A Survey on Content, Layout and Accessibility (CLA) of LAW083 MOOC among UiTM Law Foundation Students

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Abstract: *Massive Open Online Courses (MOOCs) are online learning environments designed for large numbers of participants and are typically free, open, and flexible. In 2019, Universiti Teknologi MARA (UiTM) launched UFUTURE, an online platform featuring UiTM MOOC among its integrated features. With the aim of improving learning quality, UiTM MOOC offers diverse learning materials and activities to accommodate students of various learning styles. Recognising its benefits, the Introduction to Law of Contract, Torts and Crimes (LAW083) course, a compulsory subject for law foundation students at the Centre of Foundation Studies, UiTM Selangor Branch, Dengkil Campus (COFS), was adapted into a MOOC. Although previous research has discussed students' perceptions towards MOOC in learning various subjects, there has been no comprehensive study on law foundation students' perceptions of using MOOC for learning LAW083 at COFS. This study employed a cross-sectional survey approach to collect primary data from UiTM Law Foundation students enrolled at COFS during Session 2 of the 2023/2024 semester. Based on Krejcie and Morgan's*

(1970) formula, the sample size for the available population (N=720) was determined to be 251 after screening. The sampling method used for the respondents was purposive convenience sampling, where the online survey was distributed to the target population within the same academic session. This research acknowledges the limitation of sample size, which may affect the applicability of the findings concerning the LAW083 MOOC among UiTM Law Foundation students. Based on the results of the Friedman test that was conducted, the results presented the ranks of three (3) measures: content (C), layout (L), and accessibility (A), or CLA, which were found to be significantly different. The questionnaire assessed students' opinions on the LAW083 MOOC regarding content, layout, and accessibility while also gathering feedback for improvements in these areas. The survey findings will be used to improve the CLA of the LAW083 MOOC. It is recommended for future studies to broaden the sample size and incorporate other qualitative methods such as interviews or focus group discussions to obtain more in-depth insights.

Keywords: *Massive Open Online Courses, online learning, Introduction to Law of Contract, Torts and Crimes, UiTM law foundation students, perception*

1.0 INTRODUCTION

THE EVOLUTION OF MOOC

Massive Open Online Courses (MOOCs) are online learning environments designed for large numbers of participants and tend to be free, open, and flexible (Amado et al., 2022). The evolution of MOOCs can be traced back to email-based courses from the 1990s (Stracke et al., 2019; Smith et al., 1999). Open online learning through self-paced web-based courses emerged soon after the internet gained popularity in the late 1990s and early 2000s (Wiley & Gurrell, 2009). Baturay (2015) stated that the term "MOOC" was first introduced in 2008 by Stephen Downes and George Siemens in their course, titled "Connectivism and Connective Knowledge." Earlier MOOCs did not focus on the content; rather, they emphasised the formation of networks among participants and the sharing of resources and contributions within those networks. This type of MOOC, founded on a 'connectivist' pedagogy, was later referred to as "cMOOC" (Stracke et al., 2019). In 2011,

a different type of MOOC emerged, known as the "xMOOC." This model focused on traditional educator-led instruction, aiming to deliver content to a large public audience (Downes, 2007). In contrast to cMOOCs, xMOOCs provide a more enclosed learning environment where all resources are gathered in one place. The differences between xMOOC and cMOOC are summarised in the table below.

Aspect	cMOOC	xMOOC
Learning Theory	Founded on connectivist theory	Founded on behaviourist theory
Learning Environment	Open, less-structured learning environment	Enclosed, centralised learning environment
Instructor-Learner Interaction	Informal, network-based interaction	More formal, tutor-like experience

Table 1: Differences between xMOOC and cMOOc

Since then, MOOCs have grown significantly, with millions of registered users and hundreds of courses offered by numerous platforms such as Coursera, edX, FutureLearn, Swayam, Udacity, and Udemy (Perifanou, & Economides, 2022). These courses are available around the world and are created by many providers. MOOC represents a significant development in education, offering accessible and often free courses to a wide audience without restrictions of time and location (Siemens, 2013). This aligns with the aspirations outlined in Article 26 of the United Nations Universal Declaration of Human Rights, which states that education shall be free, at least in the elementary and fundamental stages. The majority of MOOCs today are primarily content-based (xMOOC); therefore, they are different from the original connectivist premise of MOOCs (Siemens, 2012).

ADOPTION OF MOOC IN MALAYSIA

In the context of Malaysia, xMOOC has been selected as the format for the development of MOOC in institutions of higher learning (Norazah et. al, 2015). The Ministry of Education Malaysia (MOE) produced the Malaysia Education Blueprint 2015-2025 (Higher Education), with the Ministry's aspirations including: increasing the number of student enrolments, enhancing the quality of teaching and learning, and globalising Malaysian

higher education institutions. To meet these goals, MOOCs have been integrated into higher education. There are three main reasons why MOOCs are used. Firstly, MOOCs can reach a diverse and wide audience, including students of all ages and those not enrolled in higher education, promoting equality in access to learning. Secondly, they enable Malaysian universities to enhance their global brand and visibility, potentially raising quality standards. Third, MOOCs are expected to reduce the costs of delivering education while maintaining quality (Ministry of Education Malaysia, 2015; Norazah et al., 2015).

