

EFFECTIVENESS OF MULTIMEDIA INSTRUCTIONAL PACKAGE FOR TEACHING MARKETING MANAGEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS

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PREETHI C[†]

Abstract

The present study is an attempt to find out the effectiveness of Multimedia instructional package over the present method of teaching on the achievement of marketing management among higher secondary school students. Multimedia in education is a format for presenting information using a combination of images, sound, audio and text. Multimedia activities encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their own work, and construct knowledge. Multimedia package will be helpful to increase student's retention, develop various skills and promote students self esteem and developing high level thinking. In the classroom multimedia can bridge the gap between theory and practice by giving students the opportunity to practice what they have learned in safe and controlled environment. School technology curricula include multi-media presentations as a required skill for students. The sample consisted of 90 higher secondary commerce students. Analysis of the data revealed that students taught through Multimedia instructional package performed better than those who were taught through present method of teaching.

Introduction

Marketing is an essential survival tool in today's competitive business environment. Marketing impacts upon almost everything we see and do in today's world. Marketing gives the opportunity to take up an exciting career requiring talent and creativity. Trade, commerce and industry constitute a vital part of our life's activities. These aspects of our life's experiences are extremely important and if we despise these, all our educational effort will be fruitless toils. The increasing

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complexity of business and commerce organisation in the present day world would make it obligatory for students to be conversant with modern principles and practices of management and marketing. The use of computers and the management technique of behavioural science have completely revolutionized the running of modern business and commercial enterprises. It therefore, has become very necessary to pay adequate attention to commerce education. The individual must be able to earn a living for dealing a civilized life. In such perspective commerce education is to be looked upon as just one phase of education. Marketing occupies an important place in the commerce subjects. It has opened worldwide chances for employment. That is why marketing has been described as a window on the rapid progress of technology and scientific knowledge that is constantly taking place in the world.

During the first 10 years of schooling students are not given formal instruction in commerce and marketing subjects. Against this background, it become necessary that at this stage instruction in these two aspects be given in such a manner that students have a good understanding of the principles and practices bearing on business, trade and industry and their relationship to society, world as a part of the economic, legal and social environment. This will enable them to understand and appreciate the functions and scope of marketing activities in the economic set up.

This millennium is characterised not only by population explosion but also by galloping advancement of science and technology. Information technology is progressively invading each and every area of modern civilization. Integration of information and communication technology is essential to meet challenges of the new decade.

In the present scientific and technological age the conventional method was not sufficient to arouse interest among the students and does not needs up to the intellectual, psychological and emotional needs of the students in the new millennium (Kala 2007). The method of teaching marketing needs to change. The traditional method of teaching is based on giving information as bits. It includes rote memorization of concepts facts and principles, which do not realize objective of marketing teaching. Teaching strategies play an important role in enhancing the learning abilities of the students. It has to be lamented however that instruction in the higher secondary classroom continues to be dominated by teachers talk, minimum student participation and teacher control as is evidenced by a number of research studies. New interesting and innovative methods should be followed for effective teaching.

.Multimedia can be used to develop active and mastery learning. In this learning situation, there is active participation on the part of the learner as opposed to passive learning listening to lectures and demonstrations. It also can stimulate the

students mind and encourage learning through all sense because multimedia can combine so many media together. Furthermore, multimedia is nonlinear and interactive in nature. The interactive nature is considered to be the most important feature.

Multimedia holds greater promise in enhancing learning as well as in improving the quality of education. Multimedia enables students get a live vision of life's aspect and scientific factors (Lu 2008). Any diagram can be explained in detail with 3D effect. It helps the student to understand the lesson clearly. Multimedia ensures flexible learning. Flexibility is recognised in the level of access to courses, the place of entry to, exit from course, the place, time and place of study; the form and pattern of interaction among learners, teachers and resources, the type and variety of resources to support study and communication; the goal or outcome of the educating process and the method used to measure achievements and success.

Learning through multimedia is an active and engaged process, store, retrieves and transmits audio, video, graphics and textual information. These kinds of systems can have a powerful impact on the learner's problem solving abilities and can generate a positive effect (Maine 2009). The interactive multimedia enhances effective self learning among students. Individual differ widely in their cognitive experiences, psychological skills, success and failure in learning, interest and perception. It can be said that no two learners are alike physically, mentally or intellectually. Since learners differ in their prior learning experiences, and in what they need to learn. Learners should be allowed to learn independently at their own pace and according to their interest and abilities.

The effectiveness of classroom teaching always depends upon the variety of the methods adopted by the teacher. The teacher should be able to use permutations and combinations of various methods, devices and techniques to make the lesson more effective. This study tries to investigate the effectiveness of multimedia instructional package in the teaching of marketing at higher secondary level.

