



**A STUDY ON UTILIZATION OF MOOC ON SCHOOL LEADERSHIP AND
MANAGEMENT (SLM) THROUGH LEARNING MANAGEMENT SYSTEM FOR
D.EL.ED. STUDENTS OF DELHI**

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Abstract

In the current educational setting, the incorporation of technology has gained significant grip and presents fresh solutions to enrich the learning journey. This exploratory study delves deeply into the application of Massive Open Online Course (MOOC) focused on School Leadership and Management (SLM) utilizing a Learning Management System (LMS) for D.El.Ed. II year students of Delhi. The basic objective of this study is to explore the student's viewpoints concerning the awareness, effectiveness, satisfaction, expectations, and challenges linked to the integration of MOOCs and LMS in their academic activities. The methodology adopted for this study is a descriptive survey, which involves the dissemination of a questionnaire to 162 D.El.Ed. trainees from different teacher training institutions under SCERT in Delhi. Through the utilization of random sampling methodologies, the study sheds light on the comprehensive perspectives of a diverse group of participants. By employing advanced techniques for quantitative data analysis, the research seeks to identify core emerging trends, and
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potential correlations associated with the utilization of MOOCs and LMS among D.El.Ed. II year students. The anticipated outcomes of this study will help us to know the status of MOOC integration within teacher education programs and offer valuable insights for future advancements in the adoption of educational technology. The importance of this research lies in its capacity to educate policymakers, educators, and stakeholders on the effectiveness of MOOCs and LMS in enhancing the educational journey of teacher trainees. By tackling the key research inquiries, this study contributes significantly to the ongoing conversation on utilizing technology to facilitate efficient methodologies of teaching-learning.

Keywords: *Massive Open Online Course (MOOC), School Leadership and Management (SLM), Learning Management System (LMS), D.El.Ed., Teacher Training colleges*

Introduction

The 21st century necessitates learners to develop specific academic competencies, proficiencies, and awareness during the learning process. Within the domain of the educational system, higher education is an important element which can promote academic skills, novel abilities and expansion of knowledge (Obloberdiyevna & Tychiyevna, 2022; Dwikoranto et al., 2020). Despite that, in the face of technological advancements, this sphere is compelled to adapt and align with these ongoing transformations. The integration of technology into education can solve various challenges faced in the modern digital age (Wijaya et al., 2016). MOOCs in Learning Management System (LMS) has gathered increasing popularity. It has served as a technological tool in the area of higher education (Belawati, 2019; Simanihuruk et al., 2019; Gusty et al., 2020). MOOC LMS enables students to engage with educational materials in a flexible and autonomous manner (Pambudi & Wibawa, 2020). The implementation of MOOCs in university's LMS provide several benefits. It can improve learning outcomes, decrease expenses and time commitments and make education easily accessible to students living in places far away. (Farhan et al., 2019; Widyastuti et al., 2022). Moreover, this technological innovation aids higher education institutions in the effective and efficient development and management of educational programs (Gusty et al., 2020; Mayulu et al., 2022).

A MOOC represents a framework designed to deliver educational content over the internet to individuals seeking to participate in specific courses, without any restrictions on participation. It represents a web-based educational initiative that caters to the engagement of large group of learners from diverse regions. The defining characteristics of MOOCs encompass their massive scale, open accessibility, interactive nature, and adherence to a four-quadrant approach comprising e-Tutorial, e-Content, Discussion forum, and Assessment components. The vastness of MOOCs is illustrated by their capacity to accommodate a vast number of

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participants, without any formal qualification requirements. Participation is unrestricted, free of charge, and extends to anyone with internet connectivity, allowing for enrollment in multiple courses if desired. Furthermore, the educational resources generated through MOOCs are shared openly and is accessible to all interested learners. The interactive nature of MOOCs fosters engagement with instructors and peers, encouraging active contribution and collaboration among participants.