Universiti Teknologi MARA (UiTM) launched its own in-house developed online platform content delivery called UFUTURE in 2019 by the Institute of Continuing Education & Professional Studies (iCEPS) (Zazaleena et al., 2021). UiTM MOOC is an internet-based platform that offers free courses to students (Siti Noorbaini et al., 2021) and it can be accessed at https://ufuture.uitm.edu.my/mooc/. With the main objective of enhancing the quality of learning and teaching, UiTM MOOC caters to the needs of existing students currently enrolled in the course as well as those who are interested in joining. The LAW083 MOOC provides students with the opportunity not only to access teaching materials but also to participate in game-based activities and take assessments to evaluate their understanding of the chapters offered in the course.

Given the numerous benefits, the Introduction to Law of Contract, Torts, and Crimes (LAW083) was implemented in Session 2 of the 2023-2024 semester. In general, the LAW083 MOOC was developed based on the LAW083 syllabus, which covers the law of contract, torts, and crimes. The purpose of the MOOC is to enable this subject to be taught not only in class but also online, allowing students to learn anytime and anywhere. The course also offers learning materials in various formats such as text, video, and interactive content to accommodate different learning preferences.

1.1 FEATURES OF LAW083 MOOC

Generally, the LAW083 MOOC employs the xMOOC model as it offers a structured learning environment. Additionally, it is formal, with its content aligned with the LAW083 syllabus. The following is the content:

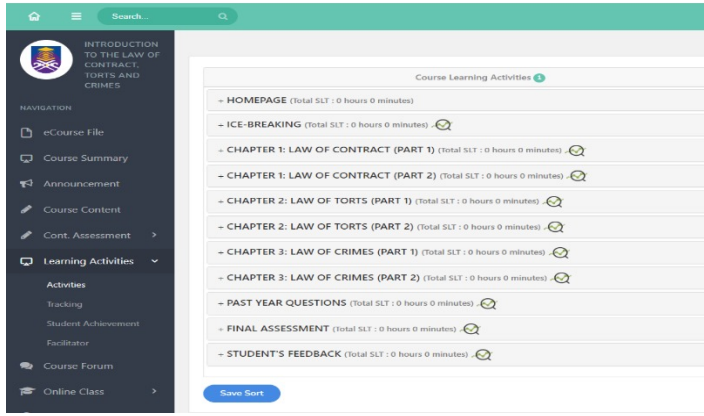

Figure 1: LAW083 MOOC'S contents
(Source: UFuture UiTM)

There are several key components in the content of the LAW083 MOOC. First is the homepage, which provides an overview of the course, including its description, learning outcomes, and course contents. It also shows a list of instructors and a learning roadmap to guide students through the course. Secondly, an ice-breaking session offers students a chance to introduce themselves, helping them feel more comfortable before delving into the course. Third, the content consists of three main chapters: Chapter 1 (law of contract), Chapter 2 (law of torts) and Chapter 3 (law of crimes). Each chapter is divided into two parts: Part I and Part II. Fourth, there are past examination papers to help students understand the format and types of questions, allowing them to better prepare for exams. Next, final assessments are included to allow students to measure their overall comprehension of the chapters. Lastly, a student feedback form is included for students to complete, allowing them to share their overall thoughts and feedback on the MOOC.

The following are the unique features of the LAW083 MOOC:

(i) Various learning materials in different formats
Each chapter in the LAW083 MOOC provides a diverse range of learning materials in multiple formats. These materials are carefully prepared to serve as references that enhance students' understanding of this course.

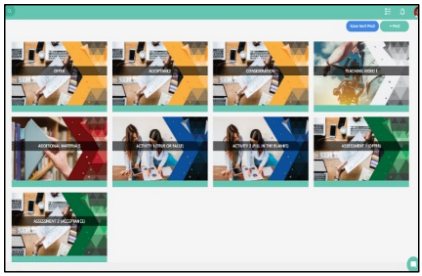

Figure 2(a): LAW083 MOOC'S contents
(Source: UFuture UiTM)

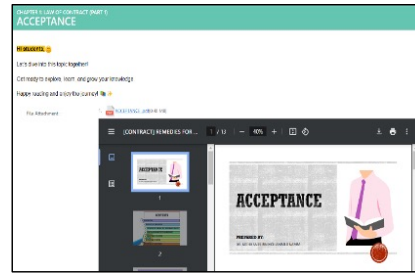

Figure 2(b): Teaching slide
(Source: UFuture UiTM)

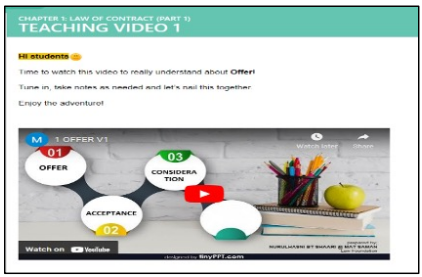

Figure 2(c): Teaching video
(Source: UFuture UiTM)

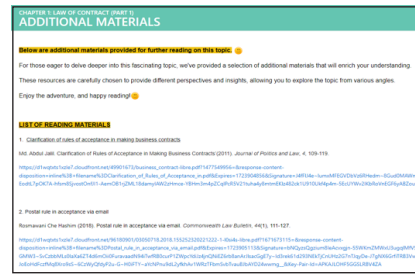

Figure 2(d): Relevant article
(Source: UFuture UiTM)

Figure 2(a) shows the learning materials that are contained in Chapter I, Part II. This Chapter explains the first three (3) elements of a contract, which are offer, acceptance, and consideration in various formats such as teaching slides, video,s and relevant articles as shown in Figures 2(b), (c), and (d). The slides and videos were prepared by lecturers, who have a thorough understanding of the content and scope of the course. For additional materials, several articles were provided by the lecturers, while others were obtained from relevant journals. This also serves as a platform for lecturers to share their research findings with students.

