Usefulness of Multimedia Instruction on Achievement in Commerce at Higher Secondary Level

R. Padma and Dr.P.B. Beulahbel Bency

Abstract--- Multimedia in Education is a system for presenting information using a combination of images, sound, audio and text. In the classroom multimedia can connect the gap between theory and practice by giving students the opportunity to practice what they have learned in a safe and controlled environment. The school technology curriculum includes multi-media presentations as a required skill for students. This research article discusses how the multimedia program is used effectively with students studying commerce at higher secondary level. The sample consisted of 903 Higher Secondary Students from commerce using simple random sampling technique. Data were analysed, it was found that the students learned through Multimedia Instructional Package performed better than those who were learned through traditional method of teaching.

**Keywords---** Multimedia Instruction, Achievement, Educational Technology and Multimedia Instructional Package.

#### I. Introduction

Multimedia is generally played and recorded or accessed by information content processing devices, such as computerized and electronic device, but can also be a part of a live performance. Multimedia ensures flexible learning. Flexibility is recognized in the level access to courses, 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 outcomes of the educating process and the methods used to measure achievements and success. Past research has identified that complications of the multimedia component has enabled students to use their mental skills in a more effective way (Surjono, 2015). The method of multimedia instruction is considered as an effective and efficient method. The combination of audio, video and animation was more effective than text mode of promoting learning (Huang &Azevedo2015). It reveals that the approach by multimedia will be highly helpful to improve student's retention, develop numerous skills and promote student self-esteem and developing high level thinking. The use of audiovisual media added with video, animation and simulation can effectively advance the context of the learning process and academic assessments results (Kapi & Osman, 2015: Fombona & Pascual, 2013: Daniel, 2013). In the classroom, multimedia can bond the gap between theory and practices by giving students the opportunity to practice what they have learned in a safe and controlled environment.

### Need and Significance of the Study

Individuals are members of the society and their action affect the society favorably or adversely. Commerce cautiously studies the actions of an individual, which is injurious to the society as a whole and recommends the

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methods of their prevention. There are certain commerce issues, which are of direct interest to the society. The incidence of taxation, the problem of money is protected, the development of agriculture, import-export, businesses and the like affect the society as a whole. Education of Commerce carefully studies, these issues in the light of social welfare and gives its biased opinion.

On education multimedia, the learning process is mainly based on computer based training course and reference books such as almanacs and encyclopedia. The explosion of information in science and technology has influenced every area of life, including business and commerce. The increasing complexity of business and commerce organizations in the present world would make it mandatory for students to be familiar with modern principles and practices of management and accounting. The Backbone of the business is Commerce education. A success in particular business is purely depends upon the quality of manpower. Commerce education should maintain the speed with changing trends. It has a crucial role to play in our society, including various political parties, religious organizations, where expertise in commercial knowledge is required. The commerce degrees are anticipated for obtaining the managerial skills and a conceptual knowledge in the wide spectrum of business and industry and to provide highly qualified and smart commerce graduates. Hence, it is important to mold the commerce students and make them to focus according to the global changes.

#### II. METHODOLOGY

#### Method

Normative Survey Method is used for the study

#### Sample

903 Higher Secondary Commerce students studying in the Higher Secondary Schools of Tirunelveli District was selected using simple random sampling technique.

### Tools Used

Asa Grant Hilliard (1989), Learning Style Inventory was the tool used for the study. Quarterly Marks of the students was taken for academic achievement.

#### Statistical Techniques Used

Mean, Standard Seviation and t test were the statistical techniques used for analyzing the data.

# Data Analysis

Table 1: Learning Style of Higher Secondary Commerce Students

Variables	Gl	obal	Analytical		
Learning Style	N	%	N	%	
	576	63.79	327	36.21	

Table 2: Level of Academic Achievement of Higher Secondary Commerce Students

Variables	Low		Ave	erage	High	
Academic Achievement	N	%	N	%	N	%
	169	18.72	573	63.46	161	17.83

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Table 3: Level of Academic Achievement of Higher Secondary Commerce Students with Global and Analytical Learning Styles

Learning Style	L	ow	Ave	erage	H	igh
Clobal	N	%	N	%	N	%
Global	143	24.83	419	72.74	14	2.43
Analytical	26	7.95	154	47.09	147	44.95