School Leadership and Management (SLM)

To shape the overall learning environment, promote effective teaching and learning, and ensure the academic and student success of the school, school leadership and management are crucial elements of educational institutions. A high-quality education is largely dependent on competent leadership and management in schools. In addition to management and administrative duties, proactive strategies for school transformation are also a part of school leadership. It involves creating a school's vision and coordinating all planning with it to increase student achievement. It also consists of sustaining good rapport with all parties involved and further involving them in administration, planning, and decision-making. The goal of school leadership is to get the community more involved and invested in school activities. Through ongoing pedagogical innovation, it aims to continuously improve teaching and learning. By creating a course on school leadership and administration using a Learning Management System (LMS), educators and administrators can enhance their skills in a flexible and easily accessible manner.

Review of Related Literatures

Utilization of MOOCs within LMS can enhance learning outcomes of students within the university setting. It allows students to engage with educational materials in a more flexible and autonomous manner, as highlighted by the work of Patandean & Indrajit (2021). It also facilitates a more effective and efficient learning experience, as noted by Belawati (2019). The integration of MOOCs in LMS enables teachers to deliver accurate feedback to students as noted by Khairi et al. (2022) and Fajrillah et al. (2020). Studies done by Ikhwan & Kep (2021) and Saputro et al. (2022) suggests that MOOCs in LMS can increase student engagement and motivation. It encourages them to actively participate in the learning process. It also has the capacity to enhance inclusivity for students with special needs or those living in remote areas, a point noted by Cinquin et al. (2019) and Zdravkova et al. (2022).

The academic performance gets enhanced with the incorporation of MOOCs in LMS. It also strengthens the higher educational institutions to nurture competent graduates. It also

empowers them to tackle the challenges posed by globalization, as mentioned by Lopukhova & Makeeva (2017) and Mishra et al. (2020). During COVID-19, the significance of MOOCs in LMS became increasingly evident. It served as a vital tool to ensure the continuity of university education (Reimers et al., 2020). The burden of social restrictions along with necessity for distancing made traditional learning impractical. But by utilizing LMS MOOCs, students and teachers could easily switch to remote online learning (Kumar & Al-Samarraie, 2018). This underscores the increased relevance and necessity of MOOCs in LMS during the COVID-19 crisis. Another study by Khan et al. (2020) and Xie et al. (2020) also underscores the pivotal role of this technology in enhancing the quality and efficacy of education within the university environment.

Moreover, the integration of MOOCs in LMS also holds promise in reducing the learning challenges caused by the pandemic (Kurniawan, 2021). A decline in educational quality stemming from school closures, ineffective remote learning methods, and learner fatigue, posed a significant challenge, leading to diminished academic performance among students, as noted by García & Weiss (2020) and Zhdanov et al. (2022). In this context, MOOCs in LMS emerge as a viable solution to combat learning loss (Reich, 2020). Through the robust platform of MOOCs in LMS, students can gain access to a variety of high-quality educational resources and diverse learning materials from across the globe, fostering a deeper understanding and acquisition of supplementary knowledge, as highlighted by Belawati (2019).

By integrating MOOCs within LMS, there is a strong belief that students will be able to achieve more favorable learning outcomes and effectively address the educational setbacks resulting from the impact of the pandemic. This integration empowers students to access educational materials from globally renowned sources, thereby enriching their perspectives and expertise in specific subject areas (Rosenbusch, 2020; Simanihuruk et al., 2019).

The major challenges comprise of as limited internet connectivity, the complexities involved in creating suitable learning materials, and the necessity to cultivate adequate support and motivation among educators and learners, as noted by Sarker et al. (2019). It is important that all stakeholders, including faculty members and students have access and proficiency to utilize the MOOCs through the LMS platforms (Huang et al., 2020; Mishra et al., 2020).