(ii) Interactive activities

To enrich students' learning experience in this course, a variety of interactive activities are offered. These activities were designed to cater to diverse student needs and preferences, providing a more engaging learning experience.

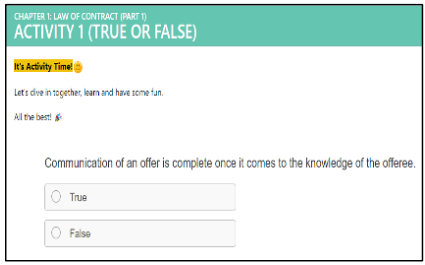

Figure 3(a): True of false
(Source: UFuture UiTM)

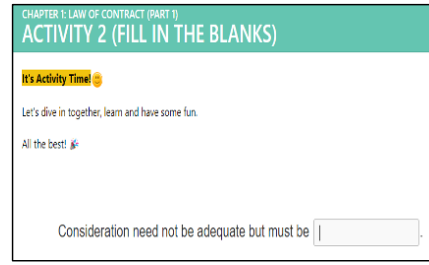

Figure 3(b): Fill in the blanks
(Source: UFuture UiTM)

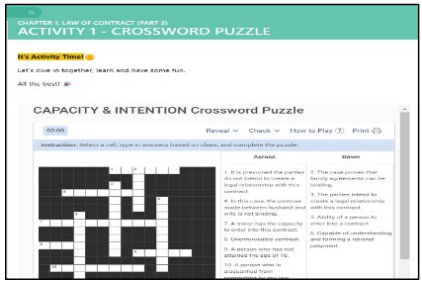

Figure 3(c): Crossword puzzle
(Source: UFuture UiTM)

Figure 3(d): Words search puzzle (Source: UFuture UiTM)

Figure 3 illustrates the various activities provided to help students gain a better understanding of the topics being taught. Among the interactive activities are true-or-false questions [Figure 3(a)], fill-in-the-blank exercises [Figure 3(b)], crossword puzzles [Figure 3(c)], and word search puzzles [Figure 3(d)]. These activities are designed to make the learning process more engaging for students.

(iii) Different forms of assessments

Assessments are also provided to measure the understanding of each chapter studied. They are offered in various forms.

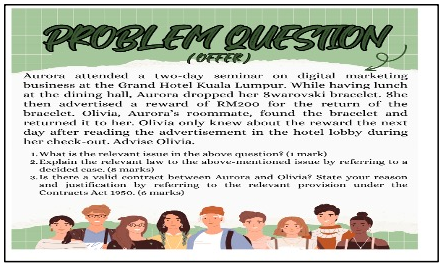

Figure 4(a): Problem based question
(Source: Ufuture UiTM)

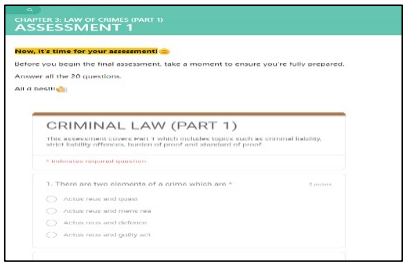

Figure 4(b): Multiple choice questions
(Source: Ufuture UiTM)

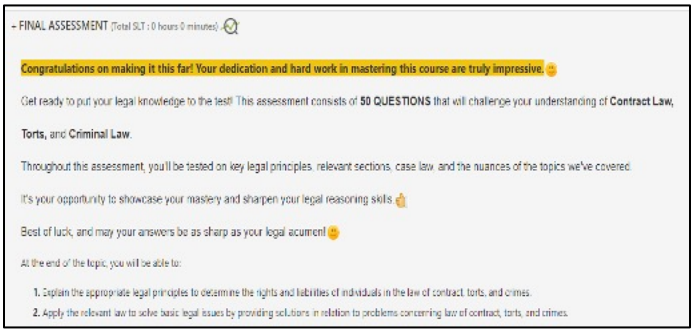

Figure 4(c): Final assessment
(Source: Ufuture UiTM)

Figure 4 shows the two (2) forms of assessments provided to help students self-assess their understanding of the topics being taught. The assessments include problem-based questions [Figure 4(a)], multiple-choice questions in Google Forms [Figure 4(b)], and the final assessment [Figure 4(f)], which consists of 50 questions designed to test students' understanding of all chapters covered in this course.

(iv) Interactive platform for student comments and feedback

To ensure that the LAW083 MOOC promotes two-way communication, interactive platforms for student comments and feedback were provided. These platforms allow students to actively engage with instructors and other students by asking questions, sharing insights, and participating in discussions.

Figure 5(a): Students self-introduction
(Source: UFuture UiTM)

Figure 5(b): Students comments
(Source: UFuture UiTM)

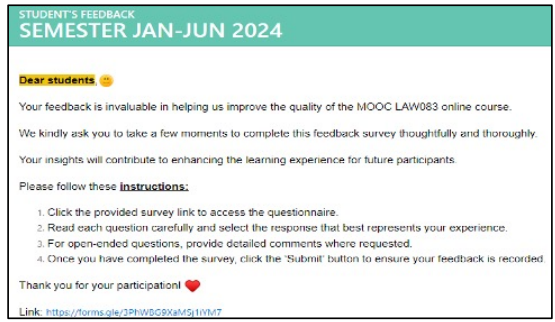

Figure 5(c): Students feedback form
(Source: UFuture UiTM)

Figure 5(a) shows an ice-breaking session where students introduce themselves, share their backgrounds, and explain why they chose to study law. This activity aims to help students feel more comfortable and confident as they progress through the course. Figure 5(b) shows students sharing their answers in the comment section of the assessment. Both the introductions and comments are reviewed and responded to by the instructors to ensure students feel appreciated and motivated to continue with the course. For continuous improvement, students are requested to fill out a feedback form to provide their overall feedback on the LAW083 MOOC.

