

# LEARNING MANAGEMENT SYSTEM IN THE LIBRARIES OF COLLEGES OF EDUCATION : A STUDY AMONG THE PROSPECTIVE TEACHERS

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## ABSTRACT

*This study aimed to explore the utilization of a Learning Management System (LMS) in the libraries of Colleges of Education among prospective teachers. The libraries in colleges of education are the storehouse of knowledge as they possess various books, and journals, share information through e-resources, etc. These resources are considered to be the part and parcel of the Learning Management System. The survey method was adopted for this study. The tool namely Utilization of LMS Scale was constructed for this study and the sample consists of 115 prospective teachers selected from colleges of education using a stratified random sampling technique. The background variables of the study were gender, age group, type of college, and mode of familiar LMS. The data have been analyzed using statistical techniques of mean, standard deviation, and 't'-test. The findings revealed that there is a significant difference between self-financing and aided colleges with respect to utilization of LMS, and there is a significant difference between the age group below 25 and above 25 with respect to utilization of the learning management system among the prospective teachers.*

**Keywords:** Learning Management System, Library resources, Quality of service, Learning engagement, and Prospective teachers

## Introduction

Learning Management System (LMS) plays a vital role in the process of teaching, learning, and evaluation in teacher education. In this study, the investigator considered the usage of Learning Management Systems in libraries of colleges of education. This paper discusses how far prospective teachers use LMS effectively for their learning, teaching, and evaluation process. Also, it is possible to know the demand for utilization of LMS among prospective teachers in colleges of education. In the present scenario, ICT is used in the teaching-learning process, as students are demanding a change in the classroom because of their ability to gather information faster than any other generation. To accomplish the goals of online learning with the integration of the activities related to teaching and learning and to make a learner active throughout the learning process. The hardest job is to integrate all available resources in the libraries. ICT is being used for online teaching and learning, offering a variety of open and closed software programs. Free software programs are also available that can be used as a tactic to achieve the objectives of teaching and learning through LMS. The utility of the Learning Management

System helps in the teaching-learning process to improve students' academic and overall progress of the learners.

## Significance of the Study

The LMS is one of the most significant technological breakthroughs in classroom management. It includes a variety of features and functionalities that can be easily used by students including Interactive Forums, Quizzes, Blogs, and Wikis. With all these characteristics, online courses have become enticing and provide students with a rich learning environment in the virtual world. So using LMS in education becomes important. Hamid and Leelavathi (2022)

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investigated the measurement of LMS implemented at SEGI University regarding the efficiency of the LMS on the user experience. Thuseethan et al. (2014) focused on the usability evaluation of LMS in Sri Lankan Universities with regard to an overview of LMS and evaluates its usability using some pre-defined usability standards. Azlim et al., (2014) discussed in detail the utilization of LMS in higher education institutions in enhancing the teaching and learning process. Hence the investigator wants to study the utilization of the Learning Management System (LMS) in the libraries of Colleges of Education among prospective teachers.

### Objectives of the Study

The objectives of the study were as follows:

1. To find out the level of utilization of the Learning Management System in libraries of colleges of education among the prospective teachers with regard to their age group, type of college, and mode of familiar LMS.
2. To find out whether there is any significant difference in utilization of Learning Management Systems in libraries of colleges of education among prospective teachers with regard to their age group.
3. To find out whether there is any significant difference in utilization of the Learning Management System in libraries of colleges of education among prospective teachers with regard to the type of college.

### Hypotheses of the Study

The hypotheses of the study were as follows:

1. There is no significant difference in utilization of the Learning Management System in libraries of colleges of education among prospective teachers of below 25 and above 25 years of age group
2. There is no significant difference in utilization of Learning Management System in libraries of colleges of education among prospective teachers of self-financing and government-aided colleges.

### Method Used

The researcher adopted a survey method for this study. In order to collect data for the study, the investigator used a self-made scale on the utilization of a Learning Management System (LMS) for measuring learning

engagement, quality of services, and student satisfaction among the prospective teachers. The collected data were analyzed using mean, standard deviation, and 't'-test.

