

# Transformation of Learning through Technology and Artificial Intelligence: An Analysis of Teaching in the Introduction to Islamic Law Course

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## Abstract

In the evolving digital era, the integration of technology and artificial intelligence (AI) has become a transformative force in education, significantly impacting the teaching and learning processes across various disciplines. This study examines the role of technology in enhancing student learning in the Introduction to Islamic Law course, a core component of the Bachelor of Laws program. The Introduction to Islamic Law course, a key part of the Bachelor of Laws program, is seeing rapid digital adoption. It covers Islamic law's distinct characteristics, attracting students from both Shariah and non-Shariah backgrounds, including non-Muslims. However, students often face challenges understanding Fiqh principles, Arabic terminology, and the differences between Islamic and civil law systems, with no studies assessing their comprehension. Utilizing a quantitative approach, data were collected from 145 students through a structured questionnaire focusing on demographic profiles, the use of technology in learning, and levels of proficiency in Islamic legal concepts. The analysis reveals that a significant majority of students (62.1%) frequently use technology, such as online learning videos, applications, and AI tools, to deepen their understanding of Islamic law. High levels of student satisfaction (84.1%) and positive impacts on learning outcomes (80.7%) underscore the effectiveness of these technological tools in facilitating more interactive, responsive, and flexible learning experiences. The study also employs the Theory of Reasoned Action (TRA) to explore how attitudes and subjective norms influence students' intentions to use technology and AI in their learning. The findings highlight that while attitudes significantly affect intentions, subjective norms do not have a statistically significant impact. The study concludes that the integration of technology and AI in legal education enhances students' mastery of Islamic legal concepts and recommends expanding the use of these technologies across other

law-related courses. It also suggests that further research be conducted to assess the long-term effects of technology in legal education.

**Keywords:** Technology, Artificial Intelligence, Islamic Law, Student Proficiency, Digital Learning

## Introduction

In an increasingly fast-paced digital era, technological advancements are no longer confined to the industrial and communication sectors alone but have significantly permeated the education sector. According to the Malaysia Education Blueprint 2013-2025, Malaysia, ranking seventh in Asia for internet usage at 67%, presents a significant opportunity to improve access to quality online learning resources (Abdullah et al., 2024). The use of technology such as educational software, mobile applications, and artificial intelligence (AI) has brought about profound changes in the way teaching and learning occur in classrooms, laboratories, and virtually (Balakrishnan et al., 2019). The development of digital technology significantly aids in the creation of databases, allowing vast amounts of data to be produced and transformed into digital format (Manap, 2008).

One area of education that has been deeply impacted is the field of legal studies, where the Introduction to Islamic Law course, as a core component of the Bachelor of Laws program, is now witnessing the rapid adoption of digital technology. The Introduction to Islamic Law course provides an overview of Islamic law (Shariah and fiqh) by highlighting its unique characteristics that distinguish it from man-made laws. This course is also taken by students without a Shariah background, including non-Muslim students. However, students often encounter challenges in understanding concepts such as the principles of Fiqh, Usul Fiqh, Qawaid Fiqhiyyah, and Maqasid Shariah, as well as the use of Arabic terminology. They also struggle with comprehending the differences and similarities between the Islamic legal system and the civil law system, especially in terms of practical application. No study has been conducted to assess the level of understanding among law students regarding this course.

Traditionally, this course has been taught through lectures, text readings, and case discussions. However, technological advancements have enabled students to access these learning materials through digital resources such as online libraries, learning applications, legal simulations, and interactive videos that are easier to comprehend (Asmi, 2002). The integration of technology into this course not only facilitates access to information but, more importantly, allows students to interact more deeply with the learning materials (Said, 2023). For example, with legal simulations, students can experience how Islamic law is applied in various case contexts. This enriches the learning process, making it more dynamic and responsive to the needs of each student. Technology also enables more flexible learning in terms of time and place (Kassim & Ahmad, 2010). Students are no longer bound to fixed class schedules or required to be on campus to access teaching materials. Online learning applications and video platforms allow students to attend live lectures or view recordings at more convenient times. The study by Sahrir and Yusri (2012), shows that online games enhance learners' perceived perception, improve concentration, increase immersion levels, and strengthen knowledge acquisition. This provides students the opportunity to tailor their learning to their personal needs, especially for those who may be working while studying or facing other challenges that limit their time on campus. Furthermore, artificial intelligence offers more than just static learning (Karim et al., 2020). With AI, learning systems can assess

student performance in real-time, provide immediate feedback, and adjust learning content based on the level of understanding achieved. For instance, AI can help students comprehend complex Shariah principles in a more systematic way, offering quizzes or exercises tailored to the student's knowledge level and providing further explanations for topics that are difficult to grasp.