MOOC platforms empower learners to engage with learning resources flexibly and autonomously through digital interfaces (Pambudi and Wibawa, 2020). Because of its success in fostering richer learning environments through interactions amongst a diverse variety of participants, geographically distant students can now participate in large numbers using only

online tools. This is something which is otherwise not possible with traditional techniques. This study is necessary to evaluate the efficacy of MOOCs on certain topics in school leadership and management (SLM) using a Learning Management System (LMS) to fully appreciate the benefits and possibilities of MOOCs.

Research Questions:

1. How aware the students of D.El.Ed are about MOOCs?
2. What is the effectiveness of MOOC on SLM?
3. What is the extent of satisfaction and expectations among the students of D.El.Ed about the MOOCs?
4. What is the level of expectations among the students of D.El.Ed about the MOOCs?
5. What challenges do students face while using MOOCs and LMS?

Research Objectives:

1. To identify the level of awareness among the students of D.El.Ed about MOOCs.
2. To find out the effectiveness of modules of the MOOC on SLM.
3. To assess the level of satisfaction among the students of D.El.Ed about the MOOCs.
4. To find out the level of expectations among the students of D.El.Ed about the MOOCs

To identify the challenges faced by students while using MOOCs on LMS.

Methodology

This was an exploratory study, that attempted to obtain the input from the respondents on utilization of MOOCs on concepts in School Leadership and Management (SLM) through Learning Management System (LMS) for D.El.Ed II year students of Delhi.

Population:

All the D.El.Ed. students at teacher training colleges of SCERT of Delhi.

Sample, Sample Size and Sampling Technique:

Sample was chosen by using random sampling technique which consists of D.El.Ed students at DIET colleges under SCERT who use MOOC on SLM. Sample size of the study was

162.Data Collection Tools:

The tool for this study was developed by the team of experts. Mixed Questionnaire was developed and distributed into two sections. The first section was related to demographic information. The second section was related to the objectives of the study.

Procedure:

Researchers selected the students who use MOOC on SLM, by the purposive sampling technique; further 162 students were selected through random sampling technique. A

questionnaire was sent to the participants through Google forms. The analysis of data utilized quantitative techniques.

Delimitations of the Study

1. The study was delimited to DIET of SCERT of Delhi state.
2. The study was delimited to D.El.Ed II year students.

Results and Discussion:

Utilization of digital platforms:

Digital platforms utilization was represented in table-1

Table-1: Digital Platforms Utilization

Digital platforms used	Frequency	Percentage
YES	110	67.9%
NO	52	32.1%

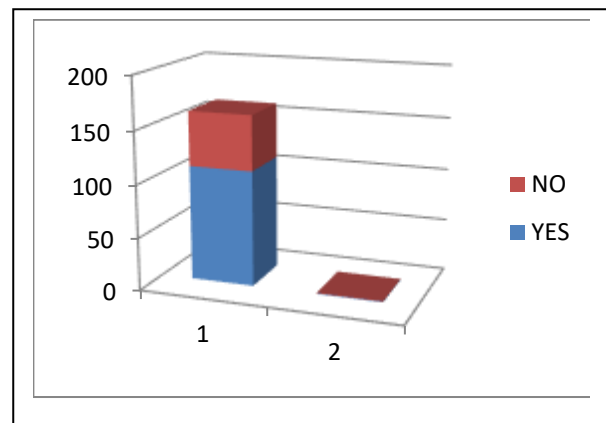


Table-1 presents data on the utilization of digital platforms, indicating whether individuals have used such platforms or not. Most respondents, constituting approximately 67.9%, have actively utilized digital platforms, while a significant portion, around 32.1%, have not engaged with digital platforms as per the survey.

