



Effectiveness of Developed Electronic Module in Terms of Achievement in Educational Administration of Med Students

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January 13, 2020

EFFECTIVENESS OF DEVELOPED ELECTRONIC MODULE IN TERMS OF ACHIEVEMENT IN EDUCATIONAL ADMINISTRATION OF MEd STUDENTS

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Abstract

As we know that education is a systemize knowledge of our environment. The purpose of education is to prepare students for life. Students can learn through personal experience and by relating new information through innovative methods. In traditional methods of teaching the focus was only on imparting the knowledge, which could not develop the understanding, practical ability and skills in the learners. If a teacher adopts similar strategies for teaching then students will be bored and they will stop taking interest in the learning. Present scenario is the scenario of fast changes, innovative ideas, skill based information, and creativity. In this age of rapid change teachers need to adopt new trends. Information and Communication Technology is one of them. The main aim of this paper is to explore the integration of ICT in the area of higher education. It was a pilot study whose objective was to find out the effectiveness of electronic module (e-module) in terms of achievement in Educational Administration of M. Ed students. The study has been carried out purposely selected 23 students of M. Ed who were studying at School of Education, DAVV Indore. The tool was developed by the researcher to measure achievement in Educational Administration of M.Ed students. The result of this pilot study showed that e-modules are effective in terms of achievement of M. Ed students in Educational Administration. This module enhances student centered learning based on ICT. Now a days

traditional method of teaching are not so worthy, for that e-modules can be a wonderful teaching aid for a skilled instructor.

Introduction: Education is a bipolar process in which educator is at the one end and educant at the other. Successful teaching depends upon the approach of communicating the subject matter to the learners. As we know that education is a systemize knowledge of our environment. The purpose of education is to prepare students for life. Students can learn through personal experience and by relating new information through innovative methods. In traditional methods of teaching the focus was only on imparting the knowledge, which could not develop the understanding , practical ability and skills in the learners. If a teacher adopt similar strategies for teaching then students will be bored and they will stop taking interest in the learning. In this age of rapid change teacher need to adopt new trends related to Information and Communication Technology (ICT).

Present Scenario of Teaching and Learning: Now a days education is not only based on psychology but also on technology. With the growth of the technology students can take the responsibility of their own learning, with the help of the teacher. Teacher can guide their pupils for setting the goals and making a plan then he can facilitate them to follow the plan for reaching the goal. This process can make their pupils self regulating and self evaluating. In the whole process , Information and Communication Technology can help the pupils as a powerful tool.

Need and Significance of ICT in Higher Education: The fact emerges that in higher education children find learning to be most difficult. The most important reason for not learning is poor teaching. If teaching is not well planned, then it will be ineffective. In this technological scenario a teacher has to be ready with his objectives, tools and techniques. For a wonderful teaching tool should be powerful, technique should be innovative and teacher should be motivated. A teacher should understand that individuals are coming from different backgrounds, they are having different talents, ideas and interests. These ideas and talents need execution, which is possible only through contemporary teaching. Contemporary teaching involves group work, more expression, discussion of ideas, evidences and argumentation etc. Thus for various skill development in pupils recent trends are needed. In these recent trends Information and Communication Technology is one of them. Electronic module enhances student centered learning based on ICT.

e-Module

Personalized System of Instruction involves Self Instructional e-Module (SIM). SIM ensures 'learner participation' & involvement by presenting answers to them. This ensures that the learner 'evaluates' his progress. The answers provided to the questions help him do so & they act as 'reinforcement in learning. SIM's has one thing in common with text books & that is 'self-pacing' or the possibility for the learner to proceed with learning at a speed convenient to him.

Definition of Module

According to W.R. Houston (1972); "***e-Module is a set of experiences designed to facilitate the learner's demonstration of specified objectives.***"

According to R. L. Amends "***Module is a set of learning activities intended to facilitate the student's achievement of an objective or set of objectives.***"

Advantages of e-Module

e- module has following possible advantages in the administration:

- (a) Students can study e-modules within their own environment. This means they can be used not only within teaching institutions but also on the job.
- (b) Students can study e-modules with minimum disruption to their normal duties and responsibilities. While this applies to both students and teachers and it is particularly true for teachers who can use e-modules as resources for staff development.
- (c) e-Modules may be administered to a single user, small groups or large groups according to need.
- (d) e-Modules programs can be easily revised and upgraded by replacing one module by another amending aspects of a single module.
- (e) e-Module programs are flexible in the sense that they can be implemented through a variety of scheduling patterns.
- (f) e-Modules are cost effective and economical to use.

