

INFLUENCE OF E-CONTENT IN ACHIEVEMENT DIFFERENCE AMONG XI STANDARD STUDENTS WITH RESPECT THEIR LEARNER GENERATION

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Abstract: An attempt has been made in this paper to study the influence of e-content in achievement difference among XI standard students with respect to learner generation. Experimental method has been used in the present investigation. A sample of 120 students studying in different school from, Nannilam, Tiruvarur and Kumbakonam in Tamil Nadu, were selected for the study. The sample divided into equivalent group, experimental and control group design. The experimental group engaged by the e-content method and control group engaged by the traditional method. The finding of the study shows a significant difference in achievement of XI standard students with respect to learner generation. Therefore, there should be more and more number of e-content packages used in classroom. The influence of e-content package is not only for the modern generation but also for the future generation.

Keywords: influence, e-content, achievement, learner generation.

Introduction

Learning process is an individual process where different levels of learners are accommodated in a learning sphere in an individualized manner. Many attempts were being made by researchers to explore the methods to drive the intended knowledge at different learning levels and the outcomes of such researches showed that there are varied levels of efficiencies of attainment of learning targets among the learners. To meet the learners with their needs and to make the learning dynamic and meaningful, the role of teachers with modern methods of teaching plays a vital role in this digital era. Now, traditional teachers were replaced by the e- teachers, who are the new generation of teachers who will work both in regular and virtual environment. The introduction of e-content in the classroom environment made successful changes in the education predominantly.

STATEMENT OF THE PROBLEM

The problem of the study is stated as development and validation of e-content package for XI standard students in learning history (topic on: Indian-Geographical features and Impact on History).

OBJECTIVES OF THE STUDY

1. To find out there is any significant difference between control group and experimental group in their achievement test (Pre-test, Post-test score) with respect their learner generation.

HYPOTHESIS OF THE STUDY

1. There is no significant difference between pre-test score of experimental group students with respect their learner generation.
2. There is no significant difference between pre-test score of control group students with respect their learner generation.
3. There is no significant difference between post-test score of experimental group students with respect their learner generation.
4. There is no significant difference between post-test score of control group students with respect their learner generation.
5. There is no significant contribution of contributing variable of experimental group and control group students achievement in post-test scores.

METHOD OF THE STUDY

'Experimental method was used in the present study. The study adopts pre test post test equivalent group design.

EXPERIMENTAL PHASES OF TWO GROUP

S.No.	Groups	Pre-test	Treatment	Post-test
1.	Experimental Group	Achievement test	E-content Package	Achievement test
2.	Conventional Group	Achievement test	Conventional Approach	Achievement test

SAMPLE OF THE STUDY

Purposive sampling technique was used for the selection of the sample. Out of a sample of 120 students two groups were divided namely experimental and control groups with 60 students in each group. The experimental group was engaged by the investigator and the control group was engaged by their social science teacher.

TOOLS USED FOR THE STUDY

1. Development and Validation of E-content package for XI standard students topic in "India Geographical features and their Impact on History".
2. An achievement test constructed and validated by the investigator.

ANALYSIS OF DATA

In accordance with the objectives of the present study, the study were gathered, tabulated, classified and analyzed statistically and objectively. The final sample of the study consisted of 120 higher secondary students from Nannilam, Tiruvarur and Kumbakonam in Tamil Nadu, Tamil Nadu, India. The statistical techniques used for the analysis were

- ❖ Descriptive analysis - Mean and Standard Deviation
- ❖ Differential analysis - 't' test
- ❖ Regression analysis

Table – 1

t-value of Pre-test for Experimental group and Control group students with respect their Learner Generation

Learner Generation		N	Mean	Standard deviation	t-value	Level of significance
Experimental	First	35	7.80	1.795	0.675	NS *
	Second	25	8.08	1.222		
Control	First	38	8.16	1.326	0.987	NS*
	Second	22	8.55	1.683		

NS* - Significant at 0.05 level

a) Significant difference in pre-test scores of experimental group with respect to learner generation

The above table 1, describe that the mean value of the first generation students is 7.80 with standard deviation 1.795. The mean value of second and above generation students is 8.08 and standard deviation 1.222. the calculated 't' value 0.675 is lesser than the critical value 2.01 at 0.05 level of significance. It indicates that the difference in the gain scores of first generation and second and above generation students in not significant. Hence, the null hypothesis is accepted. Therefore, it is concluded that the first and second generation of students in experimental group do not differ significantly in the pre-test scores.

b) Significant difference in pre-test scores of control group with respect to learner generation

The above table 1 describes that the mean value of the first generation students is 8.16 with standard deviation 1.326. The mean value of second and above generation students is 8.55 and standard deviation 1.683. The calculated 't' value 0.987 is lesser than the critical value 2.01 at 0.05 level of significance. It indicates that the difference in the gain scores of first generation and second and above generation students is not significant. Hence, the null hypothesis is accepted. Therefore, it is concluded that the first and second learner generation of control group students do not differ significantly in the pre-test scores.