1.2 RESEARCH PROBLEM STATEMENT

The LAW083 MOOC was developed to enhance students' knowledge of LAW083 and has been used as part of teaching and learning resources at COFS since January 2024. Despite its adoption over the last year, little is known about students' perceptions of the CLA of the LAW083 MOOC. Further improvement of the CLA of the LAW083 MOOC is important, as the examination results of UiTM Law Foundation students from the same cohort, who were enrolled in the LAW083 course during Session 2, 2023/2024 and Session 2, 2022/2023, showed a slight decline in the number of students achieving an A grade. In Session 2 of the 2022/2023 semester, 47% of students received an A, whereas in Session 2 of the 2023/2024 semester, only 28% achieved an A. This represents a 19% decrease in the percentage of students earning an A. Hence, there is a need to explore the law foundation students' perceptions of CLA regarding the use of the LAW083 MOOC to enhance their academic performance.

1.3 RESEARCH OBJECTIVES

There are two (2) main research objectives for this study. The first objective is to measure students' perception of the contents, layout, and accessibility (CLA) of the LAW083 MOOC. The second objective is to identify areas for improving the content, accessibility, and layout of the LAW083 MOOC.

2.0 LITERATURE REVIEW

MOOCs are a product of advancements in technology integration within education. Since 2012, they have served as a platform for disseminating knowledge worldwide, enhancing educational accessibility, and enabling flexible learning experiences. In Malaysia, MOOCs were officially launched in 2015 through Malaysia's national MOOC platform for public higher education institutions called OpenLearning.com (Kumar & AlSamarraie, 2018). Gradually, universities developed and began using their platforms to offer MOOC courses to students, such as UFUTURE at UiTM. This increase in MOOC usage became more evident after the COVID-19 phase, during which countries implemented movement restrictions to curb the pandemic's spread (Tlılı et al., 2022). Studies related to MOOCs have been widely conducted, both internationally (De Moura et al., 2021; Wang et al.,

2023; Kala & Chaubey, 2023) and in Malaysia. Based on the examination of the literature, there are two (2) main themes of studies related to MOOCs conducted in Malaysia: (i) readiness for MOOC adoption and (ii) student perceptions and experiences.

READINESS FOR MOOC ADOPTION

In Malaysia, studies related to MOOCs can be traced back to 2015. Norazah and others (2015) explored MOOCs and their impact on open learning in higher education, offering diverse learners access to free or low-cost educational content and the ability to earn credits. In assessing Malaysia's higher education institutions' readiness to use MOOCs for learning, the researchers used a questionnaire. The questionnaire aimed to measure social readiness, educational readiness, and technological readiness. Although the results of the questionnaire were positive, the researchers felt that this might be influenced by the novelty effect, where students show increased interest due to the newness of MOOC. Recognising the need for studies related to MOOCs to assess the effectiveness of their use in learning, many studies have been conducted in Malaysia in general, and specifically at UiTM, focussing on student perceptions and experiences.

STUDENT PERCEPTIONS AND EXPERIENCES

Under this theme, various aspects were examined by researchers, including the usability of the MOOC-OpenLearning platform, perceptions of MOOCs, the perceived usefulness of the MOOC platform, and user satisfaction. The study aimed to identify factors that significantly impact the acceptance of MOOCs, assess students' experiences, and explore the factors influencing their preferences for using MOOCs. It also sought to identify the challenges that hinder students from using MOOCs. Additionally, the researchers investigated undergraduate students' perceptions of MOOC use and satisfaction, focusing on the platform's usability, quality, and interface, as well as reviewing the MOOC platform's effectiveness as an interactive tool. This is explained in the table below:

No	Author	Aim	Course/ Subject	Research instrument	Population
1.	Adi Syahid and others (2021)	To evaluate the usability of MOOC-OpenLearning from the perspective of undergraduate students at UTHM, focusing on aspects of usefulness, ease of use, ease of learning, and satisfaction.	General	Questionnaire	Undergraduate students from Universiti Tun Hussein Onn Malaysia (UTHM)
2.	Kalthom and others (2017)	To examine undergraduates' perception on the effectiveness of Critical and Creative Thinking (CCT) MOOC in fostering their employability skills.	Critical and Creative Thinking course	Semi-structured interview	Undergraduate students from Universiti Teknikal Malaysia Melaka (UTeM)
3.	Farleen (2021)	To survey which factors have a high impact on the acceptance of MOOC learning modules.	General	Questionnaire	Undergraduate students from UITM Pulau Pinang Branch, Permatang Pauh Campus
4.	Zazaleena and others (2021)	To assess students' experiences in using this online classroom.	Interactive Multimedia course	Questionnaire	Centre of Foundation Studies, UiTM Selangor Branch DengkilCampus
5.	Nurhafizah and others (2021)	To determine factors that influence students' preferences in using MOOCs and to identify the problems that prevent students from using it.	Seven (7) MOOC courses relating to pharmacy	Questionnaire	Faculty of Pharmacy, UiTM Puncak Alam

