



Analysis of Learning Motivation of Master's Students Using Learning Management System

Eva Ramdanika Sapitri*, C Asri Budiningsih¹

¹ Educational Technology (Faculty of Education), Universitas Negeri Yogyakarta, Yogyakarta, Indonesia

Received: September 01, 2025

Revised: October 01, 2025

Accepted: December 09, 2025

Published: December 09, 2025

Corresponding Author:

Eva Ramdanika Sapitri

evaramdanika.2023@student.uny.ac.id

DOI: [10.29303/jppipa.v11i11.12712](https://doi.org/10.29303/jppipa.v11i11.12712)

© 2025 The Authors. This open access article is distributed under a (CC-BY License)



Abstract: This study examines the learning motivation of Master's students in English Education in their use of Learning Management Systems (LMS). A descriptive quantitative survey was conducted involving 50 students from several universities in Java and Lombok. Two variables were measured—*intrinsic* and *extrinsic* motivation—adapted from established motivational constructs. Data were analyzed descriptively to identify students' motivational tendencies without generalizing beyond the sample. The findings show that *intrinsic* motivation ($M = 4.32$) is slightly higher than *extrinsic* motivation ($M = 4.01$) on a 5-point scale. *Intrinsic* motivation is reflected in students' interest in engaging with course materials and the enjoyment of structured LMS-based learning activities. *Extrinsic* motivation appears in responses related to academic expectations and lecturer guidance, though these external factors were rated lower than internal drivers. The results indicate that students perceive LMS use as supportive of their learning motivation, particularly in facilitating access to materials and organizing learning tasks. However, the study does not assess causal effects of LMS use on academic outcomes. The findings highlight the need for LMS designs that strengthen both *intrinsic* and *extrinsic* motivational aspects to enhance student engagement in English education contexts.

Keywords: English education; *extrinsic* motivation; *intrinsic* motivation; learning management system; learning motivation.

Introduction

The rapid development of information and communication technology (ICT) has significantly influenced the landscape of higher education. One of its major impacts is the increasing adoption of Learning Management Systems (LMS) as digital platforms for organizing instructional materials, assessments, and communication. While LMS are designed to support flexibility and accessibility in learning, their actual effectiveness varies depending on institutional infrastructure, user readiness, and the specific pedagogical context in which they are implemented (Dhawan, 2020). LMS offers convenience in managing teaching materials and learning evaluations and facilitating more effective communication between

lecturers and students, all conducted digitally (Aljawarneh, 2020). With the existence of LMS, learning is no longer constrained by space and time, making it particularly beneficial for distance learning and increasingly essential during the COVID-19 pandemic (Dhawan, 2020). Learning motivation, consisting of *intrinsic* and *extrinsic* dimensions (Deci et al., 1990; Eccles & Wigfield, 2001) is a key determinant of how effectively students engage with digital learning platforms. In online and blended learning contexts, motivation becomes even more critical as students must regulate their learning more independently and sustain engagement without the immediate presence of lecturers or peers (Hartnett et al., 2011). Although Master's students are generally expected to possess adequate digital literacy, the ability to use LMS for

How to Cite:

Sapitri, E. R., & Budiningsih, C. A. (2025). Analysis of Learning Motivation of Master's Students Using Learning Management System. *Jurnal Penelitian Pendidikan IPA*, 11(11), 742–749. <https://doi.org/10.29303/jppipa.v11i11.12712>

advanced academic tasks—such as analytical reading, reflective assignments, and complex project coordination—requires a different level of digital academic competence. This distinction underscores the need to examine motivational factors related to LMS use specifically in postgraduate English education programs.

Existing research provides valuable insights but also shows several limitations. Junining et al., (2024) highlight student engagement and task management in LMS but do not explicitly analyze how these forms of engagement relate to motivational drivers, particularly at the Master's level where learning expectations differ. Another study by Murcahyanto, (2024) demonstrates that LMS has a positive impact on intrinsic motivation and student satisfaction. However, this study focuses solely on direct effects. It does not delve into the context of language education, which opens opportunities for further research to expand the analysis into the field of English language education at the Master's level, where distinct dynamics and motivational needs exist, such as the demand for mastery of academic language and advanced digital literacy.

