

Effectiveness of the Animated Video Method in Vocabulary Learning: A Case Study of Noble Technical Institute in Arbil

Shivan Khudhur Ridha (✉ shivankhudhur1@gmail.com)

Ataturk University: Ataturk Universitesi

Hanife Bensen Bostanci

Ataturk University: Ataturk Universitesi

Mustafa Kurt

Ataturk University: Ataturk Universitesi

Research Article

Keywords: educational institutes, English language, improve vocabulary learning, bivariate analysis

Posted Date: June 6th, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1094583/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

This research evaluates the effectiveness of animated videos in vocabulary learning among Noble Technical Institute (NTI) students. Experimental research methodology was used with 40 students as the study subject, and the study subjects were picked randomly. After the pre-test was conducted for all the students, they were grouped into two categories for the treatment regime: those taught with animated video and the rest without animated video. Post-test was conducted after the lesson. The data were analyzed statistically, hence, bivariate, and univariate analyses were conducted. From the pre-test result, the highest score was 89 and the lowest score was 41 from the data of 40 students as a research subject. As for the posttest for those taught without animated video, the highest score was 91, the lowest score was 46, and the mean score was 70 from the data of 20 students as a research respondent / subject. Likewise, those taught with animated video recorded their highest score to be 98, the lowest score was 53 and the mean score was 76 from the data of 20 students as a research subject. The bivariate analysis shows that teaching with animated video ($X^2 = 0.0005$, P-value= 15.675) was significant compared to teaching without animated video. From the questionnaire administered to the student, most of the students agreed that learning with animated video enhances assimilation, makes study more interesting, improve vocabulary learning, makes class interactive and makes learning of English to become faster. There are divergent views regarding learning with animated video being the best form of learning, few of the students agreed while some of the student did not agree to that. Conclusively, the result of this study shows that learning of vocabulary with the aid of animated video is very effective to aid students' understanding and assimilation.

1. Introduction

English language is a foreign language to Arbil, and it is an integral part of the modern societies. English language is spoken worldwide and adopted by many countries as either first or second language in workplaces and educational institutes. The English medium institutes are more popularly accepted compared to those institutes with local languages. English is notable medium of conversation among most societies (Taguchi, 2014) [14]. English language learning requires the skills of speaking, reading, writing, and listening (Gebhard, 2013). Learning English language and teaching is generally challenging for the societies where it is not much commonly spoken or used frequently. The most challenging task for the classroom teachers is to analyze the most suitable techniques for teaching English as a foreign language in most developing and underdeveloped societies (Smith, Kuchah, & Lamb, 2017) [13]. English language teaching does not only require the textual information, but also self-motivation of the instructor and it depends on the learning ability of the students (Copland, Garton, & Burns, 2014) [6].

There are many studies outlining the approaches and certainly different methodologies for teaching English as a second / foreign language including task-based learning and Audiolingual, communicative language teaching, neutral approach, content-based instruction, grammar-translation method, and direct method adding to these the oral approach (Richards & Renandya, 2002) [12]. These methodologies are suitable for different situations including exploring, speculating, and describing the foreign language

(Escandon, 2002) [8]. English has become the hegemonic language especially of academics moreover; almost all curriculums and courses are taught in English language and there is no way to escape English as a foreign language (Bocanegra-Valle, 2014) [4]. The rationale of this study is to integrate technology and modern tools into teaching and learning process for an easy and sustainable learning. English as foreign language needs dedication and every language is an art [7]. Therefore, this research focused on evaluating the teaching of English language by making it more interesting and attractive piece of art rather than a social need. The private institutes in Iraq and Arbil – NTI lack responsiveness strategies and techniques for improving the English vocabulary of the students. Despite adopting English as a medium of language the students even in the English Department lack skills to play with English vocabulary that is not only significant for learning English as a second language but also it is fundamental to speaking fluently, understanding and writing confidently. Therefore, this study embarked on the idea of including the technological tools for innovative learning. It analyzed the effectiveness of visual technology especially animated video to implement this technique for teaching mid-career learners in Iraq. The aim of this study is to enhance the teaching mode of the students for sustainable knowledge and for a more adaptive approach towards English as a foreign language.

