

DEVELOPING MOODLE-BASED E-LEARNING COURSE TO UNDERSTAND THE LEADERSHIP SKILLS AMONG B. ED. STUDENT-TEACHERS

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Abstract

The present century is rightly called the technological century. The revaluation of ICT is influencing the practices of educational systems worldwide. Leadership is an important factor in an educational institution, incorporating newly generated knowledge and diverse perspectives for application in various contexts. This article will identify and analyze the concepts, types, and qualities of leadership, providing examples of leaders from the past and present and strategies for cultivating leadership styles. This study focuses on developing Moodle-based e-learning courses for student-teachers to understand leadership skills. The study shows the effectiveness of Moodle-based e-learning courses in understanding leadership skills.

Keywords: Moodle-based learning course, Leadership Skills

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Introduction:

The goal of the educational system is always to acquire and improve human abilities. Education aims to procure knowledge, which involves a constant investigation of creative techniques and devices to enable learning. The education system has shifted from the conventional method, which is chalk-and-talk, to digitized pedagogical approaches through technical devices.

Moodle, the full form of which is ‘Modular Object-Oriented Dynamic Learning Environment,’ is an online program aimed at producing a modified teaching-learning environment for students. It allows teachers to create content, handle subjects, and involve the students and teammates. The students can also operate Moodle to open the calendar of the class, present assignments, take quizzes, and network with their classmates. Administrators can design and operate simulated classrooms, offering access to materials such as videos, documents, and tests. Moodle also provides a chat aspect, which gives a safe setting for students to

converse with teachers and peers. Few educators use Moodle primarily for sharing content, whereas some utilize it as a central platform for administering quizzes and tests. The platform supports scalability, accommodating small groups of students as well as many customers.

Concept of Leadership:

Leadership is the procedure by which a person encourages the ideas, mental attitudes, and actions of subordinates to achieve the goals of an institution. Leaders determine a vision for the future, assist others in seeing the possibilities ahead, and motivate and inspire them to achieve shared objectives. Without leadership, groups often fall into discord and struggle to find common ground due to differing perspectives and solutions. Effective leadership energizes individuals to pursue significant goals they might not otherwise attempt, focusing on influencing others to work toward common aims.

Types of Leaders:

Leadership can be classified into **informal** and **formal** categories:

- **Informal Leaders:** Those naturally recognized as leaders by their peers.
- **Formal Leaders:** Individuals officially designated as leaders within an organization.

Both types play crucial roles in the workplace. Leadership, whether informal or formal, depends on trust and confidence from others, as well as reliability in decision-making.

Leadership involves guiding and motivating subordinates toward achieving organizational goals, focusing on three key elements: influence, group dynamics, and goal orientation. Leaders influence others' behaviour, work in group contexts, and aim to accomplish collective goals.

Aspects of Leadership:

- Leading, influencing, commanding, and guiding people.
- Setting a direction and building a vision for others to follow.

Prominent leaders in history have displayed leadership values, like:

- **Mahatma Gandhi:** He supported nonviolence to gain freedom.
- **Mother Teresa:** She has devoted her life to helping needy and deprived people.
- **Martin Luther King Jr.:** He has advocated civil rights and racial equality through peaceful techniques.
- **Nelson Mandela:** He has worked to end apartheid and establish democracy in South Africa.

Types of Leaders/ Styles of Leadership:

Different leadership styles are found in different places, each with benefits and disadvantages. An institution's ethos and objectives mainly decide which style is most appropriate. Several institutions utilize various

leadership styles to efficiently and effectively tackle various responsibilities and departmental requirements.

Autocratic Leaders:

An autocratic leader is called a 'one-person show,' carefully observing their group to ensure duties are achieved as ordered. These leaders make decisions individually, discussing without subordinates, and anticipate conformity without cross-questioning. Communication is low, and the views of employees are usually ignored. This type of leader relies on ability and control, usually directing an atmosphere of worry rather than respect or faithfulness. Staff may feel forced to perform to evade punishments or dismissal.

These types of leaders keep complete control and accountability for choices. Whereas autocratic leaders can be effective and efficient in small institutions or circumstances requiring instant decision-making, it can become difficult if employees avoid teamwork, particularly in vital instances. However, it can attain quick outcomes when the leader is trained and capable; tirelessly, it may promote arguments, disagreements, and detachment among employees. Nowadays, in job places, where employees are often highly educated, they do not prefer autocratic leaders.

