Impact of Canvas LMS on Communication, Evaluation, and Performance in Islamic Culture Education: A Quantitative Study

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Abstract

This paper aims to assess the efficiency of the Canvas LMS in the teaching of Islamic Culture at Al Qasimia University, UAE. Employing a quantitative approach, the research surveyed 155 students engaged in Islamic Culture courses using Canvas LMS, focusing on three key areas: communication, student evaluation, and student achievement. The study outcomes show a positive effect of Canvas LMS on all the three aspects. The findings from the quantitative analysis reveal a positive relationship between the use of Canvas LMS and student-instructor communication, student evaluation, and students' performance. These findings indicate that the platform has the capacity to expand the teaching of Islamic culture in the digital environment. The study also outlines recommendations including the need to improve the feedback system and accessability of stored lessons. Recommendations are made for the improvement of Canvas LMS in the context of Islamic cultural studies based on these findings. This research contributes meaningful findings to the existing research on e-learning in cultural and religious education and provides implications to the educators and administrators of similar educational institutions. The findings and recommendations of this study may be useful to other institutions with similar programs and contribute to the improvement of the field of digital education in cultural studies

Keywords: *Canvas Learning Management System, Islamic Culture Curriculum, Technology, E-Learning, Student Engagement, Al Qasimia University*

INTRODUCTION

Integration of digital learning platforms in higher education is becoming inevitable within the fast-changing landscape (Jawabreh et al., 2023; Yang & Ali, 2022). Canvas Learning Management System (LMS) has revolutionized the field of educational technology, providing unique opportunities for teaching and learning at a Pearson college (Smith & Ostrow, 2019). This paper reviews the application and success of Canvas LMS in educating Islamic Culture at Al Qasimia University, UAE.

Al Qasimia University, commissioned by His Highness Sheikh Dr. Sultan bin Muhammad Al Qasimi and opened in 2014, teaches Quranic sciences while considering the challenges faced in giving it a broader vision of university study. The university aims to go beyond conventional academic training, shaping educated individuals who can benefit from their Islamic value system on various levels. This approach is crafted to enable graduates to contribute with strong impact worldwide (AlQasimia University, 2023).

The Islamic Culture course plays a central role in fulfilling the wide-ranging educational aims held by Al Qasimia University. The objective of this course is to explore Islam, learn Arabic, and examine the many facets that comprise Islamic cultural heritage. This aligns with the university's long-range goals to foster cross-cultural communication as part of greater academic global collaboration and Islamic heritage preservation (AlQasimia University, 2023).

Canvas LMS is positioned within this educational framework, presenting both opportunities and challenges. While digital platforms have shown promise in enhancing educational experiences (Al-Ataby, 2021), caution is needed when considering their appropriateness in specific educational contexts such as Islamic Culture. Studies

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suggest the benefit of LMS in enhancing student engagement and learning achievements (Mpungose & Khoza, 2020; Santiana et al., 2021), but research specific to the field of Islamic studies is scarce.

This research aims to fill this gap by studying how Canvas LMS was implemented at Al Qasimia University and its impact on teaching Islamic Culture. We are particularly interested in understanding how the Canvas LMS system aligns with an institution that prides itself on its commitment to a global mindset, ethical engagement (through professionalism and academic integrity), lifelong learning, excellence in all endeavors, and innovation as a fundamental part of the scholarly community. We examine the communication system between students and instructors, evaluation of student performance by teachers, and overall academic achievement.

This analysis will help provide an understanding of the effectiveness of Canvas LMS in this specialized educational context. The results of this research will not only contribute to the expanding body of e-learning literature in cultural and religious education but also have implications for educators and administrators working within similar settings.

Al-Qasimia University: An Introduction and Historical Context

Al Qasimia University is a private institution situated in Sharjah, United Arab Emirates that was founded in 2014 by His Highness Sheikh Dr. Sultan bin Muhammad Al Qasimi, Supreme Council Member and Ruler of Sharjah (Al Qasimia University, 2023a). This university has a mission to offer excellent education with a focus on Islamic studies.

Al Qasimia University has many undergraduate programs that are recognized by the Ministry of Education in the United Arab Emirates. These include religious education in Islamic studies, Quran and Arabic language and literature, as well as professional education in business administration, engineering, and information technology (Al Qasimia University, 2023b). This combination of traditional and modern disciplines reflects the university's aim to honor its Islamic heritage while providing the contemporary knowledge and skills required for the 21st century.

The campus is set in Sharjah University City, featuring a design that blends traditional Islamic and contemporary styles. It includes state-of-the-art facilities with environmentally sustainable systems, promoting bioclimatic architecture to enhance the learning environment (Al Qasimia University, 2023c).

