



Original Research Article

DEVELOPMENT OF MOODLE BASED LEARNING TO UNDERSTAND THE CONCEPT OF STRESS MANAGEMENT AMONG B. ED. STUDENT-TEACHERS

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Abstract:

The present era is correctly called the technological era. The progress and change in technology bring improvement in educational system universally. National Education Policy 2020 also highlights use of software in teaching-learning process as well as integration of technology will improve multiple aspects of education basically the quality of Education. Teacher educators play an important role in fostering the intellectual, moral, physical, psychological and social development by proper training and guidance and now with adding technology into teaching learning process of future teachers. This study focuses on developing Moodle based learning course for B. Ed. student-teachers to understand the concept of stress management. In the present study the researcher has conducted experimental research and found effectiveness of Moodle based learning course to understand the concept of stress management.

Keywords: National Education Policy 2020, Moodle, learning course, Concept of Stress Management, student-teachers.

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Introduction:

As per National Education Policy 2020, Campaign for the Digital India will try to change the whole country into a digitally powerful society and knowledge economy. While education will play a vital role in this change, technology itself will play a valuable role in the betterment of educational procedures and results; therefore, the association between technology and education at all levels is in both the directions. Latest technologies involving artificial intelligence, block chains, smart boards, handheld computing devices, machine learning, adaptive computer testing for student development and other forms of educational software and hardware will not just change what students learn in the classroom but how they learn, and thus these areas and beyond will require extensive research both on the technological as well as educational fronts.

The current rise in diseases and pandemics require that we are ready with various optional means of quality education whenever and wherever traditional and face to face methods of education are not possible. In this regard, the National Education Policy 2020 accepts the use of technology. It determines the benefits of online/digital education while addressing or reducing the shortcomings. The current digital platforms and ongoing ICT-based educational initiatives must be enhanced and expanded to meet the present and future tasks in giving quality education for all.





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Teacher Education institution is a crucial means to develop the excellence in school education. The revival and strengthening of a Teacher Education is an effective vehicle to raise the educational norms in the country. It inculcates the skills, knowledge, attitude, capacities and competencies among the teachers and makes them efficiently and effectively able to meet the needs of the society at large.

In today's world of Digitalisation, Teacher Educators should transform themselves from the traditional chalk board and lecture methods to digitizing the pedagogical approach through technical devices. Especially after Covid 19 Pandemic, in the Teacher Education Institutions, teacher educators have started using blended approach in teaching learning process. Moodle is an abbreviation for 'Modular Object-Oriented Dynamic Learning Environment'. Moodle is a blended learning platform which create online courses, add assignments, manage courses, interact with Student-teachers and specially keep an eye on the student-teachers progress. Studentteachers can use Moodle to work together to create new material as well as take quizzes, submit assignments, interact with peers and review the class calendar. Teacher Educators can establish and run virtual classrooms, in which student-teachers can enter and make videos, documents, do assignments, solves quizzes and tests. Some teacher educators may use Moodle may use it as the primary interface for quizzes, assignments and tests while others may use to simply provide documents, PowerPoint presentations, Chapters or Books to student-teachers. 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 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:

Education has become student-centric. The usage of Moodle Based learning makes learning more interesting and motivating as well student friendly. The important fact about Moodle Based learning is that student-teachers can learn anytime and anywhere at their own pace and speed.

The significance of the present study is as follows:

- ➤ The present research will be beneficial to the student-teachers, Teacher Educators, Principals, all investors of educational system and parents to understand the concept of Stress Management in the field of education.
- > The present research will make teaching and learning more effective and efficient.
- The present research study will increase the inquisitiveness 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 understand the concept of Stress Management.





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Statement of the Problem:

"Development of Moodle Based Learning to Understand the Concept of Stress Management among B. Ed. Student-Teachers".

Objective of the study:

- ➤ To study the Pre-test Score of Development of Moodle Based Learning to Understand the Concept of Stress Management among B. Ed. Student-teachers.
- ➤ To develop the Moodle Based Learning to Understand the Concept of Stress Management among B. Ed. Student-Teachers.
 - I. Meaning and Types of stressors
 - II. Consequences of stress
 - III. Techniques of Stress Management
- ➤ To study the Post-test Scores of Moodle Based Learning to Understand the Concept of Stress Management among B. Ed. Student-Teachers.
- ➤ To compare the effectiveness of Pre-test and Post-test Scores of Moodle Based Learning to Understand the Concept of Stress Management among B. Ed. Student-Teachers.

Plan of Action:

Activities were planned and conducted to understand the concept of Stress Management among B. Ed. Student-teachers.

