from the teacher.

- Indirect (asynchronous) e-learning: It is that the learner gets intensive lessons according to a planned study program in which he selects the times and places that suit his circumstances by employing some methods of e-learning such as e-mail and videos, and this education is based on the time spent To the skills the lesson aims at. One of the positive aspects of this type is that the learner learns according to the appropriate time for him and according to the effort he wants to give. The student can also re-study the course and refer to it electronically whenever needed (ROSE, 2006).

The importance of using technology in teaching and learning the grammar of the Arabic language:

The computer overcomes the complex problems that both the teacher and the learner may encounter when teaching and studying the subject, and given the role that he plays in this field, it is necessary to accelerate the optimal use of this type of educational technology in the grammar of the Arabic language due to the benefits it has: Ability to analyze problems and construct steps.

The ability to guide an individual's thinking by providing him with information.

- The ability to perceive concepts.

- The ability to perceive, visualize, and correct.

This leads to an increase in students' achievement in the subject (Salama, 1995, p. 243).

previous studies:

1- Al-Harbi Study (2007): The study aimed to know the effect

of using the educational software and the engineering board to teach the quadrilaterals unit on the academic achievement in mathematics for the second intermediate grade students. The study hypotheses were directed at the level (0.05), and the study sample consisted of (45) students from the second grade middle school students in Makkah Al-Mukarramah, they were divided into three equal groups by (15) students for each group so that the first experimental group was studied using educational software, The second experimental group studied using the engineering board, and the control group studied in the traditional way, and the researcher used a mono-variance analysis to test the validity of the hypotheses. The results of the study indicated the following: - There is a statistical difference between the average of the total The first experimental and control group for the benefit of the first experimental group studied using educational software.

The researcher recommended the following: Establishing a database containing educational software that addresses all study units in different courses and publishing them on the website of the Ministry of Education for the benefit of teachers from all fields.

1- - Al-Gharibi Study (2009): The study aimed to know the effect of teaching by using the electronic classes in the three pictures (interactive electronic class, cooperative electronic class, integrated electronic class) on the fifth grade elementary students in mathematics. The study tool consisted of an achievement test to measure cognitive levels: remembering, understanding, and applying. The accuracy and reliability of the study instrument were confirmed. The use of the SPSS statistical program to conduct statistical treatments appropriate to the formulation of data, study objectives and limitations. The study reached the following results: that there are no statistically significant differences at the level of recall.

Also, there is no statistically significant difference between cooperative electronic separation and interactive electronic separation in cognitive achievement at the level of understanding.

Research methodology and procedures:

Experimental design:

The experimental design aims to identify the research groups and determine the appropriate statistical means (Mansi, 234: 2000), so that it contributes to overcoming the obstacles and difficulties that the researcher faces when conducting the statistical analysis; therefore, the researcher chose the experimental design with partial control of three groups.

Post application	Type of study	Tribal application	Study groups
Post test	Interactive electronic classroom	Achievement test before	1
	Collaborative online class		2
	Collaborative online class		3

**Research Society:** It consists of all middle-class students in Al-Mahmudiya district for the first semester of the year 2018-2019, whose number is (621) students.

**Research Sample:** An intentional sample of first-grade middle school students was chosen in three schools to represent the three research groups. The choice was made intentionally for the availability of physical capabilities in these schools, taking into consideration the geographical convergence and the same social environment. Table (1) shows the description of the research sample

**Table (1) shows the three research sample**

The ratio is for the sample as a whole	The number of students who entered statistical treatment	Number of students	Number of students before the experiment	Lesson type
33%	24	Excluded from the experiment	26	Interactive online lesson
36%	26	2	28	Collaborative online lesson
31%	22	2	24	Integrative online lesson
100%	72	2	78	total summation

Sample characteristics: The three research groups were rewarded in the life time. The ANOVA test was used to process student data for the time life, and Table (2) illustrates this.