Similarly, Nguyen, (2023), emphasizes the need for curriculum and assessment adjustments to maximize LMS benefits, but the implications for postgraduate English education—where higher-order thinking and advanced literacy skills are essential—remain insufficiently discussed. However, the study needs to provide detailed explanations of how these adjustments differ at higher education levels, which presents a gap for researchers to analyse relevant adjustments in Master's programs, ultimately aiding in understanding how LMS-based evaluations can enhance learning motivation in the context of English language learning, which demands critical and analytical language skills and can be achieved by identifying the factors that influence student motivation in using LMS.

Additionally, research by Fatika Sari et al., (2024) reveals that LMS supports self-regulated learning through features such as time management tools and learning strategies that enable students to manage their learning processes. However, this study only describes the effects of LMS on independent learning without specifically highlighting motivational factors at the postgraduate level, particularly regarding personal initiative and more complex learning management skills. Postgraduate programs, especially in the field of English Language Education, require students to have substantial intrinsic motivation and advanced time and resource management skills, as they often act as facilitators of learning in dynamic professional environments.

This study offers an opportunity for further research to explore the role of LMS in the Master's program context. LMS should not only provide essential features such as time management tools but also support deeper motivational aspects, such as fostering initiative, self-reflection abilities, and engagement in formative assessments that encourage students to actively and critically participate.

Based on the limitations identified in previous studies, there is a clear need for further research on the learning motivation of Master's students in the use of LMS in English Language Education. Although various studies have highlighted aspects of engagement, satisfaction, and independent learning in LMS, the specific focus on learning motivation at the postgraduate level remains limited, particularly regarding digital literacy, personal initiative, and learning management skills required in professional and dynamic language education environments. To date, there are only a few empirical studies explicitly examining the learning motivation of Master's students in using LMS. Thus, this study aims to fill this gap and provide insights into the factors influencing student motivation(Valerrand et al., 1992).

Therefore, this research focuses on analysing the learning motivation of Master's students in English Education in their use of LMS, providing in-depth insights into the factors driving their motivation at this level. Factors such as access to technology, self-confidence in using LMS, and lecturer support also influence how optimally LMS can be utilized (Nguyen, 2023).

Method

This study employs a descriptive quantitative research design with a survey approach to investigate the motivation of Master's students in using Learning Management Systems (LMS). A quantitative approach is used to describe and analyse the conditions related to the research problem by examining factors influencing the motivation of Master's students to use LMS. These factors include intrinsic aspects, such as the desire to master English, and extrinsic aspects, such as encouragement from lecturers and the assessment systems implemented. This design was chosen to provide a detailed description of the factors underlying LMS usage motivation and the intensity of its use in teaching and learning activities. The survey approach allows for data collection from a large number of respondents in a short time, making it suitable for in-depth statistical analysis (Creswell & Creswell, 2018).

This study's population consists of Master's students in English Language Education programs who

use LMS during their learning activities. The sample includes 50 Master's students enrolled in English Language Education programs at universities in Java and Lombok, where LMS serves as the primary learning platform. The sampling technique used is purposive sampling, with inclusion criteria requiring students to have active LMS access and at least one semester of experience using it.

The instrument used in this study is a questionnaire adapted and developed based on Self-Determination Theory Deci et al., (1990) and Expectancy-Value Theory (Eccles & Wigfield, 2001). The questionnaire consists of two leading indicators—*intrinsic motivation* and *extrinsic motivation*—divided into ten questions. A 5-point Likert scale was employed to help respondents provide their answers, with scale ratings ranging from 1 (strongly disagree) to 5 (strongly agree).

Data were collected using a questionnaire link created via Google Forms and distributed to four universities offering Master's programs in English Language Education. Before data collection commenced, the instrument underwent validity testing conducted by an expert in English Education and Digital Learning to ensure clarity and content validity.