First reaction of students for MOOC:

First reaction of students for MOOC on SLM was represented in table-2

Table-2: First reaction

First reaction to this "MOOC" on SLM	Frequency	Percentage
NICE	55	34%
INNOVATIVE	68	42%
USEFUL	90	55.5%
INTERESTING	58	35.8%
NEUTRAL/ NOT AT ALL	7	4.3%

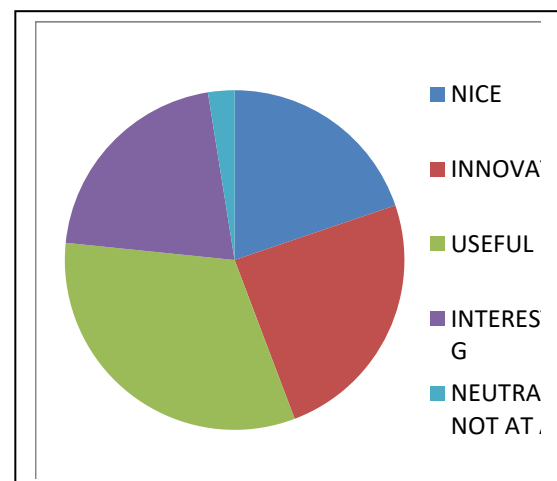


Table-2 illustrates the first reactions of respondents to the "MOOC" on SLM (Massive Open Online Course on Self-Learning Modules). The term "Nice" is chosen by 55 respondents (34%), suggesting a positive and appreciative first reaction to the MOOC on SLM. The term "Innovative" is chosen by 68 respondents (42%) who have perceived the MOOC as innovative in their initial reaction. The next term "Useful" is chosen by a majority of 90 respondents (55.5%) suggesting they have found the MOOC to be useful. Further, the term "Interesting" is chosen by 58 respondents (35.8%) and described their first reaction to the MOOC as interesting. Lastly, the term "Neutral/Not at All" is chosen by a smaller proportion, 7 respondents (4.3%) have expressed a neutral or not-at-all positive reaction.

SLM course attended:

MOOC course on SLM attended by teacher trainees was represented in table-3.

Table-3: SLM course attended

Attended SLM	Frequency	Percentage
YES	36	22.2%
NO	126	77.8%

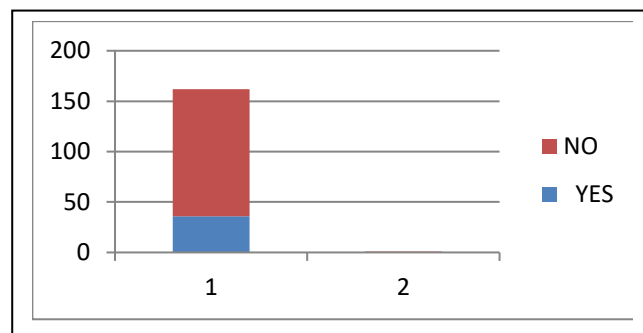


Table-3 provides information on whether respondents attended a course related to Self-Learning Modules (SLM). A relatively small percentage, around 22.2%, reported attending a course related to SLM, indicating some level of engagement with this specific educational approach. The majority, constituting 77.8%, did not attend a course related to SLM, suggesting that a significant portion of the respondents did not have exposure to formal education directly associated with Self-Learning Modules.

Sources to know about this MOOC on SLM:

The following table-4 shows the sources to know about MOOC.

Table-4: Sources to know about this MOOC on SLM

Sources through which they know about this MOOC on SLM	Frequency	Percentage
Internet	12	7.4%
Peer group	12	7.4%
Faculty	102	63%
Institute Head	36	22.2%