6.	Siti Nurshahida and others (2022)	To investigate the implementation of what online learners prefer and what they experience while using MOOCs.	Cytology course	Questionnaire	Diploma students in Medical Laboratory Technology, Faculty of Health Sciences, UiTM Pulau Pinang Branch, Bertam Campus
7.	Wan Ismahanisa and others (2022)	To identify the satisfaction among undergraduate students that have experienced MOOC for Microbiology for Environmental Health.	Microbiology for Environmental Health	Questionnaire	Undergraduate students from UiTM Pulau Pinang Branch, Bertam Campus
8.	Hazrat and Izaham Shah (2024)	To investigate the perceptions of postgraduate students towards MOOC, evaluating the effectiveness of MOOC in enhancing the learning outcomes and the challenges students face while using MOOC for learning.	General	Semi-structured interview	Afghan postgraduate students at UiTM
9.	Noor Azlina and others (2024)	To measure the perceived usefulness of the MOOC platform for the Customer Service Principle course and user satisfaction.	Customer Service Principle course	Questionnaire	Faculty Business and Management, UiTM

Table 2: Summary of literature on MOOC usage

Studies on MOOCs have been conducted by various universities in Malaysia. For example, Adi Syahid et al. (2021) examined the usability of the MOOC-OpenLearning platform at Universiti Tun Hussein Onn Malaysia. Their study found that undergraduates had moderately positive perceptions regarding the platform's usefulness, ease of use, ease of learning, and overall satisfaction.

Similarly, Kalthom et al. (2017) explored the impact of MOOCs at Universiti Teknikal Malaysia Melaka (UTeM). Using semi-structured interviews, they investigated undergraduates' perceptions of MOOCs in Critical and Creative Thinking (CCT) courses and their role in enhancing employability skills. The findings indicated that students viewed the CCT MOOC positively, recognizing its effectiveness in fostering key employability skills such as problem-solving and decision-making.

Similarly, at UiTM, while several studies have examined students' perceptions of MOOCs, none have specifically focused on law subjects at the foundation level. Among the existing research, Farleen (2021) conducted a study using questionnaires to identify key factors influencing the acceptance of MOOC learning modules. Another study by Nurhafizah et al. (2021) explored factors influencing students' preferences for MOOCs at the Faculty of Pharmacy, UiTM Puncak Alam, and identified challenges hindering MOOC adoption. Using a questionnaire distributed to students enrolled in seven MOOCs, the study found that students valued the diversity of teaching materials, flexible accessibility, and self-paced learning.

A similar study by Wan Ismahanisa et al. (2022) evaluated undergraduates from UiTM Pulau Pinang Branch, Bertam Campus, who had taken a MOOC for a core subject in a previous semester. The study assessed their acceptance of MOOCs as a blended learning tool through a questionnaire. Likewise, Siti Nurshahida et al. (2022) investigated students' perceptions of MOOCs in a Cytology course among Diploma in Medical Laboratory Technology students at the Faculty of Health Sciences, UiTM Pulau Pinang

Branch, Bertam Campus. Additionally, Zazaleena et al. (2021) focused on foundation-level students at UiTM, specifically in an Interactive Multimedia course, rather than a law subject. Using a questionnaire, the study assessed students' experiences with MOOCs.

The most recent study on MOOCs was conducted by Hazrat and Izaham Shah (2024), which examined the perceptions of Afghan postgraduate students at UiTM Malaysia. The study assessed the effectiveness of MOOCs in enhancing learning outcomes and explored the challenges encountered by students. Using semi-structured interviews, the findings were thematically analyzed and presented.

Additionally, a study by Noor Azlina et al. (2024) employed a questionnaire to measure the perceived usefulness of the MOOCs platform for the Customer Service Principle course and user satisfaction at the Faculty of Business and Management, UiTM.

In summary, research on MOOCs in Malaysia primarily focuses on students' perceptions and experiences in using them as teaching tools. The subjects investigated range from general topics to specific courses taken by students. Research instruments commonly used to assess these objectives include questionnaires and interviews. These studies have been conducted at various universities, including UiTM.

However, while previous research has explored students' perceptions of MOOCs across different subjects, comprehensive studies on law foundation students' experiences with MOOCs, specifically for LAW083 at COFS, remain limited. This research gap highlights the need to examine foundation law students' perceptions of the content, layout, and accessibility of the LAW083 MOOC.

3.0 RESEARCH METHODOLOGY

3.1 METHODOLOGY

This research employed a quantitative methodology and used an online survey instrument to gather primary data. Online data collection was used instead of conventional methods as it is more cost-efficient (Park et al., 2019). This research was approved by the Research Ethics Committee of Universiti Teknologi MARA (RECUiTM) (Ref. No.: REC/08/2024 (ST/MR/173) on 29th August 2024. This section explains the methodology of this research, namely: (a) sampling technique; (b) instrumentation and method of analysis; and (c) development of the questionnaire.

3.2 SAMPLING TECHNIQUE

This study used a survey approach to collect primary data. In this study, law foundation students from the Centre of Foundation Studies (COFS), Universiti Teknologi MARA Dengkil, participated as respondents and were selected using a simple random sampling. Krejcie and Morgan (1970) indicated that the sample size for the available population (N=720) is n=251 after screening. The sampling method used for the respondents was purposive convenience sampling, with the online survey distributed to the target population of UiTM Law Foundation students enrolled at COFS during Session 2, 2023/2024. The inclusion criteria are: (a) students enrolled in the LAW083 MOOC during session 2 of the 2023/2024 semester; and (b) students who have accessed the LAW083 MOOC. The exclusion criteria are: (a) students who were on leave due to illness or emergency; and (b) students who did not consent to be a respondent or complete the questionnaire.