The objective of the study was to analyze the effectiveness of animated video method in vocabulary learning among students of Noble Technical Institute (NTI) In Arbil. The following specific objectives guided the study:

- To determine the performance of student taught with animated video in Noble Technical Institute (NPI) In Arbil.
- To determine the performance of student taught without animated video in Noble Technical Institute (NTI) In Arbil.
- To compare the performance of student taught with and without animated video in Noble Technical Institute (NTI) In Arbil.

How effective is the animated video method in vocabulary learning among students of Noble Technical Institute (NTI) In Erbil?

The specific research questions are as follows:

- How is the performance of student taught with animated video in Noble Technical Institute (NTI) In Arbil?
- How is the performance of student taught without animated video in Noble Technical Institute (NTI) In Arbil?
- What is the difference in performance of student taught with and without animated video in Noble Technical Institute (NTI) In Arbil?

The paper is structured as follows, "section 2 contains Significance of the study, section 3 contain methodology, section 4 contains result and discussion, and section 5 contains Conclusions and

2. Significance Of The Study

This study analyzes the impact of animated video in learning of English language as a foreign language. The study added to the body of knowledge on learning with video. This study is unique and peculiar to the participants; it will gain a good view to the literature of language teaching.

2.1 Study Hypothesis

Ho: There is no significant improvement or difference in the effectiveness and learning achievement in mastering the vocabulary by students being taught via animation or cartoon video.

Ha: There is a significant improvement or difference in the effectiveness and learning achievement in mastering the vocabulary by students being taught via animation or cartoon video.

2.2 Theoretical Framework

Cognitive theory of Multimedia Learning guided this study; the theory established that there are two channels of acquiring information and usage: visual and verbal channels, which can equally be referred to as pictorial and verbal channels (Mayer and Moreno, 2003) [11]. Each channel has their limitations but the use of the two will facilitate integrative learning into the existing cognitive system. Maximum use of the working memory happens by using the two system. This is the same system adopted with the aid of animated/video learning, where what is being passed verbally has pictorial/video illustration for better understanding. This study leveraged on this theory and want to ascertain the effectiveness of the learning system.

3. Methodology

3.1 Study Design

Quantitative experimental research methodology was used in this study. Quantitative experimental research methodology is used to compare two groups: experiment and control groups. The outcomes of each group (the control and experiment group) after the learning sessions helped in analyzing the effectiveness of animation in vocabulary learning among the study subject. Experimental research keeps all the settings constant for both the groups but change the independent variable (Coiro, Knobel, Lankshear, & Leu, 2014) [5] (p.180).

3.2 Study Area

Noble Technical Institute Located in the City of Arbil, the capital of Kurdistan region - Iraq, the Institute was established in 2014 as Hawler Petroleum Institute. In 2017, the institute expanded and became as Noble Technical Institute. The Institute has a modern study environment comprised of modern class

setups equipped with multimedia facilities. In addition, it has specialized labs and workshops for each department. More than dozen labs are available and equipped with modern apparatus that are required to carry out the subjects' relevant practical and experimental part.

3.3 Study Sample

Simple Random Sampling method was used to select the study participants among the Noble Technical Institute of Northern Iraq. Simple Random Sampling is a probability sampling technique that enable researchers to select participants randomly (Martínez-Mesa, González-Chica, Duquia, Bonamigo, & Bastos, 2016) [10]. This study assessed a total of 40 Diplomas pre-intermediate - intermediate students from English Language Department of Noble Technical Institute. 20 students were randomly selected for the control and experiment groups, respectively. The participant's age range is 19-22 years.

