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DEVELOPING MOODLE BASED E-LEARNING COURSE TO ENHANCE THE KNOWLEDGE OF FUNCTIONS OF EDUCATIONAL MANAGEMENT OF B. ED. STUDENT-TEACHERS

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## Abstract:

The present century is rightly called the technological century. The revaluation in ICT is influencing the practices of educational system worldwide. Teacher Education is an essential, important and powerful means for the upliftment of educational standards in the country. Teacher educators play an important role in developing knowledge, attitudes, aptitudes, abilities, skills and values of future teachers by proper training and guidance and now with adding technology into teaching learning process. This study focused on developing Moodle based e-learning course for B. Ed. student-teachers to enhance the knowledge of Functions of Educational Management. In the present study the researcher has conducted experimental research and found effectiveness of Moodle based e-learning course.

**Keywords:** Moodle, E-learning course, Functions of Educational Management

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#### **Introduction:**

The educational system aims to provide direction as well as build and expand upon human capabilities and capacities. Gaining knowledge, understanding and skills are the chief determination behind the educational process, involves a continuous exploration of new methods, techniques and devices to support learning. The educational system shifts from the traditional chalk board and lecture methods to digitizing the pedagogical approach through technical devices.

Moodle is an abbreviation for 'Modular Object-Oriented Dynamic Learning Environment'. Moodle is an online platform which prepares personalised and customized learning environments for student-teachers as well as teacher educators. Teacher Educators can use Moodle for blended learning as well as to create online courses, add assignments, manage courses, interact with Student-teachers and specially keep an eye on the student-teachers progress. Student-teachers can use Moodle to work together to create new material as well as review the class calendar, submit assignments, take quizzes, and interact with peers. Teacher Educators can create and manage virtual classrooms, in which student-teachers can access and create videos, documents, do assignments, solves quizzes and tests. Some teacher educators may use Moodle to simply provide documents to student-teachers, while others may use it as the primary interface for quizzes, assignments and tests.

A Moodle learning environment can be created by downloading and installing, the Moodle software on a web server. The Moodle platform is open source and is built using a modular design, so that an advanced users





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can modify the platform as and when needed. Individual users, such as teacher educators and student-teachers, can sign up for an account on the Moodle server and access content through either the "Moodle Desktop" application or the web interface.

### **Rationale of the study:**

The invention of the Internet and worldwide web has opened the sources of information for all. Now a days, education has become learner-centric. The use of e-learning makes learning interesting and student-teacher friendly. The best thing about e-learning is that student-teachers can learn anytime and anywhere.

The significance of the present study is as follows:

- ➤ The present research will be useful to the student-teachers and Teacher Educator to enhance their knowledge in the field of education.
- ➤ The present research will make teaching and learning more effective and interesting.
- > The present research study will increase the curiosity among the B. Ed. student-teachers. It is also the path for the scholars in this area.
- > The present research is important to increase computer literacy in the society.
- The present research is helpful to increase student-teacher's audio and visual competency.
- > The system will be helpful for the student-teachers to access at their own pace.
- ➤ The present research is also important as Moodle Based Learning package to enhance the knowledge and the interest in Functions of Educational Management.

### **Statement of the Problem:**

"Developing Moodle Based e-Learning Course to Enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers"

## Objective of the study:

- ➤ To study the Pre-test Scores of Developing Moodle Based e-Learning Course to Enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers.
- ➤ To develop the Moodle Based e-learning Course to Enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers.
  - I. Planning
  - II. Organising and Staffing
  - III. Directing and Controlling
- > To study the Post-test Scores of Moodle Based e-learning Course to Enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers.
- ➤ To compare the effectiveness of Pre-test and Post-test Scores of Moodle Based e-learning Course to enhance the knowledge of Functions of Educational Management for B. Ed. Student-teachers.
- ➤ To study the effectiveness of Moodle Based e-learning Course to Enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers.

## Plan of Action:





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Activities were planned and conducted to enhance the Knowledge of Functions of Educational Management for B. Ed. Student-teachers.

#### **Preparation:**

Researcher Prepared Moodle based e-learning course for B.Ed. student-teachers. Following are the sub topic included,

- 1. **Pre** –**Test**: Researcher prepared a questionnaire with the help of a plug in 'Quiz' available in Moodle. This test includes multiple choice type questions. 20 questions were given in the pre-test.
- **2. Preparation of Course:** The researcher used Moodle platform to prepare this course. Following are the topics included in the course.
  - ➤ **Topic one: Planning**: In this module researcher includes meaning and Importance of Planning. This information was presented in documents and Power Point Presentation.
  - ➤ Topic Two: Organising and Staffing: In this module researcher includes Meaning and Importance of Organising and Staffing. This information was presented in the document and video was included.
  - ➤ **Topic Three: Directing and Controlling:** Concept of MOOC was introduced. This information was given in Power point Presentation and Documents.
- **3. Post–Test**: Researcher prepared a questionnaire with the help of a plug in 'Quiz' available in Moodle.

## **Implementation:**

After Developing pre-test and course researcher enrolled the B. Ed. student-teachers in the e-learning course. First student-teachers completed pre-test then as per scheduled time. They completed course. Whenever they faced problem researcher guided them. After completing course student-teachers finished post-test.

## **Time/Schedule of Data Collection:**

Table. 6.1. Time Schedule

| Sr. No. | Activities                | Time   |
|---------|---------------------------|--------|
| 1       | Pre-Test                  | 45 min |
| 2       | Planning                  | 30 min |
| 3       | Organising and Staffing   | 30 min |
| 4       | Directing and Controlling | 30 min |
| 5       | Post -Test                | 45 min |

## **Sampling:**

The purposive sampling Technique was adopted for finalising sample. 50 B. Ed. Student-teachers who are studying in the Guru Nanak College of Education and Research, Bhandup (W), Mumbai was taken as the sample of the study.