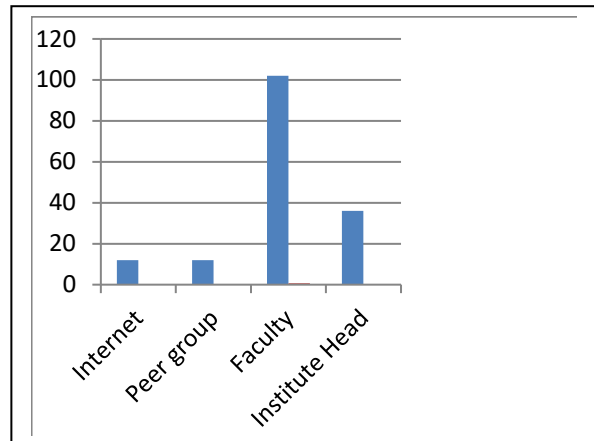


Table-4 provides information on the sources through which respondents became aware of the MOOC on Self-Learning Modules (SLM). Faculty members played a crucial role, with 63%, in informing respondents about the MOOC on SLM, underlining the importance of educators as sources of information. Both online sources (Internet) and peer groups contributed to awareness

but to a lesser extent, each accounting for 7.4%. The Institute Head, with 22.2%, also played a notable role in communicating information about the MOOC within the institution.

Online SLM course difficulty:

Table-5 shows the perception of students that studying SLM course online will be difficult

Table-5: Online SLM course will be difficult

Studying SLM course online will be difficult	Frequency	Percentage
Yes	32	19.8%
No	126	77.8%
May be	4	2.5%

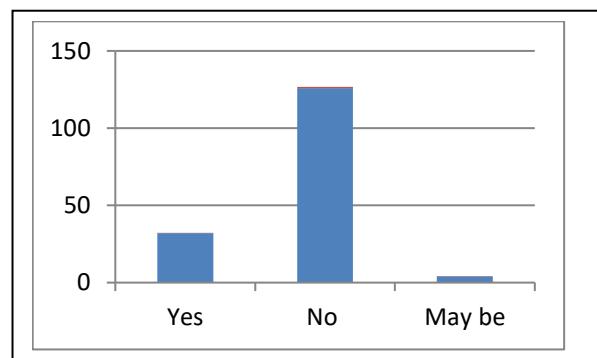


Table-5 provides information on respondents' perceptions regarding the difficulty of studying a Self-Learning Module (SLM) course online. Most respondents, constituting 77.8%, are optimistic and do not perceive studying an SLM course online as difficult. A notable portion, 19.8%, believe that online learning for SLM courses may pose challenges. A smaller group, 2.5%, expressed uncertainty, suggesting a neutral stance or lack of a definitive opinion on the difficulty of online SLM courses.

Management and leadership skill enhancement from Online learning:

Further table-6 shows that Online learning enhances management and leadership skills for future.

Table-6: Online learning enhances management and leadership skills for future

Online learning enhances management, leadership skills	Frequency	Percentage
Yes	138	85.2%
No	10	6.2%
Can't say	14	8.6%

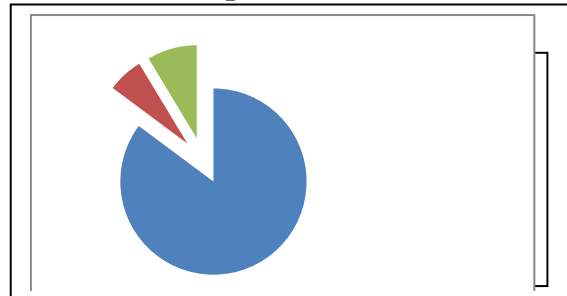


Table-6 provides information on respondents' perceptions regarding the enhancement of management and leadership skills through online learning for the future. The majority of respondents, constituting 85.2%, are optimistic about the potential of online learning to enhance their management and leadership skills for the future. A small percentage, 6.2%, holds a negative view, suggesting a degree of skepticism or disagreement on the idea that online education contributes to skill enhancement in these areas. A notable portion, 8.6%, remains uncertain or refrains from providing a conclusive response, indicating a range of perspectives on the impact of online learning on future management and leadership skills.

Effectiveness of module of the MOOC on SLM:

The effectiveness of module of the MOOC on SLM was represented in table-7.

Table-7: Effectiveness of module of the MOOC on SLM.

