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System in Terms of Achievement of B.Ed.
Teacher Trainees

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Effectiveness of Developed Learning Management System in Terms of Achievement of B.Ed. Teacher Trainees

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ABSTRACT:

The present piece of research work is associated with Information & Communication Technology which involves the incorporation of internet services in the teaching methods to provide all round fortification of education. With the use of technology and Internet in teaching- learning has shown noteworthy changes, as they provide new ways of gaining knowledge. Today the students prefer to learn informally rather than to get formal education. Also, during this fast pacing life most of the teaching methods skip the needs of slow learners and backward child. To overcome these flaws of today's teaching methods, one of the ways of teaching widely to endorse knowledge consists in the use and creation of virtual ambience around the learner which is available online in various formats, which can be achieved by Learning Management Systems. The paper is about a study whose objective is to study the effect of learning management system in terms of achievement for B.Ed. Teacher Trainees. The type of research design was Single -Group Pre test-Post test Design. The sample consists of 48 B.Ed. Teacher Trainees of second semester who were selected by random sampling. Single group was taught by learning management system and achievement test was applied before and after teaching through LMS. The tools was developed by the researcher i.e. achievement test. Appropriate statistics i.e. correlated t-test was used for the analysis of data. The results of the present study reveals that learning management system is effective in terms of achievement and significantly affect the achievement of B.Ed. Teacher Trainees. These results are valuable for augmenting achievement using LMS- MOODLE.

1.0 INTRODUCTION:

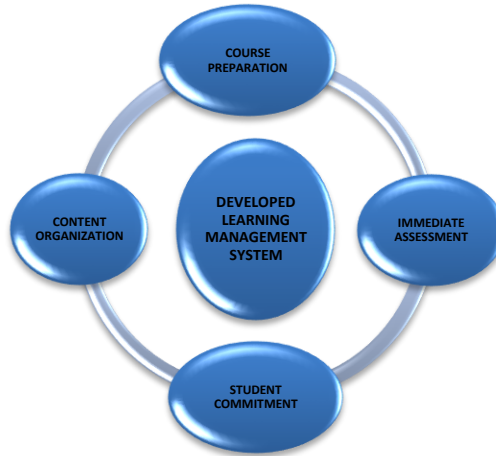
1.0.1 Learning Management System- LMS

The Learning Management System is a computer application that is used for arrangement, distribute, circulate and consign self-paced online courses. Learning Management System works as fundamental

repositories to address all type of instructive necessities. The foremost areas addressed by LMS operation are:

1. Course Preparation: according to the syllabus of the sample.
2. Immediate Assessment: using various features of MOODLE app and Google forms
3. Student Commitment: through notifications
4. Content Organization: as per the units the theories and the course.

Fig 1.1 Areas of Developed Learning Management System

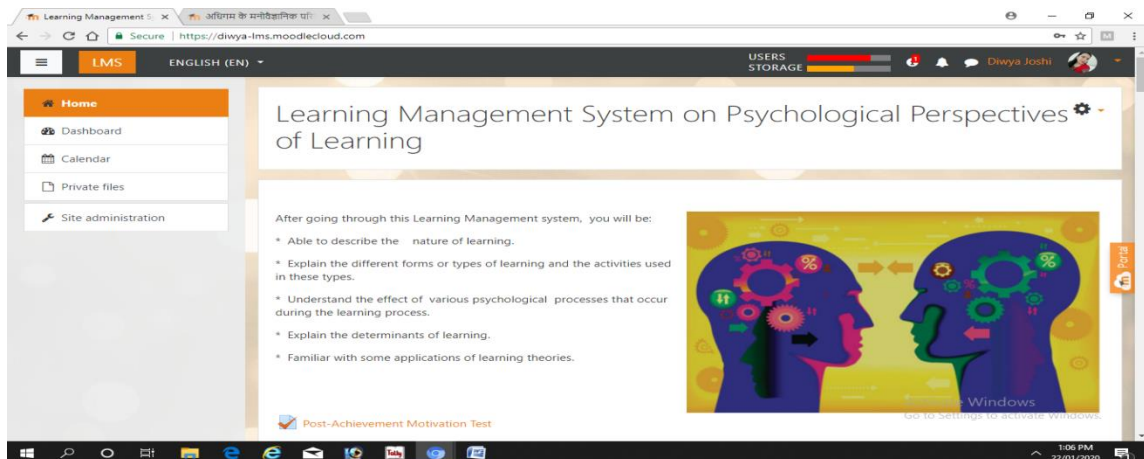


1.0.2 Modular Object Oriented Dynamic Learning Environment - MOODLE:

MOODLE is an ellipsis for Modular Object Oriented Dynamic Learning Environment It is used as LMS to continue and support users involved in growing student-centered educational surroundings. An effective LMS can have following functions:

1. Strong Management,
2. Proper commands and controls, and
3. Fruitful conversation between teacher and learner.

Fig 1.2 Overview of Developed Learning Management System



1.0.3 Learning Management System and Achievement

A widespread way to measure the extent of learning is to assess learner's achievement. Assessing learner achievement in e-learning surroundings requires exceptional awareness. Test results, as achievement scores are frequently used as the measuring bond for student encroachment to the next rank and as an estimate for judging the excellence of the college and the educators who work in them. The strongest predilection noted in a study done by Buzetto-More (2008), was towards the online compliance of assignments, with students overpoweringly noting that they like having the facility to check their assignment grades online. It has been established that there is a correlation between academic involvement, discussion forums, and grade.

