

# DEVELOPING MOODLE BASED E-LEARNING COURSE TO ENHANCE KNOWLEDGE OF DECISION-MAKING AMONG D.EL.ED. STUDENT-TEACHERS

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#### **Abstract**

In the world of technology, Teacher Educators need to upgrade and change themselves in the field of Education. So that they can develop their student-teachers to face the challenges and achieve their aims in the life. Being maintaining these aspects in the view, the researcher aims to develop Moodle Based E-Learning Course to enhance knowledge of Decision-Making among D. El. Ed. student-teachers. The study was conducted using experimental research design with thirty student-teachers of D. El. Ed. Data from the study was collected through Quiz on Moodle based e-learning course. The findings indicated that there is significant difference between the pre-test and post-test scores of Moodle Based E-Learning Course to enhance knowledge of Decision-Making among D. El. Ed. student-teachers. The conclusions also highlighted that Moodle based e-learning course is effectively prepared for student-teachers of D. El. Ed. to enhance knowledge of Decision-Making.

**Keywords**: Moodle, E-learning course, Decision making, Student-teachers.

### INTRODUCTION

Every single day an individual make decision. Certain decisions in our life are very simple while others are more difficult or challenging. Several decisions will be so monotonous that we as an individual without a conscious thought would follow them. But complex or difficult decisions require more attention. The capacity to make the right decision with available data which is at hand is essential. It would be comfortable if there were one method or plan, we would have used in any circumstances, nevertheless there is no such formula or an idea. Each choice creates its own difficulties and we all have various techniques of tackling the challenges.

#### MEANING OF DECISION MAKING

**Decision making** is described as the psychological and intellectual procedures heading to the assortment of a course of action among numerous optional circumstances. Each and every

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decision generates an ultimate option. The end product can be an activity or a point of view. Decision-making abilities and methods emphasize a lot of attributes of management. Decision Making connotes preparing an option or reaching or arriving to an inference. This engages a broad scope of individual and social abilities including reasoning, originality, fact finding, logical aptitude, compassion to others and firmness. Decision making depends on a detailed and complete information of a range of methods and procedures.

The various stages to make good decisions are as follows

- Create a constructive environment/ Identify the problem
- Generate good alternatives /Brainstorm for all possible solutions
- Explore these alternatives / Evaluate the pros and cons consequences of each solution
- Choose the best alternative / Select the solution or Decision
- Check your decision/ Evaluate and take action/ Communicate and Reflect on the decision

#### **NEED OF THE STUDY**

Researches have been performed on Decision Making related to the Developing, learning and evaluating among Distance Education Learners, Business Administration College students, strategies for Digital story telling among Middle school students, a longitudinal study from student to registered nurses, careers among High school students, Cooperating Teachers and Student-teachers of English and women with mental retardation in simulated interpersonal situations of abuse as well as strategies to enhance clinical decision making ability among nurses.

E-learning make learning interesting and learner-oriented and best things is that they can learn anytime and anywhere. E- Learning courses are easily available, open licenced textual matter, means and additional computerized resources which are beneficial for instructional process, evaluation as well as for research work. Since accessible materials are completely reconsidered and removable, they can be modified to appropriate the path a teacher educator wants to impart a module. E- Learning courses accept the freedom to modify data and information by eliminating immaterial subject matter or accumulating one's particular material, as well as the elasticity to merge parts of resources together, thereby confirming items are circumstantial to a definite programme.

Nevertheless, no studies have been performed on D. El. Ed student-teachers by developing Moodle Based E-Learning Course. Hence, researcher proposes to develop the Moodle Based



E-Learning Course to enhance the knowledge of Decision Making among D. El. Ed. Student-teachers.

#### STATEMENT OF THE PROBLEM

Developing Moodle Based E-Learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.

#### AIM OF THE STUDY

The foremost aim of the study was to develop the Moodle Based E-Learning Course to enhance knowledge of Decision Making among D. El. Ed. student-teachers.

## **OBJECTIVES OF THE STUDY**

- 1. To study the Pre-test Scores of Moodle Based E-Learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.
- 2. To develop the Moodle Based E-learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.
  - a) Concept of Decision-Making
  - b) Process of Decision-Making
  - c) Benefits of Decision-Making
- 3. To study the Post-test Scores of Moodle Based E-learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.
- 4. To compare the Pre-test and Post-test Scores of Moodle Based E-learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.
- 5. To study the effectiveness of Moodle Based E-learning Course to Enhance Knowledge of Decision Making among D. El. Ed. Student-Teachers.

#### HYPOTHESES OF THE STUDY

There is no significant difference between pre-test and post test scores of Moodle Based E-Learning Course to enhance knowledge of Decision Making among D. El. Ed. studentteachers.

## METHODOLOGY OF THE STUDY

Researcher has used the Experimental method to solve the research problem and experimentation was well suited. The single group method of experiment was used here for implementation of experiment. Moodle based e-learning course was used on experimental



group. In this experimental group firstly, the Pre-test was conducted followed by Moodle based e-learning course and afterwards post-test was conducted.

## **Sample and Data Collection:**

30 D. El. Ed. student-teachers (Unaided teacher education college) was surveyed was the sample of the research. The technique of sampling which was used was Random sampling.

