



A Study of Animations as a Tool to Teach English in Elementary Education

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Abstract:

In this study, the researcher has tried to check the effectiveness of Animation modules designed for the English language textbook of standard six. The objectives were, to develop animation modules of the selected content from English textbook of standard- VI, to study the level of achievement of experimental group and control group of English subject of standard –VI, during the experiment and replication of the experiment and to observe the practical significance of the statistical result of the study. The sample contained 169 students, 86 for implementation of the experiment and 83 for the replication of the experiment from two randomly selected schools of Navasari district of Gujarat. Experimental Control Randomized Two Group Post-Test Only Design was applied and DATA was collected after implementing and replicating the experiment. After collection of the data, the statistical technique of mean scores, Standard Deviation, and t-test was applied. The null hypotheses were verified particularly by comparing the scores of the post-test of the control group and the post-test of experimental groups. After this, the practical significance of the effect of treatment was also measured with the help of Effect size. A significant difference was observed in favour of the experimental group in both experiments and the replication of the experiment. It was inferred from the interpretation of the DATA that the animation modules enhance the achievement of students in the English language.

Keywords: Animation, Achievement, Experimental Method, ELT

Introduction:

Looking at the condition of the students of Gujarati Medium Primary schools of Gujarat, the researcher tried to study the reasons behind it and found that the primary schools do not have teachers who had English subject as a principle subject at their graduation and that they are supposed to teach all the subjects irrespective of the subject that they had opted in under or post-graduation. Change may be brought about by introducing Animation as a tool to teach which may arise interest among the students and can help the teacher too. Considering this, the researcher has made up her mind to create animation modules for the initial units of Semester 1 textbook of English of standard six of Gujarati medium schools of Gujarat. By reviewing various pieces of literature, the researcher found out the research gap and focused on it. Many studies have been made about animations, but for Gujarati Medium Schools of the sixth standard, this might be the first-ever attempt.

Objectives

1. To develop animation sequences of the selected content from the English textbook of standard- VI

2. To study the level of achievement of the experimental group and control group of English subject of standard –VI
3. To study the level of achievement of the experimental group and control group of English subject of standard –VI during the replication of the experiment
4. To observe the practical significance of the statistical result of the study

Hypothesis

H01 There will be no significant difference between mean scores of the post-test of the experimental group and post-test of the control group

H02 There will be no significant difference between mean scores of the post-test of the experimental group and the post-test of the control group in the replication.

Population and Sample

The population of this research is the students of the sixth standard of Gujarati medium primary schools of Navsari District, Gujarat. So the finding of this study may apply to the students of the sixth standard of Gujarati Medium Schools of Navsari district.

The randomly selected sample contained 169 students in which 86 students were taken in the implementation of the experiment and 83 students were taken in the replication of the experiment. The two Gujarati Medium Primary schools in the Navsari district were 1. L.M.P. Reva Experimental Primary School, Bilimora, Dist., Navsari and 2. A. B. School, Khund, Chikhli, Dist. Navsari.

Research Design

In the present study, from true experimental design, Randomized post-test design also known as Experimental Control Randomized Two Group Post-Test Only Design, has been selected.

As per the research design, there are two stages of experimentation. The researcher has first made an experiment in an urban school and then a school of the rural area was taken for the replication of the experiment. There were two groups, one is the experimental group (ER) and the other is the control group (CR). In the Experimental group (ER) treatment is applied while in control group (CR) treatment is not applied and the English subject was taught through the traditional method being practiced by the researcher in the school.

Development of Animation Modules

The researcher designed Animation Modules with the help of technical experts having professional experience for the selected units of the English textbook of standard six. It was a huge task and the researcher followed several steps.

Right from the selection of the content to the finalization of the modules, all steps are summarized here.

- Selection of the Content: Determined after consultation of the school administration and consideration of school convenience.
- Content Analysis: Content analysis was made considering the learning outcomes prescribed by GCERT.
- Review of Animation based Available Sources: The researcher made a simple survey to check available academic resources regarding Animations.
- Design of Animation Modules: Animation modules were prepared with the support of academic and technical experts.
- Expert Review and Responses The modules were shown to subject experts (Academic Experts) as well as technical experts. Required modifications were made.
- Pilot study: The pilot study was made on J.J. Maheta School, located in Bilimora. Care was taken to implement the experiment exactly in the same manner in which the real experiment was supposed to be conducted.

- Finalization of the Animation Modules: The final draft was designed after exposure to the actual situation and more modifications considering them.

The teacher made Achievement Test

The teacher made an achievement test for units selected by the researcher from the textbook of English of standard six was designed. This test is used as a post-test, a tool for the collection of the DATA.

DATA Collection

The data were collected with the help of the posttest. The teacher made post-test contained 62 test items to be asked as per the expected learning outcomes. Answers were recorded on the answer sheet. The test was that of 50 marks. The investigator created a data spreadsheet in MS Excel 2007 an office package of Microsoft.

DATA Analysis and Interpretation

After collection of the data, the statistical technique of mean scores, Standard Deviation, and t-test was applied. The null hypotheses were verified particularly by comparing the scores of the post-test of the control group and post-test of experimental groups. As mentioned above, the investigator created a data spreadsheet in MS Excel 2007 an office package of Microsoft. For the analysis of the data, the investigator has taken the help of an expert in statistical data analysis who has used SPSS computer programme to compute mean scores, standard deviation, and t-ratio. In addition to this, the practical significance of the experiment and replication of the experiment was also measured through the formula of effect size. Then the average effect size of the experiment and the replication of the experiment were calculated to infer the practical significance as a whole.