Effectiveness of module of the MOOC on SLM.	Frequency	Percentage
Helpful	24	14.8%
Good	46	28.4%
Effective	76	47%
Easy to access	88	54.3%
Cost effective	32	19.8%
Diverse content	54	33.3%
Fun learning	18	11.1%

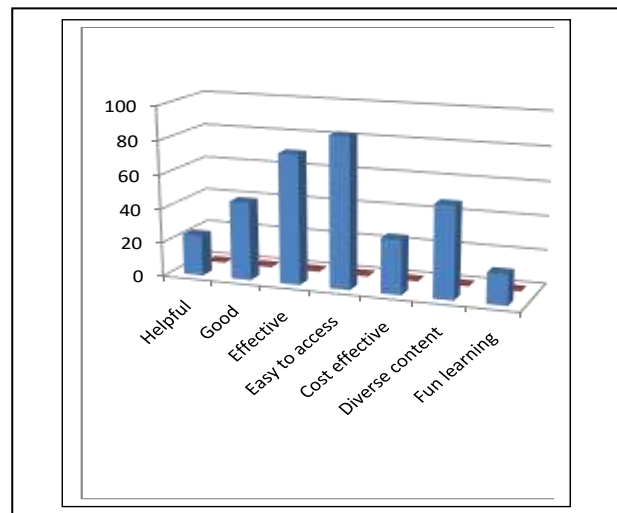


Table-7 provides insights into the perceived effectiveness of the module of the MOOC on SLM (Study of Learning Management). 24 respondents (14.8%) find the module to be helpful, indicating that it provides some degree of assistance or support in their learning. The term

"Good" is chosen by 46 respondents (28.4%), suggesting a positive evaluation of the module's quality and impact. Most respondents, 76 (47%), consider the module to be effective, indicating that it achieves its intended outcomes and positively influences their learning experience. 88 respondents (54.3%) find the module easy to access, highlighting the importance of accessibility in their perception of effectiveness. 32 respondents (19.8%) view the module as cost-effective, implying that they perceive the value of the module in relation to the cost involved. 54 respondents (33.3%) appreciate the module for its diverse content, suggesting that the module covers a range of topics or perspectives. 18 respondents (11.1%) associate the module with fun learning, indicating that the learning experience is engaging and enjoyable.

Expectations from MOOC:

The below table-8 provides information about the expectations of students from MOOC.

Table-8: Expectations from MOOC

Expectations from MOOC on SLM	Frequency	Percentage
To get better opportunity to study at low cost	22	13.6%
To improve digital skill	20	12.3%
To obtain knowledge	24	14.8%
To develop better management skills	64	39.5%
To develop leadership ability to improve skills, knowledge and management skills effectively at a lower cost	2	1.2%
All the skills are very necessary	2	1.2%

