

A STUDY ON AWARENESS OF LEARNING MANAGEMENT SYSTEMS (LMS) AMONG DEGREE STUDENTS

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Abstract:

The rapid advancement of technology has transformed higher education, with Learning Management Systems (LMS) playing a crucial role in digital learning. However, the awareness and effective utilization of LMS among degree college students remain largely unexplored. This study investigates LMS awareness levels, adoption rates, and the challenges faced by students across different demographic categories, including college type, gender, location, and academic discipline. A total of 400 students were selected through stratified random sampling, ensuring balanced representation across key demographic variables. The data was collected using a structured questionnaire and analyzed using descriptive and inferential statistics, including mean, standard deviation, and t-tests. The findings reveal significant disparities in LMS awareness. Private college students exhibit higher LMS awareness than their government college counterparts, likely due to better digital infrastructure and institutional support. The Urban students demonstrate greater familiarity with LMS compared to rural students, highlighting the digital divide in accessibility and technological exposure. Additionally, science students show the highest LMS awareness, followed by commerce and arts students, suggesting that digital tools are more integrated into science curricula. However, no significant gender-based differences in LMS awareness were observed, indicating similar adoption rates among male and female students. The study underscores the need for targeted interventions to improve LMS awareness and accessibility. Recommendations include enhancing digital infrastructure in government and rural colleges, integrating LMS modules into curricula across disciplines, and implementing training programs to bridge the awareness gap among arts and commerce students. By addressing these disparities, institutions can ensure more inclusive and effective LMS adoption, thereby improving digital learning experiences in Karnataka's higher education sector. These findings contribute to ongoing discussions on digital education and provide valuable insights for educators, policymakers, and institutions.

Keywords: LMS, Digital Education, Higher Education, Students Awareness.

Introduction

The rapid advancement of technology has revolutionized education, with Learning Management Systems (LMS) playing a crucial role in modern academic environments. LMS platforms facilitate online learning, streamline the organization of academic resources, and enhance communication between students and teachers. Although widely embraced in higher education worldwide, the level of awareness and effective utilization of LMS among Degree college students remains relatively unexplored. This study aims to assess students' awareness of LMS, their adoption rates, and the challenges they encounter while using these platforms for academic purposes. Understanding these aspects is essential for improving digital learning experiences and ensuring that LMS tools are effectively integrated into higher education institutions. By analyzing the current trends in LMS usage, this research will provide insights into how students engage with digital learning platforms, identify potential barriers to their

adoption, and propose strategies to enhance their accessibility and usability. The findings will serve as a valuable resource for educators, policymakers, and institutions seeking to optimize LMS implementation in higher education sector. This study will contribute to the broader discourse on digital learning by highlighting key factors influencing LMS adoption and usage. By addressing existing gaps, it will help in formulating targeted strategies to improve students' digital learning experiences, thereby enhancing the overall effectiveness of technology-driven education.

SIGNIFICANCE OF THE STUDY:

In the digital age, Learning Management Systems (LMS) have become essential tools for modern education. This study is significant as it examines the awareness and utilization of LMS among degree college students. By assessing students' familiarity with these platforms, the research aims to provide insights into their adoption patterns and challenges in using LMS for academic purposes. The findings of this study will be valuable for educators, policymakers, and institutions in developing effective digital learning strategies. Understanding the barriers students face in adopting LMS can help institutions design targeted interventions to improve accessibility and usability. Additionally, this research will contribute to enhancing the overall efficiency of digital education by identifying gaps in LMS implementation and suggesting solutions for better integration. By strengthening LMS adoption, this study seeks to improve student engagement and learning experiences in higher education. It will also provide recommendations for optimizing the use of technology in academic settings, ensuring that digital learning tools effectively support students' educational needs. Ultimately, this research will contribute to the advancement of digital education, helping institutions create a more interactive, efficient, and inclusive learning environment.

LITERATURE REVIEW:

Several studies have examined the role of LMS in higher education, particularly focusing on student engagement, digital learning challenges, and adoption trends.

Brown et al. (2019) conducted a study on the influence of Learning Management Systems (LMS) on student engagement. Their research underscored the importance of faculty training in maximizing the effectiveness of digital learning platforms, ensuring that educators can fully utilize LMS features to enhance student interaction and participation.