This is one of the core aspects of the academic philosophy of Al Qasimia University, where the main goal is to prepare students to be global citizens. Al Qasimia University strives to provide a holistic education where students participate in various co-curricular activities and community services along with their academic activities (Al Qasimia University, 2023d). This approach seeks to assist graduates in excelling both academically and in their social and cultural lives.

The university's focus on complete and coordinated education in Islamic studies has enrolled students from 120 nationalities, speaking different languages and belonging to different countries from the Americas to East Asia including the UAE. This is evident in the curriculum of the university, where internationalization is promoted within the framework of Islamic values (Commission for Academic Accreditation, 2019).

The educational system of Al Qasimia University is based on several principles that include ethical commitment, lifelong learning, academic excellence, and innovation. These values define the institution's vision on education, research, and community outreach, preparing students to be enlightened, educated, and socially responsible members of society (Al Qasimia University, 2023a).

The Importance of The Study

This study aims to examine the implementation of the Canvas Learning Management System (LMS) in the teaching and learning of Islamic education at Al Qasimia University, contributing to the literature on educational technology in specific academic settings (Mpungose & Khoza, 2020). Therefore, this research seeks to offer practical recommendations to educators and administrators on the integration and utilization of contemporary technology in Islamic education through the analysis of how technology can transform the teaching environment.

The study fills a gap in the literature by examining the unique issues and possibilities for Canvas LMS in Islamic culture courses. Previous works have examined the role of LMS in higher education in general (Santiana et al., 2021), however, there is a lack of literature on its utilization in the teaching of Islamic studies. This research aims at determining the advantages as well as the disadvantages of applying the Canvas LMS in this specific area in order to establish recommendations for its optimal application.

The implication of this study goes beyond Al Qasimia University. In light of the above, Al-Ataby (2021) has observed that the uptake of digital learning platforms in higher education is gradually on the rise in the Arab region. This paper offers insights that may help educational institutions within the United Arab Emirates and the greater Middle East region to improve the use of the Canvas LMS in Islamic cultural curricula.

Furthermore, this study is in consonance with the UAE's agenda for enhanced and superior education systems as envisioned in the National Strategy for Higher Education 2030 (Ministry of Education, 2020). Thus, this study contributes to the nation's vision of transforming into a knowledge-based economy and promoting the teaching and learning of Islamic culture through the use of digital technologies.

From the perspective of the presented global tendencies in educational technology, this study offers useful findings about the applicability of LMS to culturally sensitive curriculums. According to Burrack and Thompson (2021), the appropriate implementation of LMS can greatly improve the degree of student engagement and their outcomes. Thus, analyzing these effects in the framework of Islamic education helps to expand knowledge about the possibilities of adapting digital platforms for different educational purposes.

Problem Statement and Research Questions

The purpose of this paper is to evaluate Canvas LMS in the delivery of the Islamic culture curriculum at Al Qasimia University. Specifically, it examines the effects of Canvas LMS on teaching approaches, learners' engagement and learning achievement in the area of Islamic sciences. Also, the research seeks to evaluate the strengths and weaknesses of Canvas LMS as implemented within the Islamic educational system (Al-Ataby, 2021). Regarding the use of technology in learning management systems in higher education, extensive research exists in recent years (Mpungose & Khoza, 2020; Santiana et al., 2021). Despite some understanding of the possibilities of using such a platform for the study of Islam, very little research has been conducted in this area. This paper aims to address this gap by analyzing the features of Canvas LMS in relation to the teaching of Islamic culture.

How does the integration of Canvas LMS influence students' communication, assessment and performance in Islamic Culture classes? What are the perceived benefits and challenges of using Canvas LMS in teaching Islamic culture at Al Qasimia University? How can the current Canvas LMS be modified or enhanced to increase its effectiveness for Islamic studies teaching at Al Qasimia University?

Scope and Limitations of the Research

This study assesses the application and implications of the Canvas LMS within the Islamic Culture curriculum at Al Qasimia University, drawing from the experiences of the student cohort engaged in the specific courses within this curriculum. The relevance and applicability of its outcomes are therefore inherently specific to this educational setting and may not be generalisable to other academic contexts or study areas. The methodology, centred around participant self-reports, offers in-depth insights at the cost of potential subjectivity; thus, a careful interpretation of the data is required.

A deliberate choice was made to explore and evaluate the effectiveness and impact of Canvas LMS only within the realm of Islamic cultural education and not undertake a comparative analysis with other technological tools or broader educational impacts. Consequently, while the study contributes targeted insights and recommendations within its focused scope, these methodological and contextual boundaries must be borne in mind when considering the findings.

The present research examines the application of Canvas LMS and its outcomes in the context of the Islamic Culture course at Al Qasimia University. It is based on the students' experiences within specific courses offered

under this curriculum, and offers a detailed analysis of a particular educational scenario. The findings may have limited applicability to other academic contexts or fields (Creswell & Creswell, 2018).