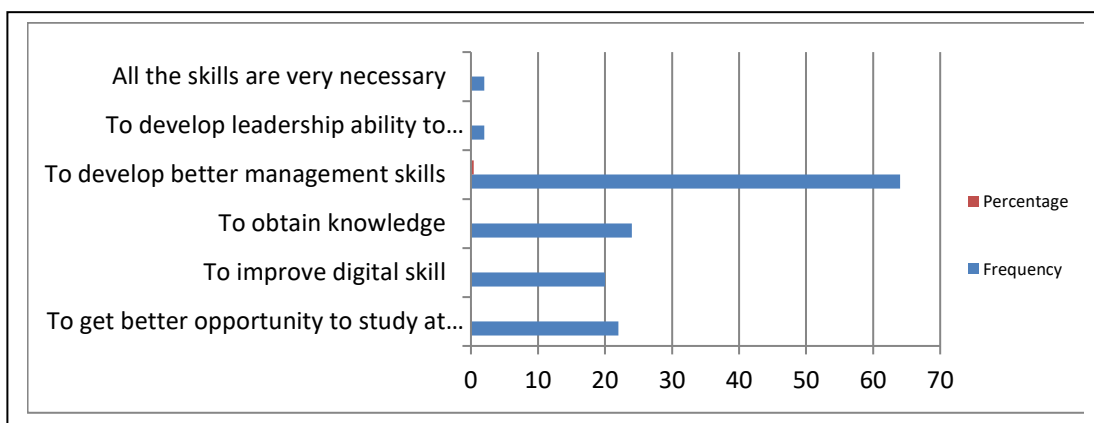


Table-8 presents the expectations of respondents from the MOOC on Self-Learning Modules (SLM). The largest group of respondents, with 39.5%, expressed a primary expectation of developing better management skills through the MOOC on SLM. Access to improved educational opportunities at a lower cost was a significant expectation for 13.6% of respondents. A diverse set of expectations, including improving digital skills, obtaining knowledge, and developing leadership abilities, was represented among the respondents. The data reflects the varied expectations individuals have from the MOOC, indicating the multi-faceted nature of educational aspirations and goals.

Learning goals after MOOC

Table-9 enlist the learning goals of students after doing MOOC on SLM.

Table-9: Learning goals after MOOC

Learning goals after doing MOOC on SLM	Frequency	Percentage
High grades in D.El.Ed Course	6	3.7%
Strengthening concepts of SLM	54	33.3%
Helpful in School Teaching	76	46.9%
Seems interesting	22	13.6%
Not bothered about grades	2	1.2%
Getting grades in this course as well as strengthening concepts which will be further helpful in school teaching	2	1.2%



Table-9 outlines the learning goals of respondents after completing the MOOC on Self-Learning Modules (SLM). The most prevalent learning goal, with 46.9%, was to acquire knowledge that would be helpful in school teaching, indicating a practical and applied orientation. Strengthening concepts of SLM was a significant goal for 33.3% of respondents, reflecting a focus on deepening understanding. Interest-driven learning goals (e.g., finding the

MOOC interesting) and goals related to academic achievements (e.g., high grades in D.El.Ed Course) were also represented among the respondents. The data suggests a combination of academic, practical, and interest-driven learning goals, showcasing a diverse set of aspirations among the individuals.

Digitally equipped for this MOOC:

Further, table-10 indicates whether the learners were digitally equipped for this MOOC or not.

Table-10: Digitally equipped for this MOOC

Digitally equipped for this course	Frequency	Percentage
Yes	128	79%
No	34	21%

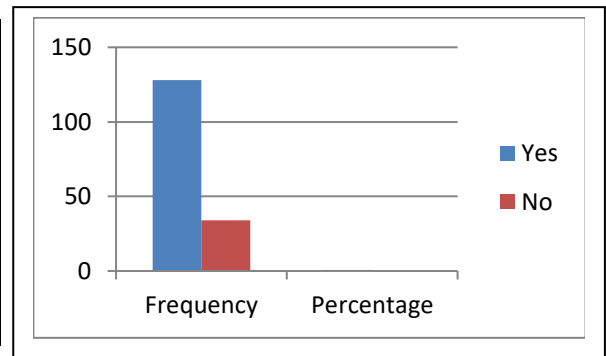


Table-10 provides information on respondents' digital preparedness for the MOOC on Self-Learning Modules (SLM). Most respondents, comprising 79%, have the necessary digital infrastructure and resources to participate in the MOOC on SLM. A significant portion, 21%, lacks the digital equipment needed for the course, potentially facing challenges in accessing and fully engaging with the online content.

Meaning of leadership from students' aspects:

Table-11 shows the Meaning of leadership from students' point of view.