3.4 Data collection procedures

The data was collected using questionnaire and test results, the test results comprise of both pre-test and post-test results of both the experiment and control group. Both experimental and control groups tested pre and post learning session. Their responses were described in the results for comparison. The study compared the learning outcome of the control and experimental group.

3.5 Data Collection Materials

Productive and receptive vocabulary learning were used for this study. Therefore, the test focused on all the four parts of language testing reading, writing, speaking, and listening. Secondly, the control group focused on these four parts through text whereas, the experimental group members were administered through animated videos. Animated videos were specifically developed for this study. The animated video was developed by the help of software specialists that made use of the relevant information from the learning materials. Furthermore, the study included the post-test, the post-test emphasized on academic writing and short essays on current issues. For speaking test, it tested the ability of the students on productive and receptive vocabulary before and after the animated video methods of teaching and learning. However, the post-test exercise entails 20 vocabulary words for each section that is reading, writing, and listening. For speaking, the post-test students were free to include words they learnt. The title of the course is *Building Vocabulary*. Chart showing the steps in data collection is shown in Fig. 1.

3.6 Data analysis procedures

The data was collected through test results and questionnaire. Univariate and bivariate analyses were conducted. The univariate shows the frequency and distribution of the participant. The bivariate analyses were used to compare variables to determine the association between the variables.

3.7 Ethical considerations

A written consent form was presented to the participants to get their consent. The consent form clearly outlines the aim and objective of the study, and the participants were briefed about the research before

the beginning. The consent and approval of NTI management were sought for before the research. Confidentiality, anonymity, and no harm were done to the participants.

4. Results & Discussion

The findings from the research are hereby presented based on the thematic areas as shown in Table 1:

Table1. Demographic data of the respondent

Variable	Categories	Number	Percentage (%)
Age	19	10	25
	20	9	22.5
	21	11	27.5
	22	10	25
Sex	Male	22	55
	Female	18	45

Majority of the respondents are 21 years old (27.5%) and male constitute the highest proportion of the respondents (55%).

4.1 Pre-test Results

The Pre-test results for vocabulary test goes thus: From the pre-test result, the highest score was 89 and the lowest score was 41 from the data of 40 students as a research respondents/subject. The result data can be seen in the Table 2 below.

Table 2
Result of the vocabulary test in the pre-test

Pre-test Score							
Student's Number	Score						
1	41	11	65	21	44	31	68
2	53	12	66	22	56	32	69
3	64	13	74	23	67	33	77
4	55	14	72	24	58	34	75
5	73	15	52	25	77	35	55
6	86	16	56	26	89	36	59
7	83	17	68	27	86	37	71
8	68	18	68	28	73	38	71
9	55	19	67	29	58	39	70
10	42	20	77	30	45	40	81
Mean Score	66						
Highest Score	89						
Lowest Score	41						

According to the pre-test results (Result range: 89-41 & Mean Score: 66), the vocabulary knowledge of institute's pre-intermediate - intermediate students of NTI was averagely satisfying. Some students performed well while the others below average. Therefore, it is necessary to deploy teaching techniques to improve the student's vocabulary knowledge. This buttresses the need to implement and check the effectiveness of animated videos to improve students' vocabulary mastery in treatment sessions after the pre-test was conducted.

Treatment Session

4.2 Post-Test Results

The Results of the Action in Post-test are displayed below: After observing the gaps in the understanding of vocabulary by the students, teaching techniques with the aid of animated videos was introduced, to determine the effectiveness of animated video teaching techniques, the students of the pre-test were grouped into experiment (taught with animated video) and control group (taught without animated video) to compare. The results of the post-test for the two groups are displayed below:

Teaching without animated video: After calculating the posttest, the highest score was 91, the lowest score was 46, and the mean score was 70 from the data of 20 students as a research respondent/subject. The result data can be seen in the table below.

