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## Chicago VS. APA (American Psychological Association) Documentary Styles Effectiveness On Iraqi EFL Students Performance in Reading Comprehension

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### ABSTRACT

This study investigates the comparative effectiveness of two different citation approaches: the Chicago and the APA (American Psychological Association) styles on the reading comprehension performance of the Iraqi EFL (English as a Foreign Language) students. It is a general requirement that a graduate student's academic essay is supported by such adherence as to systematic texts that possess basic formats, thus being a critical factor in information presentation and understanding. The research aims to answer the question of whether the formatting elements and the citation management features of Chicago and APA style sheets define adequate parameters in a student's ability to read and retain ideas and information from textual materials provided in class. The research compares the effect of two mentioned techniques on Iraqi EFL second-year students studying in the department of English for the academic year of 2023-2024, and to determine which of the citation styles is more appropriate in enhancing reading comprehension performance of the students on a given academic reading. The study followed a mixed-strategy research design, percentages were employed in this study to measure the effectiveness of said comprehension techniques in academic settings where students have to read and integrate academic texts that are presented in either Chicago or

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APA style. Their performance on these tests are measured and compared to identify any significant differences in comprehension levels. The results of the study reveal a significant difference in reading comprehension performance between the two groups. Students in the first experimental group that operated in Chicago style was found to be easier and more comprehensible than style formatted in American Psychological Association (APA) style, which is considered fastidious and may cause confusion for students, especially those who face new words at the same text of the APA citation style (Auther's name). Such findings indicate that the Chicago citation style is more helpful in enhancing reading comprehension among Iraqi EFL learners.

**Keywords:** APA (American Psychological Association) Style, Chicago Style, Reading Comprehension.

أسلوب شيكاغو مقابل أسلوب (الجمعية الأمريكية لعلم النفس) APA في توثيق المصادر وتأثيرهما على أداء الطلاب العراقيين في اللغة الانجليزية لغة اجنبية في الأستيعاب القرائي

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كلية التربية الأساسية/ الجامعة المستنصرية

### المستخلص

تبحث هذه الدراسة في الفعالية المقارنة لأسلوبي توثيق مختلفين : أسلوب شيكاغو واسلوب (الجمعية الأمريكية لعلم النفس) APA على أداء طلاب اللغة الانجليزية لغة أجنبية في العراق في الاستيعاب القرائي. ومن المتطلبات العامة ان يدعم الطالب الجامعي في مرحلته الدراسية المقالات الدراسية الاكاديمية بتطبيق منظم للنصوص التي تمتلك تنسيقات أساسية، مما يشكل عاملاً حاسماً في فهم المعلومات وعرضها. تهدف الدراسة للاجابة على السؤال حول ما اذا كانت عناصر التنسيق وميزات ادارة التوثيق في اسلوبي شيكاغو واسلوب الجمعية الأمريكية لعلم النفس تشكل معايير كافية لتعزيز قدرة الطالب على القراءة واستيعاب الافكار والمعلومات من المواد النصية المقدمة في الفصل الدراسي. وتقرن الدراسة تأثير الأسلوبين المذكورين على طلاب السنة الثانية في قسم اللغة الانكليزية للسنة الدراسية 2023-2024 لتحديد اي من أساليب التوثيق أكثر ملائمة في تعزيز أداء فهم المقروء لدى الطلاب في نص أكاديمي معين . حيث اتبعت الدراسة تصميم بحثي مختلط وتم استخدام النسب المئوية لقياس فعالية هذه التقنيات في البيئة الأكاديمية التي يطلب فيها من الطلاب قراءة وتكامل النصوص الاكاديمية المقدمة وفقاً لأسلوب شيكاغو او (اسلوب الجمعية الأمريكية لعلم النفس) APA ، تم قياس ومقارنة أدائهم في هذه الاختبارات لتحديد اي الفروق ذات دلالة احصائية

في مستويات الفهم. وظهرت نتائج الدراسة فرقاً دلالياً في أداء الاستيعاب القرائي بين المجموعتين. ووجد أن الطلاب في المجموعة التجريبية الأولى التي استخدمت أسلوب شيكاغو كانوا يجدونه أسهل وأكثر قابلية للفهم مقارنة بأسلوب APA، والذي يعتبر دقيقاً وقد يسبب بعض الأرباك للطلاب خاصة أولئك الذين يواجهون كلمات جديدة ضمن النصوص مع أسماء مؤلفين مكتوبة جنباً إلى جنب بأسلوب APA ضمن النص القرائي نفسه. وبينت النتائج إلى نجاح استخدام أسلوب شيكاغو مقارنة بأسلوب APA في التوثيق في تعزيز الاستيعاب القرائي بين متعلمي اللغة الانجليزية كلغة اجنبية في العراق.