Table-11: Meaning of leadership from students' aspect

Leadership meaning	Frequency	Percentage
Working with group	6	3.7%
Ability to influence others	42	25.9%
Power and control	0	0%
All of the above	114	70.4%

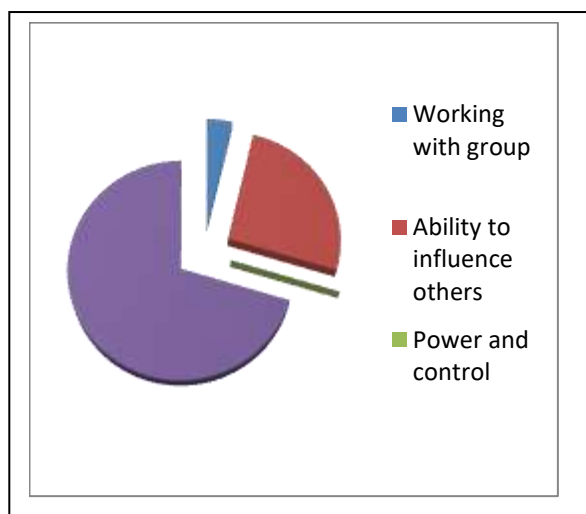


Table-11 presents students' perspectives on the meaning of leadership. 6 respondents (3.7%) associate leadership with working collaboratively within a group. 42 respondents (25.9%) perceive leadership as having the ability to influence others. No respondents (0%) associate leadership with power and control. The majority, with 114 respondents (70.4%), believe that leadership encompasses all the provided aspects, including working with the group and the ability to influence others.

Through this MOOC you can support yourself/teachers regarding effective classroom management practices:

Table-12: Support yourself/teachers regarding effective classroom management practices

Support teachers for effective classroom management practices	Frequency	Percentage
Yes	128	79%
No	4	2.5%
May be	30	18.5%

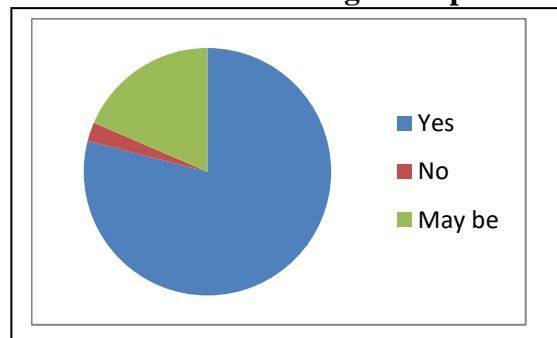


Table-12 provides insights into respondents' self-perceived support, or support for teachers, regarding effective classroom management practices. Most respondents, constituting 79%, perceive that there is support available for themselves or for teachers concerning effective classroom management practices. A very small percentage, 2.5%, believe that there is no support for effective classroom management. A notable portion, 18.5%, expresses uncertainty or neutrality on the matter, suggesting that they may not be entirely sure about the level of support for effective classroom management.

Conclusion:

In the pursuit of this research, our primary objective was to explore a variety of aspects related with the incorporation of MOOCs in Self-Learning Modules (SLM) for second year students of the Diploma in Elementary Education. The study reveals a significant level of awareness prevalent among D.El.Ed II year students with regards to MOOCs. It is evidenced that 67.9% students actively engaging with digital platforms which is indicative of a significant interaction with online resources. Furthermore, most of the participants conveyed positive responses towards the MOOC integrated in SLM. The perceived effectiveness of the MOOC module was predominantly favorable, as students believed in its ability to achieve the desired objectives,

while they found it easily accessible. Moreover, respondents expressed their confidence in online learning's potential to enhance their managerial and leadership competencies for the future. With regards to satisfaction, a considerable number of students expressed contentment with the MOOCs. However, challenges such as digital accessibility and perceived complexities in online learning were also acknowledged. Overall, the study underscores the transformative potential of integrating MOOCs into SLM to positively influence learning experiences and outcomes among D.El.Ed II year students. To optimize the advantages of MOOC integration, it is important to tackle the identified challenges and provide adequate support to assist students in effectively navigating digital platforms. By addressing these obstacles and aligning MOOC offerings with student expectations, educational institutions can establish an inclusive and efficient learning environment for all.

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