Laissez-Faire Leaders:

Laissez-faire leaders take a non-interventionist approach, evading direct engagement with their group as much as possible. Contrasting autocratic leaders who show prominent power, laissez-faire leaders lack confidence and power, leading to the least guidance. Choices are left to the group, and objectives are usually unclear, leading to a lack of direction and guidelines. This approach is more similar to non-leadership and may affect institutional inefficiencies and ineffectiveness due to inadequately handled decisions. Whereas laissez-faire leaders can perform temporarily, it is usually only appropriate when group members are highly competent, accountable, and self-enthusiastic. It

operates effectively with educated, developed, cultured, and experienced employees. This type of leader usually fails to reinforce or promote group work, leading to a lack of unity and a low positive influence on group dynamics.

Democratic Leaders:

It is also known as participative leaders; the democratic leader highlights inclusiveness and cooperation. Democratic leaders are broad-minded, productive, and empathetic towards their group for their opinions. Staff are reinforced to state their views and contribute to decision-making. These types of leaders act as good hearers, examine suggestions prudently, and evaluate them when suitable. This approach promotes respect, collaboration, and a sense of shared accountability among group members.

In a democratic environment, achievements and failures are shared instead of merely the leader's accountability. Perfect democratic leaders work as part of the team rather than placing themselves above it. They distribute accountability equally, confirming that authority and decision-making are distributed. This type of leader is highly efficient and effective in providing group work and attaining the objectives through shared work.

Situational Leaders:

The situational leaders adjust to the conditions that are prevailing, combining components of different leadership styles. Situational leader who is an efficient assessor of the situation, examines the essentials of the minute, and chooses the most suitable leadership style. For example, these leaders may utilize an autocratic style for taking immediate decisions and may change to a democratic style for collective problem-solving. Situational leaders are believed to be the most flexible, effective, and efficient, as they adapt to leadership styles as per the particular problems and needs of a given situation. It stresses adaptability and approachability, confirming that the selected leadership

style supports institutional objectives and group dynamics.

Major features of Leadership:

- **Empathy:** Empathy comprises realizing others' viewpoints and placing yourself in their situation. Superiors who display understanding towards their group promote faith and motivate teamwork, supporting the group with the mission instead of fostering negativity.
- **Consistency:** Superiors who are steady in their acts and choices gain recognition and trustworthiness, which are crucial in any institution. By displaying impartiality and consistency, they establish a norm that motivates the same conduct in their group.
- **Honesty:** Honesty is an analytical attribute of effective and efficient leadership. Superiors who are reliable and clear as crystal tackle problems openly, assisting faith and allowing personal and institutional growth and development.
- **Goal Setting:** A crucial characteristic of a perfect leader is the capacity to plan and evaluate the process needed to achieve institutional goals. Leaders should give proper direction and support to urge definite modification and attain objectives efficiently and effectively.
- **Communication:** Effective communication is vital for upholding association in the group. When leaders noticeably state hopes, tackle problems, and suggest guidance, this enables their group to maintain aim and encourages them to attain institutional objectives.
- **Flexibility:** Various challenges need various answers. Leaders who are flexible and approachable to innovative ideas are more expected to find the best answers. This technique reinforces novelty and encourages group members to distribute their vision.
- **Conviction:** A strong sense of intent and willpower is an important feature of a leader. Leaders who

believe in their vision and enthusiastically perform toward it motivate their group and perform as an important basis of reinforcement and advice.

Significance of the Study:

The existing study has numerous important advantages. It will help student-teachers and teacher educators by developing their understanding and creating a teaching-learning process that is extra efficient and effective. By developing inquisitiveness and awareness among student-teachers, the research provides a way for achievers in the discipline of management. It moreover performs a vital position in enhancing computer knowledge in the nation at large, which is important in today's computer world. Moreover, the study aims to enhance student-teachers' audio and visual literacy, which are important for new teaching-learning methods. The technique enhanced through this research will permit student-teachers to retrieve teaching-learning content in their personal space, encouraging personalized learning. The research is too important for proposing a Moodle-Based Learning Course, which will be beneficial for attaining understanding and acquiring curiosity in leadership skills, promoting mutually present and future educators.

Statement of the Problem:

Developing a Moodle-Based E-Learning Course to Understand the Leadership Skills among B. Ed. Student-Teachers.

Aim:

The foremost aim of the current study was to develop a Moodle-based e-learning course to understand the leadership skills among B. Ed. student-teachers.

Objectives:

- To study the pre-test scores of the Moodle-based e-learning course to understand the leadership skills among B. Ed. student-teachers.
- To develop the Moodle-based e-learning course to understand the leadership skills among B. Ed. Student-Teachers.