The collected data were analysed using descriptive statistics to determine the distribution of motivation levels, including averages, standard deviations, and minimum and maximum values for each motivation category. Data analysis was performed using SPSS software.

Table 1. Research Instrument Indicators

Indicator	Statement
Intrinsic Motivation	I feel interested in using LMS because the interactive English content supports my understanding.
	I feel satisfied after successfully completing tasks and understanding the English materials provided in LMS.
	I use LMS because I enjoy the process of learning English through various multimedia activities available.
	I feel motivated to utilize LMS because I want to enhance my independent learning skills in practicing English.
	I feel that studying through LMS helps me achieve my academic goals in mastering

Extrinsic Motivation

English and teaching methodologies.

I am motivated to use LMS because of constructive feedback from lecturers regarding the activities and tasks I complete.

I use LMS because the transparent assessment system motivates me to actively participate in English discussion forums.

I feel the need to utilize LMS to meet academic requirements in English courses, including group assignments and presentations.

I use LMS to achieve good academic results to fulfill lecturers' expectations and secure recommendations for my career.

I am motivated to use LMS because of automatic reminders about assignments and exams that help me stay organized.

The Likert scale is used to measure people's attitudes, opinions, and perceptions toward social phenomena. Analyzing the results of survey data is essential to organize the data into categories, systematically structure the information, and draw meaningful conclusions.

Table 2 . Likert Scale

Score	Information
5	Strongly agree
4	Agree
3	Neutral
2	Not Agree
1	Absolutely Not Agree

Source: (Sugiyono, 2019)

Table 3. Standard Measurement

Scale		Category	
1.00	1.80	Absolutely Agree	Not Agree
1.81	2.59	Not Agree	
2.60	3.40	Neutral	
3.41	4.20	Agree	
4.21	5.00	Strongly agree	

The processed data were then analyzed using descriptive analysis, which aimed to provide a detailed description of respondents' answers based on the two indicators in the research instrument. The descriptive analysis includes calculations of the mean, standard deviation, and minimum and maximum values.

Result and Discussion

This research focuses on two primary indicators of motivation: intrinsic motivation and extrinsic motivation. These indicators are measured through a set of 10 structured questions distributed to 50 respondents who are Master's students in English Language Education. Intrinsic motivation refers to the internal drive and personal satisfaction that students derive from learning, such as mastering challenging material or achieving self-set academic goals. In contrast, extrinsic motivation encompasses external factors that influence learning behaviours, including academic grades, lecturer expectations, and other rewards or incentives tied to performance.

The data collected from the respondents were meticulously analysed to provide a comprehensive understanding of both motivational dimensions. Detailed descriptive statistical methods were employed, including calculations of the mean, standard deviation, and minimum and maximum values for each indicator. This approach not only highlights the overall trends in motivation among the respondents but also identifies variability in their experiences and perceptions. The mean scores reflect the average level of motivation for each item, while the standard deviation provides insights into the consistency of student responses. Minimum and maximum scores, on the other hand, help to capture the range of motivational levels, shedding light on potential outliers or unique cases within the data set.

By analysing the intrinsic motivation indicator, this study aims to uncover the extent to which students are driven by internal factors, such as a genuine interest in learning English or a desire to enhance their independent study skills. Similarly, the extrinsic motivation indicator is analysed to determine how

external influences – such as constructive feedback from lecturers, transparent assessment systems, and practical benefits like reminders for assignments – shape student engagement with the Learning Management System (LMS). Together, these indicators provide a nuanced view of the motivational landscape, illustrating how both internal and external factors interplay to influence students' learning behaviours.