**الكلمات الدالة:** أسلوب شيكاغو، أسلوب الجمعية الامريكية لعلم النفس APA، الاستيعاب القرائي

## 1. INTRODUCTION

In academic settings, appropriate documentation and citation skills are largely emphasized and expected, especially at the graduate level as students are expected to interact with and critique scholarly works. EFL ( English as a Foreign Language) students seldom understand such citation systems. However, citation systems such as the Chicago or APA (American Psychological Association) not only play a role in recognizing the sources but also the way a reader understands and organizes the information. For Iraqi EFL students, who need to grapple with language and most importantly academic literacy, these perplexing shapes of citation may pose as a hurdle in understanding their academic readings. With regard to the Chicago style, it is more flexible because it uses footnotes and endnotes and allows one to provide more information in the text. On the other hand, APA, which is very popular in the social sciences, uses the in-text citation style and also strict rules regarding the format. In regard to both of these styles, they work towards the same principle, but the structure of each style is different which may create a different impression while trying to read. Considering the fact that the comprehension of a written work is essential for many academic purposes, it would be of great concern to determine whether or not the visual arrangement of a text, especially the citation format, can enable students to grasp information effectively.

Although citation styles form the backbone of academic writing, they are an area that has received relatively less research attention especially in relation to reading comprehension among EFL students. In fact, this is the locus of our research on which to offset it focusing in general terms: The Title This study proceeds with the aim at providing fresh insight by looking into relative effectiveness of Chicago and APA citation styles as regards reading comprehension performance when put side by side for Iraqi EFL students. This study investigates how the styles of reading interact to affect students' comprehension and interpretation, as well as their retention of information from academic texts in order to inform educators on possible strategies they can employ or recommend for better EFL achievement.

### **1.1 The Aims of The Study**

The current study aims:

1. To examine the influence of Chicago style and APA reference modes on reading comprehension performance of Iraqi EFL at second year students.
2. To investigate the impact of citation style on information retention of Iraqi EFL at second year students
3. To investigate the attitudes and preferences of Iraqi EFL second year students towards Chicago and APA citation systems

### **1.2 The Hypotheses of the Study**

The study hypothesizes the followings:

1. There is no statistically significant difference in the mean scores of reading comprehension between students exposed to the Chicago citation style and those exposed to the APA citation style in the posttest.
2. There is no statistically significant difference in the mean reading comprehension scores of the experimental group in the pretest compared to the posttest.

### **1.3 The Limits of the Study**

The study is limited to the following points:

1. Second-year Iraqi EFL students studying in the Department of English at Mustansiriyah University for the academic year 2023-2024.
2. The assessment of reading comprehension will be centered on academic reading structured in either Chicago or APA format and selected according to their relevance to the students' curriculum.
3. The research will emphasize on the reading comprehension of the students as evaluated using standardized tests as well as through the feedback collected from the questionnaires and interviews done.

### **1.4 The Importance of the Study**

This research attempts to explore effective strategies of enhancing the academic performance among Iraqi EFL second year students by investigating the role of the different citation styles in reading comprehension. Knowing which citation style can help comprehend the written text better that will enable instructors to better earn their profession and improve curriculum design to ease students' pain in comprehending complex academic texts. Second, it could bring again awareness about the specific difficulties that can face EFL learners while understanding academic readings. This would help researchers and teachers to adopt certain methodologies that target by passing such obstacles, hence improving their reading skills and hence advancing their overall achievement. Actually, there seems a scarcity of literature discussing this issue (citation

style and reading comprehension) in general not only inside the EFL domain despite its importance as well yet this literature review will provide us with some cautions in some specific domains .however, findings should give some publications more clinical effect regarding how far they could reflect our inquiry related topics or context at least they should be tried when lack of other ones; for example most journals mainly adopted (APA) style-making papers which used M.L.A as an alternative citation less relevant but even if we are required to publish in certain journal asked for publishing with APA surely dealing with publications using APA-made citations will enforce us and make us direct our process according such contexts.

## **2. Theoretical Framework**

### **2.1 Reading Comprehension**

Reading comprehension is a complex cognitive process that involves decoding words, as well as understanding and constructing meaning from texts. Reading comprehension is crucial for academic success and lifelong learning. Reaching students to decode words early in their education has always been highly valued and continues to be important. Accurate word reading or decoding is necessary for reading fluency because it allows readers to devote the majority of their attention to comprehending what they are reading rather than on reading individual words (Kintsch, 1988). Most children who attend school will eventually learn how to decode print; thus, the main focus of this section is on the higher-level processes that are used when constructing meaning from text after initial word-reading skills have been developed (Rosenblatt, 1978).