Data collection involves participant self-reports to gather data; therefore, the study provides detailed qualitative insights into students' perceptions. However, this approach introduces potential subjective and thus the data requires interpretation critically (Johnson & Christensen, 2019). Mpungose and Khoza (2020) observed that such methodological choices in LMS research are useful for generating context-specific understanding but could be less transferable.

The research focuses on the assessment of Canvas LMS and its utility within the context of Islamic cultural education and therefore does not include comparisons with other technological tools or its broader on educational impacts. This decision supports the research objectives but limits the generalizability of the results. According to Al-Ataby (2021), while such focused research within particular domains can be beneficial, one should pay attention to the specific context while analyzing the findings.

Therefore, although the research presents specific recommendations within its focus, it is essential to acknowledge the methodological and contextual limitations. While the study contributes to research within the context of digital learning in specialized fields (Shah et al., 2022), it is advisable to consider it to alongside other similar studies on LMS in higher education to get a holistic understanding of the implementation of LMS in higher education.

Uncovering the Insights

Literature Review on Canvas LMS

Based on the literature review, Canvas has been instrumental in changing the delivery of higher education. The literature has shown that technology improves the academic achievement of the students (Hassan et al., 2022; Hatamlah et al., 2023; Shniekat et al., 2022). This paper will thus seek to find out how much Canvas LMS has fueled student engagement, learning, and the delivery of the Islamic Culture course based on the literature review in this paper.

Mpungose and Khoza (2022) focused on the perception of postgraduate learners on different LMSs of which includes Canvas. They also identified how these systems are used in sharing content, communication and assessment management. Therefore, the participants' response was generally encouraging, but the study showed that the users need more help and that the interfaces should be made more straightforward. Santiana et al. (2021) dedicated their study to the possibilities of Canvas LMS for enhancing the effectiveness of the online courses. According to the study done by them, they were able to understand that the platform has several advantages when it comes to enhancing the quality and access of the course syllabi. However, they also pointed out some issues concerning material education and the students' motivation and participation, thus underlining the need to enhance these aspects.

Another study done by Burrack and Thompson (2021) aimed at identifying the possibilities of Canvas LMS in incorporating assessments in the higher learning institutions. Their study endorsed the system due to its efficiency in assessment, communication and tracking of the students' performance, thus underlining the importance of the system as a teaching tool.

Al-Ataby (2021) in a study on the implementation of hybrid with the help of Canvas LMS found that it has a positive influence on the students' understanding and knowledge acquisition. The present study elucidated the possibilities of utilizing Canvas LMS in enhancing active learning strategies as well as the attitudes of the students toward learning.

Anatalia et al. (2019) aimed at understanding the opinions of educators concerning the utilization of LMS, which consists of Canvas. They concluded that the overall corporate situation was favourable but pointed to certain problems, such as technical and security issues.

These works provide a comprehensive view on the Canvas LMS's features and effectiveness in the context of higher education. It was noted that while Canvas offers a great opportunity for the improvement of quality of

students' learning, it is important not to neglect such aspects as support for users, improvements and the level of flexibility. These findings are relevant for the institutions that are considering the option of using Canvas LMS or plan on increasing their usage of the platform in their teaching approaches, including the teaching of Islamic culture. In addition to that, the recent literature conducted by Jawabreh et al. (2023) and Yang and Ali (2022) on the implementation of the digital learning platforms in different educational environments also supports the significance of the present study in the context of Islamic culture education.

Canvas LMS: Shifting the Gear In Educational Learning Management Systems Paradigm

Canvas LMS is one of the most effective Learning Management Systems that was designed to assist the educators in the creation of the course content, its publication and management, as well as the assessment of the students and their achievements (Al et al. , 2021). It improves the organization of course content and work since it has facilities for online lectures, tests, and involves the learners in various discussions. The utilization of the portal is useful due to the availability of study materials, feedback, and means for engaging in pertinent conversation (Judge & Murray, 2017).

The possibilities provided by the integrated gradebook, analytics, and, most importantly, mobile applications allow teachers to control the level of students' activity and their achievements made in the platform (Al-Ataby et al. , 2021). It is characterized by the focus on the user's needs, which makes the platform fairly simple to navigate in the online course context; hence, Canvas LMS is one of the leaders in the sphere of digital learning (John, 2021).

LMS and other management systems set a guideline and plan to follow in order to enhance the management of the organization and its resources (Jawabreh et al. , 2022; Nawaiseh et al. , 2022; Yang & Ali, 2022). These systems facilitate decision making and the achievement of the organization's vision and mission (Jawabreh et al. , 2023; Oudat et al. , 2024).

Canvas LMS turns the traditional roles and shifts the learning process to be more adaptive where learners and teachers can modify the learning process. This makes it possible for the development of individual learning plans, is useful for different activities, and has feedback (Judge & Murray, 2017). Also, it assists the educators to have storage and sharing of educational materials without the fear of exposure while at the same time protecting students' data.