Table 4. Descriptive Statistics of Intrinsic Motivation

	N	Minim		Maxim		Std. Deviation
		Statisti	Statisti	Statisti	Statisti	
		cs	cs	cs	cs	
Intrinsic_1	50	2	5	4.06	.108	.767
Intrinsic_2	50	3	5	4.04	.095	.669
Intrinsic_3	50	3	5	4.10	.071	.505
Intrinsic_4	50	3	5	4.04	.081	.570
Intrinsic_5	50	3	5	4.06	.053	.373
Valid	N50					
	(listwise)					

The results of the descriptive statistical analysis of five intrinsic motivation items highlight that Master's students in English Language Education exhibit relatively high levels of intrinsic motivation in using Learning Management Systems (LMS). The average scores for these items range from 4.04 to 4.10, demonstrating that most students possess solid and positive motivation derived from internal factors; this indicates that students are not solely driven by academic obligations but also by the satisfaction and enjoyment they derive from the learning process facilitated by LMS. These findings underscore that LMS contributes positively to students' understanding of English language material, aligning its use with both personal fulfilment and academic achievement.

Upon closer examination, the analysis reveals variations in students' perceptions of different intrinsic motivational aspects, shedding light on nuanced experiences. For instance, the Intrinsic_1 item, which evaluates students' interest in the interactive content provided by LMS, displays the highest standard deviation (0.767). This variation signifies disparities in how students perceive and engage with the interactive elements of LMS. While some students find these features highly motivating and integral to their learning process, others may not share the same level of enthusiasm. Factors contributing to these differences could include individual learning preferences, prior technical experience, or inconsistencies in the quality of interactive content across LMS platforms; this highlights

the need for educational designers to ensure that LMS content is consistently engaging and tailored to diverse learner needs.

In contrast, the Intrinsic_5 item, assessing the role of LMS in helping students achieve their academic goals, has a much lower standard deviation (0.373); this indicates a more uniform perception among students regarding the value of LMS in supporting academic success, particularly in mastering English and teaching methodologies. Such consistency suggests that the practical applications of LMS—such as structured access to resources and alignment with learning outcomes—are broadly recognized and appreciated by students. This finding highlights the effectiveness of LMS in addressing core academic objectives, which likely contributes to its widespread acceptance as a critical educational tool within Master's programs.

Furthermore, the data suggest that LMS functions beyond being a mere technological aid; it serves as a vital source of intrinsic motivation for students. The platform's ability to foster interest, deliver satisfaction, and facilitate the fulfilment of academic goals significantly contributes to sustained student engagement. By addressing intrinsic needs such as curiosity and personal achievement, LMS enables students to take greater ownership of their learning journey. However, the observed variations in the perception of LMS features reveal potential areas for improvement. Specifically, enhancing the quality and interactivity of content could cater to a broader range of learning styles, ensuring that all students derive maximum benefit from the platform.

The significance of these findings extends to the broader implications for educational practice and LMS design. Effective LMS platforms should not only prioritize functional aspects such as ease of access and content organization but also focus on creating emotionally engaging and intellectually stimulating learning environments. Strategies could include incorporating adaptive learning pathways, gamified elements, and multimedia resources to enrich the user experience. Such improvements would likely bridge the gap in student perceptions, fostering more excellent uniformity in how LMS features are experienced and valued.

These results also resonate with existing literature emphasizing the role of intrinsic motivation in learning, particularly in digital environments. Previous studies, such as those by Cohen et al. (2008), underline that intrinsic factors including enjoyment and personal growth, are essential drivers of practical educational technology usage. Aligning with this perspective, the current study reinforces that intrinsic motivation can significantly enhance the effectiveness of LMS as a

learning tool, particularly in the context of English language education.

In conclusion, while LMS is already recognized for its contribution to fostering intrinsic motivation, it is clear that targeted improvements could make it even more impactful. The development of more engaging, personalized, and interactive content should be a priority for LMS developers and educators. By doing so, LMS can continue to serve not only as a repository of resources but as a dynamic platform that genuinely inspires and empowers students in their academic and personal growth.