Rationale of the Study

Module is one of the most popular forms of self instructional material. Many researches have been conducted in this field which were developmental & experimental in nature.

Lampe (1984), Hansberry (1985), Johnson (1986), Lee (1987), Knotts (1988), Chang-Shih-Tusng (1989), Cook (1994), Rodriquez (1995), Rowland (1999), Sharma (1987), Mohammad (1988), Al-Quattam (1989), Anitha (1989), Joshi (1999), Aggabao (2002), Rastogi (2003), Shetty (2004), Arora & Singh (2005) developed & designed module for different target groups.

Some researchers studied the effectiveness of module with various variable like achievement , attitude and reaction of students towards module. Torres (1984), Ginapp (1985), Pankiewiez (1985), Odhuno (1989), Swearingen (1993), Cap (1995), Kumar (1990), Madhumohan (1990), Santoshkumar (1990), Sansanwal & Joshi (1990), Arunachalam (1991), Dhamija (1993), Dutt (1998), Senapati (1998), Kohal (1999), Singh (2001).

Module can be an effective tool of instructions. Module already developed in various subjects at different levels but there is no study in the field of educational administration. We are living in the age of democracy. The success of democracy depend on education. A democratic country has must have good educational planning & decision making. M.Ed. students of today are the educational administrators of tomorrow.

So it is necessary for them to have knowledge of various theories regarding conflict, motivation & decision making & system approach. These theories help them to solve their future problems regarding their job. These theories are helpful for an administrator to resolving the conflict in an institution, to motivate their pupils in goal directed behavior & to take a fair decision. Module is the best mean to achieve this quality. They can study e-module by self pacing & critical thinking. Researcher could not find any study related to the development of e-module in theories of Educational Administration.

Statement of the Problem

EFFECTIVENESS OF DEVELOPED ELECTRONIC MODULE IN TERMS OF ACHIEVEMENT IN EDUCATIONAL ADMINISTRATION OF MEd STUDENTS

Objective of the Study

The following objective was proposed for this research work-

- To compare the mean scores of achievement in Educational Administration of M.Ed. students towards developed e-module at pre & post stage.

Hypothesis

The following hypothesis was studied:-

There is no significant difference in mean rank scores of achievement in Educational Administration of M.Ed. students towards the developed e-module at pre & post –test stage.

Delimitations of the Study

1. The sample size only comprised of 23 students of M.Ed. who have chosen Educational Administration as their optional paper at School of Education, DAVV, Indore.
2. Purposive sampling method was used to collect the sample.
3. Criterion Reference test was non standardized & developed by the researcher.
4. Effectiveness of treatment was assessed only with the help of Achievement scores.
5. The developed e-module was created only with one unit of subject code 626: Educational Administration of School of Education, DAVV, Indore.
6. The e-module was developed in English language only.

Sample

The sample consisted of 23 students of M.Ed. studying at School of Education, DAVV, Indore. The sample comprised both male & female students. Purposive sampling technique was used. The students were of the age group between 22-45 years. They belonged to different socioeconomic backgrounds. All the students were able to understand, read & write English properly.

Experimental Design

The study was based on the pre-test, post-test single group design. Pre-test by Criterion Reference Test was administered & then each student of sample has been provided a copy of developed e-module via e-mail. Researcher instructed them to study the e-module at their own pace. After one month Criterion Reference Test was administered on the group.

Layout of Experimental Design-

$$O_1 \times O_2$$

where- O_1 = pre test
 \times = treatment
 O_2 = post test

Tool of the Study

Tools are necessary for collecting the data. Tool selected according to the objective of the study. So the selection of the tool is an important aspect of research activity. Achievement was the dependent variable of the study. e-Module was taken as means of treatment. The achievement of students in the subject 'Educational Administration' (subject code: 626) of M.Ed., School of Education, DAVV, Indore was observed with the help of a Criterion Reference Test consisted of 50 questions. Test has been divided in five sections A,B,C,D & E. Section A consisted fill in the blanks, sec. B consisted true/false, sec. C consisted multiple choice questions, sec. D consisted match the columns & sec. E consisted answers in one word. Maximum marks for the test were 50. Each question carried 1 mark. The total time given for completing the test was one hour.

