



PERCEPTION OF STUDENT-TEACHERS TOWARDS MOODLE-BASED SELF-LEARNING

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Abstract:

In this digital age, Integration of technology in education has transformed teaching–learning practices more flexible and learner-centered. In the field of education, E-learning, has emerged as a powerful approach. It enables learners to access content from anywhere at any time through digital platforms. After lockdown, self-learning through online platforms has gained significant importance in teacher education. Moodle is a widely used open-source Learning Management System (LMS) designed to support teaching and learning through online platforms. Moodle holds a distinct position due to its scalability, user-friendliness, and ease of use (Al-Fraihat et al., 2025a). This study reveals that the overall perception of Moodle-based self-learning for the topic “making connections to the text” skills, focuses on text-to-self, text-to-text, and text-to-world connections. The findings of this study among S.Y.B.Ed. student-teachers shows that the overall perception Moodle-based self-learning module (72.47%) which is moderately high and positive. The dimension Ease of Use of Moodle (65.83%) shows moderately positive perception. Learning Experience through Moodle (81.57%) shows strong positive perception. Engagement and Participation (66.44%) shows moderately positive perception. Understanding of ‘Making Connections to the Text’ (83.65%) indicates the module was highly effective and Attitude towards Moodle-based Learning (64.87%) suggests moderately positive perception.

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Introduction:

In this digital era, the integration of technology in the teaching and learning has brought significant transformation in curriculum transaction. It has led to a paradigm shift from traditional classroom practices towards more flexible, learner-centred, and technology-enabled learning environments. E-learning has emerged as a significant mode of instruction in transacting curriculum. This innovative approach

promotes learner-centred education and supports continuous learning.

Among the various digital platforms available, Moodle is the widely used (“(PDF) Teachers’ and Students’ Perception Regarding the Use of Moodle,” n.d.) Learning Management System (LMS), which is commonly used to create, manage, and distribute digital resources for both in-person and online delivery of educational instructions (PDF, n.d.). Moodle has a high rate of acceptance in the community and in many



institutions and has a wide variety of active courses, available in many languages (Gamage et al., 2022).

It allows the teachers to prepare structured content with interaction based on 4 quadrants, designed to enhance better learning experiences. The self-learning platform Moodle, provides insights about the effectiveness, usability, and overall impact about student-teachers' understanding. It facilitates student-teachers' to learn with the help of videos, quizzes, discussion forums, and assignments. Yousef et al. (2015) conducted a meta-analysis on Moodle usage and concluded that it offers substantial support for active learning strategies through its built-in assessment tools, real-time feedback mechanisms, and collaborative features (Kaur & Sharma, 2025). This approach fosters active participation and critical thinking of the learners. It plays an important role in supporting the needs of modern education. It encourages blended learning approaches by integrating traditional classroom teaching with online learning experiences. This self-learning platform combining both pedagogical and digital competencies.

It fosters deeper comprehension and reflective thinking among future teachers. (Tan et al., 2025) It is important to understand the perception of student-teachers about using Moodle as an e-learning platform (Tan et al., 2025). This study holds significance for Policymakers, Principals, Teacher educators and student-teachers in promoting digital learning strategies. The results will contribute in improving instructional practices in teacher education programs by integrating technology effectively. This study will explore the perception of student-teachers on Moodle as a self-learning tool.

Rationale of the Study:

The advancement of digital technology is making online learning platforms an integral part of modern pedagogy has significantly influenced today's educational practices. Change in learning delivery method is accompanied by inquiries when assessing

whether online education is a practical replacement for traditional classroom instruction, cost-benefit evaluation, student experience, and student achievement are now being carefully considered (Akpen et al., 2024).

In teacher education, there is an increasing emphasis on equipping student-teachers with effective learning strategies and digital competencies due to the increasing demands along with content knowledge. Moodle, as a widely used Learning Management System, offers opportunities for self-paced and interactive learning.

While Moodle is widely used globally, there is limited research examining its effectiveness in university settings (Al-Fraihat et al., 2025c). One of the essential skills in self learning is the ability to make connections to the text, which enhances comprehension, interpretation, and critical thinking. As future educators, student-teachers to facilitate meaningful learning experiences for their students, as traditional teaching methods do not provide sufficient scope for individualized learning and reflection. But Moodle-based self-learning allows learners to engage with content at their own pace and revisit the materials whenever needed. Learning management systems (LMSs) and e-learning tools have become mainstream, reshaping teaching and learning methods and establishing a lasting presence in higher education (Al-Fraihat et al., 2025b).