Table – 2

t-value of Post-test for Experimental group and Control group students with respect their Learner Generation

Learner Generation		N	Mean	Standard deviation	t-value	Level of significance
Experimental	First	35	72.51	3.302	3.098	NS *
	Second	25	74.40	3.524		
Control	First	38	54.34	3.323	2.870	NS*
	Second	22	56.59	2.667		

NS* - Significant at 0.05 level

a) Significant difference in Post-test scores of experimental group with respect to learner generation

The above table 1, describe that the mean value of the first generation students is 72.51 with standard deviation 3.302. The mean value of second and above generation students is 74.40 and standard deviation 3.524. the calculated 't' value 3.098 is lesser than the critical value 2.01 at 0.05 level of significance. It indicates that the difference in the post test scores of first generation and second and above generation students is not significant. Hence, the null hypothesis is accepted. Therefore, it is concluded that the first and second learner generation of experimental group students differ significantly in the post-test scores.

b) Significant difference in Post-test scores of control group with respect to learner generation

The above table 1 describes that the mean value of the first generation students is 54.34 with standard deviation 3.323. The mean value of second and above generation students is 56.59 and standard deviation 2.667. The calculated 't' value 2.870 is slightly higher than the critical value 2.01 at 0.05 level of significance. It indicates that the difference in the gain scores of first generation and second and above generation students is not significant. Hence, the null hypothesis rejected accepted. Therefore, it is concluded that the first and second learner generation of control group students differ significantly in the post-test scores.

Table - 3

Contribution of contributing variable of experimental group and control group students achievement in post-test score with respect their learner generation

Post test score		Un standardized co-efficient		Std. co-efficient	t	Significant level
		B	Std. error			
Learner Generation	Experimental Group	1.381	1.321	0.335	2.707	0.09
	Control Group	1.384	1.018	0.268	2.201	0.09

The above table -3 shows that the learner generation of the student (2.201 & 2.707) is significantly contributed to the dependent variable the achievement in learning History through E-content package for XI

standard students. The beta value shows that the learner generation (experimental group – 0.335 & control group – 0.268). It concludes, that above table learner generation variable is positively more contribute to achievement of history, in learning through conventional method. It indicates that control group students based on their beta score is positively higher than experimental group students (e-content method). Therefore, based on the above result the E-content more influence among the higher secondary school students based on their generation.

RESULTS AND DISCUSSIONS

The major findings which have emerged from the study are as follows:

1. There is a significant difference between pre-test score of experimental group students with respect their learner generation.
2. There is no significant difference between pre-test score of control group students with respect their learner generation.
3. The is significant difference between post-test score of experimental group students with respect their learner generation.
4. There is significant difference between post-test score of control group students with respect their learner generation.
5. The study reveals that e-content package is more contribute in learning History for XI standard students. The researcher was compare the mean score and 'beta' value of control and experimental group students. It concluded that the experimental group students post-test score were is higher than the control group, therefore, e-content package is influence in learning history at higher secondary level.

CONCLUSION

The study reveals that there is a gradual change from conventional method to deep e-content method towards learning thereby helping the students to understand the material, interact with the content, relate concepts to every day experience and have a thorough knowledge of the content. Improved instructions on the part of teachers and e-content method on the part of students could go a long way towards academic success of students.

Reference

- [1] **Garrett Henry, E. (2008).** *Statistics in Psychology and Education.* Surajeet Publications: Delhi.
- [2] **Pio Albina , A & Edward William Benjamin ,A. (2013).** *Effectiveness of E-content in teaching Mathematics for Standard XI Students.* *Indian Journal of Applie Research.* 3 (9), 183-184.
- [3] **Durnkum William (1979)** achievement and student- Teacher verbal interaction in high school physics with and without CAL, Dissertation Abstract International. Vol. 40, March, 1980, P-777-A.
- [4] **Ebrahimi, Pouria. (2010).** E-content A Broad-Sepctrum View toward Benefits and Pitfalls Ebrahimi, Pouria Information Analyses; Opinion Papers; Reports-Evaluative.
- [5] **John W. Best And James V. Kahn (1999)** *Research in Education,* Seventh Edition Prentice Hall of India private Limited, New Delhi
- [6] **Lizeron Eremias., & Subash, N. (Jan 2013).** E-Content Development: A milestone in the dynamic progress of e-learning. *International Journal of Teacher Educational Research (IJTER),* v2 n1, ISSN: 2319-4642.
- [7] **Richad Kolothumthodi (2008),** Development and Validation of E-content package on communication: Process and Type for the B.Ed. Trainees. Unpublished M.Ed. dessertaion, Barathidasan University, Tiruchirappalli.
- [8] **Melissa C (2010),** To evaluate e-learning interventions designed to improve learners performance”, *Journal of Political Science Education* Vol.6-NO.3,Pg.158, 2010.
- [9] **Nimanujacob (2007),** Development and Validation of e-content on capillarity in physics”, M.Ed Dissertation, Bharathidasan University, Tiruchirapalli, Tamil Nadu.
- [10] **Selvi (2009),** Effectiveness of e-content on pituitary glands and its secreted harmones in biology at tertiary level, *Edutracks,* Vol.7-No.8,Pg.27, 2009.
- [11] **Selvam (2009),** Development and Validation of e-content on heart structure and functions in biology at higher secondary level”, *Edutracks.* Vol.9-No.6,2009.