Information and communication technology (ICT) is a modern tool used in education, helping lecturers incorporate technology into their teaching to improve learning quality, while also promoting student collaboration and interaction (Sakti, 2023; Mohamad et al., 2018). Online collaborative learning tools or community-based learning platforms allow students to work in groups virtually, share ideas, and complete assignments together even when they are in different locations. This fosters a spirit of cooperation among students and encourages more active idea exchange, which is a crucial element in legal studies. Overall, the integration of technology and AI in the Introduction to Islamic Law course not only enhances access to information but also transforms the learning methods themselves, making them more interactive, responsive, and efficient. Students are not only able to learn Islamic law through texts and lectures, but they can also interact more deeply with learning materials, analyze cases more thoroughly, and apply theory in practical situations with greater confidence. Through the use of this technology, the learning process becomes more aligned with the needs of the modern world, enabling students to achieve a higher level of mastery in the Introduction to Islamic Law course.

### **Research Methodology**

This study uses a quantitative approach involving 145 students from a university in Malaysia. The respondents were randomly selected and asked to complete a questionnaire containing three main sections: Demographic Profile, Use of Technology in Learning, and Level of Proficiency.

Section A: Demographic Profile includes questions related to age, gender, level of study, study program, and proficiency in using technology.

Section B: Use of Technology in Learning contains questions about the frequency of technology use and the types of technology employed.

Section C: Level of Proficiency assesses students' mastery of Islamic legal concepts after taking the course with the aid of technology.

The data were analyzed using SPSS software to obtain descriptive statistics, including percentages and correlations between variables (Ishak & Talaat, 2020). Meanwhile, in the quantitative regression analysis, this study is based on the Theory of Reasoned Action (TRA) (Hale et al., 2002). This conceptual framework is used to explore how students' attitudes and subjective norms influence their intentions to use technology and artificial intelligence (AI) in teaching the Introduction to Islamic Law course, and subsequently, how these intentions affect their actual behavior. The Theory of Reasoned Action (TRA) is a psychological model that has proven effective in explaining and predicting human behavior (Effendi et al., 2020). TRA is based on the premise that an individual's behavior is determined by their intention to act, which in turn is influenced by the individual's attitude towards the behavior and subjective norms, that is, their perception of the expectations of significant others in their lives. TRA is employed in this study because its primary focus is on students' intentions and

behaviors in using technology and AI, which is a phenomenon that can be explained through attitudes and social norms. The use of TRA in this study is also based on its ability to provide a clear and systematic framework for understanding how the two main variables (attitude and subjective norms) can influence intentions and subsequently actual behavior. This enables the researchers to predict and understand the factors that drive or hinder the use of technology and AI in learning, as well as to provide solid findings for designing more effective educational interventions or strategies.

## Research Findings

### *Descriptive Statistics*

Descriptive statistics were first used to examine the patterns of technology usage frequency, types of technology, levels of satisfaction, and their impact on respondents' learning.

Frequency of Technology Usage in Introduction to Islamic Law Course

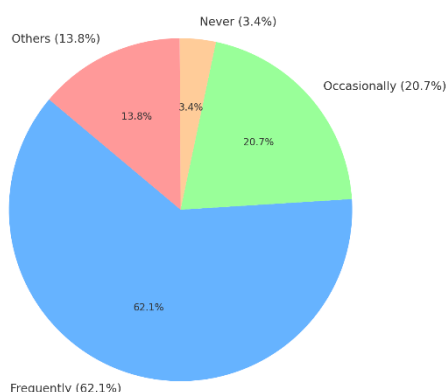


Figure 1: Frequency of Technology Usage

Figure 1 shows statistics on the frequency of students using technology in the Introduction to Islamic Law course. A total of 62.1% of students reported using technology frequently in their learning. This indicates that the majority of students actively integrate technology into their learning process, likely through the use of educational videos, mobile applications, or other digital tools related to the course. Another 20.7% of students reported using technology occasionally, suggesting some variation in the level of technology usage among students. Only a small percentage of students, 3.4%, reported that they never use technology in their learning. This data indicates that technology plays a significant role in the learning process for most students.