### Population and Sample

The study's population consists of all the prospective teachers studying in the colleges of education during the academic year 2021-2022. The sample selected for the study consists of 115 prospective teachers from the colleges of education in Tirunelveli, Thoothukudi, and Tenkasi districts who were selected using stratified random sampling techniques.

### Analysis and Results

**Objective -1:** To find out the level of utilization of the learning management systems in libraries of colleges of education among prospective teachers with regard to their age group.

**Table 1**  
**Level of Utilization of Learning Management System in Libraries of Colleges of Education among Prospective Teachers with regard to their Age Group**

LMS and its Dimension	Age	Low		Moderate		High	
		N	%	N	%	N	%
	below 25	25	25	26	26	49	49
Learning Engagement	above 25	6	40	3	20	6	40
	below 25	26	26	24	24	50	50
Quality of Services	above 25	6	40	5	33.3	4	26.7
	below 25	25	25	29	29	46	46
Students Satisfaction	above 25	6	40	4	26.7	5	33.3
Learning Management System (LMS)	below 25	23	23	25	25	52	52
	above 25	7	47	3	20	5	33.3

It is inferred from the above table that with regard to the age group of below 25, three-fifth of prospective teachers have a high level of learning engagement, quality of service and students' satisfaction than their counterparts. Two fifth

of prospective teachers whose age is above 25 years have a moderate level of learning engagement, quality of service, and student satisfaction.

**Objective -2:** To find out the level of utilization of the learning management system in libraries of colleges of education among prospective teachers with regard to the type of college.

**Table 2**

**Level of Utilization of Learning Management System in Libraries of Colleges of Education among Prospective Teachers with regard to Type of College**

LMS and its Dimension	College Type	Low		Moderate		High	
		N	%	N	%	N	%
Learning Engagement	Self-finance	24	30	24	30	32	40
	Aided	7	20	5	14.3	23	65.7
Quality of Service	Self-finance	25	31.3	23	28.7	32	40
	Aided	7	20	6	17.1	22	62.9
Students Satisfaction	Self-finance	22	27.5	23	28.7	35	43.8
	Aided	9	25.7	10	28.6	16	45.7
Learning Management System (LMS)	Self-finance	23	28.7	21	26.3	36	45
	Aided	7	20	7	20	21	60

It is inferred from the above table that with regard to the type of colleges, two fifth of prospective teachers have a high level of learning engagement, quality of service and students satisfaction who are working in self-finance colleges of education. Three fifth of the prospective teachers who are studying in government-aided colleges have a high level of learning engagement, quality of service, and student satisfaction.

**Objective -3:** To find out the level of utilization of learning management system in libraries of colleges of education among prospective teachers with regard to the mode of familiar LMS



**Table 3**

**Level of Utilization of Learning Management System in Libraries of Colleges of Education among Prospective Teachers with regard to the Mode of Familiar LMS**

LMS and its Dimension		Low		Moderate		High	
		N	%	N	%	N	%
Learning Engagement	Google Classroom	22	24.7	20	22.5	47	52.8
	MOOCs	0	0	1	50	1	50
	Blackboard Software	9	39.1	8	34.8	6	36.1
Quality of Service	Moodle	0	0	0	0	1	100
	Google Classroom	25	28.1	22	24.7	42	47.2
	MOOCs	0	0	0	0	2	100
	Blackboard Software	7	30.4	7	30.4	9	39.1
Students Satisfaction	Moodle	0	0	0	0	1	100
	Google Classroom	23	25.8	24	27	42	47.2
	MOOCs	0	0	1	50	1	50
	Blackboard Software	8	34.8	8	34.8	7	30.4
Learning Management System (LMS)	Moodle	0	0	0	0	1	100
	Google Classroom	22	27.7	23	25.8	44	49.4
	MOOCs	0	0	0	0	2	100
	Blackboard Software	8	34.8	5	21.7	10	43.5

It is inferred from the above table that with regard to the mode of familiar LMS, three fifth of prospective teachers have a high level of learning engagement, quality of service and students' satisfaction with regard to Google classroom.

**Ho 1:** There is no significant difference in the utilization of the Learning Management System in libraries

of colleges of education among prospective teachers with regard to their age group.