According to John (2021), Canvas LMS is a contemporary cloud-based platform designed for effective online courses' management. The tool helps in dealing with the issues concerning the content delivery, interactions between the students and the teachers, and evaluation of the students. The interface of the platform is flexible and manageable and can be customized to various learning tools; it is suitable for real-time and postponed interaction, which is vital for hyflex and online classes.

Globally, Canvas LMS has acquired a good reputation especially in the higher learning institutions in assisting in the enhancement of students' learning and performance. Some of the research done at renowned institutions like the University of Central Florida and the University of Minnesota has shown that it increases student participation, boosts the students' performance especially in exams, and is a good tool for course management and providing feedback to students (Johnson et al. , 2020; Smith & Brown, 2021).

Thus, Canvas LMS and the process of its development has brought it to the list of popular and reliable LMSs that are used in educational institutions (Capogrossi, 2020; Sally & Yu-Hui, 2019). It therefore encompasses the user interface, all functionalities and ongoing development that determine its status among learning management systems.

Features of Canvas LMS for Online Education

Canvas LMS is an application that contains all the necessary tools needed to design as well as deliver online learning courses. These features can be categorized into four main areas:

Course Content Management: This feature allows the teachers to create content and structure the material, which in turn allows the students easy access to learning materials (Burrack & Thompson, 2021). The is compatible with different content types: text, multimedia, and active ones.

Communication Tools: It strengthens the form of interaction between teachers and students using various means of communication including email, discussion boards, and chat. All these tools enhance group learning to make individuals partake actively and interact with other learners (Santiana, et al. , 2021).

Assessment and Grading Instruments: To offer this, the platform has a set of tools through which one can develop quizzes, examinations, and assignments. They facilitate the effectiveness of evaluations of the assessment and learning material and the efficiency of feedback mechanisms with regards to both formative and summative evaluation strategies (Al-Ataby, 2021).

Analytics and Reporting: This utility is very helpful in offering fundamental information that can help educators to assess student's progress, interaction and performance (John, 2014).

Modern IT solutions assist to analyze the curves and to determine the potential problems with course delivery. Said characteristics combine to make Canvas LMS support an all-encompassing platform that is well-fielded to offer online courses.

Some of the significant ideas, which underpin the design of the system, include user- friendliness and availability; thereby making it easy even for those with a low level of technologic literacy – the teachers and students (Merinda, 2018).

Furthermore, Canvas LMS provides integration options with other applications, which allows enlarging the range of tasks addressed in learning processes (Mpungose & Khoza, 2022). Even more, the platform is mobile friendly expanding the access to courses, their content and activities among the users (Yang & Ali, 2022).

The new versions of Canvas LMS have included elements like, virtual conference ones, accessibility enhancements that prove that the platform is in the constant process of adapting to new edtech trends (Jawabreh et al. , 2023). These new features expand Canvas LMS capabilities even more and make it an ideal and highly effective solution for online learning.

Student Perceptions of Canvas LMS in the Islamic Culture Curriculum Context

Currently, using Canvas LMS in education has become an area of interest for scholarly work where research focuses on the effectiveness of and the features offered by Canvas LMS. Santiana et al. (2021) studied the students' perceptions towards the use of the application providing insight into the user perception in education-related matters on online platforms.

According to Kite et al. (2020), respondents comprising of the academic staff and the students were generally satisfied with Canvas, but dissimilarities existed regarding the features. This aligns with Wilcox et al. (2016), who adopted a combined approach of learning and feedback analytics to improve the instructional practices, while stressing on the significance of user-oriented in LMS.

The usage of Canvas LMS has been elaborated across various studies and its flexibility across the given disciplines has been proven. Sari and others used it in sociolinguistics (Sari et al. , 2020), whereas Maher and Nuseir highlighted the evaluation of the Canvas LMS integration from educators' point of view (Maher & Nuseir, 2021). Garcia et al. (2021) focused on the analysis of students' feedback, thus, contributing more to the understanding of the consequences of the platform for the different participants in the educational process.

It is notable that there is a dearth of prior literature specifically refering to the practical implementation of Canvas LMS in Islamic Culture curriculum. However, general research can be resourceful in the process of analysis as well as fine-tuning of the key notions. For example, Nishitha & Pandey (2021) found that students in general, consider Canvas as a useful tool since they rely on the interface and the necessary resources. This may apply to the teaching of Islamic Culture courses although more research needs to be conducted to get more insights on the matter.

A study conducted by Tsang in 2019 refering to research from 2015 established that both educators and students had positive experience using Chromebooks alongside Canvas LMS surpassing initial expectations. Although the study is not specifically focused on Islamic Culture education, the results imply a positive implication of the effective application of Canvas LMS in other related teaching environments.