#### Plan of Action:

- I. Preparation: Activities were planned and conducted to enhance the Knowledge of Decision Making among D. El. Ed. Student-teachers. Researcher Prepared Moodle based e-learning course for D. El. Ed. student-teachers. Following are the sub topic included,
  - i. **Pre-Test**: Researcher prepared questionnaire with the help of plug in 'Quiz' available in Moodle. This test includes multiple choice questions. 15 questions were given in the pre-test.
  - ii. Preparation of Course: Researcher used Moodle platform to prepare this course.Following are the topics included in the course.
    - ➤ Topic one: Concept of Decision Making: In this module researcher includes meaning of Decision Making, Priorities and Types of Decision Making. This information was presented in documents
    - ➤ Topic Two: Process of Decision Making: In this module researcher includes Steps to be followed for Decision Making. This information was presented in document and video was included.
    - ➤ Topic Three: Benefits of Decision Making: Case study, Different Scenarios and benefits of Decision Making was introduced. This information was given in Power point Presentation.
  - iii. **Post–Test**: Researcher prepared questionnaire with the help of plug in 'Quiz' available in Moodle.
- II. Implementation: -After Developing pre-test and course researcher enrolled the D. El. 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 1

Time Schedule

Sr. No.	Activities	Time
1	Orientation about how to use Moodle course in the Mobile App	30 Min.
2	Pre-Test	45 min
3	Concept of Decision-Making	30 min
4	Process of Decision-Making	30 min
5	Benefits of Decision-Making	30 min
6	Post-Test	45 min

# **Tools for Data Collection:**

The researcher used following tools for research

- 1. Pre-test and Post-test: Researcher prepared Quiz on Moodle based e-learning.
- 2. Moodle based e-learning package: The content-based Moodle based e-learning programme were developed for D. El. Ed. Student-teachers. Researcher developed Moodle course on the college Moodle 'GNCER Nurture U' named as 'Decision Making'. Following topics were included in the course,
  - i. Pre-Test
  - ii. Concept of Decision-Making
- iii. Process of Decision-Making
- iv. Benefits of Decision-Making
- v. Post Test



# **Techniques of Data Analysis:**

To analyse the obtained data, the descriptive and inferential techniques of data analysis were used.

- i. Descriptive Analysis In the descriptive analysis, mean was calculated.
- ii. Inferential analysis-In the inferential analysis, t-test was calculated.

#### **ANALYSIS AND INTERPRETATION:**

There is no significant difference between pre-test and post-test scores of Moodle Based E-Learning Course to enhance knowledge of Decision Making among D. El. Ed. studentteachers.

Table 2

Comparison of the Pre-Test and Post Test Scores of Student-teachers

Test	Number of Student - Teacher	Mean	t-value
Pre-Test	30	32.33	3.33
Post-Test	30	35.83	(Significant at 0.05 level)

The table depicts that t-calculated is 3.33 which is greater than t- tabulated. Therefore, the null hypothesis is rejected at 0.05 level of significance. It is concluded that there is significant difference between the pre-test and post-test scores of student-teachers as disclosed by the t-value 3.33 (significant at 0.05 level).

The performance of the post-test scores compared with pre-test scores is higher which is evidently seen. This is an exact sign of the effective and efficiency of the Moodle Based E-Learning Course to enhance knowledge of Decision Making.

#### **FINDINGS**

The Table shows the Means Scores of student teachers' performance in pre- test score is 32.33 and the Means Scores of student teachers' performance in post test score is 35.83. Performance of post-test scores is better compared to the pre-test scores. The 't' value which is 3.33 shows that there is significant difference at 0.05 level.

It states student teachers' performance is much better in post- test in understanding the Concept of Decision Making. In this topic of Decision Making, it covers the meaning, process and Benefits of Decision Making. Along with Text, images and Video about Decision Making is



included. Student-teachers learnt this topic as per their space, time. Where ever required they read the content again. This study shows that e-learning can be used as an effective learning strategies for enhance knowledge. As D. El. Ed student teachers are matured, grown up adults and they can do self—learning. They can learn content as per their speed, time.

#### **IMPLICATIONS**

The research will be advantageous to Principal, teacher educators and all investors in the field of Education.

This research will provide directives to the educators functioning in the subject to forecast and organise various policies, schedules and methods to enhance the concepts of student-teachers in the Course of Educational Management by developing Moodle based E-learning Course.

Principal can adopt e-learning courses in collaboration with the teacher educators. E-learning is important as it offers reasonable information to student-teachers, allows teacher educators to develop their own work and gives material for lessons. Principal should motivate teacher educators and student-teachers to use E-learning as these are affordable and it will reduce cost of books. Principal should encourage teacher educators to use Technology in Education.

Teacher Educators can implement e- learning course for student-teachers. Teacher educators can also make various pathways in the instructional process which will assist the student-teachers to create teaching process more interesting and expressive. E-learning courses can also stimulate student-teachers to achieve their objective methodically.

This study will aid Students -Teachers to enhance the concept of Decision Making through Moodle Based e-Learning. They will use e-Learning course for their lesson preparation and for updating their knowledge. They can use internet resources without violating copy-rights. Student-teachers learnt this topic as per their space, speed and time. Whenever and wherever required student-teachers can read the content again.

# **CONCLUSION**

In this digital age e-learning is part and parcel of education system. E-learning courses decreases prices usually related with education. Any Student-teacher can learn anytime, anywhere. E-Learning courses is significant because it offers reasonable material to student-teachers, allows teacher educators to develop their own content and stipulates teacher Educators with work for lessons. So, teacher educators should use OER in teaching-learning to make it more interesting and enjoyable.



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