Table 4: Difference between the Higher Secondary Commerce Students with Global and Analytical Learning Styles in their Academic Achievement

Learning Style	Low	Mean	SD	Calculated 't' value	Table Value	Remark
Global	576	818.03	112.12	19.39	1.06	C
Analytical	327	989.41	135.62	19.39	1.96	3

Table 5: Difference between the Higher Secondary Commerce Students with Global and Analytical Learning Styles in their Academic Achievement in terms of Class of Study

Class	Learning Style	N	Mean	SD	Calculate 't' value	Table value	Remark
VI	Global	364	821.13	110.15	13.86	1.96	S
XI	Analytical	217	982.25	148.61	15.80		
VII	Global	212	812.73	115.51	14.97	1.06	C
XII	Analytical	110	1003.54	104.61	14.97	1.96	ာ

Table 6: Difference between the Higher Secondary Commerce Students with Global and Analytical Learning Styles in their Academic Achievement in terms Order of Birth

Birth Order	Learning Style	N	Mean	SD	Calculated 't' Value	Table Value	Remark
First	Global	176	818.95	111.09	9.82	1.96	S
FIISt	Analytical	128	973.85	151.30	9.02	1.90	
Middle	Global	197	815.19	113.38	11.09	1.96	S
Middle	Analytical	95	995.44	137.38	11.09		
Last	Global	203	820.00	112.20	13.65	1.96	S
	Analytical	104	1003.05	110.66	13.03	1.90	

Table 7: Difference between the Higher Secondary Commerce Students with Global and Analytical Learning Styles in their Academic Achievement in terms of Locality of Residence

Locality of Residence	Learning Style	N	Mean	SD	Calculate 't' value	Table Value	Remark
Urban	Global	231	840.34	106.87	10.21	1.96	S
	Analytical	140	994.46	156.051	10.21		
Rural	Global	345	803.10	113.23	17.44	1.96	S
	Analytical	187	985.63	116.39	17.44		

# III. FINDINGS

The findings of the study are:

- 63.79% of higher secondary commerce students have global learning style and 36.21% of them have an analytical learning style.
- 18.72% of higher secondary commerce students have low academic achievement, 63.46% of them have average academic achievement and 17.83% of them have high academic achievement.
- 72.24% of higher secondary commerce students with global learning style and 47.09% of higher secondary commerce students with analytical learning style have average academic achievement. There is significant

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difference in the academic achievement of commerce higher secondary students with global and analytic

learning styles. The students with analytical learning style have better academic achievement.

• There is significant difference in the academic achievement of commerce higher secondary students with

global and analytic learning styles with regard to class of study. The students with analytical learning style

have better academic achievement.

· There is significant difference in the academic achievement of commerce higher secondary students with

global and analytic learning styles with regard to order of birth. The students with analytical learning style

have better academic achievement.

There is significant difference in the academic achievement of commerce higher secondary students with

global and analytic learning styles with regard to locality of residence. The students with analytical learning

style have better academic achievement.

IV. EDUCATIONAL IMPLICATIONS OF THE STUDY

With the implementation of multimedia as a tool for learning, it has captured the students' interest and made

them passionate in the learning process. It can be concluded that multimedia components such as animation and

videos to be a powerful tool to communicate facts, explain concepts and trigger emotions. Training may be

given for teachers to implement the multimedia technique in classrooms. A multimedia application is a creative

presentation of a blend of media such as sound, graphic, text and animation. The advancement of such applications

supports education system by improving knowledge sharing process and at the same time influence people to think

creatively. Internet resources may be strengthened to make use of all the available free online resources. With

multimedia, the process of learning can become more goals oriented, more participator, flexible in time and space,

unaffected by distance and tailored to individual learning style, and increase relationship between teachers and

students. With multimedia, the communication of the information can be done in more effective means and it can be

an effective instructional medium for distributing educational information because it is enables the teacher to present

the information in various media. Administrators shall help the teachers and students to get the use of multimedia in

their class doorsteps.

V. CONCLUSION

From the findings of the study, it was observed that the students with worldwide and analytic learning styles

have higher academic success. While studying with regard to their elegance of study, order of birth and locality of

residence, the identical widespread distinction was found. The scholars with analytical learning style. Therefore, it

was concluded that the analytical studying fashion has its very own giant influence on the educational achievement

of higher secondary commerce students.

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