Table 5. Descriptive Statistics of Extrinsic Motivation

	N	Minim		Maxim		Std. Deviation
		Statisti	Statisti	Statistic	Statisti	
		cs	cs	s	cs	Error
Extrinsic_1	50	3	5	3.92	.102	.724
Extrinsic_2	50	2	5	3.98	.101	.714
Extrinsic_3	50	2	5	3.62	.090	.635
Extrinsic_4	50	2	5	4.00	.081	.571
Extrinsic_5	50	2	5	4.16	.100	.710
Valid	N50					
	(listwise)					

The descriptive statistical results for the five extrinsic motivation items reveal that the average scores range from 3.62 to 4.16, indicating generally high levels of extrinsic motivation among Master's students in English Language Education using Learning Management Systems (LMS). Extrinsic motivation in this context is defined by external factors such as the desire to achieve good grades, meet lecturers' expectations, and leverage the practical benefits offered by LMS features, including automatic reminders for assignments and exams. These findings underscore the significant role that external incentives play in encouraging student engagement with LMS as a central tool for their learning activities.

The item Extrinsic_5, which recorded the highest average score (4.16), suggests that the majority of students view LMS as a valuable tool for meeting academic expectations and advancing their future career prospects. This result highlights the practical utility of LMS in facilitating students' academic and professional development. The positive correlation between LMS features, such as timely reminders and career-oriented outcomes, and student motivation underscores the importance of designing LMS platforms that address these tangible needs effectively. Conversely, Extrinsic_3, with the lowest average score (3.62), indicates variability

in students' motivation to fulfil academic requirements such as group assignments and presentations. While the score remains relatively high, it points to differences in individual preferences or challenges faced in collaborative tasks, which may require further exploration to enhance student experiences.

In terms of variability, Extrinsic_1, which evaluates the influence of constructive feedback from lecturers, exhibited the highest standard deviation (0.724). This finding indicates substantial variation in how students perceive the motivational value of lecturer feedback. These differences could stem from inconsistencies in the quality, frequency, or delivery of feedback across different courses or instructors. Some students may find timely and constructive feedback particularly motivating, while others may not perceive it as impactful, highlighting the need for standardized and effective feedback mechanisms within LMS platforms.

Conversely, Extrinsic_4, which assesses students' perceptions of transparent assessment systems, showed the lowest standard deviation (0.571). This consistency suggests that most students share a unified perspective on the importance of transparent assessment practices in encouraging active participation in LMS-enabled discussion forums. Transparent assessments likely instill a sense of fairness and clarity, motivating students to engage more actively in their learning activities and fostering trust in the educational process.

Overall, the findings reveal that extrinsic motivation among students is strongly influenced by factors that directly enhance their academic performance and support their long-term career goals. Elements such as transparent assessments, constructive lecturer feedback, and automated organizational features like reminders play pivotal roles in increasing the frequency and consistency of LMS usage. These aspects align with existing theories, which emphasize the importance of extrinsic motivation in driving student engagement within digital learning environments. When LMS platforms offer practical, relevant benefits tied to academic and professional outcomes, they are more likely to sustain student participation and involvement.

The broader implications of these findings suggest that extrinsic motivation is as critical as intrinsic motivation in ensuring the effective use of LMS. While intrinsic factors, such as personal interest and satisfaction, inspire students to engage in self-directed learning, external motivators provide structure and incentives that complement internal drives. This balance is crucial, particularly in a distance learning context where students may face additional challenges in staying engaged and organized.

Furthermore, this study supports the tenets of the Self-Determination Theory (Deci et al., 1990), which

posits that intrinsic motivation is fueled by personal interest and satisfaction in the learning process. Many students demonstrated a strong intrinsic desire to master English, reflecting the theory's assertion that internal drives are essential for deep learning. At the same time, the findings align with the research of Eccles & Wigfield, (2001), who stress the significance of external factors, such as academic expectations and support from instructors, in motivating students. These factors are incredibly influential in distance learning scenarios, where direct interpersonal interactions are limited, and external structures play a crucial role in guiding student behavior.

In conclusion, this study not only corroborates existing motivational theories but also addresses gaps in the literature regarding the dual roles of intrinsic and extrinsic motivation in the learning experiences of Master's students. By demonstrating how LMS features influence both internal satisfaction and external incentives, the findings reinforce the importance of designing LMS platforms that cater to the holistic motivational needs of students. Enhancing features such as feedback mechanisms, transparent assessments, and career-oriented tools can further optimize LMS platforms, ensuring they remain effective and engaging learning environments for students at advanced educational levels.