Teaching with animated video: After calculating the posttest, the highest score was 98, and the lowest score was 53 and the mean score was 76 from the data of 20 students as a research respondent/subject. The result data can be seen in the Table 3 below.

Table 3
Result of the vocabulary test in the post-test

Post-test Score							
Teaching without animated Videos				Teaching with animated Videos			
Student's Number	Score	Student's Number	Score	Student's Number	Score	Student's Number	Score
1	46	11	70	1	53	11	77
2	58	12	71	2	65	12	78
3	69	13	79	3	76	13	86
4	60	14	77	4	67	14	84
5	78	15	57	5	86	15	64
6	91	16	61	6	98	16	68
7	88	17	73	7	95	17	80
8	73	18	73	8	82	18	80
9	60	19	82	9	67	19	79
10	47	20	82	10	54	20	90
Mean Score	70			76			
Highest Score	91			98			
Lowest Score	46			53			

Based on the posttest conducted by the researcher, it can be identified that the post-test session with animated video showed the highest scores of the two treatments. The score is higher than that of the session without animated video. Furthermore, the researcher also used SPSS to calculate and compare these results with the initial results. The researcher used P-value and Chi-square to find out the significant variables.

4.3. Hypotheses Result:

To answer the hypothesis above, the table below shows that there is significant difference in the effectiveness and learning achievement in mastering the vocabulary of students who are taught by using animation or cartoon video. The bivariate analysis shows that teaching with animated video ($X^2 = 0.0005$, P-value= 15.675) is significant compared to teaching without animated video as displayed in the Table 4 below.

Table 4
Bivariate analysis

Variable	N	Mean	Std. Deviation	χ^2	P-value
Teaching without animated Videos	20	70	10.768	2.345	0.567
Teaching with animated Videos	20	76	12.567	15.675	0.0005

4.4 Questionnaire Findings

From the questionnaire administered to the student, most of the students agreed that learning with animated video enhance assimilation, makes study more interesting, improved vocabulary learning, makes class interactive and makes learning of English to be faster. There is divergent view as regards learning with animated video being the best form of learning, few of the students agreed while some of the student did not agreed to that. The findings are displayed in the Table 5 below:

Table 5
Questionnaire summary

No	Questionnaire	SA	A	N	D	SD
		(%)	(%)	(%)	(%)	(%)
1	Learning with animated video enhance assimilation	37.5	50	18.8	0	0
2	Learning with animated video makes study more interesting.	50	37.5	6,3	6,3	0
3	Learning with animated video improved vocabulary learning	0	81.3	18,8	0	0
4	Learning with animated video makes the class interactive	6,3	68,8	18,8	6,3	0
5	Learning with animated video makes learning of English to be faster.	0	18,8	50	25	6,3
6	Learning with animated video is the best form of learning	12,5	37,5	56,3	0	0

4.5 Discussion

From the pre-test, it was found that few of the students understands English very well and there is need to teach the students with the aid of a befitting technique to make the study easier to assimilate. Therefore, the need to evaluate the effectiveness of learning with animated video. The chat above shows that the mean score and the highest scores of those taught with the aid of animated video are higher than other

categories. As well, learning with animated video is more significant compared to the normal learning system. Furthermore, the report of the questionnaire administered to the students shows that the students attest to the effectiveness of learning with animated video.

Based on the explanation above, it can be concluded that H_0 was rejected, and H_a was accepted. Cartoon or animation/computer - animated short films and educational videos method were significant to improve the learning of vocabulary by the students. In a study by Andriano (2019) [3], the study found that video gave a contribution to students' speaking and listening because it provides authentic material, and video encourage students to learn the target language. Chat comparing the test results are given in Fig. 2.

Aisyarani's (2014) [2] study found that students love to hear stories dealing with the media used in the learning process. The findings from this study are also in tandem with Aditama & Solikhah (2018) [1] study that found short movies as a good method in teaching and improving vocabulary mastery. Margono (2010) [9] claimed that teaching English verbs with the aid of cartoon film was very effective. It enhances student's assimilation.