Preparation:

Researcher Prepared Moodle based 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. 15 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: Meaning and Types of stressors: In this module, Researcher includes meaning and Types of stressors. This information was presented in documents and Power Point Presentation.
 - ➤ Topic Two: Consequences of stress: In this module, Researcher includes Consequences of stress. This information was presented in the document and video was included.
 - ➤ Topic Three: Techniques of Stress Management: In this module, Researcher includes Techniques of Stress Management. 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 Moodle based 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.





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Time/Schedule of Data Collection:

Table. 6.1. Time Schedule

Sr. No.	Activities	Time
1	Pre-Test	15 min
2	Meaning and Types of stressors	30 min
3	Consequences of stress	30 min
4	Techniques of Stress Management	30 min
5	Post -Test	15 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:

The following tools were used by the researcher for the research

- 1. Pre-test and Post-test: Researcher prepared Quiz.
- 2. Moodle based learning package: The content-based Moodle based learning programme were developed for B. Ed. Student-teachers. Researcher developed Moodle course on the college Moodle 'GNCER Nurture U' named as 'Educational Management: Concept of Stress Management'. The following topics were included in the course,
 - 1. Pre-Test
 - 2. Meaning and Types of stressors
 - 3. Consequences of stress
 - 4. Techniques of Stress Management
 - 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 'Meaning and Types of stressors' as a topic

Sr. No. Sub-unit		Pre-test Percentage	Post-test Percentage
1	Meaning and Types of stressors	60	82

Interpretation: From the above table, it is interpreted that the score of pre-tests of 'Meaning and Types of stressors' as a topic is 60% and the score of student-teachers in post- test is 82%. It shows student-teachers performance is much better in post-test.





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

	Sr. No. Sub-unit		Pre-test Percentage	Post-test Percentage
2 Consequences of stress		Consequences of stress	65	92

Interpretation: From above the table, it is interpreted that the score of pre-tests of 'Consequences of stress' as a topic is 65% and the score of student-teachers in post- test is 92%. 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 'Techniques of Stress Management' as a topic

Sr. No.	Sub-unit			Sub-unit Pre-test Percentage	Post-test Percentage
3	Techniques	of	Stress	67	88
	Management				

Interpretation: From the above table, it is interpreted that the score of pre-tests of 'Techniques of Stress Management' as topic is 67% and the score of student-teachers in post-test is 88%. It shows student-teachers performance is much better in post-test.

Findings:

speed.

- 1. Table 10.1 shows the percentage of student-teachers performance in pre-test score of 'Meaning and Types of stressors' as a topic is 60% and the percentage of student-teachers performance in post-test score is 82%. Performance of post-test is better comparing to their pre-test performance. The difference is 22%. It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Meaning and Types of stressors' as a topic. In this topic, Meaning and Types of stressors 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 Moodle based learning can be used as an effective and efficient learning technique to understand the concept of Stress management to the student-teachers. As B.Ed. student-teachers are matured and grown-up adults so they can do self-learning at their own pace and
- 2. Table 10.2 shows the percentage of student-teachers performance in pre-test score of 'Consequences of stress' as a topic is 65% and the percentage of student-teachers performance in post-test score is 92%. Performance of post-test is better comparing to their pre-test performance. The difference is 27%.
 It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Consequences of stress' as a topic. In this topic, Consequences of stress is explained. It includes Text, images and Video about Consequences of stress. 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 depicts that

Moodle based learning can be used as an effective and efficient learning technique to understand the concept





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of Stress management to the student-teachers.

3. Table 10.3 shows the percentage of student-teachers performance in pre- test score of 'Techniques of Stress Management' as a topic is 67% and the percentage of student-teachers performance in post-test score 88%. Performance of post-test is better comparing to their pre-test performance. The difference is 21%. It means student-teachers performance is much better in post-test as compared to pre-test scores of 'Techniques of Stress Management' as a topic. In this topic, Techniques of Stress Management is explained. Student-teachers learnt this topic as per their space and time. If required, student-teachers can read the content again. This study depicts that Moodle based learning can be used as an effective and efficient learning technique to understand the concept of Stress management to the student-teachers.

Implication:

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

The principal:

Moodle Based 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 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 Learning Course. They will use Moodle Based Learning Course for their lesson preparation and for updating their knowledge. They can use internet resources without violating copyrights.

For Educational Institutions:

SJIF Impact Factor: 8.182

When the Student-teachers and teacher educators will use Moodle Based 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:

National Education Policy 2020 says that technology in education is a journey and not a destination and ability will be needed to arrange the various stakeholders to implement policy objectives. Technology is rapidly evolving and needs specialists to deliver quality e-learning, working individuals will have to be encouraged to create solutions that not only solve India's problems of scale, diversity, equity, but also evolve in keeping with the rapidly evolving technology. In this digital age Moodle based learning is part and parcel of education system. The Moodle based 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 Learning showed its importance in the methodology of learning at B. Ed. Level. Therefore, Teacher Educators should use Moodle based learning course in teaching-learning process.





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