Recent research has also looked at the use of Canvas LMS in culturally targeted learning environments. For instance, Hassan et al. (2022) studied the use of Canvas in Middle Eastern universities and found results that may be relevant to the teaching of Islamic Culture. Similarly, Hatamlah et al. (2023) focused on the utilization of educational technology in religious studies programs and provided insights that can be possibly applied to Islamic Culture courses concerning the use of Canvas LMS.

In addition, Jawabreh et al. (2023) and Yang and Ali (2022) have carried out studies on the use of digital learning platforms with students in other parts of the world and in other cultural contexts, although these studies are generalized and is not confined to the usage of Canvas LMS or Islamic Culture.

However, the current literature suggests that Canvas LMS could be suitable for learning Islamic Culture but it calls for further study on the effectiveness of its utilization for teaching this subject matter.

Methodological Approach

Study Design

As the present study is framed in line with established research methods, it adopts a quantitative research approach (Creswell & Creswell, 2018). This research employed an online self-administered questionnaire cpmpleted by targeted and selected Al Qasimia University students who were active users or had used Canvas LMS in their Islamic Culture classes.

The questionnaire was formulated to ensure that comprehensive information about the students' perceptions about Canvas LMS were received, narrowing the focus to three main areas of evaluation:

How effective the platform is in enhancing the quality of their education.

Level of satisfaction with the platform.

Challenges encountered during usage

This approach aligns with the study conducted by Santiana and colleagues on the efficiency of the LMS in the past year and by Mpungose and Khoza.

As for qualitative data analysis, the present work is concerned with describing opportunities and chakllenges linked to the Islamic Culture course at Al Qasimia University in the context of the platform. This analytical approach follows the recommendations for educational technology assessment according to the writings of Burrack and Thompson.

The target population is represented by multicultural students from over one hundred countries, who receive education in the field of Islamic culture. Using convenience sampling with a diverse sample, the aim is to obtain a wide range of perspectives which improves the external validity of the outcomes (Johnson & Christensen, 2019, p. 242). The study looks into the features of Canvas LMS, ability to access materials anytime and any day, capacity to conduct digital assessments, and impact on achievement.

The research aims to achieve the following objectives:

Firstly, to reflect the commitment of Al Qasimia University concerning its ideals as an Islamic educational institution.

Secondly, to identify the most effective manner in which Canvas LMS can be used to teach Islamic culture. This aligns with the university's future vision and trends in educational technology in culture learning as discussed by Al-Ataby (2021) and Hassan et al. (2022).

The approach employed in this study aims to offer a set of actionable suggestions for enhancing Canvas LMS usage in the specific academic context, thus contributing to the existing knowledge on Canvas LMS effectiveness in specialised interdisciplinary study domains (Hatamlah et al., 2023; Jawabreh et al., 2023).

Sample Size

The study sample covers Al Qasimia University learners in the Islamic Culture course during the fall semester 2023–2024. 250 students were selected for the study, of which, 155 students completed the survey, yoleding a response rate of 62 percent. This participation rate is deemed reasonable for research in education. Notably, a higher response rate was obtained from females than males.

A gender imbalance was noted in the sample; 121 of the respondents were male students (78. 1%) while 34 were females (21. 9%). This gender disparity aligns with the patterns evidenced in the other comparable investigations carried out in the same area (Hassan et al. , 2022).

Regarding participants' academic year, most were first and second year students, which is appropriate to the usual sequence of the Islamic Culture course in the curriculum. Particularly, 98 first-year students. 38 second-year students, 13 third-year students, and 2 the fourth-year students responded. Four students did not indicate their year of study. This distribution is appropriate given the general applicability of the course to early education in university (Al-Ataby, 2021).

Regarding the students' level, the predominance of lower level students reflects the course structure at Al Qasimia University, where Islamic Culture is taught mostly to first- and second-year students. This accords with pedagogical models which place importance on the initial years of tertiary education where students take their core courses (Jawabreh et al. , 2023).

The participants' characteristics and the number of participants were similar to recent studies on LMS implementation in higher education (Mpungose & Khoza, 2022; Santiana et al . , 2021) and hence, suggest that the findings could be generalized to similar educational contexts.

Table 1: Gender distribution of study students

Student Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	121	78.1	78.1	78.1
	Female	34	21.9	21.9	100.0
	Total	155	100.0	100.0	

Participants' distribution across the colleges demonstarted the interdisciplinary nature of the Islamic Culture course. The College of Sharia and Islamic Studies had the highest representation, comprising sixty-one students 39. 4%, followed by the College of the Holy Qur'an with thirty-three students 21. 3%. The College of Arts and Humanities contributed 31 students (20%). The College of Economics and Management and the College of Communication eah had 15 students (9. 7%). Such diversity also underscores the importance of the course across different areas of study, and it aligns with the integrated approach of this university to Islamic education (Jawabreh et al. , 2023).