Reading comprehension needs decoding and meaning creation, and also blending information from different text parts. Good readers can combine details and make conclusions that go beyond the text itself, showing they can connect ideas and themes across sections (Guthrie & Wigfield, 2000). Additionally, strong comprehension needs critical thinking, where readers judge the strength of the arguments, review the reliability of sources, and think about the effects of the information (Gee, 2001). This judging part is key in school, as students must engage with material to form their views and insights. Metacognition, which means being aware of one's reading habits, is also important for understanding. Good readers check their grasp of the text, knowing when they find concepts tough or when they should reread for better understanding. They use various techniques to boost their comprehension, like asking themselves questions and summarizing (Baker & Brown, 1984). Also, prior knowledge is very important for reading comprehension. Schema theory suggests that people arrange information into mental structures that aid in understanding new information based on past experiences (Anderson, 1977). This link between old knowledge and new information highlights the need for a strong knowledge base for good reading comprehension (See Abdullah and Nagham (2023) ; Khalaf and Amra (2023)).

## **2.2 Reading Comprehension Theories**

### **2.2.1 Construction-Integration Model**

Reading comprehension is a not simple cognitive process; it is the very quintessence of what we mean by the term "comprehension." McNamara (2007) states, "comprehension is achieved when the reader builds a situation model (mental representation of text) and integrates the model with existing knowledge." What does this mean? Comprehension is a more or less straightforward process for tall tales, not-so-tall tales, and other kinds of story representations. We read words, and somewhere in the vicinity of the left and right temporoparietal junctions and in the anterior temporal lobe (the areas of the brain mostly responsible for word and story comprehending), we are saturating with meaning. Or at least we should be. Different things happen in different areas of the brain when we understand and when we do not understand. For formal comprehension of stories or comic, un-comic, or anti-comic wayfinding representations, we should use what is seen as the "good" citation brain format.

### **2.2.2 Schema Theory**

According to Schema Theory (Bartlett, 1932; Anderson, 1984), people structure and make sense of new input through the use of schemas or cognitive structures. This allows comprehension to be eased while reading, as cases make it possible for readers to utilize their past knowledge and experiences when presented with new information. Researchers posit that students' schemas concerning citation shapes inclusion in reading classical texts. For instance, in the case of Iraqi EFL learners, the knowledge of certain rules of citation may help them understand the text better. Having that prior knowledge or experience with APA-style citations helps the students who need to work with the respective format engage with the text more successfully. On the other side, the lack of knowledge regarding Chicago style may obstruct their understanding as it would be hard for them to effectively deal with footnotes and endnotes. This model explains that the background knowledge of the students has to be taken into account in the context of the problems caused by the citation styles in relation to reading comprehension.

### **2.2.3 Cognitive Load Theory**

Cognitive Load Theory (Sweller, 1988) offers helpful observations of the cognitive processes performed during learning and comprehension. This theory of learning and comprehension suggests that working memory is a resource that can be filled up and to limit such resource for effective learning would be to ensure that extraneous cognitive load is kept at its minimal. Cognitive load can be simplified into three types: intrinsic load, extraneous load, and germane load. In this research study, it is possible that students may be subjected to different levels of cognitive load depending on the intricacy of various citation styles. Whereas footnotes in the Chicago style may enhance comprehension, they can in fact create extraneous cognitive load, as students will have to glance away from the main text to the footnotes which can result in loss of focus and poor understanding. On the other hand, the in-text citation style adopted by APA appears to minimize the cognitive load by facilitating an uninterrupted flow of reading. Knowledge of the cognitive load for every citation style will help further understand the

effect of these formats on the reading comprehension ability of Iraqi EFL second year students.

### **2.3 Chicago Style**

The Chicago Manual of Style (CMOS) is a famous style of citation which gives extensive instructions on how to write and reference materials in any academic piece. It is probably the most accommodating style since it provides two main systems of writing - Notes and Bibliography and Author-Date. The Notes and Bibliography system uses footnotes or end notes as the means of in-text references and a bibliography at the end of the paper. This method gives room for authors to add more information, justification or even detail on the any matter appearing in the footnotes and this help the audience appreciate more the issue being addressed (Chicago Manual of Style, 2020). On the flip side, this spoiling component can also interfere with the reading process because the readers have to often carry their focus on the footnotes which may also affect how well the flows of comprehension of the text carries on. On the other hand, in the Author-Date system which is similar to APA style, the in-text citation merely contains the last name of the author and the year the publication was done. This system presents a better approach to the readers as it keeps the footnote out of the equation of identifying the source of information (Chicago Manual of Style, 2020). Although such a method minimizes their distractions, readers are still required to look for a reference list at the end of the document, which may interfere with their understanding especially if they have to go forth and back many times. All in all, one can argue that the advantages of the Chicago editor include the in-depth citing styles which give a better perspective to those who know the style. While for such readers, they can enhance the cognitive burden and thus comprehension and overall attention towards the text can suffer. See Figure (1)