- a. Concept of Leadership
- b. Characteristics/Qualities of Leadership
- c. Types of Leadership

- To study the post-test scores of the Moodle-based e-learning course to understand the leadership skills among B. Ed. student-teachers.
- To compare the pre-test and post-test scores of Moodle-based e-learning courses to understand the leadership skills among B. Ed. student-teachers.
- To study the effectiveness of the Moodle-based e-learning course to understand the leadership skills among B. Ed. student-teachers.

Hypotheses:

There is no significant difference between the pre-test and post-test mean scores of the Moodle-Based E-Learning Course to Understand the Leadership Skills among B. Ed. student-teachers.

Methodology:

The researcher used the experimental method to solve the research problem, and experimentation was well-suited. The single-group method of the experiment was used here for the implementation of the experiment. The Moodle-based e-learning course was used on the experimental group. In this experimental group, firstly, the pre-test was conducted, followed by a Moodle-based e-learning course, and afterwards, the post-test was conducted.

Sample and Data Collection:

A sample of 30 B.Ed student-teachers was chosen through a random sampling technique. The sample of the study was from unaided teacher education institutions as well as from colleges affiliated with the University of Mumbai.

Plan of Action:

Activities were planned and conducted for the Understanding Leadership Skills Through Moodle-Based Learning Course.

Preparation:

The Researcher Prepared a Moodle-based learning course. The following are the subtopics included:

1. **Pre–Test:** The researcher planned a questionnaire with the support of the plug-in ‘Multiple Choice Questions’ obtained in Moodle. The researcher was interested in gathering information regarding leadership skills among student teachers, and the rating scale was considered a suitable tool. In this study, a five-point rating scale was used to measure leadership skills. This scale includes very often, often, sometimes, rarely, and not at all types of questions. 18 questions were given in the pre-test.
2. **Preparation of Course:** The researcher used the Moodle platform to prepare this course. The following are the topics included in the course.

- **Topic one: Concept of Leadership:** In this module, the researcher covers the concept of leadership. This information was presented in documents.

In a Moodle-based learning course, student-teachers are provided with a document listing various characteristics that describe a group leader. They are instructed to select five characteristics from the list that they consider most essential for a group leader. Additionally, they are tasked with ranking these five characteristics in order of importance, with 1 being the most critical and 5 the least significant. The course also includes a document outlining the concept of leadership to support their understanding.

- **Topic Two: Qualities/Characteristics of a Leader:** In this Moodle-based learning course, the researcher includes the qualities/characteristics of a leader. This information was presented in a PowerPoint presentation showing pictures and video.

The Teacher Educator shows the pictures of leaders on the PowerPoint presentation, like Shri. Amitabh Bachchan, late Dr. Abdul Kalam, Shri. Barak Obama, Dr. Man Mohan Singh, late Ms. Indira Gandhi, Shri. Narendra Modi, Shri. Sachin Tendulkar, and Shri. L. K. Advani and tells student-teachers to write the main characteristics of the leaders and show leadership qualities with the help of a PowerPoint presentation.

- **Topic Three: Types of Leadership:** In this, the types of leadership were presented. This communication was given in a PowerPoint presentation, a document, and a video. The course gives a brief video presentation followed by an activity to identify whether student-teachers are more task- or relationship-oriented.

The Moodle-based learning course includes a brief video presentation followed by an activity designed to help student-teachers identify whether they are more task-oriented or relationship-oriented. The course provides a document titled "**Leadership: It's Your Choice**" and instructs participants to review the numbered questions at the top. Student-teachers are directed to mark their selected answers for each question.

On the same page, the teacher educator guides them to draw lines connecting their answers, forming a graph. After completing the graph, the teacher educator prompts them to analyze the results by asking reflective questions: Is the line relatively consistent, or are there frequent variations? Are there significant changes across different categories? They are also asked to examine any **Xs** they may have placed—are they concentrated in one or two categories?

Finally, the teacher educator helps student-teachers interpret their results by asking if their graph suggests they are more task-oriented or relationship-oriented. The session concludes with an explanation of **"How to Interpret Your Leadership Style."**

- 3. Post-Test:** The researcher organized a questionnaire with the help of the plug-in 'Multiple Choice Questions' offered in Moodle.

Time/Schedule of Data Collection:

Time Schedule

Sr. No.	Activities	Time
1	Orientation about how to use the Moodle course	30 Min.
2	Pre-Test	45 min
3	Concept of Leadership	30 min
4	Characteristics/ Qualities of Leadership	30 min
5	Types of Leadership	30 min
6	Post-Test	45 min

Tools:

The researcher applied the following tools for research.