Table 2: student level-based sample size

Year of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Level 1	98	63.2	64.9	64.9
	Level 2	38	24.5	25.2	90.1
	Level 3	13	8.4	8.6	98.7
	Graduate	2	1.3	1.3	100.0
	Total	151	97.4	100.0	
Missing	System	4	2.6		
Total		155	100.0		

ANALYSIS AND RESULTS

The research aim of this study was to evaluate the improved ccommunication eenhancement, sstudents evaluation & their Performance in Islamic Culture Course via Canvas Learning Management System at Al Qasimia University. To execute the analysis, Smart PLS was used for the data analysis that following best practices in SEM (Hair et al. , 2021a).

The Measurement (Outer) Model

The assessment of the measurement model was done using the procedure as outlined by Hair et al. (2021a) in their guidelines. First, the reliability of the indicators was checked with the threshold being equal to 0. 70 for indicator loadings. Second, internal consistency was established by assessing composite reliability (CR). Values of 70 or above were considered acceptable (Hair et al. , 2021b).

The convergent validity was tested through the AVE, which should be above 0. 50 as reported in Fornell and Larcker (1981). For discriminant validity, the AVE of each latent construct had to be greater than the highest squared correlation of that construct with any other construct to satisfy Fornell-Larcker's condition.

Two methods were employed to test discriminant validity: cross loading technique and Fornell Larcker relationship matrix. These methods are well known in PLS-SEM literature for their capability of to assess discriminant validity (Henseler et al , 2015).

These analyses are presented in Figure 1 and Tables 3-5, where all the measurements to meet the suggested criteria. All the values for loadings, composite reliability, and the AVE are within the acceptable limit confirming the reliability and validity of the measurement model.

Following the validation of the measurment model, the analysis proceeded to thr structural model. This step-wise approach aligns with the best practice guidelines in PLS-SEM (Hair et al. , 2021a; Sarstedt et al., 2022).
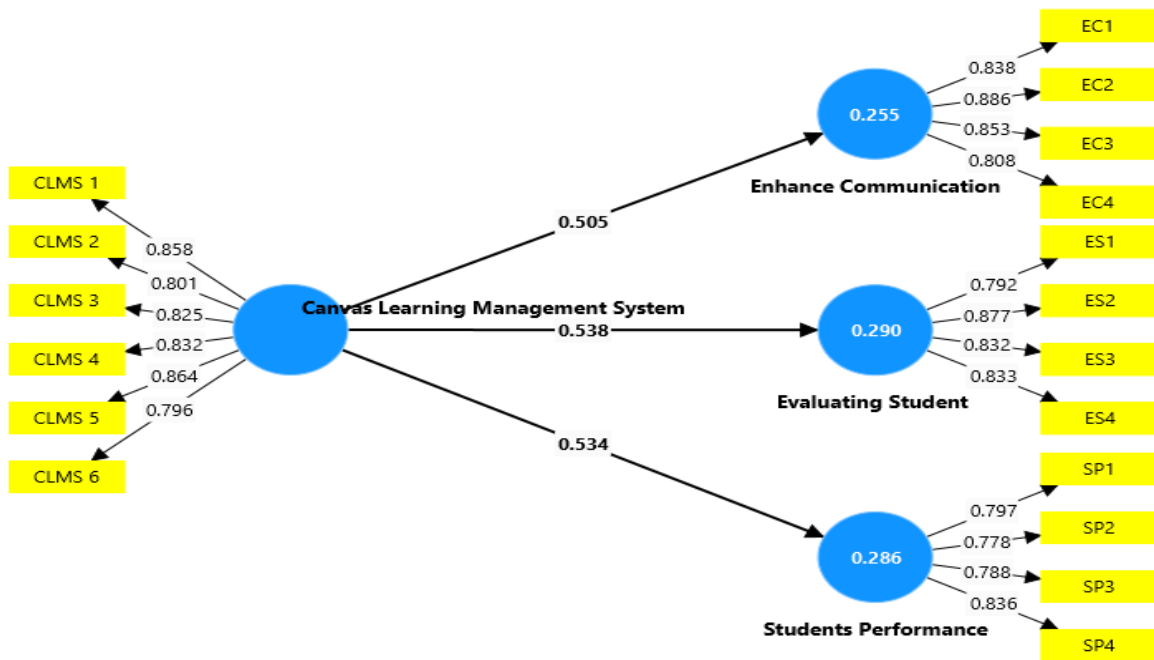
Figure 1: Measurement Model

Table 3: Results of reflected measurement model

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Canvas Learning Management System	0.909	0.912	0.930	0.689
Enhance Communication	0.868	0.871	0.910	0.717
Evaluating Student	0.854	0.859	0.901	0.696
Students Performance	0.813	0.819	0.877	0.640

Table 4. Correlation matrix Fornell-Larcker

	Canvas Learning Management System	Enhance Communication	Evaluating Student	Students Performance
Canvas Learning Management System	0.830			
Enhance Communication	0.505	0.847		
Evaluating Student	0.538	0.688	0.834	
Students Performance	0.534	0.624	0.794	0.800