The information in Table 3 introduces the general background of the respondents (n=247) in this study. Of the respondents, females constituted the majority at 82.5% (n=207) while males comprised 17.5% (n=44). Regarding the frequency of access, more than a third, 41.8% (n=105), reported that they accessed the MOOC between one and six days a week, while 32.3% (n=81) accessed the MOOC more than once a month. A smaller portion, 21.9% (n=55), accessed the MOOC once or twice, and only 4.0%

(n=10) of the participants reported daily access. Concerning the devices used, the majority of respondents used laptops at 54.8% (n=228), while those who used tablets, computers, smartphones, and smartwatches accounted for 11.1% (n=46), 31.5% (n=131), 2.6% (n=11), and 0.0% (n=0), respectively.

Variable	Item	Frequency	Percentage
Gender	Male	44	17.5
	Female	207	82.5
Access Frequency	Once or twice	55	21.9
	At least once a month	81	32.3
	Between one to six days a week	105	41.8
	Daily	10	4.0
Devices*	Laptop	228	54.8
	Tablet	46	11.1
	Computer	131	31.5
	Smartphone	11	2.6
	Smartwatch	0	0.0

*Based on the frequency of use

Table 3: The General Background of Respondents (*n*=251)

3.3 INSTRUMENTATION AND METHOD FOR ANALYSIS

The data collection and analysis were conducted using an online questionnaire (Google Form) and IBM SPSS Statistics software, respectively. These data were subjected to descriptive statistical analysis for a general overview and the Friedman test to evaluate differences in agreement among the related group of respondents regarding the satisfaction of MOOC constructs, i.e., the content, layout, and accessibility.

3.4 DEVELOPMENT OF THE QUESTIONNAIRE

The main part of the questionnaire focuses on students' perceptions of three constructs of the LAW083 MOOC platform (Table 4): (a) content, (b) layout, and (c) accessibility. This part contains 17 items and uses a 4-point Likert-type scale (1—strongly disagree to 4—strongly agree) for responses and was developed based on the literature.

Construct	References	Coding	Item
(a)	Wan Nurhayati et al. (2020)	C1	The contents of the MOOC are aligned with the LAW083 syllabus.
		C2	The course materials in the MOOC enhance understanding of LAW083.
		C3	The activities provided in the MOOC are engaging.
		C4	The assessments allow for the evaluation of understanding in LAW083.
		C5	The additional materials in the MOOC are useful for enhancing understanding of LAW083.
		C6	Satisfaction with the quality of the content provided in the MOOC is evident.
(b)	Oh et al. (2019)	L1	The MOOC's visual design is appealing.
		L2	The layout of the MOOC is user-friendly.
		L3	The MOOC's layout is well-organized.
		L4	The MOOC's layout is easy to navigate.
		L5	Overall satisfaction with the experience of using the MOOC's layout is noted.
(c)	Iniesto et al. (2021)	A1	The MOOC allows for learning LAW083 according to individual needs and convenience.
		A2	The MOOC enables learning outside of a fixed classroom environment.
		A3	The MOOC provides free access to all course contents.
		A4	The MOOC can be accessed easily online.
		A5	UiTM's internet facilities facilitate easy access to the MOOC.
		A6	Satisfaction with the overall accessibility of the MOOC.

Table 4: The Questionnaire's Content Development Based on Constructs: (a) Content; (b) Layout; and (c) Accessibility

A pilot study was conducted for the instrument reliability test (n=26), using Isaac & Michael's (1995) sample size determination technique, in which sample sizes for pilot projects ranging from 10 to 30 are adequate. The data were analysed using Cronbach's alpha, indicating an overall high and significant alpha value (α=0.960) based on the constructs shown in Table 5.

	Cronbach's Alpha	N of Items
Content	.947	6
Layout	.878	5
Accessibility	.879	6

Table 5: Conbach's Alpha Item-Total Statistics Based on Constructs

4.0 RESULTS AND DISCUSSION

This section presents the results of the: (a) descriptive statistics analysis; and (b) Friedman test.

4.1 DESCRIPTIVE STATISTICS

Table 6 and Figure 6 present a descriptive statistical analysis of the type of content, layout, and accessibility of the material under consideration based on the Likert scale. Even within the content category (C), it is encouraging to see more than 60% of participants strongly agree with most items in the subscale, especially "C1" with 62.3% and "C2" with 64.4%, which boosts content satisfaction levels. On the other hand, in the layout category (L), there appears to be varied feedback; for instance, "L1" shows that 1.6% strongly disagree, and 8.5% disagree, thus indicating some measure of dissatisfaction. However, "L5" received a more positive response, with 52.2% of respondents strongly agreeing, suggesting that some aspects of the layout were found to be favourable. Concerning accessibility (A), the general rate was favourable towards this attribute, especially for "A3", where 67.6% of respondents strongly agreed, identifying this as an area of strength. Despite content and accessibility being acknowledged as quite satisfactory, in comparison to the other attributes, the layout category needs improvement to better satisfy the users.