1. Pre and Post-test: The researcher conducted a quiz on Moodle-based e-learning.
2. Moodle-based e-learning package: The content-based Moodle-based e-learning package was acquired for B.Ed student-teachers. The researcher developed a Moodle course on the Moodle in the subject 'Educational Management: Leadership Skills.' The following topics were included in the course:
 - a. Pre-Test
 - b. Concept of Leadership
 - c. Characteristics/Qualities of Leadership
 - d. Types of Leadership
 - e. Post Test

Statistical Techniques:

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

- a. Descriptive Analysis—In the descriptive analysis, the mean was calculated.
- b. **Inferential** analysis the inferential analysis: The t-test was calculated.

Analysis and Interpretation:

There is no significant difference between the pre-test and post-test mean scores of the Moodle-based e-Learning Course to understand the leadership skills among B. Ed. student-teachers.

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

Test	Number of Students - Teachers	Mean	Standard Deviation	t -value
Pre-Test	30	32.33	4.10	3.33 (Significant at 0.05 level)
Post-Test	30	35.83	4.09	

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

The performance of the post-test scores compared with the pre-test scores is higher, which is seen. This is an exact sign of the effectiveness and efficiency of the Moodle-based e-Learning course in understanding leadership skills.

Findings:

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

It states that student teachers' performance is much better in the post-test in understanding the topic of leadership skills. This topic of leadership skills covers the concept, characteristics/qualities, and types of leadership skills. Text, images, and videos about leadership skills are included. Wherever required, they read the content again. This study shows that e-learning can be used as an effective learning strategy to understand. As B.Ed. Student teachers are mature, grown-up adults, and they can do self-learning. They can learn content at their own speed and time.

Different Roles in Moodle-Based Learning:

- Role of Student-teacher—Reading and understanding the content of understanding about leadership skills and solving the multiple-choice questions (pre-test and post-test).
- Role of Teacher Educator—Preparing the content on the Moodle App on the topic of Understanding

Leadership Skills and making it accessible to student-teachers at their own pace and time.

- Role of Instructional Material—Moodle-Based Learning Course on Understanding Leadership Skills.

Conclusion: The information was as follows:

- Moodle-based learning in Understanding diverse text forms was found effective for the student-teachers.
- Moodle-based learning courses help the student-teachers to develop professional abilities and life skills too.
- The developed Moodle-based learning Courses developed curiosity and interest among the student-teachers.
- All student-teachers enjoyed working on the Moodle-Based Learning Course.
- All student-teachers agreed that it was a tension-free learning experience.
- Many student-teachers learned to look at the content from a realistic point of view. Moodle Learning showed its importance in the methodology of learning at the Level. It is suggested as a better strategy to teach and train the student-teachers. The facilitator experienced an opportunity to learn the art of preparing Moodle-based learning.

In today's digital era, e-learning has become an integral part of the education system. It offers the advantage of reducing traditional educational costs, such as those related to classrooms and learning materials. Students have the flexibility to learn at any time and from any location. Open Educational Resources (OER) play a crucial role by offering affordable materials to students, enabling faculty to improve their work, and supplying content for courses. Therefore, educators should incorporate OER into their teaching practices.

Implication:

The study will be hugely useful to the various interested parties in the field of education.

- **Principal:** Moodle-based learning Courses are important because they provide reasonable content to student-teachers, permit teacher educators to improve their efforts, and offer teacher educators material for the topic. Principals should always encourage student-teachers and teacher educators to help with Moodle-based learning courses because these are reasonable and will decrease the cost of books. Principals should inspire teacher educators to utilize technology in education.
- **Students-teachers and teachers:** This study will assist student-teachers and teacher educators in comprehending the meaning of leadership skills. This will improve Moodle-based learning courses for their lecture planning and for upgrading their understanding.
- **Educational Institutions:** Students, teachers, and teacher educators will help Moodle-based learning. Courses for the teaching-learning process price of content will be deducted, which will be useful for the institution to strategize its financial statement.

Ten Commandments of Leadership:

1. Have confidence in yourself!
2. Maintain a positive outlook towards others!
3. Show patience and tolerance with yourself and Others!

4. Be trustworthy and dependable!
5. Be open to receiving advice, suggestions, and constructive criticism!
6. Avoid spreading gossip!
7. Respect others' belongings!
8. Listen actively!
9. Be polite and considerate!
10. Embrace and welcome everyone!

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