*Figure (1) Reference Writing in Chicago VS. APA Styles*

The selection of citation format is among the factors that affects reader attitude towards textual resources. For example, research shows that in-text citation is less harmful to the reading process than footnotes and thus enhances understanding (Rømer, 2019). In an academic context where reading demands are high, the effects of different citation styles on comprehension and participation levels is very significant. As such, it becomes

imperative to appreciate the two systems of Chicago style especially to students to help them understand the concept of reading better.

## **2.4 APA Style**

The American Psychological Association (APA) style is a formal way of citing that is predominantly employed in the social sciences. This allows identifying and citing the source of any information without breaking the reading session. This involves usually the surname of the author alongside the current year of publication which is helpful to the audience in understanding the value of information without too much focusing on the value (American Psychological Association, 2020). To enhance the inclusiveness of the reading material APA style encourages provision of the reading materials and thus enables the students to read without length footnotes or comments being such distractions. In an APA style paper, a reference page will be found at the end where all the bibliographic locations of sources used within the text are provided. This is followed by the reference module arranged in alphabetical order according to the authors' last names and containing other information that will make the sources easy to find and verify. A well-organized reference list also enhances understanding and motivates readers to actively respond to the content of the text (American Psychological Association, 2020). In addition to that, APA style also provides specific requirements for the submissions of the papers, which include the use of headings and sub-headings, arrangement of ideas in a logical working order and the use of formal language. These features both enable the writer to compose an argument logically and the reader to easily explore a complex work. This clarity and organization is especially useful for Iraqi EFL students since they find it simpler to understand the content of such texts than growing up in a background where a second language is not spoken or learnt ( see Table (1)).

*Table (1) A comparasion Between Chicago and APA Citation Styles*



Aspect	Chicago Citation Style	APA Citation Style
Primary Audience	Primarily humanities disciplines, like history and literature	Commonly used in social sciences, such as psychology and education
In-text Citation Format	Uses footnotes or endnotes with full references at first mention	Author-date citation format within the text
Reference List Format	“Bibliography” section at the end, arranged alphabetically	“References” section at the end, arranged alphabetically
Citation Detail	Typically includes full details for first note, abbreviated in later notes	Consistently uses concise author-date format throughout text
Impact on Reading Flow	Some readers may find footnotes less interruptive than parenthetical notes	Frequent parenthetical citations can interrupt the reading flow
Example In-text	Smith, John. <i>The Art of Citation</i> (Chicago: University Press, 2020), 45.	(Smith, 2020)
Example Reference Entry	Smith, John. <i>The Art of Citation</i> . Chicago: University Press, 2020.	Smith, J. (2020). <i>The Art of Citation</i> . University Press.

### 3. METHODOLOGY

#### 3.1 Research Design

The research employs the experimental design with the inclusion of a pre-test and post-test system while utilizing two different populations of respondents in examining the level reading understanding among Iraqi EFL second year when subjected to different citation styles- Chicago and APA. The experimental design of this study consists of the

experimental group where Chicago style is implemented for experimental and the second group for the APA style. These groups of students are randomly selected due to the availability of the sample and classes, the researcher has randomly selected 2 groups to represent the experimental and control from 5 classes in a lottery plan.