Types of Technology Used in Introduction to Islamic Law Course

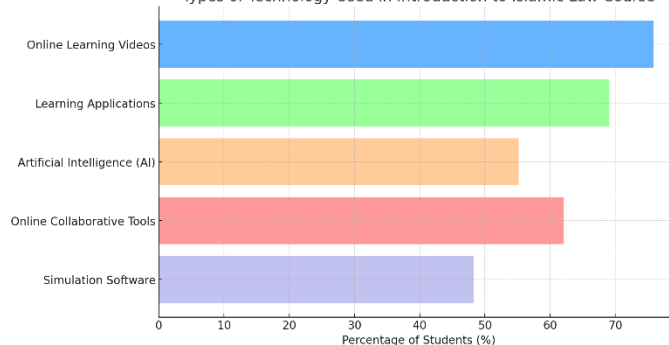


Figure 2: Types of Technology Used

Figure 2 provides a detailed insight into the types of technology most frequently used by students in this course. Online learning videos emerged as the most commonly used technology, with 75.9% of students reporting its use. This could be attributed to the convenience and effectiveness of videos as an interactive and engaging learning medium, allowing students to grasp Islamic legal concepts more clearly. Additionally, 69.0% of students use learning applications, indicating a strong preference for mobile platforms and digital apps that offer personalized and interactive learning content. Artificial intelligence (AI) is also utilized by 55.2% of students, signalling an increase in the adoption of advanced technologies that provide features such as chatbots, automated quizzes, and performance analytics. Other technologies, such as simulation software (48.3%) and online collaborative tools (62.1%), are also employed, illustrating the diverse range of technologies used to support learning.

Level of Satisfaction with the Use of Technology in Introduction to Islamic Law Course

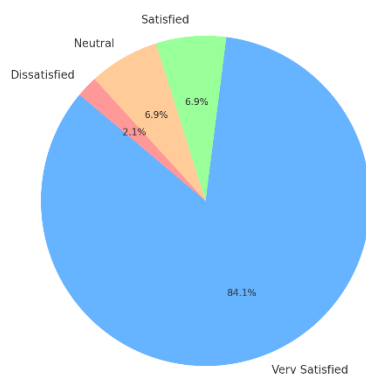


Figure 3: Level of Satisfaction with the Use of Technology

Figure 3 provides an overview of student satisfaction levels with the use of technology in the Introduction to Islamic Law course. Interestingly, 84.1% of students reported being very satisfied with the technology employed. This indicates that the majority of students feel that technology has facilitated their learning and enhanced their overall educational experience. Students likely appreciate the features of technology that allow for more flexible, interactive, and easily accessible learning. While a small percentage of students fall into the satisfied (6.9%) and neutral (6.9%) categories, only 2.1% of students reported dissatisfaction with the technology, making the level of dissatisfaction almost negligible. Overall, these statistics affirm that technology has had a positive impact on the students' learning experience, resulting in a very high level of satisfaction.

The Impact of Technology on Learning in Introduction to Islamic Law Course

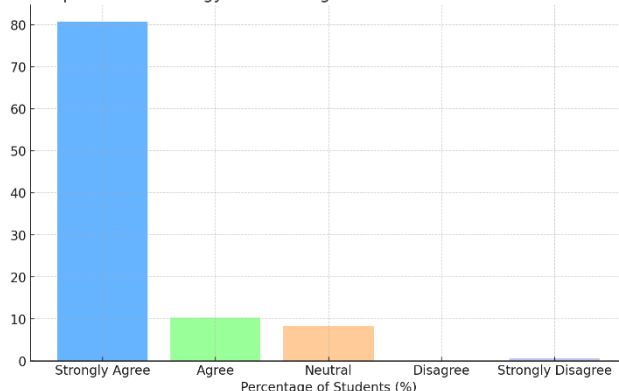


Figure 4: The Impact of Technology on Learning

Figure 4 presents students' perspectives on the impact of technology on their learning. A total of 80.7% of students strongly agree that technology has had a positive effect on their learning. This suggests that the majority of students feel that technology not only facilitates their learning but also helps them gain a deeper understanding of Islamic legal concepts. For example, technology like artificial intelligence may provide real-time feedback, allowing students to correct their mistakes immediately and accelerate their learning process. Additionally, 10.3% of students agree that technology has had a positive impact on their learning, making the overall positive response to technology remarkably high. Only 0.7% of students strongly disagree with this statement, indicating that very few students feel that technology does not have a positive impact. This data highlights the significant influence of technology in enhancing students' learning outcomes, particularly in the context of Islamic legal studies.

