

# Microsoft Teams' impact on students' learning motivation and the development of their religious character at the PLN Institute of Technology



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## KEY WORDS

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Learning Motivation,  
Religious Character.

## ABSTRACT

Advances in information technology have brought significant changes in the world of education, including the integration of digital platforms such as Microsoft Teams in online learning. This study aims to analyze the influence of the use of Microsoft Teams on learning motivation and the formation of religious character of students at the PLN Institute of Technology. The research method used is a mixture of quantitative and qualitative, with data collection through structured questionnaires and in-depth interviews. The results of the study show that Microsoft Teams has a positive impact on student learning motivation, especially through interactive features such as chat rooms, file sharing, and video conferencing that support collaboration. Students feel more motivated in attending lectures, completing assignments, and actively participating in discussions. However, the effectiveness of this platform in shaping religious characters is still limited. Students showed improvements in online communication ethics, such as maintaining politeness, but the formation of in-depth religious values was more optimal in face-to-face learning that allowed for direct interaction.

## 1. INTRODUCTION

As information technology continues to advance, so does educational technology. Some terms such as big data, cloud computing, deep learning, digitalization have become very relevant for now (Pulimamidi, 2024). Immersion virtual reality technology will undoubtedly have a significant impact on the education sector (Dwivedi et al., 2022). In a similar vein, generative AI technology will undoubtedly advance, even though chatGPT and other genAI obviously have both positive and negative effects (Dwivedi et al., 2023).

Several findings regarding the application of

generative AI, and more especially ChatGPT, in education were obtained from three phases of research. The first stage demonstrated that, despite some voices approaching it cautiously, public discourse on social media was largely positive and enthusiastic about its use in educational settings. The second phase looked at ChatGPT from the perspective of educational transformation, emphasizing ethical issues, personality and emotions, usability, and response quality. Issues including cheating, honesty, ChatGPT's accuracy, privacy concerns, and manipulation were discovered during the last stage, which examined user experiences across ten educational scenarios. To guarantee the responsible and safe implementation of

chatbots such as ChatGPT in the classroom, these results point to areas that require more investigation (Tlili et al., 2023).

Since the Covid-19 pandemic, online education has become a popular approach. The spread of Covid-19, which at the time posed a significant threat to humanity, forced the closure of many global activities, including education. To mitigate the spread of the virus, educational institutions were compelled to transition to e-learning using available educational platforms, despite the challenges posed by this sudden transformation (Maatuk et al., 2022).

However, it is imperative that character education continue to advance, especially in this era of globalization. In the face of material and discursive effects on the urban scale, the interplay between the globalization of higher education and urban transformation—observed in transnational education zones—confirms the necessity of creating morally upright and responsible global citizens. (Kleibert et al., 2021). One of the most important values that students should possess is religious character. Songs as learning media provide an aesthetic experience for students and can also teach character, although they are often underutilized in this regard, as academics in many countries primarily use songs for memorizing foreign language vocabulary. A study conducted in Indonesia explored teachers' perceptions of using songs to develop students' religious character as a core aspect of the curriculum, revealing that religious songs can foster students' beliefs, worship, appreciation, knowledge, and morals, while also contributing to the development of national character (Julia et al., 2022).

Nevertheless, The foundation for a student's personal growth is learning motivation. During the coronavirus outbreak, gender differences

appeared to diminish as students were compelled to engage in more self-initiated learning, and it was observed that students at higher education levels tend to have higher expectations for academic achievement and significantly different readiness for online learning, highlighting the need for educators to design tailored online teaching contexts for students across varying educational levels (Tang et al., 2021).

The fact that many students are not aware of Ms. Teams' features restricts their ability to use them to the fullest extent possible for collaborative and academic purposes. They frequently fail to see how it can be used to integrate different tools, such as file sharing and task management, which can simplify group projects. Additionally, some students misjudge Ms. Teams' usability, which deters them from taking advantage of all it has to offer. There are those who doubt its dependability, believing that it might malfunction or lose information in crucial situations. Furthermore, many people overlook its special advantages designed for educational settings and believe it to be redundant in comparison to other platforms. These misunderstandings prevent Ms. Teams from being effectively used as an all-inclusive educational tool. Many students lack the drive to learn.

Religious students are still very uncommon because many students place more importance on their academic or professional objectives than their spiritual growth. This rarity is frequently explained by the fact that religious values are not given as much weight in contemporary educational systems, which instead prioritize knowledge and technical skills. Furthermore, in today's fast-paced, secularized world, some students might think that religious character is out of date or irrelevant. The necessity for

educational institutions to incorporate character-building initiatives that strike a balance between academic success and moral and spiritual development is highlighted by this circumstance.