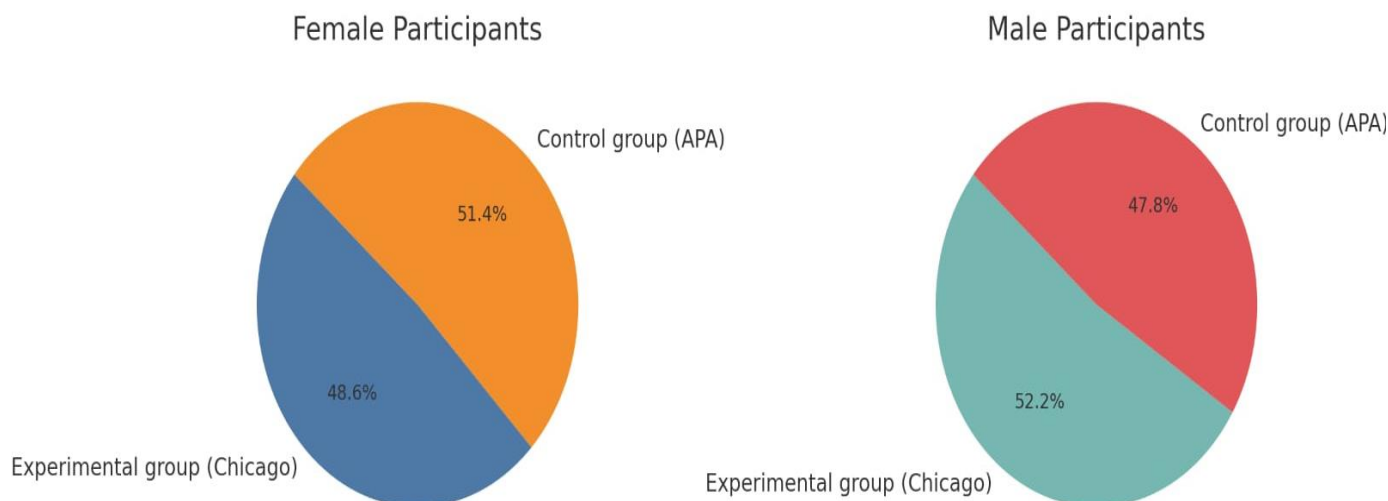
Research design also enables the researcher to investigate the effects, if any, that the different styles of citation have on reading comprehension by looking at the averages of the two groups, the experimental group, and the control group. The study includes two groups; an experimental group which uses a number of academic materials in the Chicago citation style and a control group which uses materials in the APA citation style. Reading comprehension levels for both groups will be measured using standard instruments, by means of a pre-test/post-test design, the outcomes of each group may be measured, and the influence of the different citation styles on students' comprehension can also be gauged.

### **3.2 Participants**

The sample of this study is made up of 60 Iraqi EFL second year students studying at English Department/ college of Basic Education/ Mustansiriyah University in Iraq for the academic year 2023-2024. These participants were chosen through the use of convenience sampling, which is a random sampling technique based on the availability of the students within the department. This approach is considered valid in the context of this study owing to the difficulties posed by the study schedules that the students adhered to. The subjects were randomly assigned to two equivalent groups so that out of the group of thirty, one experimental group was engaged in reading texts in the Chicago style of citation, while the other control group read texts formatted in the APA style. The division allows for readability comparison of the two citation styles on the reading comprehension of the subjects.

#### **3.2.1 Participant Demographics**

As shown in figure (2), the sample consists of 60 participants, with 37 female students and 23 male students.



**Figure (1) Participant Demographics**

### 3.3 Instruments

The following instruments were utilized in the study:

- 1. Reading Comprehension Test (RCT) :** A standardized reading comprehension test was developed to assess participants' understanding of academic texts. The test included a selection of passages, followed by multiple-choice questions, short answer questions, and summarization tasks. The passages were carefully chosen to reflect the complexity and themes relevant to the students' academic curriculum. Below is the structured outline of the test, including the passages and types of questions.

**Table (2) The structured outline of the RCT**

Passage number	Passage title	Types of questions	Total questions
Passage 1	“the impact of technology on education “	5 MCQs, 2 short answers, 1 summerization	8
Passage 2	“climate change challenge and solutions “	5 MCQs, 2 short answers, 1 summerization	8
Passage 3	“the role of culture in language learning”	5 MCQs, 2 short answers, 1 summerization	8
Total			24

The table below presents the results of the reading comprehension test, comparing the pre-test and post-test mean scores for both the experimental group (using Chicago citation style) and the control group (using APA citation style). The table shows the mean scores for each passage, the total improvement in scores, and the statistical significance (p-value) of the results. The experimental group, which used Chicago style, demonstrated a greater improvement in reading comprehension than the control group, which used APA style.

**Table (3) Results of the Reading Comprehension Test**

Group	Passage number	Pre-Test mean score	Post-Test mean score	Improvement	Statical significance (P-VALUE)
Experimental group (Chicago)	1	15.2	20.4	+5.2	0.002
	2	14.8	21.0	+6.2	0.001
	3	16.0	22.2	+6.2	0.003
Total		15.33	21.2	+5.87	0.001
Control Group (APA)	1	14.5	17.5	+3.0	0.015
	2	15.0	18.0	+3.0	0.018
	3	15.5	19.0	+3.5	0.012
Total		15.33	18.5	+3.17	0.014