		Likert Scale							
		1 Strongly Disagree		2 Disagree		3 Agree		4 Strongly Agree	
	Item	*n*	%	*n*	%	*n*	%	*n*	%
(a)	C1	2	0.8	5	2	86	34.8	154	62.3
	C2	2	0.8	9	3.6	77	31.2	159	64.4
	C3	3	1.2	13	5.3	105	42.5	126	51
	C4	2	0.8	7	2.8	86	34.8	152	61.5
	C5	2	0.8	9	3.6	83	33.6	153	61.9
	C6	2	0.8	8	3.2	88	35.6	149	60.3
(b)	L1	4	1.6	21	8.5	125	50.6	97	39.3
	L2	5	2	11	4.5	120	48.6	111	44.9
	L3	3	1.2	18	7.3	104	42.1	122	49.4
	L4	3	1.2	20	8.1	112	45.3	112	45.3
	L5	4	1.6	7	2.8	107	43.3	129	52.2
(c)	A1	2	0.8	6	2.4	105	42.5	134	54.3
	A2	2	0.8	4	1.6	94	38.1	147	59.5
	A3	2	0.8	6	2.4	72	29.1	167	67.6
	A4	2	0.8	5	2	78	31.6	162	65.6
	A5	9	3.6	28	11.3	106	42.9	104	42.1
	A6	3	1.2	4	1.6	92	37.2	148	59.9

*n: frequency, %: percentage

Table 6: Descriptive Statistics: (a) Content; (b) Layout; and (c) Accessibility

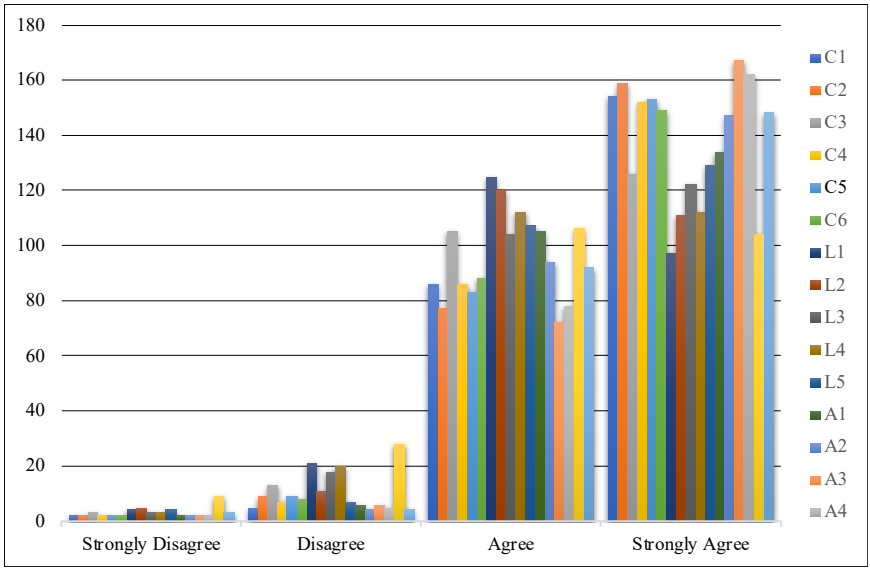

Figure 6: Descriptive Statistics

The Shapiro-Wilk normality test for the content, layout, and accessibility has a significant level of non-normal distribution ($\rho<0.05$), which indicates that the survey may require the use of a non-parametric method of inferential statistical analysis for further examination (Table 7).

	Statistic	df*	Sig.*
Content	.816	26	.000
Layout	.869	26	.003
Accessibility	.869	26	.003

*df: degree of freedom, Sig.: significant level of ρ at 0.05.

Table 7: Normality Tests of Shapiro-Wilk

4.2 FRIEDMAN TEST

This section presents the results from a Friedman test (Table 8) in which the ranks of three measures: content (C), layout (L), and accessibility (A) were found to be significantly different. The Friedman test indicates that "content" (C) received the maximum rank (mean rank: 2.52), which leads to the conclusion that participants viewed this aspect more positively than "accessibility" (A) (mean rank: 2.44), while "layout" (L) scored the lowest (mean rank: 1.04), suggesting that it was the least appreciated, with $\chi 2(2) = 392.278$, $\rho < .05$. The test statistics showed the Chi-square value of 392.278 with 251 samples and an Asymptotic Significance (ρ-value) of less than .001, where the highest acceptable ρ-value in a social science study is typically set at 0.05. This strong statistical significance indicates that the perceptions of the three aspects do differ and suggests the need to determine the reasons for the lower rating of layout relative to content and its accessibility. Finally, these results suggest that layout issues should also be tackled to increase overall satisfaction with the evaluated aspects.

(a)	C: Content	2.52
	L: Layout	1.04
	A: Accessibility	2.44
(b)	*n*	251
	Chi-Square	392.278
	df	2
	Asymp. Sig.	<.001

Table 8: Friedman Test: (a) Mean Ranks; and (b) Test Statistics.

5.0 COMMENTS AND SUGGESTIONS ON CONTENT, LAYOUT AND ACCESSIBILITY

The questionnaire assessed students' opinions on the LAW083 MOOC regarding content, layout, and accessibility, while also gathering feedback for potential improvements in these areas. This section addresses the second research objective.

5.1 CONTENT

In terms of content, students found it useful and helpful in their learning, particularly during exam preparation. This can be observed in the following:

"Mooc really helps me understand the subject better"

"Overall, MOOC helped me a lot in preparing for my tests and finals"

"The contents are easily understandable and really useful to me especially when the final exam is around the corner"

That said, several concerns raised by the students can be categorised into the following two aspects:

(a) Need for updates
Some students suggested that the content, especially slides and additional materials, should be updated regularly.

"Please update MOOC content more frequently"

"Update the slide in MOOC with additional notes"

The feedback shows that students highlighted the need for more frequent updates to the MOOC content, such as slides and additional notes. They also suggested that additional materials be updated each semester.