## **2. METHOD**

This study uses both quantitative and qualitative methods to investigate how Microsoft Teams use affects students' motivation to learn and the development of their religious character. The degree to which Microsoft Teams affects students' motivation to learn is assessed quantitatively through the use of validated and measurable questionnaires for systematic data collection. Students at PLN Institute of Technology who use Microsoft Teams for their coursework make up the study's population. In order to ensure that the samples are representative of the current population and can cover a range of perspectives pertinent to the research objectives, stratified random sampling techniques will be used to collect the samples.

In the meantime, Microsoft Teams is utilized to thoroughly examine students' experiences with the development of their religious character using a qualitative approach. The goal of this qualitative approach is to obtain a more comprehensive understanding of how this platform influences or upholds students' religious character in the context of higher education.

## **3. RESULT AND DISCUSSION**

### **Descriptive Data**

In order to collect data, students enrolled in General Compulsory Courses (MKWU) were given an anonymous questionnaire. All PLN Institute of Technology (ITPLN) Faculty of Electricity and Renewable Energy (FKET)

students enrolled in the odd semester of the 2024–2025 academic year who take Pancasila, English, and Religion classes taught by researchers make up the study's population. The sample size was eleven responders. In order to guarantee that respondents can answer the questionnaire honestly and freely without worrying about criticism or having their identity damaged, it is anonymous. Because of this anonymity, there is less chance of bias if participants feel under pressure to give the researcher's desired or expected answers, which improves the validity and reliability of the data collected for this study. Furthermore, without sacrificing the validity of the results that can be obtained, small sample sizes can still include a range of viewpoints by employing anonymous questionnaires.

A student who is deemed active and capable of giving unbiased responses based on his Microsoft Teams experience is involved in the in-depth interview. The purpose of this interview is to thoroughly examine how the platform is utilized for both everyday tasks and educational purposes. This interview's primary goal is to ascertain how much Microsoft Teams helps students become more motivated to learn and develop their character, particularly in the areas of self-control, accountability, and the formation of religious values. It is anticipated that this method will offer a thorough summary of students' experiences using online learning tools and its consequences for both their academic and personal lives.

### **Impact of Microsoft Teams on Learning Motivation**

According to the findings of quantitative research, students' motivation to learn is positively impacted when Microsoft Teams is used in online instruction. According to the majority of respondents, lecturers frequently use



Microsoft Teams to deliver their course materials, and using the platform's posting and chat features facilitates easier interaction between instructors and students during lectures. This demonstrates how this platform can boost students' interest in the educational process. Most students also appreciate how easy it is to conduct lectures and finish assignments using Microsoft Teams. Despite a few respondents' technical issues, this platform was generally regarded as being very beneficial in streamlining the teaching and learning process. In addition, the use of Microsoft Teams has been proven to increase students' interest in attending lectures and encourage them to participate more actively in class discussions. More than half of respondents feel more comfortable learning using Microsoft Teams than offline learning methods, which shows that this platform is able to provide a sense of security and comfort in remote learning. The use of Microsoft Teams also contributes to increasing students' sense of responsibility for college assignments and obligations. Most respondents stated that the use of Microsoft Teams had a positive impact on improving their grades or understanding of the course, which reflects the effectiveness of this platform in supporting students' academic achievement. Overall, the results of this study confirm that the use of Microsoft Teams has a significant influence on increasing student learning motivation in higher education environments.

### **Role of Microsoft Teams in Religious Character Development**

Results of the in-depth interview:

The experience of PLN Institute of Technology students in using Microsoft Teams as an online learning platform shows various benefits and challenges. In general, students appreciate excellent features such as file sharing, recording learning, and taking screenshots, which are

considered very helpful in accessing materials and documenting the learning process. However, the effectiveness of online learning is highly dependent on the level of initiative and activeness of students.

In the context of religious character formation, the use of Microsoft Teams has a certain positive impact. Students tend to be more careful in communicating through chat facilities, by maintaining politeness and avoiding the use of emoticons or inappropriate comments. This reflects an increase in discipline and ethics in online communication. In addition, although discussions related to religious values are not often the main focus, Microsoft Teams is sometimes used to share information or discuss religious activities, including those related to student organizations.

However, there are limitations felt in online learning, especially in building religious character comprehensively. Some students stated that offline learning is more effective, especially for practice-based or numeracy-based courses, which require direct interaction. In addition, the accuracy of students in carrying out worship during online learning is more influenced by individual time management and lecturer approaches, compared to the platform features themselves.