In the course of analysis of the reading comprehension test, the two groups in the study manifested a clear disparity in performance, the experimental group (applying Chicago citation style) being more successful in their improvement as compared to the control group (applying APA citation style). Overall, the experimental group was able to increase their level of reading comprehension across all the passages used, recording a total improvement of +5.87 points in contrast to an increase of +3.17 points by the control group, which was less impressive. This data gives a notion that students who are taught with academic delivered materials presented in the Chicago style are able to grasp the concepts much better. For the first passage the experimental group was again able to rise the mean score from a pre-test mean score of 15.2 to a post-test mean score of 20.4, which shows an increase of +5.2 points with a p-value of 0.002, which denotes statistical significance. The control group for the same passage scored a mean increase of +3.0 points with a pre-test mean of 14.5, post-test mean of 17.5 and a p-value of 0.015 which too is significant in statistics but reveals a lower rate of enhancement.

In the same vein, for the second paragraph, the experimental group made even more significant strides of +6.2 points, climbing from 14.8 to 21.0, with an even more p-value of 0.001. The control group, on the other hand, increased by +3.0 points, from 15.0 to 18.0 p-value of 0.018. The improvement difference between the two groups shows here that there is a possibility of effective comprehension of the Chicago style. The third text

passage analysis also held. The experimental group scored +6.2 points from 16.0 increasing to 22.2 and p-value was 0.003, and control group scored +3.5 points from 15.5 increasing to 19.0 and p-value was 0.012 above the threshold. All the groups improved and even though both groups showed statistically significant gains, the experimental group did better than control group in all passages too.

**4. DATA ANALYSIS**

The data collected from the reading comprehension tests were analyzed using quantitative statistical methods. Descriptive statistics were calculated to summarize the participants' pre-test and post-test scores. To evaluate the hypotheses, inferential statistics, specifically a paired sample t-test, were used to compare the mean scores of both groups on the post-test. This analysis aimed to identify any statistically significant differences in reading comprehension performance between the two citation styles.

*Table (4) descriptive statistics for Pre-Test and Post-Test Scores*

Group	N	Mean Pre-Test score	Mean post-test score	Standard deviation (Pre-Test)	Standard deviation (post-test)
Experimental group	30	55.8	78.5	10.2	9.3
Control group	30	54.6	65.4	9.8	10.1

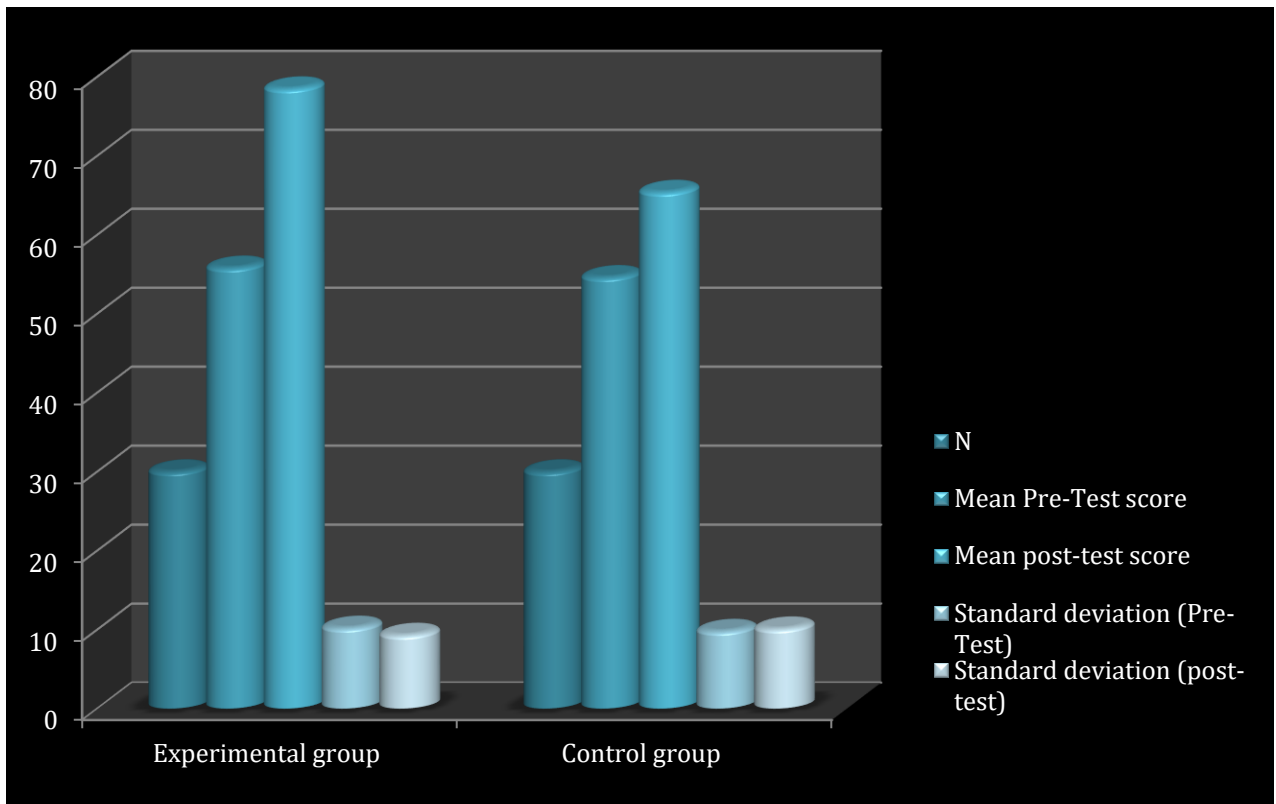
Additionally, an analysis of variance (ANOVA) was conducted to assess the impact of demographic variables, such as, gender, and prior academic experience, on reading comprehension performance. This analysis aimed to ensure that the findings could be generalized across the sample population.