Table 6. Statistics Descriptive

Indicator	Amount	Average	Std. Dev.	Min	Max	Information
Motivation	50	4.06	0.57	2	5	Agree
Intrinsic Motivation	50	3.93	0.67	3	5	Agree
Extrinsic				2		

The results from Table 6 indicate that Master's students in English Language Education demonstrate high levels of motivation in utilizing Learning Management Systems (LMS), encompassing both intrinsic and extrinsic motivational factors. The average score for intrinsic motivation stands at 4.06 with a standard deviation of 0.576, while extrinsic motivation averages 3.93 with a standard deviation of 0.672. Both scores fall within the "Agree" category, signifying that the majority of students are motivated by internal drives, such as personal satisfaction and the desire to take ownership of their learning, as well as by external incentives like academic grades and meeting lecturers' expectations. These findings highlight a balanced interplay between intrinsic and extrinsic factors, which

collectively enhance student engagement in the digital learning environment provided by LMS.

A deeper examination of the data reveals that intrinsic motivation plays a slightly more dominant role, as evidenced by the higher average score and lower variability. This suggests that students are naturally inclined toward self-directed learning and derive satisfaction from mastering new skills and materials, particularly in the context of English language education. LMS serves as a platform that not only supports but also amplifies these intrinsic tendencies by offering features that facilitate autonomous learning, such as structured content delivery, interactive activities, and accessible resources. The relatively low standard deviation in intrinsic motivation scores further indicates a consistent recognition among students of the personal value and fulfillment derived from using LMS.

Extrinsic motivation, while slightly lower in average score, remains a critical factor in driving student engagement. The variability in extrinsic motivation, as reflected in the standard deviation, suggests that external factors such as the quality of lecturer feedback, the transparency of assessment systems, and practical LMS features like automatic reminders are perceived differently among students. For instance, students who value career-oriented outcomes may place a higher emphasis on the role of LMS in achieving academic success and professional advancement. Conversely, those with less emphasis on external expectations might perceive extrinsic motivators as secondary to their learning journey. Nonetheless, the overall score for extrinsic motivation reflects a positive trend, indicating that LMS successfully addresses these external needs for most students.

The range of minimum and maximum scores for both types of motivation suggests some variation in student experiences with LMS. These differences could be attributed to individual preferences, prior familiarity with digital learning platforms, or variations in the implementation and quality of LMS tools across different courses or institutions. Despite these variations, the consistently high averages underline the overall effectiveness of LMS as a motivational tool in higher education.

These findings reaffirm the importance of integrating both intrinsic and extrinsic motivational elements into the design and implementation of LMS. Intrinsic motivation, driven by a student's internal desire for knowledge and self-improvement, is essential for fostering deep, meaningful engagement. Meanwhile, extrinsic motivation, influenced by tangible rewards and external support systems, complements this by providing structure, direction, and additional incentives for consistent participation. Together, these

motivational factors create a synergistic effect, enhancing not only student engagement but also learning outcomes.

Moreover, these results align with established motivational theories, such as the Self-Determination Theory (Deci et al., 1990), which emphasizes the interplay between intrinsic and extrinsic motivation in driving learning behaviors. Intrinsic factors such as personal interest and satisfaction resonate with the theory's emphasis on autonomy and competence, while extrinsic factors like academic grades and lecturer expectations reflect the importance of external reinforcements in sustaining motivation. This dual framework is particularly relevant in digital learning environments, where LMS features must cater to a diverse set of motivational needs.

In conclusion, the findings from this analysis underscore the pivotal role of LMS in supporting both intrinsic and extrinsic motivation among Master's students in English Language Education. While intrinsic motivation highlights the platform's ability to inspire self-directed learning and personal growth, extrinsic motivation underscores the value of external structures and rewards in maintaining consistent engagement. To further enhance LMS effectiveness, educational designers and administrators should focus on strengthening features that address motivational dimensions, such as providing high-quality interactive content, transparent assessment practices, and responsive feedback systems. By doing so, LMS can continue to serve as a transformative tool in higher education, fostering an enriching and engaging learning experience for students.