- Post-test of Control and Experimental Groups of the implementation of the Experiment:

H01 There will be no significant difference between mean scores of post-test of the experimental group and post-test of the control group

Group-wise Mean Scores, Standard Deviation and t-ratio of the post-test

Table – 1

Group	Total (N)	Mean	SD	SED	t-ratio
Experiment Group	45	38.133	4.0033	0.9043	12.959**
Control Group	41	26.415	4.3504		

** Significant at 0.01 level (12.96 > table value 2.58)

From the above table, it can be observed that the obtained value of t-ratio between experiment and control group students is 12.96. When df=84, the obtained value of t-ratio does exceed the table value of 't' 2.58 needed at 0.01 level of

significance. Hence there is a significant difference between the mean scores of experiment and control group students. Consequently, the null hypothesis (H01) that there will be no significant difference between mean scores of the post-test of the experimental group and post-test of the control group after the experiment of the study is not accepted at 0.01 level.

It means that the difference between the mean scores of the control group and the experimental group of the experiment was significant and it was in favour of the experimental group. So it can be inferred that the treatment of Teaching with the help of Animation Modules applied to the experimental group during the experiment has been more effective in terms of achievement is the English Subject for the students of standard six and is an effective tool.

• Post-test of Control and Experimental Groups of the Replication of the Experiment:

H02 There will be no significant difference between mean scores of the post-test of the experimental group and the post-test of the control group in the replication of the experiment.

Group-wise Mean Scores, Standard Deviation and t-ratio of the post-test

Table – 2

Group	Total (N)	Mean	SD	SED	t-ratio
Experiment Group	43	37.93	4.8436	1.0951	8.611**
Control Group	40	28.5	5.1137		

** Significant at 0.01 level (08.61 > table value 2.58)

From the above Table, it can be observed that the obtained value of t-ratio between experiment and control group students is 8.61. When df=81, the obtained value of t-ratio does exceed the table value of 't' 2.58 needed at 0.01 level of significance. Hence there is a significant difference between the mean scores of replication of the experiment and control group students. Consequently, the null hypothesis (H02) that there will be no significant difference between mean scores of the post-test of the experimental group and post-test of the control group after the replication is not accepted at 0.01 level.

It means that the difference between the mean scores of the control group and the experimental group of the experiment was significant and it was in favour of the experimental group. So it can be inferred that the treatment of Teaching with the help of Animation Modules applied to the experimental group during the replication of the experiment has been more effective in terms of achievement is the English Subject for the students of standard six and is an effective tool.

• **The effect size** value of statistical results during the experiment is 2.69 and the effect size value of statistical results during the replication of the experiment is 1.84. The average effect size value is 2.26, which is greater than 1.00. The practical significance of results is considered higher if the effect size value is ≥ 0.1 . (Haladyna, Tom, Thomas, 1979). Thus the effect size in the present study indicates that the practical significance of the result was high.

Findings

From the analysis of the DATA obtained after the experiment as well as the replication of the experiment, it can be said that teaching with the help of Animation is more effective in terms of achievement in English subject compared to the traditional way of teaching so far, and it enhances the achievement of the learners of English subject of standard six of the Gujarati Medium schools of Navsari district.

Implications of the study

The research revealed the following educational implications. From this research, it is implied that students tend to remember what they have learned through such an interesting aid like animation and retention of the students appears to be increased. Animations create interest among the students and it results in interest in the subject that they are learning. Anything learned with interest is remembered for a long time. Being so interesting, they create a readiness to learn which helps the students learn better as per the law of readiness. Students are fond of animations are parents are always found to be complaining about their child that s/he keeps on watching television and most of the time cartoon channels. Teaching through animation fulfills their interest in cartoons and that helps them learn better.

References:

Books:

Best J. W. (1993) *Research in Education* (6th ed.). New Delhi: Prentice-Hall of India Pvt.Ltd.
 Desai, K.G. Shah &Desai H.G. (2013).Sanshodhan Paddhatio ane Pravidhio. Ahmedabad: University Granthnirman Board.
 Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction. Longman Publishing.*P 289
 GCERT (2012).*Text Book of English of Standard Six* (1st ed.). Gandhinagar: Gujarat School Text-Book Board.
 Kothari, C.R., (1994). *Research Methodology.*New Delhi: Wiley Eastern Ltd. New Age International Ltd.

Patel, R.S. (2017). *Fundamental Concepts of Research: Research Handbook*. Ahmedabad: Jay Publication

Uchat, D. A. (2009). *Research Methodology in Education and Social Sciences*. Rajkot: Shant Publication

Web References

Desai, Amjad (2015). *Animation in Education*. accessed from

<http://www.cgpundit.com/animation-in-education/> accessed on 5th July 2015

<http://arjournals.annualreviews.org/>

<http://unicef.in/Story/1145/-Meena----animated-spots-on-girls--education-go-on-Air>

http://www.ncert.nic.in/departments/nie/del/publication/pdf/english_primary_level.pdf

http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/english.pdf

<https://www.britannica.com/art/animation>

MEENA Cartoon Health Awareness: accessed from

<https://www.youtube.com/%20watch?%20v=QU MgoY3E-g>