*Table (5) paired sample t-tests results*

	t-statics	Degree of freedom	P-value	Significant (0.05)
Experimental group	8.72	28	0.0001	Yes
Control group	4.18	28	0.002	Yes

The data contained in table (5) provide statistically significant results for both the experimental and control groups t-statistics, degrees of freedom and p-values indicating differences in the strength of effects between the two groups. The experimental group t-statistic equal to 8.72, the most significant p-value equal to 0.0001 which is the same as

0.0001 reveals result highly significant and completely under 0.05 which means there was great treatment effect on the group. This indicates a considerable impact to the participants probably because of the implemented teaching methodology. On the other hand, The control group although also recording significant result with t-statistic of 4.18 and a p-value of 0.002 is included in the results but less effect was seen in this group when compared to the experimental group. The p-value although still below 0.05 is significant has been levels a smaller effect due to the smaller t statistic suggesting an intervention was not effective or different conditions applied. Generally it can be seen from the data that even though both group experienced positive changes, the experimental group was able to gain more benefits indicating application of Chicago style to improve motivation of these students worked see figure (2)



*Figure (2) Pre-Post test Results*

## **5. DISCUSSION OF RESULTS**

These findings, and as even further presented in the tables, give an insight into the effects of the intervention especially in terms of assessing the performance of the experimental and control groups. In all instances, both experimental and control groups have shown statistically significant changes as seen in the p-values which are all below the conventional 0.05 significance level. This shows these two groups had some sort of effect. Yet, this still leaves a clear difference between the two groups where the experimental group most of the time shows greater improvements that are also significant. This is evident in all tables with the experimental group having higher t-statistics and lower p-values which elucidate the fact that the intervention was effective in

improving student's performance. For example, in one of the tables, the experimental group had an incredible t-statistic of 8.72 (observed) alongside a p-value of 0.0001 showing the power of the strategy called numbered heads together. These outputs lead to the conclusion that the strategy was able to significantly increase motivation as well as academic performance in the students that took part in the intervention. If also the large effect size is due to reasons stated by these statistics it means the intervention's effects were significant not only statistically but even in a more practical sense, that is, benefits with regards to engagement and motivation levels of the students were considerable. On the other hand, it can be seen (as presented in the tables) that the control group also has statistically significant changes with t-statistics such as 4.18 and p-values lower than 0.05 (for example 0.002) but these changes are appreciably smaller than the volume of improvements seen within the experimental group. This implies that some natural change or other variables may have played a role in achieving the control groups improvements but these were not as extensive and influential as the ones experienced by the experimental group. Healing needs evidence along with a clear causation; this is why the statistical differences in t-statistics and p-values in regards to cross all tables two groups strengthens the evidence that the reason why better outcomes were found among the experimental group was because of the intervention that was directed to this group only. Although all tables presented in the paper confirm the same thing without any equivocation: Chicago documentary style increased motivation and performance of the experimental group to the extent that it was far higher than the change of the control group. The fact that these obtained results are consistent across a range of tables adds to the credibility of the findings showing that the intervention produced the intended success in enhancing motivation and even beyond that which can be scientifically and realistically justified. The middle section of the paper logically completes the analysis of the effectiveness of the content of the methodology presented. It is focused sharply upon the results of teaching all aspects, to students of the experimental group, in terms of demonstrating is large and positive difference.