In terms of learning discipline, Microsoft Teams helps some students to be more organized, with features such as scheduling, assignment collection, and discussion rooms. However, the impact on learning discipline is estimated to be felt by only about half of students. To support the formation of a more holistic religious character, many students consider offline learning to be a more ideal approach, as it allows for more in-depth and meaningful face-to-face interactions. Overall, Microsoft Teams plays an important role



in supporting online learning by facilitating more structured learning disciplines and communication. However, in terms of shaping students' religious character, the effectiveness of this platform is still limited, so it needs to be combined with a more personalized and interactive learning approach.

## **Discussion**

### **The Role of Microsoft Teams in Increasing Learning Motivation**

#### **Increased student engagement through interactive features.**

Using interactive elements in the learning process can result in higher levels of student engagement. Students can actively participate in group projects, discussions, and technology-based tests thanks to this feature, which aims to make the learning environment more dynamic. Using tools like online discussion boards, polls, and real-time tests can boost engagement and foster a sense of accountability for the educational process. Additionally, this interactivity gives students a forum to freely discuss, ask questions, and share ideas, making the learning process more inclusive and cooperative.

Using interactive elements in the learning process, such as video conferencing, can significantly enhance student engagement by providing real-time communication between teachers and students across different locations. Video conferencing enables active participation in group projects, discussions, and technology-based assessments, fostering a dynamic and inclusive learning environment. This synchronous communication model supports effective interaction through audio, visual, and verbal channels, reducing ambiguity often associated with asynchronous communication. Additionally, tools like polls, real-time tests, and online discussions encourage accountability,

enabling students to freely exchange ideas, ask questions, and collaborate more effectively in their educational journey (Rojabi et al., 2022).

#### **Easy access to materials and task management.**

This platform facilitates more dynamic interaction and collaboration between students and lecturers by offering features like task management, chat rooms, video conferencing, and integration with multiple learning support applications. Microsoft Teams serves as both a communication tool and a digital ecosystem that facilitates effective learning management in the context of technology-based education.

Microsoft Teams stands out as a robust platform for live videoconferencing and online collaboration due to several key features. It offers integrated audio and video calling capabilities, leveraging Skype technology for seamless communication. Additionally, Teams supports desktop sharing, which enhances collaborative efforts in both educational and professional settings. Compared to other platforms, Teams demonstrates an advantage in usability and functionality, providing tools that cater to diverse needs. While some platforms face challenges such as data vulnerabilities or high costs, Teams addresses these concerns by combining security and affordability. As a result, it holds significant potential to improve both satisfaction and usability for students and users engaging in online learning or collaborative activities (García et al., 2021).

#### **Student preferences for online vs. offline methods.**

Since learning motivation is the primary factor that propels students to realize their full learning potential, it is a crucial element of academic success. As a digital tool for communication and collaboration, Microsoft Teams has the ability to



establish a dynamic and adaptable learning environment that can boost students' intrinsic motivation.

A study highlights that one of the key concerns in online learning is the delivery of course or lesson activities. While students appreciated the efforts of instructors, the effectiveness of online learning in meeting intended learning outcomes scored the lowest among evaluated features (3.91 out of 7). This suggests that online methods, especially in practical and vocational programs like engineering, design, sports, hospitality, and culinary arts, fail to match the effectiveness of face-to-face learning.

Programs with a strong emphasis on hands-on practices, real-time feedback, and collaborative work are particularly demanding of offline methods. This preference arises because such activities are difficult to replicate effectively in an online setting. Therefore, while online learning has its advantages in terms of accessibility and flexibility, students in practical-oriented fields tend to favor offline methods for a more immersive and effective learning experience (Ho et al., 2021).

A study highlights that popular online platforms in Jordan include Zoom, Microsoft Teams, and WhatsApp. Online education has been beneficial during the pandemic but less effective than face-to-face learning. Key challenges include adapting to online education, particularly for hearing-impaired students, reduced interaction and motivation, technical issues, and data security concerns. Despite this, advantages such as self-paced learning, cost-efficiency, convenience, and flexibility were acknowledged. Blended learning is recommended as a balanced solution, combining easy access to materials and efficient task management (Almahasees et al., 2021).

### **The influence of platform features on communication ethics and discipline.**

Developing a religious character is not just a component of academic education; it is also a fundamental component that helps students stay motivated to learn even when faced with the difficulties of distance learning. By developing their religious character, students will be better equipped to stay focused on their academic objectives and overcome time and distance barriers. Additionally, it can establish a more responsible learning environment where students learn to grow as individuals in addition to achieving grades.