(b) Lack of quizzes and limited interactive quizzes
Overall, many students appreciated the quizzes but recommended increasing both their number and variety for a more engaging learning experience.
"provide more activities and content for each chapter"

"maybe add more quizzes to make sure students understand better"

"can use the concept of studying in QUIZLET and try applying it for the games to revise, memorise, and enhance understanding. For example, quizzes, questions, and FLASHCARD"

The feedback indicates that students expressed the need to not only increase the number of activities but also to diversify them to help students better understand the course. This is supported by students who suggested using Quizlet game models for revision purposes to enhance their understanding of the course.

5.2 LAYOUT

Students generally found the layout easy to navigate and well-organised. That said, several issues were raised by the students, which can be categorised into two aspects:

(a) Lacking modern design
Some students remarked that the layout lacks modern design and is not very visually appealing.

"The layout is uncluttered but needs a more modern design"

"I hope the layouts can be changed according to today's trend/modern since it can enhance more on students' focus and learning"

"more colorful and cartoons"

"MOOC could be more visually appealing"

The feedback reveals that students appreciated the layout but felt it could be made more modern. The low score for the MOOC layout suggests that students found the content structure unappealing, which hindered their ability to engage with the course. They suggested updating it to align with current trends to enhance focus and learning. Furthermore, they recommended incorporating more colour and cartoons to make the MOOC more visually appealing.

(b) Confusing navigation
Some students claimed that the navigation was complicated and suggested simplifying the layout.

"it is quite complicated to look for material as you have to click on multiple pages to get the contents needed"

This feedback shows that the student found it complicated to navigate the MOOC when searching for materials, as accessing content required clicking through multiple pages.

5.3 ACCESSIBILITY

Students generally found the MOOC easily accessible. However, several issues were raised by the students, which can be categorised into two aspects:

(a) Mobile device compatibility
Some students encountered difficulty accessing certain slides in the MOOC via mobile devices.

"less user friendly on phones compared to the laptop as there are often glitches"

"opening MOOC on phone is a bit hard to navigate"

"Some slides in MOOC are required to be opened through Laptop devices only, which is limited for students who use tablets and smartphones"

The feedback indicates that students reported difficulty accessing the MOOC on mobile devices, often experiencing glitches. Some slides can only be opened on laptops, which limits accessibility for students using tablets and smartphones.

(b) Issues with UITM Wi-Fi
Several students reported difficulties accessing the MOOC via UiTM's Wi-Fi, which restricted their ability to use the platform effectively.

"Students may have trouble accessing MOOC when using UiTM Wi-Fi"

"provide more effective internet services for the community to easily access MOOC"

This feedback conveys that some students reported difficulties accessing the MOOC while using UiTM's Wi-Fi. Furthermore, they emphasised the importance of reliable internet services in ensuring seamless access to MOOCs.

In short, while the LAW083 MOOC is generally appreciated for its content, layout, and accessibility, several key areas require enhancement. Addressing these issues, as highlighted in this section, could improve the overall learning experience and enhance students' understanding of this course.

6.0 CONCLUSION AND RECOMMENDATIONS

Overall, the use of the MOOC for learning LAW083 aligns with the Malaysia Education Blueprint 2015-2025 (Higher Education) to globalise Malaysian higher education institutions. It offers various benefits, including more choices for students to access teaching materials, engage in activities like quizzes and videos, and accommodate diverse learning styles and needs.

For the first research objective, data analysis shows that in the content category (C), over 60% of participants strongly agree with most items, particularly "C1" at 62.3% and "C2" at 64.4%, indicating high content satisfaction. However, the layout category (L) received mixed feedback. For example, 1.6% of respondents strongly disagree with "L1", and 8.5% disagree, indicating some dissatisfaction. In contrast, "L5" received a positive response, with 52.2% of respondents strongly agree, suggesting that some aspects of the layout are favourable. Regarding accessibility (A), the feedback is generally positive, especially for "A3," where 67.6% of respondents strongly agree, marking it as a strength. Although students view the content and accessibility positively, as shown in section 4.0, several issues were raised in their comments and suggestions in section 5.0, which have impacted their MOOC learning experience.

Meanwhile, for the second research objective, student feedback shows that while the LAW083 MOOC is generally appreciated for its content, layout, and accessibility, specific areas need improvement. In terms of content, students highlighted the need for updates, a lack of quizzes, and limited interactive options. The layout was criticised for lacking modern design and its confusing navigation. Additionally, accessibility concerns were raised regarding mobile device compatibility and issues with the UiTM Wi-Fi, which hindered students' ability to access the MOOC effectively.

Based on the aforementioned discussions, the research proposes a set of recommendations to improve LAW083 MOOC in terms of its content, layout, and accessibility:

1. For the content of the MOOC, it is suggested to implement regular updates by establishing a schedule for reviewing course materials. This will ensure that the content remains current and relevant to students' needs. Further, incorporating more interactive activities can better support various learning styles, enrich their learning experience, and keep students motivated.

2. For the layout of the MOOC, it is proposed to redesign it to reflect modern design trends and incorporate more colour and cartoons to make the MOOC more visually appealing. Furthermore, a clear navigation structure is recommended to help students easily access the content.

3. For the accessibility of the MOOC, it is recommended to ensure that all slides and course materials can be accessed on mobile devices, thus removing any restrictions that currently limit access to laptops only. Additionally, it is suggested to conduct regular maintenance checks on the Wi-Fi system to ensure optimal performance in ensuring smooth access to the MOOC.

It is hoped that improving the content, layout, and accessibility will support students of various learning styles, enhance their learning experience, and improve their understanding of this course.

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