## **Tools Used:**

The researcher used the following tools for research

- 1. Pre-test and Post-test: Researcher prepared questionnaire.
- 2. Moodle based e-learning package: The content-based Moodle based e-learning programme were developed for B. Ed. Student-teachers. Researcher developed Moodle course on the college Moodle 'GNCER Nurture





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U' named as 'Educational Management: Functions of Educational Management'. The following topics were included in the course,

- 1. Pre-Test
- 2. Planning
- 3. Organising and Staffing
- 4. Directing and Controlling
- 5. Post-Test

## **Data Analysis:**

The Statistical techniques used for data analysis were percentages.

# **Interpretation:**

Table 10.1. To compare the effectiveness of Pre-test and Post-test Percentage of 'Planning' as a topic

| Sr. No. | Sub-unit | Pre-test Percentage | Post-test Percentage |
|---------|----------|---------------------|----------------------|
| 1       | Planning | 50                  | 88                   |

**Interpretation:** From the above table, it is interpreted that the score of pre-tests of 'Planning' as a topic is 50% and the score of student-teachers in post- test is 88%. It shows student-teachers performance is much better in post-test.

Table 10.2. To compare the effectiveness of Pre-test and Post-test Percentage of 'Organising and Staffing' as a topic

| Sr. No. | Sub-unit                | Pre-test Percentage | Post-test Percentage |
|---------|-------------------------|---------------------|----------------------|
| 2       | Organising and Staffing | 45                  | 80                   |

**Interpretation:** From above the table, it is interpreted that the score of pre-tests of 'Organising and Staffing'as a topic is 45% and the score of student-teachers in post- test is 80%. It shows student-teachers performance is much better in post-test.

Table 10.3. To compare the effectiveness of Pre-test and Post-test Percentage of 'Directing and Controlling' as a topic

| Sr. No. | Sub-unit                  | Pre-test Percentage | Post-test Percentage |
|---------|---------------------------|---------------------|----------------------|
| 3       | Directing and Controlling | 45                  | 85                   |

**Interpretation:** From the above table, it is interpreted that the score of pre-tests of 'Directing and Controlling' as topic is 45% and the score of student-teachers in post- test is 85%. It shows student-teachers performance is much better in post-test.

## **Findings:**

Table 10.1 shows the percentage of student-teachers performance in pre-test score of 'Planning' as a topic





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is 50% and the percentage of student-teachers performance in post-test score is 88%. Performance of post-test is better comparing to their pre-test performance. The difference is 38%.

It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Planning' as a topic. In this topic, concept and Importance of Planning is discussed. Student-teachers learnt this topic as per their space and time. If student-teachers are not able to understand the topic, they can read the content again and again. This study shows that e-learning can be used as an effective learning strategy to enhance knowledge of the student-teachers. As B.Ed. student-teachers are matured and grown-up adults so they can do self-learning.

- ➤ Table 10.2 shows the percentage of student-teachers performance in pre-test score of 'Organising and Staffing' as a topic is 45% and the percentage of student-teachers performance in post-test score is 80%. Performance of post-test is better comparing to their pre-test performance. The difference is 35%.
  - It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Organising and Staffing' as a topic. In this topic, concept and Importance of Organising and Staffing is explained. It includes Text, images and Video about Organising and Staffing. Student-teachers learnt this topic as per their space and time. Where ever and whenever required, student-teachers can read the content again. This study shows that e-learning can be used as an effective learning strategy to enhance knowledge of the student-teachers.
- ➤ Table 10.3 shows the percentage of student-teachers performance in pre- test score of 'Directing and Controlling' as a topic is 45% and the percentage of student-teachers performance in post-test score 85%. Performance of post-test is better comparing to their pre-test performance. The difference is 40%. It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Directing and Controlling' as a topic. In this topic, concept and Importance of Directing and Controlling is explained. Student-teachers learnt this topic as per their space and time. If required, student-teachers can read the content again. This study shows that e-learning can be used as an effective learning strategy to enhance knowledge of the student-teachers.

### **Implication:**

The study will be of immensely beneficial to the different stakeholders in education.

### The principal:

Moodle Based e-Learning Course is important because it provides affordable material to students, allows teacher educators to enhance their own work as well as it provides teacher educators with content for lectures. The principal should motivate teacher educators and student-teachers to use Moodle Based e-Learning Course as these are affordable and it will reduce the cost of books. The principal should encourage teacher educators to use Technology in Education.

### For Students -Teachers and Teacher Educators:

This study will help student-teachers and teacher Educators and to understand the concept Moodle Based e-Learning Course. They will use Moodle Based e-Learning Course for their lesson preparation and for updating





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their knowledge. They can use internet resources without violating copyrights.

#### For Educational Institutions:

When the Student-teachers and teacher educators will use Moodle Based e-Learning Course for teaching-learning process, the cost of books required will be reduced and it will be helpful for the institution to plan their budget.

#### **Conclusion:**

In this digital age e-learning is part and parcel of education system. The e-learning reduces the cost of traditional Education such as for classrooms and educational material. Any Student-teacher can learn anytime, anywhere at his or her own pace. Moodle based e-learning course is important because it provides affordable material to student-teachers, allows teacher educators to enrich and develop their own work. Moodle Based e-Learning showed its importance in the methodology of learning at B. Ed. Level. Therefore, Teacher Educators should use Moodle based e-learning course in teaching-learning process.

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