Table 5. Outer Loadings

	Canvas Learning Management System	Enhance Communication	Evaluating Student	Students Performance
CLMS 1	0.858			
CLMS 2	0.801			
CLMS 3	0.825			
CLMS 4	0.832			
CLMS 5	0.864			
CLMS 6	0.796			
EC1		0.838		
EC2		0.886		
EC3		0.853		

EC4		0.808		
ES1			0.792	
ES2			0.877	
ES3			0.832	
ES4			0.833	
SP1				0.797
SP2				0.778
SP3				0.788
SP4				0.836

Analysis of the Structural Model

The last procedure in applying PLS-SEM and in building the model is the use of the bootstrapping technique in PLS to confirm the hypothesized relations. However, Hair et al. (2021) demonstrate that in the course of analyzing PLS beyond the path coefficients, the hypothesis should be supported only if the respective path coefficients are statistically significant. On the other hand, significant paths support the assessment of the hypothesized causal relation.

Regarding the path coefficients, it is suggested to employ the bootstrapping method with a sample size of at least 5,000 (Hair et al., 2019; Hair et al., 2021). Thus, the bootstrap sample size for the present study was set to 5,000, equivalent to the original sample of 155. This resulted in appropriate t-values and minimized errors.

The structural paths are presented in Table 6 indicating the standardized path coefficients and the analyses of the hypotheses' significance are explained in Figure 2. Below is the conclusion made from the analysis of the study through structural model in smart PLS.

Hypothesis 1: There exists evidence that Canvas LMS optimises the process of educational communication between the student and experts. The t-test statistic was 7.770 and P value of 0.000, which represent a highly significant level in terms of the statistics of the findings. This supports the observed improvement in the flow of communication. This aligns with findings by Mpungose and Khoza (2022) as well as John (2021) which show that integration of learning management systems enhances communication in learning spaces.

Hypothesis 2: There is a positive association between Canvas Learning Management System and students' performance evaluation. The calculated value of the test statistic was 9.627 with p value equal to 0.000, suggesting high significance. This empirically supports the observation made regarding the enhanced aspect of the assessment of learner performance. Burrack & Thompson (2021) also substantiate these findings by demonstrating that LMS improves the assessment process.

Hypothesis 3: There is a direct relationship between the Canvas LMS and the learners' overall performance. The calculated test statistic was 9.035 with a p-value of 0.000, indicating high significance. This supports the observed increase in students' performance as noted. Al-Ataby et al. (2021) found that learning management system also have a positive influence on students' performance.

This study highlights the need for LMS research in the context of higher education particularly in the Islamic context, as emphasized **by** Jawabreh et al. (2023) and Yang & Ali (2022).
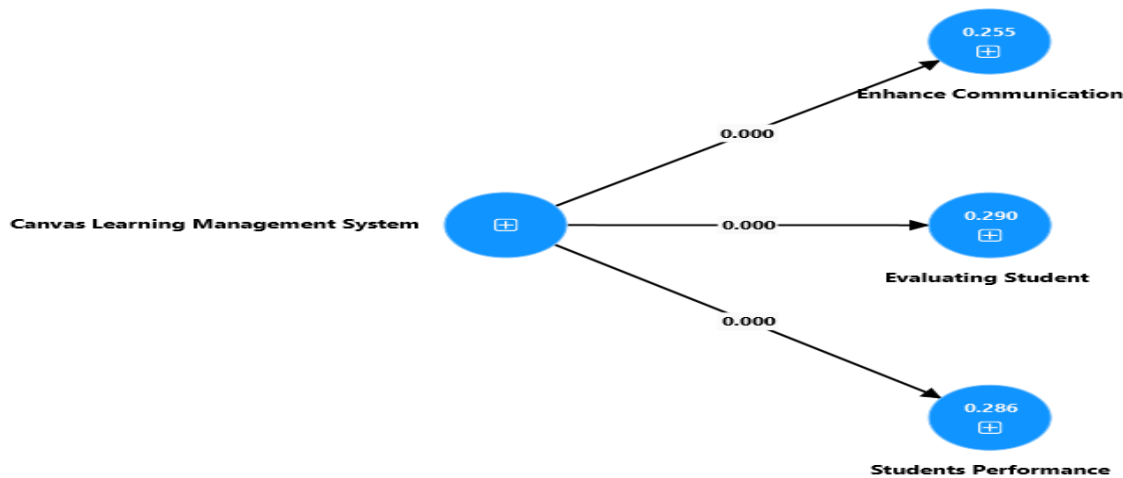
Figure 2: Structural Model Analysis