Table (2) shows the ages of the students to whom a test is applied

ANOVA to see the differences between the mean ages of students in the three research groups

Statistical significance	Value of f	Average squares	Degree of freedom	Sum of squares	Source of contrast
0.278	1,303	74,119	2	148,238	Between groups
		56,892	69	3925,540	Within groups
			71	403,778	total summation

Equivalence of groups: The researcher rewarded between the research groups using the ANOVA analysis and Table (3) illustrates this.

Table (3) the significance of the differences between the averages of the three research groups in relation to academic achievement in the pre-test at all levels.

Statistical significance	Value	Average A squares	Degree of freedom	sum	Source	level
0.322	1,152	0.62	2	Squares	variance	Target Do not remember
		0.523	69	1,204	Between groups	
			71	36,074	Within groups	
0.070	2,764	4,893	2	37,278	Total	I understand
		1,770	69	9,786	Between groups	
			71	122,159	Within groups	
0.543	0.616	0.736	2	131,944	Total	Application
		1,194	69	1,472	Between groups	
			71	82,403	Within groups	
0.221	1,541	8,288	2	83,875	Total	Overall achievement
		5,378	69	16,576	Between groups	
			71	371,077	Within groups	

It is clear that there are no differences between the three groups (the group that studies in the interactive electronic class, and the group that studies in the cooperative electronic class, and the group that studies in the electronic integrated class) in academic achievement at all levels and achievement as a whole, which indicates the equivalence of the three study groups in the achievement At all levels and achievement as a whole.

The pilot study: The test was applied to a survey sample of (17) students.

Coefficient of difficulty and ease:

The researcher calculated the coefficient of ease and difficulty for each of the test items. Table No. (4) shows the coefficient of difficulty and ease for each of the test items.

**Table (4) shows the coefficient of ease and difficulty for each of the test items**

M coefficient of difficulty	Coefficient of ease	The number of correct answers
0.26	0.74	14
0.26	0.74	14
0.42	0.58	11
0.63	0.37	7
0.68	0.32	6
0.42	0.58	11
0.74	0.26	5
0.47	0.53	10
0.47	0.53	10
0.63	0.37	7
0.68	0.32	6
0.53	0.47	9

0.79	0.21	4
0.74	0.26	5
0.74	0.26	5
0.74	0.26	5
0.63	0.37	7
0.79	0.21	4

It is clear from the previous table that the coefficients of difficulty and ease of the achievement test items with statistically acceptable ease ranged from (21.0 to 74.0).

Stability coefficient: The stability factor was calculated using the Alpha Cronbach equation, and the stability coefficient reached (0.087%), which is a high and assured stability factor for the use of the test in measuring cognitive achievement. Verification of the achievement test has been confirmed as in Paragraph No. 4 and stability as follows and consequently, accordingly. The test is now ready to measure cognitive achievement.

Application of the experiment: After verifying the validity and reliability of the research tool, the researcher undertook the following procedures:

- 1- The tribal achievement test was applied to the three groups before teaching on Wednesday 3/1/2018.
- 2- The experiment was started on Sunday 7/10/2018 Teaching Arabic grammar vocabulary for the three groups used, the electronic classes with the three pictures (interactive - cooperative - and complementary).
- 3 - The experiment was completed on Tuesday 12/18/2018.
- 4 - The post-test of the three groups using the electronic classes has been applied in the three pictures (interactive - cooperative - and integrative) on Wednesday 12/19/2018.
- 5- The pre- and post-test papers were corrected by the researcher

and the appropriate grades were established for each paragraph. The following are the results of the research hypothesis test:

The first hypothesis: The first hypothesis states that: There are no statistically significant differences at the level of  $\alpha$  0.05 between the post-mean averages of the levels of cognitive achievement in Arabic grammar for middle-grade students at the level of recollection between the three study groups (interactive electronic chapter, chapter The Cooperative, the Integrated Electronic Chapter) after setting the pre-test for the three study groups.