### Multiple Linear Regression Analysis

Using the Theory of Reasoned Action (TRA) approach, this study focuses on how Subjective Norms (SN) and Attitude (AT) towards technology influence students' Intention (IN) to use technology and AI in their learning. SN and AT are taken as independent variables, while IN is taken as the dependent variable.

The Cronbach's Alpha value obtained in this study is 0.708 for the three items used. This value indicates that the questionnaire instrument used in this study is reliable, with a good level of internal consistency, as shown in Figure 5 below:

Cronbach's Alpha	N of Items
.708	3

Figure 5: Reliability

Additionally, a higher F-value indicates that the model explains a significant amount of the variance in the dependent variable, compared to the variance unexplained (error). The p-value (Sig.) indicates the probability that the observed results are due to chance. A p-value of .000 suggests that there is a statistically significant relationship between the independent variables (Subjective Norms and Attitude) and the dependent variable (Intention). Since this value is less than the commonly used significance level of 0.05, we can reject the null hypothesis that there is no relationship, confirming that the independent variables significantly predict the dependent variable.

The regression analysis shows that Subjective Norms and Attitude significantly influence Intention, as indicated by a high F-value (13.776) and a statistically significant p-value (.000). The sum of squares (43.596) and mean square (21.798) further support the notion that the model has a strong explanatory power. This suggests that efforts to understand and enhance students' intentions to use technology and AI in learning should focus on shaping their subjective norms and attitudes. The strong predictive relationship highlighted by these results emphasizes the importance of targeting both psychological and social factors in educational interventions aimed at integrating technology and AI into Islamic law courses, as shown in figure 6:

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.596	2	21.798	13.776	.000 <sup>b</sup>
	Residual	226.274	143	1.582		
	Total	269.870	145			

a. Dependent Variable: IN

b. Predictors: (Constant), AT, SN

Figure 6: ANOVA

Model		t	Sig.
1	(Constant)	10.396	.000
	SN	.224	.823
	AT	3.871	.000

Figure 7: Coefficients

Further examination of the individual contributions of the independent variables reveals the following:

**Subjective Norms (SN):** The t-value for SN is .224, with a significance (p-value) of .823. This indicates that SN does not have a statistically significant impact on students' intentions to use technology and AI in this context. The high p-value suggests that the perceived social pressures or expectations from peers and educators do not significantly influence students' decisions.

**Attitude (AT):** The t-value for AT is 3.871, with a significance (p-value) of .000. This result shows that AT has a strong and statistically significant impact on students' intentions. A positive attitude towards technology and AI is a significant predictor of the intention to use these tools in learning Islamic law. The low p-value indicates that students who perceive technology and AI as beneficial, engaging, and valuable in enhancing their learning experiences are more likely to adopt these tools.

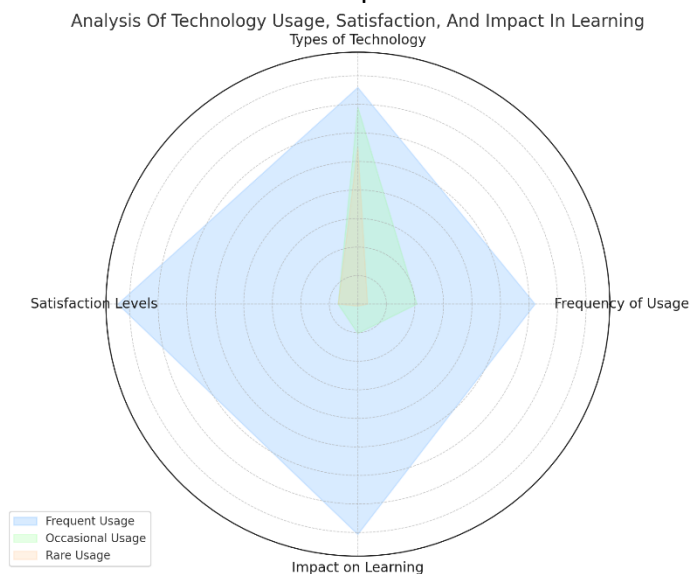
The findings from this study provide valuable insights into the factors influencing students' intentions to use technology and AI in Islamic law courses. The non-significant impact of Subjective Norms suggests that social influences or peer pressure may not play a crucial role in shaping students' intentions in this particular context. This could be due to the individualistic nature of decision-making in academic settings, where students may rely more on personal preferences and attitudes rather than external expectations.