Table 6: Hypothesis findings

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Value	P values	Hypotheses Decision
Canvas Learning Management System -> Enhance Communication	0.505	0.508	0.065	7.770	0.000	Supported
Canvas Learning Management System -> Evaluating Student	0.538	0.541	0.056	9.627	0.000	Supported
Canvas Learning Management System -> Students Performance	0.534	0.537	0.059	9.035	0.000	Supported

Table 7: Analysis of R-square

	R-square	R-square adjusted
Enhance Communication	0.255	0.252
Evaluating Student	0.290	0.287
Students Performance	0.286	0.283

CONCLUSION AND RECOMMENDATIONS

This has become largely essential since the trends in e-Learning Management Systems (e-LMS) enter the realm of necessary standards and accreditation. The COVID-19 pandemic expanded this trend and challenged educational institutions to adopt distance learning and brought focus to issues of how to foster collaboration, participation, and assessment remotely (Jawabreh et al. , 2023). Thus, based on the data collected in the form of students' feedback, our study shows how the roles of Canvas LMS grow more significant in teaching the Islamic Culture at Al Qasimia University. Despite some mixed findings, the platform shows a positive influence in teaching and learning specifically in communicating, formative assessment, and general students' effectiveness in UAE colleges (Hassan et al. , 2022). About 61% of the students revealed a preference for Canvas LMS when taking the Islamic Culture course as it provides them better access to the learning materials (Al-Ataby, 2021).

Canvas LMS integration within the Islamic Culture curriculum at Al Qasimia University has viable benefits especially in cultivating and maintaining the students' informational competency. Students prove their efficiency regarding e-learning resources and content, sharing and managing lessons, and employing electronic monitoring tools (Mpungose & Khoza, 2022). However, challenges were observed, for instance, dificulties to get a review on assessments, and to retrieve stored lessons as captured in the students' perception by Santiana et al. (2021).

Concerning sharing of content and learning environment improvement, students affirmed that the use of Canvas LMS enhanced the learning of Islamic Culture. To enhance participation, students recommend that Al Qasimia University should provide more training on the use of Canvas LMS especially in issues related to

lessons retrieval. At the same time, faculty members need sound training in delivering positive feedback through the interface and in the management and distribution of course content (Burrack & Thompson, 2021).

In conclusion, it could be deduced that the majority of the students' views towards Canvas LMS are positive in terms of collaboration as well as in meeting the teaching needs of Islamic Culture Curriculum. The overall findings have shown that the usage of this platform is beneficial for improving communication, students' assessment, and performance at Al Qasimia University in the UAE (Yang & Ali, 2022). Nevertheless, as far as the usage of Canvas LMS in the process of teaching and learning the subject in question is concerned, while its applicability with the given curriculum in general is quite robust, there is a need for further improvements and adjustments to the specifics of the Islamic Culture curriculum in particular. It will be interesting for future research to investigate these peculiar enhancements and their effectiveness on the learning achievements in Islamic courses (Hatamlah et al. , 2023). Therefore, this study has established that Canvas LMS is helpful in the teaching of Islamic Culture at Al Qasimia University, but steady enhancement and flexibility of the platform are essential to meet all the needs of this specific subject. This study is contributes to the existing literature concerning the implementation of e-LMS in culturally relevant educational settings and offers a framework for similar research endeavors in the future.

FUTURE RESEARCH DIRECTIONS FOR CANVAS LMS

The following research areas could be proposed in order to continue the investigation on Canvas LMS in the teaching of Islamic Culture curriculum. Possible future research could include the relationship between the level of change in engagement and participation, students' performance in the subsequent semesters after using Canvas LMS and the use of experimental learning models at different times in the academic year to determine the impact of LMS in academic context.

Also, research can be carried out comparing this LMS with others such as Moodle, Blackboard or Google Classroom, in relation to Islamic culture courses. The findings of this study could assist in making sound decisions on the implementation of technologies in curriculum.

Finding out how Canvas incorporates current/advanced technologies like interactive whiteboards, virtual reality and student response systems to improve learning. Suggesting how Canvas could be suited for different learners, including the visual, the auditory, the reading and the writing learners would assist in enhancing diversity in learning.

In this regard, it is important to stress the evaluation of the effectiveness of the faculty development programs in terms of how they influence the appropriate use of Canvas. Possible future research could analyze further how professional development programs and structures could improve and how educators could get more information about the tools in Canvas. However, it is also essential to determine the ways Canvas can benefit educational and cultural processes, including the teaching of Islamic culture.

An exploratory research on the use of Canvas across various disciplines within academe may determine the tool's adaptability. Due to the current discussions in the public domain regarding the privacy and security of data research, the ethical implications of students' data and data utilization in Canvas are essential. Furthermore, as for the economic effects of the integration of Canvas into the educational process, the researches that may describe how such systems might be sustained in the future could be useful.

These research directions will enrich the LMS literature and assist in enhancing quality and equity in education, especially education for diversity, which entails learning in Islamic societies.

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