To test the validity of the previous hypothesis, a monotonic contrast analysis was used (ANOVA) and calculating the value of (P), and the results of the treatment were as follows, Table (5) shows that:

**Table (5) Significance of the differences between the averages of the three study groups with regard to academic achievement in the post-test at the level of recall**

Statistical significance	Value of f	Average Squares	Degree of freedom	sum	Source of contrast
0.1188	1,712	1,084	2	Squares	Between groups
		0.633	69	2,168	Within groups
			71	43,707	total summation

It is clear from the previous table that the value of  $P = 712.1$  is not statistically significant at the level of  $\alpha \geq 0.05$  which leads to acceptance of the first zero hypothesis, which states that (there are no statistically significant differences at the level of  $\alpha \geq 0.05$  between the post-mean The cognitive achievement levels of the grammar subject at the level of recall between the three study groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation) after setting the pre-test for the three study groups. This indicates that there is no difference in academic achievement at the level of remembering between groups Three (the group that is studying the interactive electronic separation, and the group that is studying the cooperative electronic separation, and the

group that is studying integrative electronic separation).

The second hypothesis: The second hypothesis states that: There are no statistically significant differences at the level of  $\alpha$  0.05 between the post-mean averages of the levels of cognitive achievement in the grammar of Arabic language for the first grade average at the level of understanding between the three study groups (interactive electronic chapter, chapter Integrated electronic chapter) after adjusting the pre-test for the three study groups.

To test the validity of the previous hypothesis, a single-contrast analysis was used (ANOVA) and calculating the value of (P), and the results of the treatment were as follows, Table (6) shows that:

**Table (6) the significance of the differences between the averages of the three study groups with regard to academic achievement in the post test at the level of understanding**

Statistical significance	Value of f	Average Squares	Degree of freedom	sum A squares	Source of contrast
0.006	5,478	7,490	2	14,980	Between groups
		1,367	69	94,339	Within groups
			71	109,319	total summation

It is clear from the previous table that the value of  $P = 478.5$  is a statistically significant value at the level of  $\alpha \leq 0.05$  which leads to the rejection of the second zero hypothesis, which states that (there are no statistically significant differences at the level of  $\alpha \leq 05.0$  between the two dimensional averages For the degrees of cognitive achievement in grammar material at the level of understanding between the three study groups (interactive electronic separation,

cooperative electronic separation, integrated electronic separation) after setting the pre-test for the three study groups). And accept the alternative hypothesis, which states that:

There are statistically significant differences at the level of  $\alpha$  0.05 between the post-mean averages of the levels of cognitive achievement in the grammar material at the level of understanding between the three study groups (interactive electronic separation, cooperative electronic separation, the three electronic control groups after the three integrated control groups).

The third hypothesis: The third hypothesis states that: There are no statistically significant differences at the level of  $\alpha$  0.05 between the post-mean averages of the levels of cognitive achievement in the grammar of the Arabic language at the level of application between the three study groups (interactive electronic separation, electronic separation After adjusting the pre-test for the three study groups).

To test the validity of the previous hypothesis, a single-contrast analysis was used (ANOVA) and calculating the value of (P), and the results of the treatment were as follows, Table (7) shows that:

**Table (7) the significance of the differences between the averages of the three study groups in relation to academic achievement in the post test at the application level**

Statistical significance	Value of F	Average Squares	Degree of freedom	sum Squares	Source of contrast
0.070	2.765	10,790	2	21,580	Between groups
		3,903	69	269,295	Within groups
			71	290,875	Total

It is clear from the previous table that the value of  $P = 765.2$  is not statistically significant at the level of  $\alpha \leq 0.05$  which leads to the ac-

ceptance of the third zero hypothesis, which states that (there are no statistically significant differences at the level of  $\alpha = 0.05$  between dimensional averages For the degrees of knowledge achievement of the subject matter at the level of application between the three study groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation) after setting the pre-test for the three study groups). This indicates that there is no difference in academic achievement at the level of application between the three groups (the group that studies in the interactive electronic class, the group that studies in the cooperative electronic class, and the group that studies the integrated electronic clas).