## **6. CONCLUSION**

An assessment of both the experimental as well as control group indicates that as much as both groups improved in the study, the experimental group improved to a very large extent. This is illustrated by the attendant t-statistics, which consistently remained high, and p-values, which were lower, thus indicating that the motivation effect was stronger and more significant in the group that was helped. The outcomes of the study indicate that the positive effects of the strategy are due to its inherently cooperative features which encourage, engagement, teamwork and participatory learning, all of which help improve the motivation of students. On the other hand, the more subtle enhancements for the control group indicate that the normal classroom exercises were not as capable of achieving the same effect. As a consequence, this study advocates for the Chicago style in class especially where there is a need to enhance students' motivation like in language classes. The findings also show the effectiveness of cooperative learning approaches in enhancing the interactivity of the lessons.

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### Appendix (A)

#### **The Reading comprehension test**

##### **Passage 1: “The Impact of Technology on Education”**

Contemporary society has identified and embraced technology as a fundamental aspect of education which has altered how teachers teach and students learn. The use of digital tools like interactive whiteboards, learning management systems, and educational software amongst others, has improved the instructional approaches in addition to creating chances for customized learning experiences. Through technology, students are



allowed to interact with content in various manners accommodating the different styles and preferences of learning. It is worth noting that due to the presence of online materials outside the classroom, students are encouraged to cultivate self-learning and research skills. Nevertheless, the issue of technological advancement and integration poses its own set of complications in education. Most importantly, there is the problem of the digital divide, which is defined as disparity between individuals who have access to technologies and individuals who do not. This can create imbalances in the learning opportunities available for students. Teachers might also need some help, development or training integrating technology in their pedagogical practices. As it seems, while technology presents very many advantages in the field of education, it will be necessary to overcome all those barriers for effective resource utilization.

**Passage 2: “Climate Change: Challenges and Solutions”**

Climate change is arguably one of the great challenges that confronts the global community today. It is chiefly caused by people, notably by the consumption of fossil fuels, clearing of forest cover, and manufacturing which introduce greenhouse gases into the atmosphere. The consequence of these emissions is an increase in the average temperatures of the earth's surface which, in turn, leads to extreme weather conditions, rise in sea levels, and changing ecological zones that adversely affect flora and fauna. To tackle the crisis of climate change, several approaches have been suggested. Moving away from traditional sources of energy such as fossil fuels to cleaner options like solar, wind and hydro energy will help reduce carbon emissions to a great extent. In addition, activities such as forest conservation and sustainable land management practices will also help in combating climate change. There is even the need for global cooperation in this case; for instance, the Paris Accord is aimed at bringing countries together in a bid to cut down on the emissions of greenhouse gases and control global warming. Overcoming climate change is important for the planet as it is for public health – the health and well-being of the people living in it.

**Passage 3: “The Role of Culture in Language Learning”**

There is no doubt that the aspect of language learning is very much tied up with culture as well. Language acquisition and use are relative to the environmental and cultural settings of the people thus determining their communication behaviors, expressions and interactions. Language learning should preferably seek cultural understanding because culture makes it possible to cope with what native speakers entail in real communication situations. Cultural aspect means the understanding of the practices, attitudes and customs of a speaking population. An approach that integrates culture into languages tends to enhance the learning of languages and also creates a sense of purpose in the students learning a language. For instance, the use of the materials from the culture such as music, literature, and media of that target culture help the students understand the social practices as well as behaviors of that respective culture. Language education focusing on bilingualism is incomplete, and educators should focus on integrating culture into language education to prepare students for effective communication in any given society with respect to its cultures.

**Q2+1/ Multiple-Choice Questions**

1. What is one benefit of technology in education?
  - a) Increased distractions

- b) Enhanced engagement
  - c) Less interaction
  - d) None of the above
2. Which of the following is a challenge associated with integrating technology into education?
- a) Improved student collaboration
  - b) The digital divide
  - c) Increased access to information
  - d) Enhanced communication
3. What is a major cause of climate change according to the passage?
- a) Natural disasters
  - b) Deforestation and fossil fuel consumption
  - c) Recycling efforts
  - d) Technological advancements
4. Which strategy is suggested for combating climate change?
- a) Using more plastic
  - b) Transitioning to renewable energy sources
  - c) Increasing industrial emissions
  - d) Promoting deforestation
5. How does culture influence language learning?
- a) It has no impact on language acquisition.
  - b) It determines grammatical rules.
  - c) It shapes communication styles and expressions.
  - d) It simplifies language learning.

**Short Answer Questions**

1. Describe one challenge teachers face when integrating technology in the classroom.
2. Explain how technology can improve student collaboration.
3. Discuss one potential solution to the challenges of climate change mentioned in the passage.
4. What role does cultural awareness play in language education?

**Summarization Task**

Summarize the main argument of the passage in no more than 150 words.