Knowledge of marketing is more effective and enduring when it is obtained through personal observation and individual effort rather than learnt from books or listened from someone (Saint 2010). The present study is an attempt for developing a multimedia instructional package for teaching marketing at higher secondary level. It is hoped that the findings of the study could be utilised in all educational settings where achievement of the students is given more importance.

Key Words:

Multimedia: - Integrated use of the different instructional media includes film, slides, computer, tape and live face-to-face contact between teacher and student.

Instructional Package: It is a set of strategies used in the instructional process so as to make teaching learning process more easy and simple.

Objectives of the study

1. To prepare a multimedia instructional package in marketing management.
2. To find out the effectiveness of multimedia instructional package prepared in teaching of marketing management at higher secondary level.
3. To find out the effectiveness of multimedia instructional package over existing method of the achievement of marketing management of higher secondary level.

Hypothesis

1. There will be significant difference between multimedia instructional package over existing method of teaching.

Methodology

The study was carried out on a sample of 90 higher secondary school students of Palakkad district. Students of two divisions of standard XII were selected one as experimental group and other as control group. Control group consists of 45 students and experimental group consists of 45 students.

Tools

Experimental method was used to conduct the study. Multimedia Instructional Package and Achievement test in Marketing management were used as tools for the study.

Statistical techniques used

The study was aimed to determine the effectiveness of multimedia Instructional strategy for the acquisition of marketing management, it was necessary to compare the outcome of the study with that of the existing method of teaching carried out in the control group. It was important to find out whether there was any significant difference between the two. Test of significance of difference between means and ANCOVA were calculated for statistical analysis.

ANALYSIS AND INTERPRETATION

Before Experiment

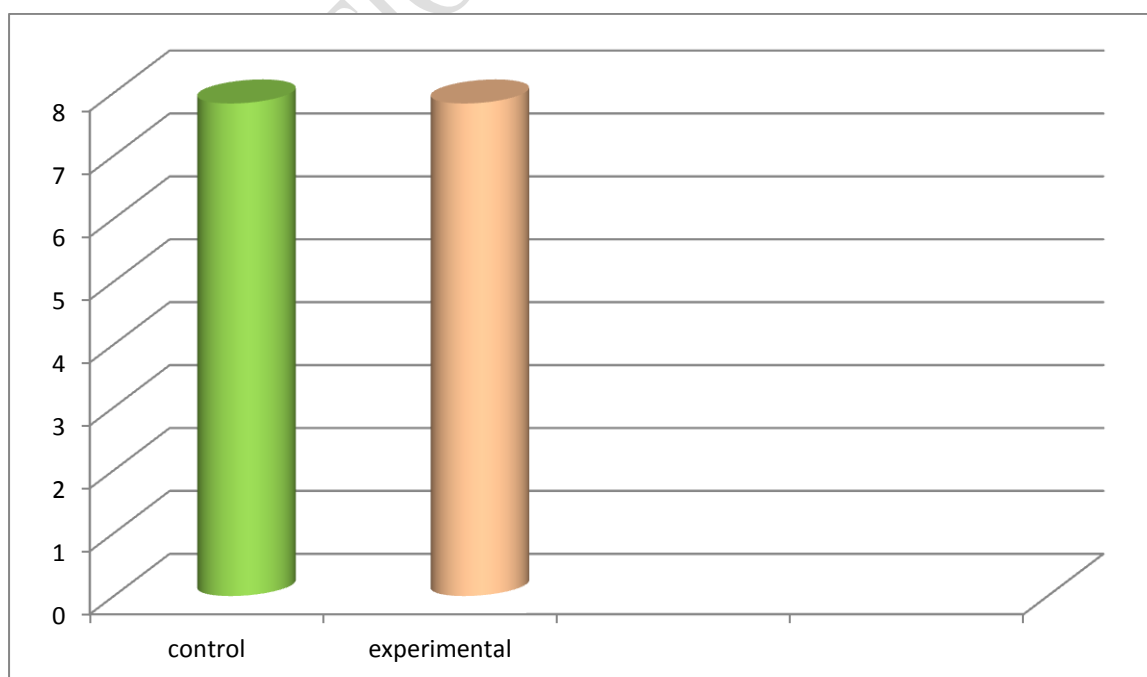
Table 1

Comparison of pre-test score of pupils in the Experimental and Control groups

Group	No. Of Pupils	Mean	SD	t-value
Experimental group	45	7.277	2.67	0.86
Control group	45	7.78	2.71	

From the table it is clear that the calculated t-value (0.86) is less the table value (2). So it is not significant at 0.05 levels. This shows that there is no significant difference between the means of the pre-test scores of pupils in the experimental and control groups. Therefore the two groups do not differ in their initial performance. The two groups were more or less of the same ability before the experiment.