5. Conclusions And Recommendation

In conclusion, the study investigates the effectiveness of teaching with animated videos using quantitative experimental method; students were divided into control and experiment groups to compare the performance of animated and non-animated teaching methods. Considering the results of the pre and post-test conducted for the selected students for both the treatment and control groups, the average result of students taught without animated video was good while the students taught with animated video have better results. This implies that learning of vocabulary with the aid of animated video is very effective to aid students' understanding and assimilation. Therefore, it is highly recommended for learning of other languages. Although, findings shows that some people are either auditory or visual learner. It is necessary for teachers to have essential knowledge of modern education system. Timely capacity building on use of media and modern teaching methods should be conducted for teachers to update their knowledge.

- English subtitled video can be encouraged among the students.
- A similar research design related to English subtitles films should be encouraged for broader knowledge.
- Educational policies should be developed to enforce the usage of instructional media (materials, methods, and technologies) to enhance learning in schools.
- Teachers should be encouraged to go for seminar, workshops, and conferences for them to be exposed to advanced system.

The implication of this study is that animated learning has proven to be viable and should be encouraged in all levels of learning. There is assurance that it will improve student's assimilation. This study was

conducted among bachelor students alone, they are predominantly young adult, the effectiveness among secondary school students and aged adult (andragogy) should be determine in future studies.

Declarations

Acknowledgment

The author with a deep sense of gratitude would thank the supervisor for his guidance and constant support rendered during this research.

Funding Statement

The authors received no specific funding for this study.

Conflicts of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

References

1. Aditama, A. P., & Solikhah, I. (2018). *The Implementation of English Short Movie to Improve Students' Vocabulary Mastery at the First Grade Students of SMA N 8 Surakarta in the Academic Year of 2017/2018 (Classroom Action Research)* (Doctoral dissertation, STATE ISLAMIC INSTITUTE)
2. Aisyarani (2014). *The Vocabulary Mastery of The Eleventh Grade Students of Ma Nahdlatul Muslimin In The Academic Year 2013/2014 Taught By Using Animation Video., Skripsi of English Education Department Teacher Training And Education Faculty Muria Kudus University*
3. ANDRIANO, A. (2019). Using English Subtitled Movie to Improve the Tenth Grade Senior High School Students' Vocabulary Achievement
4. Bocanegra-Valle, A. (2014). 'English is my default academic language': Voices from LSP scholars publishing in a multilingual journal. *Journal of English for Academic Purposes*, 13, 65–77
5. Coiro, J. U. L. I. E., Knobel, M. I. C. H. E. L. E., Lankshear, C. O., L. I. N., & Leu, D. J. (2014). Central issues in new literacies and new literacies research. *Teoksessa: J. Coiro, M. Knobel, C. Lankshear & D. Leu (toim.). Handbook of Research on New Literacies. Lontoo: Routledge*
6. Copland, F., Garton, S., & Burns, A. (2014). Challenges in teaching English to young learners: Global perspectives and local realities. *Tesol quarterly*, 48(4), 738–762
7. Coriano, V. A. (2002). *Vocabulary acquisition through reading. A study of the effectiveness of different CALL-based annotations*
8. Escandon, A. (2002). The challenges to constructivist culture in Japan. In JALT Conference Proceedings (pp. 273-279)
9. Margono, M. (2010). *The effectiveness of teaching English verbs by using cartoon film (an experimental study at the second grade of SMP Negeri 18 Semarang in the academic year of*

2010/2011) (Doctoral dissertation, IAIN Walisongo)

10. Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: how to select participants in my research study? *Anais brasileiros de dermatologia*, 91, 326–330
11. Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational psychologist*, 38(1), 43–52
12. Richards, J. C., Richards, J. C., & Renandya, W. A. (Eds.). (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge university press
13. Smith, R., Kuchah, K., & Lamb, M. (2018). Learner autonomy in developing countries. *Autonomy in language learning and teaching* (pp. 7–27). London: Palgrave Pivot
14. Taguchi, N. (2014). English-medium education in the global society. *International Review of Applied Linguistics in Language Teaching*, 52(2), 89–98

Figures

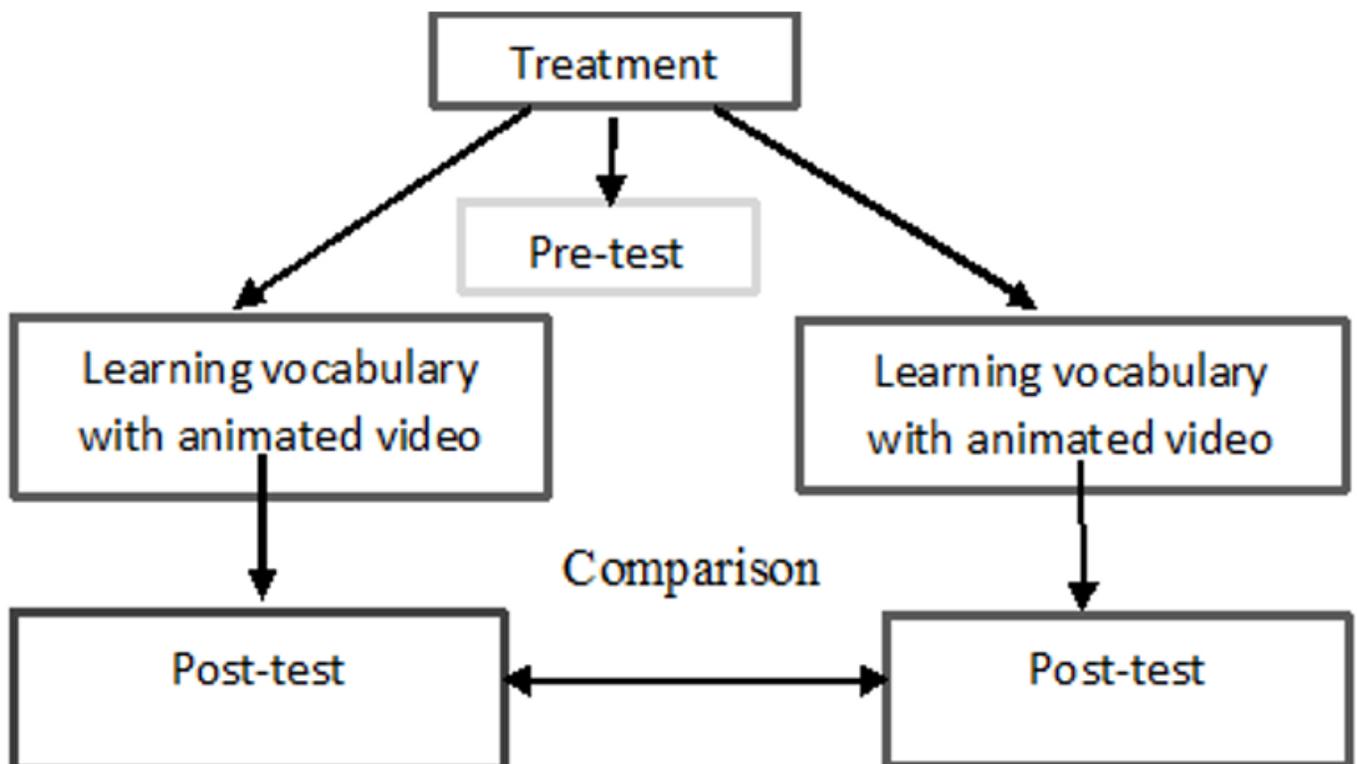


Figure 1

Chat showing the steps in data collection

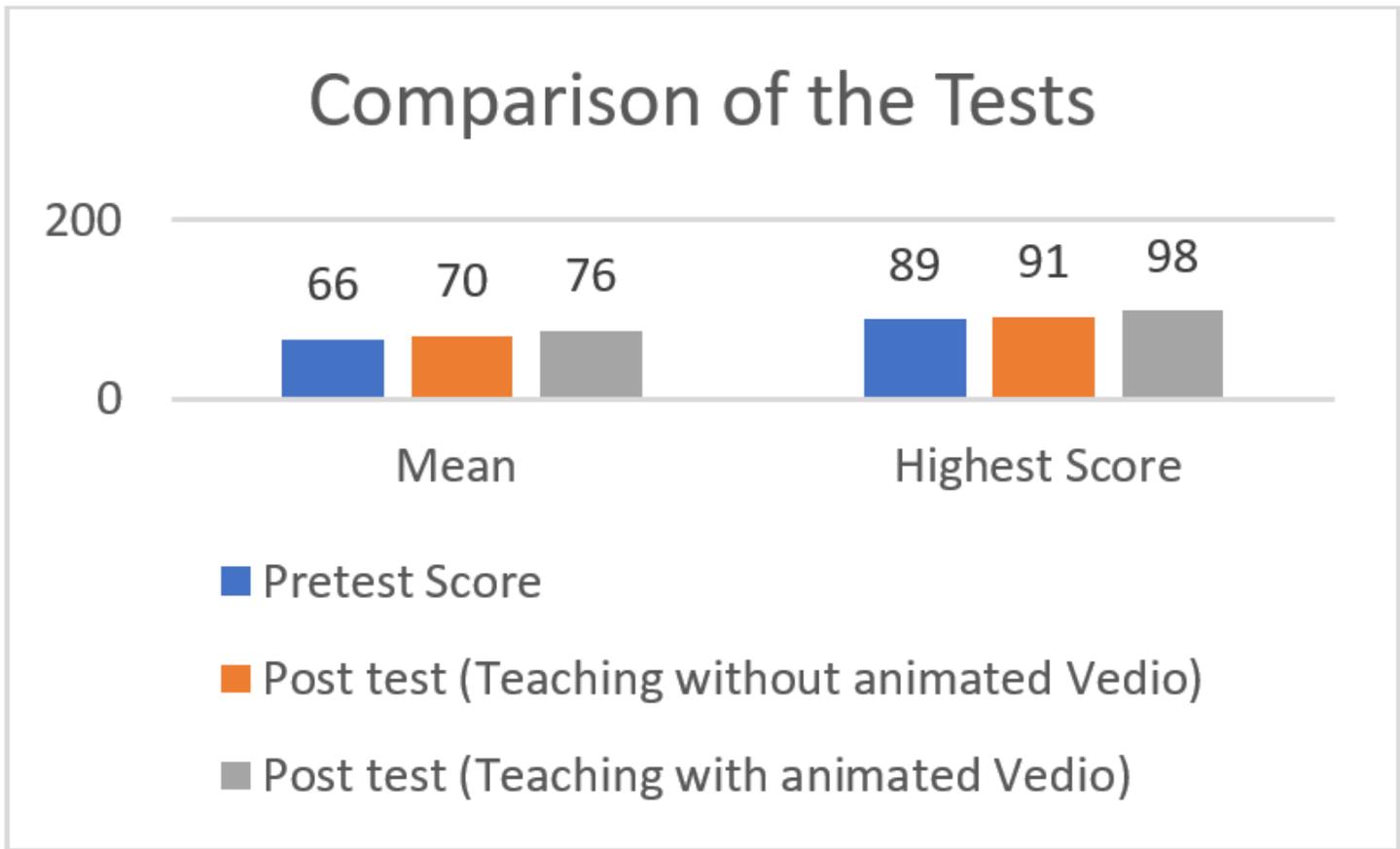


Figure 2

Chat comparing the test results