Procedure of Data Collection

Pre test for assessment of achievement was administered on the sample. The module has been developed by the researcher on theories of conflict, motivation, decision making & system approach. Then each of the student has been provided a copy of e-module via e-mail & asked them to study the at their own pace. After one month the achievement test was re-administered to the group.

Statistical Technique used for Data Analysis

The following statistical technique was used for analyzing the data:-

- **Non parametric Wilcoxon-test** was computed for studying the effectiveness of e-module on the basis of pre & post mean rank scores of students.

Interpretation of Result

The objective was **“To compare the mean scores difference of achievement in educational administration of M.Ed. students towards developed module at pre & post stage.”** The data

from posttest & pretest obtained for all 23 students are entered in the statistical software SPSS & Wilcoxon Signed –Ranks Test for related sample was applied. The result are given in table.

Table : Results of the Wilcoxon Signed- Ranks Test to compare the pretest-posttest Educational Administration achievement scores of the students in the Experiment.

| Achievement Posttest -Pretest | N | Mean Rank | Sum of Ranks | Z | p |
|-------------------------------|----|-----------|--------------|--------|-------|
| Negative Ranks | 1 | 7.50 | 7.50 | -3.760 | .000* |
| Positive Ranks | 20 | 11.18 | 223.50 | | |
| Ties | 1 | | | | |
| Total | 22 | | | | |

*the difference is significant at .01 level.

Posttest > pretest

The observed value of Z is 3.760, which is greater than its critical value 2.585 for two tailed test hence it is significant at 0.01 level of significance. So the null hypothesis i.e. ***“There is no significant difference in mean rank scores of achievement in educational administration of M.Ed. students towards the developed module at pre & post- test stage”*** has been **rejected** at 0.01 level of significance. Further the sum of their negative ranks for the experimental group (M.Ed. students) achievement in educational administration scores was found to be 7.5, while their sum of positive rank was 223.5. the observed difference is in favor of positive ranks or in other words , the posttest scores of M.Ed. student’s achievement in Educational Administration are greater. So we can say that e-module was found to be effective.

Findings and Conclusion: From the study it was found that e-module developed for teaching Educational Administration was effective in terms of students’ achievement and it can be a better option of teaching in present scenario. The role of teacher in e-module will be acquiring, processing, analyzing, integrating the content and then designing it according to the need of learner. Then prepare a powerful tool for their pupils and communicating them to how to use the tool which can make them self evaluating, self regulating. This technology offers so many benefits for the learners and instructors but technology can never be a good substitute of a

teacher. So here also teacher has to present as a guide or facilitator. Now a days traditional methods of teaching are not so worthy, for that e-module can be a wonderful teaching aid for skilled instructor.

Implications

Present study has wide implications for the persons working in the field of education. It provides guideline to text-book writers, curriculum designers, teacher educators, principals, teachers, students, parents & researchers. These are given in different captions in detail.

- **Text book Writers**

The module developed for the present study, can provide guideline to the text-book writers. Module has prepared in pictorial form. Some different facilities are also incorporated to make it more & more interactive & effective.

- **Teacher Educators**

There is a need to upgrade & up to date the knowledge of teacher educators. e-Module is an effective mean for them.

- **Administrators**

This e-module is very much beneficial for administrators. It provide a guideline to them that how to motivate their employees? How to resolve conflict in their institution, how to do strong decision making? & how to run a system in an integrated way? Either of this administrators can keep the self learning material in library. Principal can organize the proper teacher training programmes to upgrade & up to date knowledge of various innovations which have been done in the area of education through organizing workshops, seminars & refresher courses etc.

- **Teachers and Students**

For imparting knowledge teacher may use e-module. Teacher can develop module at various topics to enhance achievement of students.

- **Researchers**

It is an important area of research for the researcher. e-module is the need of learner & demands of the present society. It is observed that there is a need to develop self learning material.

Keywords: Information and Communication Technology (ICT), E-module (Electronic Module), Achievement, Innovative Strategy,

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