Kumar & Sharma (2020) explored the challenges associated with LMS adoption in higher education institutions across India. Their findings revealed that digital literacy and internet accessibility were significant obstacles, limiting the effective use of LMS among students and educators.

Lee & Park (2021) focused on student satisfaction regarding LMS features. Their analysis highlighted the necessity of incorporating interactive tools and ensuring mobile compatibility to improve the overall user experience and accessibility of LMS platforms.

Singh et al. (2022) examined the trends in LMS usage following the COVID-19 pandemic. Their research indicated a substantial increase in student dependence on digital learning platforms, reflecting a shift toward technology-driven education in higher learning institutions.

Patel & Gupta (2023) assessed the role of LMS in blended learning environments. Their study concluded that institutional support, including infrastructure and training, plays a vital role in the successful adoption and implementation of LMS in academic settings.

Rodriguez et al. (2024) investigated the integration of artificial intelligence (AI) into LMS platforms. Their research predicted a growing trend toward personalized and adaptive learning

experiences, emphasizing the role of AI-driven enhancements in shaping the future of digital education.

OBJECTIVES OF THE STUDY:

- To study the awareness of LMS between government and private degree college students.
- To study the differences in LMS awareness between male and female students.
- To analyze the differences in LMS awareness among urban and rural students.
- To compare the awareness of LMS between science, arts, and commerce students.

HYPOTHESES:

- There is no difference awareness of LMS between Government and private degree college students.
- There is no difference awareness of LMS between male and female degree college students.
- There is no difference awareness of LMS between urban and rural degree college students.
- There is no difference awareness of LMS between science, arts, and commerce degree college students.

RESEARCH METHODOLOGY:

This study employs a descriptive survey research design. A structured questionnaire was developed to assess students' awareness, usage, and perceptions of LMS. The questionnaire was distributed to 400 degree college students in Chikkamagalur District Karnataka, Quantitative analysis, including mean, standard deviation (SD), and t-tests, was conducted to evaluate the significance of various factors affecting LMS adoption.

POPULATION AND SAMPLE:

This study included a total of 400 degree college students, selected through a stratified random sampling method to ensure a diverse and representative sample. The participants were evenly distributed across key demographic categories: 200 students from Government Colleges and 200 from Private Colleges, with an equal representation of 200 male and 200 female students. Additionally, the sample was balanced in terms of geographical background, comprising 200 students from urban areas and 200 from rural areas. In terms of academic disciplines, the sample included 140 science students, 140 arts students, and 120 commerce students, ensuring a comprehensive analysis of LMS awareness and adoption across different fields of study.

DATA ANALYSIS AND RESULTS: The data collected from the questionnaire were analyzed using descriptive statistics (mean, standard deviation) and inferential statistics (t-test).

Table 1 LMS Awareness between Government and Private College Students

Variables	N	Mean	SD	T-Value	P-Value
Govt. Degree College Students	200	3.85	0.80	2.21	0.028*
Private Degree College Students	200	4.05	0.78		

Significant @0.05 levels

The findings indicate that private college students exhibit significantly higher LMS awareness than government college students ($p < 0.05$). The mean awareness score for private college students ($M = 4.05$, $SD = 0.78$) is higher than that of government college students ($M = 3.85$, $SD =$

0.80). The t-value of 2.21 and p-value of 0.028 suggest that the difference is statistically significant.

Tables 2 LMS Awareness between Male and Female Students

Variables	N	Mean	SD	T-Value	P-Value
Male Students	200	3.95	0.82	-1.65	0.099
Female Students	200	4.05	0.75		

Not significant @0.05 levels

The findings indicate no statistically significant difference in LMS awareness between male and female students. Female students (M = 4.05, SD = 0.75) have a slightly higher awareness score than male students (M = 3.95, SD = 0.82), but the t-value of -1.65 and p-value of 0.099 (>0.05) suggest that the difference is not statistically significant.