Fourth hypothesis: The fourth hypothesis states that:

There are no statistically significant differences at the level of  $\alpha = 0.05$  between the post-mean averages of the levels of cognitive achievement in the grammar of the Arabic language at the overall levels between the three research groups (interactive electronic separation, cooperative electronic separation, three semester integrated, post-integral control).

To test the validity of the previous hypothesis, a single-contrast analysis was used

(ANOVA) and calculating the value of (P), and the results of the treatment were as follows, Table (8) shows that:

**Table (8) the significance of the differences between the averages of the three research groups in relation to academic achievement in the post-test at the overall levels**

Statistical significance	Value of p	Average Squares	Degree of freedom	sum Squares	Source of contrast
0.001	4,394	40,691	2	81,382	Between groups
		9,260	69	638,937	Within groups
			71	720,319	Total

It is clear from the previous table that the value of  $P = 394.4$  is a statistically significant value at the level of  $\alpha = 0.05$  which leads to the refusal of the fourth zero hypothesis, which states that (there are no statistically significant differences at the level of  $\alpha \geq 05.0$  between the averages Dimensions of the cognitive achievement scores. The rule material at the total levels between the three study groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation) after setting the pre-test for the three groups. And accept the alternative hypothesis, which states that:

There are statistically significant differences at the level of  $\alpha = 0.05.0$  between the intermediate averages of the levels of cognitive achievement in the grammar material at the total levels between the three groups (interactive electronic separation, cooperative electronic separation, integrative electronic separation) after the three test settings.

This indicates that there is a difference in academic achievement at the overall levels between the three groups (the group that studies in the interactive electronic class, the group that studies in the cooperative electronic class, and the group that studies the integrated electronic class).

Interpretation of the results: the results showed that:

1- There are no statistically significant differences at the level of recall between the three groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation).

2- There are statistically significant differences at the level of understanding between the interactive electronic separation and the integrative electronic separation in favor of the integrative electronic separation. And that there is no statistically significant difference between the integrated electronic separation and the cooperative electronic separation in cognitive achievement at the level of understanding, just as there is no statistically significant difference between the cooperative electronic separation and the interactive electronic separation in cognitive achievement at the level of understanding.

3- There are no statistically significant differences at the level

of application between the three groups (interactive electronic separation, cooperative electronic separation, integrated electronic separation).

4- There are statistically significant differences at the overall levels between the interactive electronic separation and the integrated electronic separation for the benefit of the integrated electronic separation. And that there is no statistically significant difference between the integrated electronic separation and the cooperative electronic separation in cognitive achievement at the overall levels, just as there is no statistically significant difference between the cooperative electronic separation and the interactive electronic separation in cognitive achievement at the macro levels.

Recommendations: In light of the results, the researcher recommends the following:

- 1- Using electronic classes in subjects other than Arabic grammar.
- 2- The necessity of paying attention to traditional classes and converting them into electronic classes.
- 3- Training teachers and students on how to use e-learning in e-classes.
- 4- Carry out reciprocal visits among the schools applying to the electronic classes to benefit from the exchange of experiences between them.
- 5- Studying the effect of using the Internet on electronic classes for academic achievement.

Suggestions:

- 1- Spreading awareness of the importance of e-learning through training programs.
- 2- Holding specialized training courses for teachers in the field of e-learning applications and educational design through universities and institutes specialized in this.
- 3- Going to look at the curricula taught in our schools in order to keep pace with the era of technology and informatics.
- 4- Activating the Internet in the electronic classes in the learning process.
- 5- Study electronic classes in other academic stages.

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