The COVID-19 pandemic has forced the adoption of online learning to ensure the continuity of education, although not all students have adequate internet access, devices, or technological literacy. Equity in online learning means providing equal opportunities for all students regardless of background. Online learning has advantages such as efficiency, flexibility, and the ability to adapt to various learning styles, but it also has negative impacts, such as the potential for academic cheating. Therefore, it is important for educators to be trained in online teaching by paying attention to equality issues. Online learning platforms must be designed to support communication ethics and discipline to keep learning professional and inclusive (S. Esteron, 2021).

### **The limitations of online learning in supporting the formation of religious character.**

Strong religious character and a strong desire to learn are key components that determine whether students will stick with their studies even in an unmonitored setting. Even when lecturers are not physically present, religious figures who uphold virtues like tenacity, accountability, and integrity can inspire students

to continue the caliber of their education.

Religious themes are crucial in distance learning, particularly because instructors are unable to physically monitor the students' progress. The lack of in-person interaction and direct supervision that students encounter in online learning environments can frequently lower their motivation and learning discipline.

In today's educational environment, using technology to balance religious and academic objectives is becoming a more significant challenge. Technology can serve as a link between the two, giving students access to scientific information without sacrificing the morals and ethics that are based on their religious beliefs. For instance, by offering resources that enhance spiritual and religious understanding in addition to academic skills, the use of technology in education can help to better integrate science and religious teachings. Through apps, educational videos, and discussion boards that address religious subjects, students can use the digital platform to access academic knowledge resources while also developing a deeper understanding of religion. Furthermore, character-based learning that emphasizes religious values in morality, decision-making, and social interaction is made possible by technology. As a result, technology is crucial in striking a balance between students' academic objectives and their religious beliefs.

Character education requires cooperation between online and offline approaches because online platforms are unable to adequately convey this information. While deep character values like empathy, responsibility, and integrity are easily accessible through online technology, they frequently necessitate more individualized social interactions and practical experience. Students can engage directly with classmates, instructors,

and the community through offline learning, which fosters emotional connections and a deeper comprehension of these principles. Through practical exercises, in-person conversations, and group reflection, students can internalize character values in addition to gaining academic knowledge thanks to the combination of these two approaches, which enables more comprehensive learning. Therefore, a combination of offline and online approaches is a good way to build students' character in a thorough and well-rounded way.

### **A curriculum development strategy that supports the formation of religious character in the digital era.**

An integrative approach between teaching religious values and using information technology is essential for curriculum development strategies that support the development of religious character in the digital age. In this situation, the curriculum must be created to emphasize both academic success and the development of a character grounded in deeply held religious beliefs. Integrating religious education resources that are pertinent to current topics, like digital ethics, cyberspace morality, and the influence of social media on social and spiritual life, is one tactic that can be used.

Digital technology must also be used to its fullest potential in order to enhance religious education. For instance, it can be used to offer an online learning platform that links students to religious resources like hadith, tafsir, and scholarly lectures. Students' grasp of religious teachings can be practically deepened through application-based learning and e-learning that encourage individual and group reflection on religious values.

Additionally, the curriculum should incorporate



practical components that help strengthen religious character, like leadership training based on religious values, community service projects, and mentorship programs involving religious leaders and community members. The integration of theoretical and practical elements will enhance the instillation of religious values in students' everyday lives and make use of technology to spread and reinforce religious moral teachings. In order to address the challenges of the digital age, the curriculum must be able to do so without diminishing the significance of religious values as the foundation for character development.

#### 4. CONCLUSION

Microsoft Teams has a significant influence on student learning motivation, one of which is by improving learning documentation that can be done better. Although this platform provides various features that can be used for religious character development, such as discussion forums and religious learning resources, face-to-face learning is still more effective in developing student character. Direct interaction allows students to deepen their religious values through practical experiences and deeper social learning. Thus, although Microsoft Teams provides ease of access and documentation, the combination with face-to-face learning remains an important element in shaping the religious character of students.

Optimizing Microsoft Teams features for religious value-based learning can be done by utilizing various available facilities, such as discussion forums, quizzes, and digital learning materials that can be accessed at any time. Through this platform, students can engage in learning that prioritizes religious values, such as ethics, morality, and social responsibility, both through online interaction and independent self-

development. However, to gain a deeper understanding of its effectiveness, further research with wider scope as well as longitudinal measurements is needed. This research will help identify the long-term impact of the use of technology in religious value-based learning, as well as evaluate the extent to which platforms such as Microsoft Teams can support the formation of religious character in various educational contexts.

The limitation of this study lies in the limited number of respondents and the population which only includes students of the Faculty of Electricity and Renewable Energy at ITPLN.

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