Understanding students' perceptions of Moodle's design and layout is critical for enhancing the platform's usability and ensuring it aligns with the evolving demands of modern education (Al-Fraihat et al., 2025c). In spite of the growing acceptance of Moodle as a self-learning approach in educational institutions, comparatively limited research is done in this area. So this study focuses on the perception of S.Y.B.Ed. student-teachers on Moodle-based self-learning.



Aim of the study:

- To Study the Perception of S.Y.B.Ed. Student-Teachers towards Moodle-Based Self-Learning

Objectives of the study:

1. To design and develop a Moodle-based self-learning module on the topic ‘Making Connections to the Text’ and to study its perception among S.Y.B.Ed. student-teachers.

Hypotheses of the study:

1. There is no significant perception of S.Y.B.Ed. student-teachers towards Moodle-based self-learning module on the topic Making Connections to the Text.

Methodology:

Survey method is used for this present study, as it aims to collect data regarding the perceptions of student-teachers about the perception of Moodle-based self-learning. A descriptive research design is used to analyse and interpret the responses of student-teachers about their learning experiences through Moodle. The methodology of the present study outlines the procedures used to investigate the perception of Moodle-based self-learning on the topic “Making Connections to the Text” of S.Y.B.Ed. Student-teachers.

Sample and Sampling Technique:

S.Y.B.Ed. student-teachers are selected as sample for this study and convenience sampling technique was used for this study. Sample was collected from 46 S.Y.B.Ed. Student-teachers, who used the Moodle app for learning and prepared assignment on the topic Making Connections to the Text of Audit course Reading and Reflecting.

Tool for Data Collection:

Researcher developed used a self-constructed rating scale with 25 statements to collect data for the present study. The tool was designed to measure the perception of Moodle-based self-learning. The scale included

statements based on relevant subtopics such as Ease of Use of Moodle, Learning Experience through Moodle, Engagement and Participation, Understanding of ‘Making Connections to the Text’ and Attitude towards Moodle-based Learning. The rating scale followed a 5 point scale, such as Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree.

Procedure of Data Collection:

The researcher developed e-Content module in 4 quadrants for Moodle-based learning materials for the topic Making Connections to the Text. Student-teachers were asked to go through the e-Content module developed by the researcher in 4 quadrants Moodle-based learning materials for the topic Making Connections to the Text. In that, concept based explanations, examples, reference material, videos, PPT etc. were given. Student-teachers were asked to participate in the research forum and attempt the quiz to engage in self-learning through Moodle and submit an assignment. Researcher prepared the questionnaire in google form and shared the link through WhatsApp to the student-teachers to collect responses from the student-teachers.

Data Analysis:

Data was collected from S.Y.B.Ed. student-teachers and prepared the spreadsheet based on the google form. Data was analysed to study the perception of Moodle-Based Self-Learning on ‘Making Connections to the Text’ among with respect to the dimensions Ease of Use of Moodle, Learning Experience through Moodle, Engagement and Participation, Understanding of ‘Making Connections to the Text’ and Attitude towards Moodle-based Learning. Scoring scheme was used as 5 for Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree and 1 for Strongly Disagree. Data was analysed by calculating mean score and percentage analysis was done.



Data Analysis and Interpretation (Mean & Percentage):

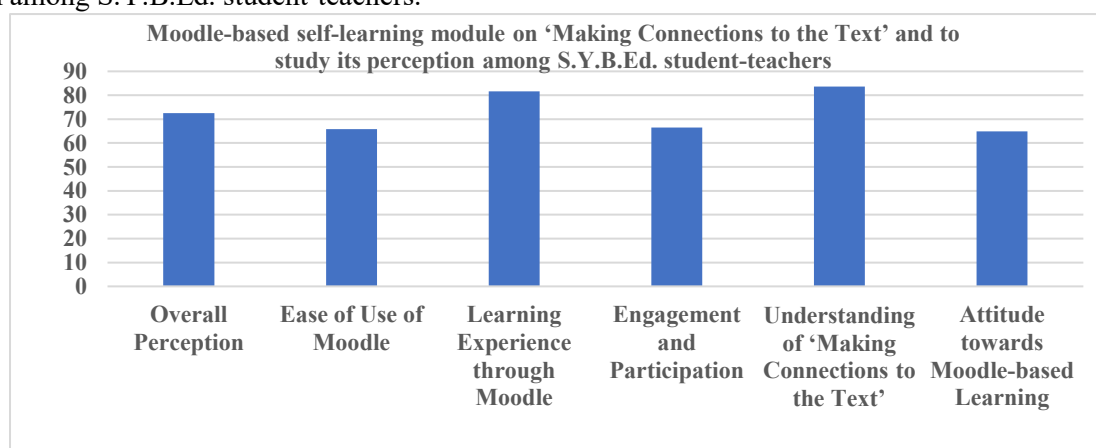
Objective: To design and develop a Moodle-based self-learning module on ‘Making Connections to the Text’ and to study its perception among S.Y.B.Ed. student-teachers.