Graphical representation of the pre-test score of pupils in the experimental and control groups



After experiment

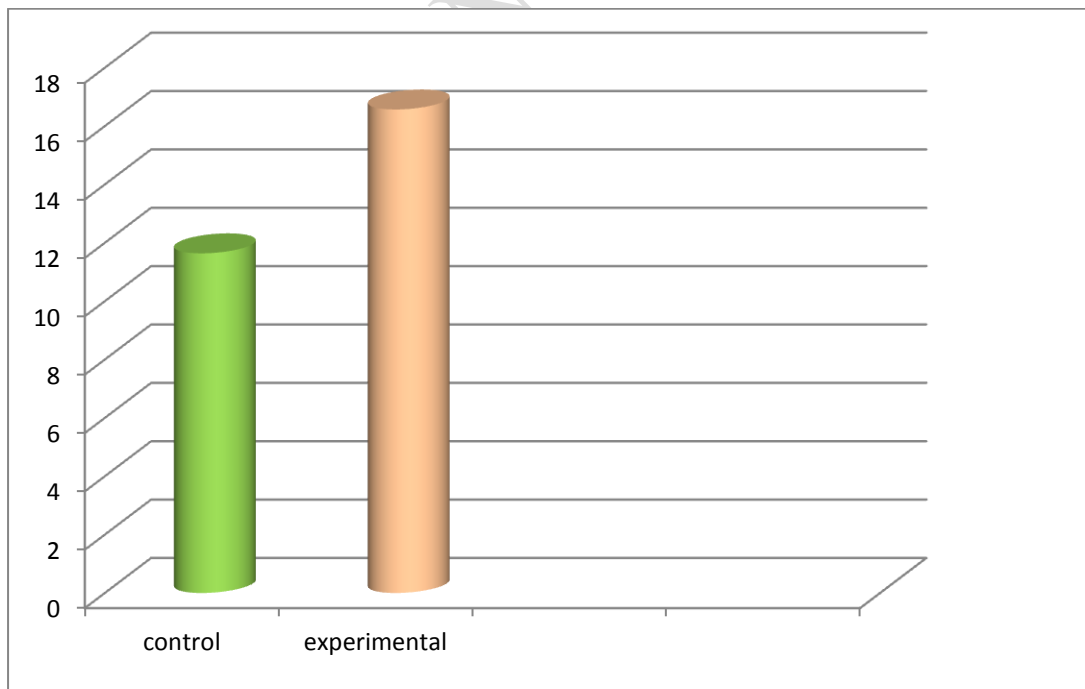
Table 2

Comparison of post-test score of pupils in the experimental and control group

Group	No. Of Pupils	Mean	SD	t-value
Experimental group	45	16.45	2.98	7.64
Control group	45	11.64	2.77	

From the table it is clear that the t-value obtained (7.64) is greater than the table value (2). It is significant at 0.05 levels. This shows that there is a significant difference between the means of the post-test score of pupils in the experimental and control groups. Therefore the two groups differ in their performance. So it can be concluded that the multimedia instructional strategy has greater effectiveness than the present method.

Graphical representation of post-test score of pupils in the experimental and control groups



Comparison of gain score of pupils in the experimental and control groups.

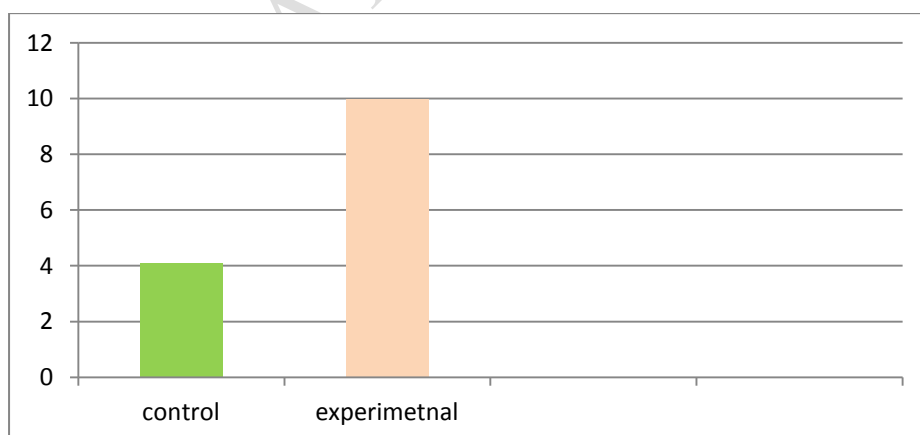
Gain scores were obtained by calculating difference in the post test and pre-test scores of each student in the two groups. The gain scores were tabulated and then the mean and standard deviation were calculated. The difference between two mean scores was found out and tested for significance. The result obtained is given in table 3

Table 3. Data and results of Test of significance of the Gain scores of Pupils in the Experimental and Control groups.