Conversely, the significant positive impact of Attitude highlights the importance of students' perceptions and personal beliefs about technology and AI. This finding aligns with previous research, indicating that a positive attitude towards technological tools is a key driver of adoption and usage in educational contexts. Therefore, fostering positive attitudes towards technology and AI among students can be a crucial strategy for encouraging the use of these tools in learning Islamic law.



## Analysis and Discussion

Overall, the analysis shows that technology plays a very important role in student learning in the Introduction to Islamic Law course. Several patterns can be identified:



### High Technology Usage

The majority of students frequently use technology in their learning process. With 62.1% of students reporting high usage frequency, it is clear that technology has become an essential tool in deepening the understanding of Islamic legal concepts. This also indicates that technology has been successfully integrated into teaching and learning methods, making it a vital component of modern education.

### Diversity of Technology Types

Students are not limited to just one type of technology. Instead, they use various technological tools such as online learning videos, learning applications, and artificial intelligence (AI). This reflects the students' tendency to take advantage of the various technological resources available to enrich their learning experience.

### High Levels of Satisfaction

Student satisfaction with the use of technology is very high, with 84.1% of students reporting that they are very satisfied. This indicates that students not only use technology but also derive significant benefits from it. Technology seems to have facilitated access to information, accelerated learning, and enhanced the understanding of complex concepts.

### Positive Impact on Learning

A total of 80.7% of students strongly agree that technology has had a positive impact on their learning. This suggests that students feel technology helps them understand learning materials more deeply and effectively. This positive effect is further strengthened by the use of technological tools that provide real-time and interactive feedback.

Technology-mediated learning equips educators with valuable tools to enhance students' exposure to key learning outcomes within the classroom by offering a combination of offline and online resources (Gabarre et al., 2014). This integrated approach enables teachers to



diversify their instructional methods, incorporating digital platforms, interactive software, and offline materials such as textbooks or handouts, creating a more flexible and dynamic learning environment. By leveraging these resources, educators can provide continuous access to content, enabling students to engage with and reinforce their understanding both inside and outside the classroom, ultimately fostering deeper comprehension and improved learning outcomes. Technology has proven to be an effective tool in the Introduction to Islamic Law course, with the majority of students using and benefiting from various types of technology. The high student satisfaction and acknowledgment of the positive impact of technology indicate that the integration of technology in education is the right step and adds significant value to the learning process. This also reflects that the future of education, particularly in the context of legal studies, increasingly depends on technology to provide a more comprehensive and inclusive learning experience.

### Conclusion

This study demonstrates that the use of technology and artificial intelligence significantly impacts students' mastery levels in the Introduction to Islamic Law course. Students reported high levels of satisfaction and showed marked improvement in their understanding and analytical skills regarding Islamic legal concepts (Karimullah, 2023). The results suggest that higher education institutions should continue to expand the use of technology in legal education to enhance the student learning experience.

Technology has proven to be highly beneficial, especially in courses that require the application of theory to practical situations, such as Islamic law. Expanding the use of technologies like artificial intelligence (AI) and simulation software in law-related courses can significantly enhance the educational experience by providing students with interactive and immersive learning opportunities. These tools allow students to engage in realistic legal scenarios, apply theoretical knowledge to practical situations, and receive instant feedback, thereby deepening their understanding of complex legal concepts.

For these technologies to be fully effective, it is crucial that instructors are well-trained in their use. Professional development and training programs focused on the latest educational technologies can equip instructors with the necessary skills to integrate these tools into their teaching practices, ensuring that students benefit from their full potential. Additionally, as technology continues to evolve, it is important for educational institutions to support ongoing research into the long-term effects of technology in legal education. Such research can help identify best practices, assess the effectiveness of various tools, and guide the optimization of technology use to enhance learning outcomes. Through these combined efforts, the integration of technology in legal education can be more effectively aligned with the needs of students and the demands of the modern legal profession.

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