Hypotheses: There is no significant perception of S.Y.B.Ed. student-teachers towards the Moodle-based self-learning module on ‘Making Connections to the Text’.

Table 1 showing details of Moodle-based self-learning module on ‘Making Connections to the Text’ and to study its perception among S.Y.B.Ed. student-teachers.

Dimension	No. of participants	Mean Score	Percentage
Ease of Use of Moodle	46	16.46	65.83%
Learning Experience through Moodle	46	20.39	81.57%
Engagement and Participation	46	16.61	66.44%
Understanding of ‘Making Connections to the Text’	46	20.91	83.65%
Attitude towards Moodle-based Learning	46	16.22	64.87%
Overall Perception	46	18.12	72.47%

Figure 1 showing details of Moodle-based self-learning module on ‘Making Connections to the Text’ and to study its perception among S.Y.B.Ed. student-teachers.



Interpretation: The above table and figure shows the dimension-wise perception of S.Y.B.Ed. student-teachers towards Moodle-based self-learning on the topic “Making Connections to the Text.”

- It interprets that the **overall perception** of S.Y.B.Ed student-teachers (72.47%) is moderately high positive perception towards Moodle-based learning.
- It indicates that the dimension **Ease of Use of Moodle** (65.83%) shows moderate levels, indicating that while student-teachers were able to use Moodle, there is scope for improving usability and interaction.
- It shows that the **Learning Experience through Moodle** (81.57%) shows a strong positive response, suggesting that student-teachers found the learning process meaningful and beneficial.
- It interprets that the dimension **Engagement and Participation** (66.44%) shows moderate levels, indicating that while student-teachers were able to use Moodle, there is scope for improving usability and interaction.
- It indicates that the highest percentage is seen in **Understanding of ‘Making Connections to the Text’** (83.65%), indicating that the perception of the student-teachers was high in improving comprehension and the ability to relate text with prior knowledge and real-life experiences.
- The lowest percentage is observed in **Attitude towards Moodle-based Learning** (64.87%), suggesting that although student-teachers accepted the platform, their enthusiasm and preference for this mode of learning can be further enhanced.



Findings:

1. S.Y.B.Ed. student-teachers showed an overall positive perception towards Moodle-based self-learning.
2. The module was highly effective in improving understanding of ‘Making Connections to the Text’ as student-teachers’ perception is very high.
3. Student-teachers’ reported a positive learning experience through Moodle.
4. The ease of use of Moodle was moderate, indicating the need for better familiarity or training.
5. Engagement and participation levels were satisfactory but can be improved with more interactive elements.
6. The attitude towards Moodle-based learning was comparatively lower, indicating a need to build greater interest and motivation.
7. Moodle-based learning successfully promoted self-directed and independent learning among student-teachers.

Suggestions:

Based on the findings, the following suggestions are proposed to promote digital learning strategies that foster deeper comprehension and reflective thinking among to Policy makers, Principals, Faculty and student-teachers.

Policy makers:

- Integration of technology and technology based education should be given importance.
- It is important to make Blended learning as part of Syllabus.

Principals:

- Encourage blended learning approaches combining classroom teaching with Moodle-based learning.
- Make it compulsory to use Moodle platform at least for few topics in each course.
- Organize orientation and training sessions to improve ease of use of Moodle.

Teacher educators:

- Incorporate more interactive activities (quizzes, forums, live discussions) to enhance engagement and participation.
- Use multimedia resources such as videos, animations, and case-based content to make learning more interesting.
- Extend Moodle-based modules to other topics to strengthen digital learning practices.

Student-teachers:

- Motivate student-teachers by highlighting the benefits of digital learning to improve their attitude.
- Provide continuous feedback and support to enhance learning experience.

Conclusion:

The study reveals that Moodle-based self-learning has a positive impact on student-teachers, particularly in enhancing understanding and learning experience, though improvements are needed in engagement, usability, and attitude.”

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