Group	No. Of Pupils	Mean	SD	t-value
Experimental group	45	9.39	2.5	9.99
Control group	45	4.10	2.8	

The critical ratio obtained is 9.99 which are greater than the table value (2). So it is significant at 0.05 levels. This shows that there is a significant difference between the mean gain score of the two groups. Since the mean gain scores are higher for the Experimental groups, it can be concluded that multimedia instructional package is more effective in teaching marketing management.

Graphical representation of gain scores of pupils in the experimental and control groups.



Interpretation using Analysis of Covariance (ANCOVA)

Analysis of Co-variance is a statistical technique used to control or adjust for the effect of one or more uncontrolled variables and permit there by a valued evaluation of the outcomes of the experiment. Analysis of covariance was the statistical technique adopted by the investigator for arriving at valid and reliable conclusion. The analysis was done to compare the effectiveness of Multimedia Instructional strategy for the acquisition of marketing management over the existing method of teaching.

Comparison of effectiveness of Multimedia Instructional Strategy over the present method of teaching.

The scores of 90 pupils of the experimental and control group were subjected to Analysis of Co-variance to determine the effectiveness of multimedia instructional package over the present method of teaching. The total sum of squares, mean square variance and F ratio for the pre-test and post test scores of the experimental and control group were computed. The data are presented in table 4.

Table 4 Analysis of variance of the Pre-test and Post test scores of the Experimental and Control groups.

Source of variation	df	SSx	SSy	MSx (Vx)	MSy(Vy)	Fx	Fy
Among Means	1	1.96	61.83	0.74	62.3	0.09	
Within groups	88	492	512.5	10.26	9.12		7.92

The calculated Fx value (0.09) is less than the table value (3.95) at 0.05 level. Hence there is no significant difference in the pre-test scores among the two groups. The calculated Fy value (7.92) is greater than the table value (3.95) at 0.05 level. Hence there exists a significant difference in the post test scores of the two groups.

The Analysis of Co Variance of the scores of the pre-test and post test of the experimental and control groups were computed. The data are presented in table 5.

Table5. Analysis of Co Variance of the scores of the pre-test and post test of the experimental and control groups.

Source of variation	df	SSx	SSy	SSxy	SSyx	MSyx	SDxy
Among means	1	1.96	61.83	7.01	59.81	58.71	
Within groups	87	492	512.5	508.64	66.84	2.04	1.26

Total	88	493.96	574.8	515.65	126.65	61.86	
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$$F_{yx} = \frac{58.71}{1.26} = 46.59$$

The calculated F_{yx} value (46.59) is greater than the table value (3.95) at 0.05 levels. Hence there exists a significant difference between the scores of two groups.

Comparison of adjusted 'Y' mean score

The adjusted mean for the post test score of students in the experimental and control groups were calculated. The data are given in the table 6.

Table 6. Adjusted means of scores for the post test of students in the experimental and control groups.

Groups	N	M _x	M _y	M _y adjusted
Control group	42	7.12	11.78	12.42
Experimental group	44	7.95	15.98	17.01
General mean		7.77	14.28	14.84

SED among two adjusted means = 0.61

$$t = \frac{17.01 - 12.42}{0.61} = 7.524$$

The adjusted mean of experimental group (17.01) greater than the mean of control group (12.42). It means that the experimental group differs significantly in their achievement. That is experimental group is superior to the control group in their performance in their post test. The adjusted means for the post-test scores were tested for significance. The t-value obtained was 7.524 and the table value at 0.05 level is 2. Hence the obtained t-value is significant. This indicates that there is significant difference between the experimental group and control group in the achievement. So it can be concluded that the students taught through Multimedia instructional package performed better than those who were taught through present method of teaching.

CONCLUSION

From the findings of the study it was explicitly proved the effectiveness of Multimedia Instructional Package for the acquisition of Marketing management. Multimedia enables learning through exploration, discovery and experience. That role belong to the learning needs of students with multimedia, the process of learning can become more goal oriented, more participatory, flexible in time and space, un affected by distances and tailored to individual learning styles and increase collaboration between teachers and students. Multimedia enables learning to become fun and friendly, without out fear of inadequacies or failure.

Suggestions

- ❖ As Multimedia instructional package is an effective visual strategy it can be tried with children with learning disabilities like dyslexia etc.
- ❖ A survey of attitude of teachers and students towards the effectiveness of this package can be conducted.
- ❖ The study can be conducted using other variables like level of adjustment.
- ❖ The study can be conducted in other discipline too.

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