Table 3 LMS Awareness between Urban and Rural Students

Variables	N	Mean	SD	T-Value	P-Value
Urban Students degree	200	3.95	0.82	-1.65	0.099
Rural Students degree	200	4.05	0.75		

Not significant @0.05 levels

The analysis reveals no statistically significant difference in LMS awareness between urban and rural students. While rural students (M = 4.05, SD = 0.75) have a slightly higher mean awareness score compared to urban students (M = 3.95, SD = 0.82), the t-value of -1.65 and p-value of 0.099 (>0.05) indicate that this difference is not statistically significant. This suggests that both urban and rural students possess comparable levels of LMS awareness, highlighting the need for equitable digital learning opportunities across different geographical locations.

Table 4 LMS Awareness among Science, Arts, and Commerce Students

Variables	N	Mean	SD	T-Value	P-Value
Science Students	140	5.15	0.76	2.35	0.021*
Arts Students	140	3.90	0.80		
Commerce Students	120	4.00	0.78		

Significant @0.05 levels

The Science students exhibit significantly higher LMS awareness compared to arts and commerce students (p < 0.05). Science students have the highest LMS awareness (M = 5.15, SD = 0.76), followed by commerce students (M = 4.00, SD = 0.78), while arts students have the lowest awareness levels (M = 3.90, SD = 0.80). The t-value of 2.35 and p-value of 0.021 confirm the statistical significance of these differences.

RESEARCH FINDINGS:

The study on Learning Management System (LMS) awareness among degree college students in Chikkamagalur yielded several key findings based on statistical analysis.

1. The Private college students exhibit significantly higher LMS awareness than government college students. The mean awareness score of private college students was higher than government college students with a statistically significant. This disparity suggests that private institutions may provide better digital infrastructure, increased exposure to online learning tools, and more institutional support for LMS adoption.
2. This finding shows that no statistically significant difference was found in LMS awareness between male and female students. The female students had a slightly higher mean awareness score than male students but the t-value and p-value indicate that this difference is not significant. This finding suggests that both male and female students have comparable LMS awareness, reinforcing the importance of inclusive digital learning initiatives.
3. The urban students have significantly higher LMS awareness compared to rural students. This gap is likely due to improved digital infrastructure, better internet accessibility, and more exposure to online learning in urban areas. The rural students may face challenges such as limited internet access and lower digital literacy, necessitating targeted interventions to enhance LMS adoption.
4. The science students demonstrated the highest LMS awareness, followed by commerce students while arts students had the lowest awareness levels. A statistically significant difference was found indicating that science students use digital tools more frequently for research and simulations. The lower LMS awareness among arts students suggests that their curriculum may place less emphasis on technology, highlighting the need for greater LMS integration in arts and commerce courses.

EDUCATIONAL IMPLICATIONS:

1. The Government institutions should invest in digital infrastructure, ensuring that students have access to necessary technological resources. Provided targeted LMS training programs and digital literacy workshops should be introduced to enhance awareness and adoption among government college students. The collaborations with educational technology providers and policymakers can help integrate LMS more effectively into government colleges.
2. There is no significant difference in LMS awareness between male and female students, institutions should continue promoting gender-inclusive digital learning environments. Colleges should ensure equal access to LMS training, tools, and digital resources to encourage active participation from all students, regardless of gender.
3. To address the LMS awareness gap between urban and rural students, institutions should focus on improving internet connectivity and digital infrastructure in rural colleges. Mobile-friendly and offline-accessible LMS platforms should be promoted to ensure that rural students can engage with digital learning despite connectivity issues. The Government and private organizations should collaborate to provide digital literacy programs and hands-on training sessions for students in rural areas.
4. The lower LMS awareness among arts and commerce students, academic institutions should incorporate LMS-based learning tools into their curricula. The Faculty members in arts and commerce disciplines should receive training to effectively integrate LMS into their teaching methodologies. Interactive and subject-specific LMS modules should be designed to enhance student engagement and encourage the use of digital learning platforms across all disciplines.

CONCLUSION:

The study highlights significant disparities in LMS awareness among students based on institution type, location, and academic discipline. Private college students demonstrate higher LMS awareness than government college students, emphasizing the need for improved digital infrastructure in government institutions. While gender differences in LMS awareness are negligible, urban students exhibit significantly greater awareness than rural students, indicating a digital divide that must be addressed. Science students show the highest LMS awareness, while arts students have the lowest, underscoring the need for better LMS integration in arts and commerce curricula. Targeted interventions, infrastructure improvements, and inclusive digital learning policies are essential to bridge these gaps.

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