1.1.0 RATIONALE:

Reigeluth, (1994), Hoskins et al. (2005), Lee, et al. (2009), Abdallah Arman, et al. (2009), Mijatovic et al. (2012), Jo et al. (2015) and Mehmet (2016) have studied Learning Management System and independently recognized and analyzed the views of learners to determine whether the LMS had any persuasion on their educational achievement. The fallout revealed that approximately all of the learners thought LMS can increase educational achievement.

In Indian perspective very few studies had been conducted. This created a gap for the researcher to design the present LMS in a collaborative manner for its effectiveness and to measure achievement by using Learning Management System. Further, the researcher has found a common thing in all these researches as most are for technical students and very few LMS for B.Ed. Teacher Trainees in India. This draws attention of the researcher towards the present situation and decided to develop an LMS for B.Ed. Teacher Trainees.

1.2.0 NEED AND SIGNIFICANCE:

LMS can be used widely for different curriculums. Specifically, the researcher would like to suggest that Learning Management System can work even better if some modifications can be done in its assessment design. Due to which the faculty can apply various techniques to assess achievement and that designs can come under collaboration based assessment designs. Learning Management System tools should be improved by upholding tasks and careful examinations of prearranged instructor and user, and peer interactions on the basis of these tasks. Learning Management System involves communication tools, like chat, discussion boards, collaboration of Google docs and Google forms, thus, improving the relations among Learning Management System users.

1.3.0 DESIGN:

In the present study **Single-Group Pretest-Posttest Design** was used. The layout is:-

O X O

Where,

O = Pre-test and Post observation

X = Treatment

1.4.0 OBJECTIVE:

1. Study the effectiveness of developed learning management system in terms of achievement for B.Ed. Teacher Trainees.

1.5.0 HYPOTHESIS:

1. There will be no significant effect of learning management system in terms of achievement for B.Ed. Teacher Trainees.

1.6.0 METHODOLOGY:

1.6.1 Sample:

The present study was experimental in nature. Single group was taken from randomly selected B.Ed Colleges of Indore (Madhya Pradesh). The sample was consisted of 48 Students of B.Ed. Second Semester.

1.6.2 Tools:

1.6.2.1 Achievement Test

Achievement test was used to assess the achievement in Psychological Perspectives of Learning of B.Ed. Teacher Trainees. Achievement CRT including 35 items was designed and developed by the researcher including items from Theories of learning, through Google forms. Students have filled that form on the app developed by the researcher using MOODLE, asynchronously or synchronously.

1.6.3 Procedure of Data Collection:

A Learning Management System was developed by the researcher using MOODLE. The permission of the principal of the College, Shri Vaishnav College of Teachers Training, Indore (Madhya Pradesh) was taken for the research work. Before the treatment, dependent variable; achievement was assessed. Then treatment was given to 48 students of the single group of B.Ed. Teacher Trainees. Then the same group was treated through Learning Management System developed using MOODLE.

1.7.0 RESULTS AND INTERPRETATION

Effect of Developed Learning Management System for B.Ed. Teacher Trainees in terms of Achievement.

The data were analyzed with the help of Correlated t-Test. First of all, the scores of achievement were tested for the assumptions of normality and homogeneity of variances. Then Correlated t-Test was performed using IBM-SPSS software.

1.7.1 Summary of Correlated t-Test of Achievement Scores for B.Ed. Teacher Trainees.

Table 1.1 Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreAch	48	3.649	.527
	PostAch	48	3.76428	.54333

Table 1.2 Paired Samples Correlations

	N	Df	Correlation	Sig. (2-tailed)
Pair 1	PreAch & PostAch	48	.851	.000

Form table 1.2 it is clear that the observed value of correlation with df (47), is .851, whose two-tailed significance value is 0.000, which is less than 0.01, hence is significant at 0.01 level of significance. Therefore the null hypothesis “There will be no significant effect of learning management system for B.Ed. Teacher Trainees in terms of achievement”, is rejected. Hence it can be concluded that treatment is effective in terms of achievement. Table 1.1 shows the Standard errors of the scores of B.Ed. Teacher Trainees before and after the Treatment with Learning Management System.

1.8.0 FINDINGS:

The major findings of the present study are as follows:

1. The learning management system was found to be effective in terms of achievement when the single group was matched with respect to pre and post-achievement scores.

1.9.0 CONCLUSIONS:

The results of the present study conclude that a Learning Management System can be used to enhance achievement by using various tools. In this paper researcher has developed a Learning Management System using MOODLE for teaching Theories of Learning to the B.Ed. Teacher Trainees of second semester. Students taught through LMS - MOODLE have scored more in achievement than before and there is a positive correlation between the pre and the post achievement scores. One of the reasons for this is MOODLE App offer freedom to learn anytime and anywhere to the students, thus it is more flexible. The tools been used in the LMS – MOODLE have increased the motivation of students, and is the fundamental reason behind the augmented scores of achievement brought after being taught through Developed LMS on MOODLE. Going through the findings of this study we are a bit confident that an LMS system can effectively and satisfactorily increase achievement while teaching Theories of Learning to the B.Ed. Teacher Trainees of second semester.

Keywords:

- Learning Management System
- MOODLE
- Achievement

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