Conclusion

This study describes the overall motivation of Master's students in English Language Education when utilizing Learning Management Systems (LMS) in their academic activities. The descriptive results show that both intrinsic and extrinsic motivation are perceived positively by students, indicating that LMS is viewed as a supportive platform that helps facilitate their learning processes. Students reported that LMS features such as reminders, structured task management, and accessible feedback contribute to their sense of organization and engagement; however, these findings represent students' perceptions and cannot be interpreted as evidence of direct impact due to the descriptive nature of the research. The study also acknowledges several limitations, including the small sample size, limited geographic scope, purposive sampling strategy, and the absence of inferential statistical testing, which restrict the generalizability and depth of the conclusions.

Therefore, future research is recommended to involve larger and more diverse samples, conduct validity and reliability testing of the instrument, and employ inferential analyses to more rigorously examine motivational factors related to LMS use.

Acknowledgments

The author would like to express sincere gratitude to Universitas Negeri Yogyakarta for providing research facilities and academic support throughout this study. Special thanks are extended to the academic supervisor, A.B., for valuable guidance, constructive feedback, and continuous encouragement. The author also acknowledges the contribution of the instrument validators who generously shared their expertise and provided insightful suggestions for improving the quality of the research instrument. Finally, heartfelt appreciation goes to fellow students and colleagues who offered assistance, motivation, and collaboration during the research process.

Author Contributions

Conceptualization, E.R.S.; methodology, E.R.S.; formal analysis, E.R.S.; investigation, E.R.S.; data curation, E.R.S.; writing—original draft preparation, E.R.S.; writing—review and editing, A.B.; validation, A.B.; supervision, A.B.; project administration, E.R.S. and A.B. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding

Conflicts of Interest

The authors declare no conflict of interest.

References

Aljawarneh, S. A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. *Journal of Computing in Higher Education*, 32(1), 57-73. <https://doi.org/10.1007/s12528-019-09207-0>

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1990). Motivation and Education: The Self-Determination Perspective. *Educational Psychologist*, 26(3-4), 325-346. <https://doi.org/10.1080/00461520.1991.9653137> [Bohrium+2pure.ewha.ac.kr+2052004025](https://pure.ewha.ac.kr/2052004025)

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177/0047239520934018>

Eccles, J. S., & Wigfield, A. (2001). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109-132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>

Fatika Sari, D., Efendi, A., & Sumaryati, S. (2024). Empowering higher education students: Enhancing self-regulated learning through LMS implementation. *Proceedings of the International Conference on Multidisciplinary Research for Sustainable Innovation*, 1, 507-513. <https://doi.org/10.31098/icmrsi.v1i.838> [proc edding.researchsynergypress.com](https://www.researchsynergypress.com)

Hartnett, M., St. George, A., & Dron, J. (2011). *Examining Motivation in Online Distance Learning Environments: Complex, Multifaceted, and Situation-Dependent*. <https://doi.org/https://doi.org/10.19173/irrodl.v12i6.1030>

Junining, E., Herawati, & Setiarini, N. (2024). Learning Management System in the Post-Pandemic Era: Comparative Study. *JEES (Journal of English Educators Society)*, 9(1). <https://doi.org/10.21070/jees.v9i1.1801>

Murcahyanto, H. (2024). The Effect of Implementing A Learning Management System on Student Motivation and Satisfaction Levels. *IJE: Interdisciplinary Journal of Education*, 2(2), 137-145. <https://doi.org/10.61277/ije.v2i2.96>

Nguyen, H.-T. T. (2023). LMS-based integrated online assessment implementation at the university to foster learning motivation and academic performance. *Interactive Learning Environments*, 1-14. <https://doi.org/10.1080/10494820.2023.2187422> [Bimaberilmu Journal](https://bimaberilmu.journal)

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. ALFABETA.

Valerrand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1017. <https://doi.org/10.1177/0013164492052004025>