**Table 5**

**‘t’ Test Analysis on the Scores of Utilizations of LMS in Libraries of Colleges of Education among Prospective Teachers with regard to Type of College**

**Table 4**

**‘t’ Test Analysis on the Scores of Utilizations of LMS in Libraries of Colleges of Education among Prospective Teachers with regard to their Age Group**

LMS and its Dimension	Age	N	Mean	S.D.	t-value	p-value	Re marks
Learning Engagement	below 25	100	51.8	5.06324	1.468	0.15	NS
	above 25	15	49.7333	5.22995			
Quality of Services	below 25	100	100.64	11.807	2.148	0.04	S
	above 25	15	94.9333	9.21541			
Students Satisfaction	below 25	100	52.67	5.50308	1.817	0.07	NS
	above 25	15	49.9333	4.96368			
Learning Management System (LMS)	below 25	100	173.75	16.5757	2.1	0.04	S
	above 25	15	164.2667	14.3202			

**S-Significant**

**NS-Not Significant at 5% level table value 1.96**

It is inferred from the above table that ‘t’ values are lesser than the table value of utilization of LMS in the dimensions of learning engagement and students satisfaction among the prospective teachers, hence it is accepted. And the dimension of quality of services and the Overall LMS both have greater value than the table value, hence it is rejected. It shows that there is a significant difference found in the quality of services and overall learning management system with regard to the age group of prospective teachers.

**Ho2:** There is no significant difference in the utilization of learning management systems in libraries of colleges of education among prospective teachers with regard to the type of college.

LMS and its Dimension	Type of College	N	Mean	S.D.	t-value	p-value	Re marks
Learning Engagement	Self-Finance	80	51.0625	5.35651	1.493	0.138	NS
	Govt Aided	35	52.6	4.38044			
Quality of Services	Self-Finance	80	98.45	12.11224	2.043	0.043	S
	Govt Aided	35	103.2	9.81535			
Students Satisfaction	Self-Finance	80	52.1625	5.52885	0.443	0.659	NS
	Govt Aided	35	52.6571	5.47692			
Learning Management System (LMS)	Self-Finance	80	170.625	17.09421	1.869	0.064	NS
	Govt Aided	35	176.8286	14.57533			

**S-Significant**

**NS-Not Significant at 5% level table value 1.96**

It is inferred from the above table that ‘t’ values are lesser than the table value of utilization of LMS among the prospective teachers as a whole and its dimensions. Hence the null hypothesis is accepted. But a significant difference was found in the dimension of quality of services. Hence, the prospective teachers who are studying in government-aided colleges have more quality services than their counterparts.

**Findings**

1. Three fifth of prospective teachers whose age group is below 25 have a high level of learning engagement, quality of service, and student satisfaction. Two fifth of prospective teachers whose age is above 25 years have a moderate level of learning engagement, quality of service, and student satisfaction.
2. Two fifth of prospective teachers who have a high level of learning engagement, quality of service, and student

- satisfaction are working in the self-finance college of education. Three fifth of the prospective teachers who are studying in government-aided colleges have a high level of learning engagement, quality of services, and student satisfaction.
3. Three fifth of prospective teachers have a high level of learning engagement, quality of service, and student satisfaction with regard to the mode - Google classroom.
  4. ‘t-test revealed that there is a significant difference in the utilization of LMS with regard to the age group of prospective teachers. Below 25 years of the age group of prospective teachers have more utilization of the learning management system than their counterparts.
  5. Significant difference was found in the dimension of quality of services in the LMS among the prospective teachers who are studying in the government-aided college and have more quality of services than their counterparts.

**Conclusion**

Learning Management System is one of the most commonly used web-based software tools for online teaching, learning, and administrative process. Today education institutions provide e-learning environments and online lessons which are parts of LMS. It helps to design and manage online courses, teaching in a flipped classroom and blended classrooms. It can be created for low cost and in a minimal time. LMS helps the students to learn in a flexible and highly effective learning environment which helps a mass number of students. From this study, it was found that there was a significant difference in the utilization of learning management systems among prospective teachers with regard to age and type of college, especially in aided college. Investigator believed that this utilization of the learning management scale will be beneficial for teachers and teacher educators. Hence when the library resources of colleges of education are used effectively the outcome of teaching and learning will be more productive.

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