



Engaging Opportunities and Challenges: Students' Perspectives Towards Developing Islamic Education Learning Media

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Abstract

This research explored students' perspectives regarding the opportunities and challenges in developing Islamic Education learning media. Using a quantitative approach with a survey research design, the study distributed questionnaires to gather data on students' views. The results were further explored and interpreted using semi-structured interviews and observations to enrich the findings and provide deeper insights. The collected data was analyzed to identify patterns and trends in their perspectives. The research found that students viewed the learning media development as supporting accessibility and flexibility, enhancing learning quality, and fostering student potential and motivation. Conversely, students identified inequality in access, teacher roles and challenges, and the quality and usability of digital media as significant obstacles. These findings offered valuable insights for educators and learning developers in designing strategies for integrating digital learning media for Islamic Education. However, this study was limited to student perspectives, and further research involving other stakeholders is recommended to provide a more comprehensive understanding about the topic.

Keywords: Challenges, Learning Media, Perspective, Student

A. Introduction

The rapid development of digital technology in the 21st century led to significant changes in various aspects of life, including education. The utilization of digital-based learning media has become one of the main innovations adopted by many educational institutions to develop the effectiveness and efficiency of teaching and learning process. For example, the use of digital-based learning media to improve students' average analytical thinking skills (Hasan Lubis et al., 2021), support the practicality of learning for both students and teachers (Putri & Guspatni, 2022), and enhance children's language skills (Ghofur & Nurhayati, 2023). To meet the goal of learning objectives, modern education requires continuous improvement. In addition, continuous improvement aims to encourage more engaging and meaningful learning experiences for students (Darmayanti, 2023). Furthermore, the use of learning media will not only increase students' engagement and enthusiasm in learning, but also improve the quality of teaching and learning in all aspects. Specifically, the overall quality of learning includes several aspects, such as memorizing information, and involving students in exploration, problem-solving, and critical-thinking activities. As a result, students' ability to implement the knowledge and skills learned in daily life becomes more tangible. This approach aligns with authentic learning experiences. Consequently, with these learning experiences, students can not only enhance their creativity and critical thinking skills, but also develop their understanding of the taught concepts (Miswar et al., 2021).

The ability to master the technology used in the learning process today is used to measure the professional competence of teachers (Nurhayani et al., 2022). This is accordance with the conditions in the digital era where the use of information and communication technology is very prevalent and becomes an inseparable part of daily life (Tajibu et al., 2021). Therefore, on the field of education, improving the quality of learning, mastering, and utilizing technology is very important for teachers. Based on these demands, students, especially those in the field of education, must understand the importance of mastering technology in the learning process. The use of technology in education has become something cannot be avoided. Therefore, the existence of skill and competency development programs for technology mastery is important for prospective teachers. With the implementation of programs that involve understanding about the logic and mastering the operation of technology, prospective teachers are expected to be able to build more interactive, innovative, and engaging learning environments for

students. Additionally, mastering technology opens wide opportunities for teachers to access more varied and up-to-date learning resources as well as facilitate effective distance learning. Based on this issue, it is important to equip education students, including students of the Islamic Education Program at the Islamic University of Indonesia (UII), with these abilities. In the Islamic Education Program at UII, students has been taught about the ability to implement and develop educational media technology. The implementation of this knowledge has been taught through the "Sumber dan Media Pembelajaran" subject.

Conversely, the development of the Information Technology (IT) curriculum often neglects the involvement from the student's perspective. As a result, this condition allows for less-than-optimal impacts on the learning process and outcomes. To fulfill this need, this research was conducted to explore the view-points of Islamic Education Program students at UII regarding the opportunities and challenges of developing Islamic education learning media in the digital era. Based on the current background and conditions, it is important to believe that a deep understanding of students' perspectives is highly necessary because they, as future teachers, are the primary actors and main users of these media. Furthermore, students' perspectives can provide valuable insights for developing more effective strategies and policies in the implementation of digital technology in Islamic education. Ultimately, the results of this research will significantly contribute to the development of learning media that are not only innovative and effective but also meet the student's needs and support the values and principles of Islamic education.

Previous research had addressed the students' perspective on learning media development. Research by Burhani et. all showed the significant influence of students' perception of learning media on learning achievement (Candrasa & Cen, 2023). This research highlighted the importance of understanding students' perception on learning media, something that subsequently elaborated in our study in details. Other research described qualitatively students' perception on online learning media (Yuniar et al., 2022). However, Ota's research differed methodologically and conducted in more limited quantity and exploration of the data. Therefore, this study will foster deeper exploration of students' perception on learning media through more complex way of collecting data. The third research by (Nurmaliah & Nursyamsiah, 2020) also conducted qualitative research on students' perception of learning media. Using different methodology, Nurmaliah & Nursyamsiah work more focused on specific e-learning media (Youtube, Google

Meet, and Google Classroom) which hindered it from obtaining more general attitude towards learning media. Based on literature reviews above, the novelty of this research lies on the students' perspectives regarding the opportunities and challenges in developing Islamic Education learning media

B. Method

The present research implemented quantitative approach with a survey research design. The research subjects were students majoring in the Islamic Education Program at UII. To obtain purposive data related to their perspectives on educational learning media, the study specifically focused on students from the Islamic Education Program at UII who were currently taking the course "Sumber dan Media Pembelajaran." This focus was chosen because these students were prepared to understand and have the practical ability to develop learning media in Islamic education. Data collection was conducted through the distribution of questionnaires as the primary method, capturing quantitative data about students' views. To enrich the findings and provide deeper insights, the results were further explored and interpreted using semi-structured interviews and observations.

The questionnaire items were designed to measure students' perspectives on opportunities and challenges in developing Islamic Education learning media, with indicators including the accessibility, the learning quality, the motivation, inequality in access, teacher roles, and digital media usability. To ensure validity, content validity is assessed through expert judgment, and construct validity was tested using exploratory factor analysis (EFA). Reliability was evaluated using Cronbach's alpha, with a threshold of 0.7 for acceptable internal consistency. A pilot test was conducted with a small sample to refine the questionnaire before full-scale data collection.

Initially, a structured questionnaire was distributed to 59 students who were registered in the selected course. This instrument was designed to collect quantitative data on students' views about the opportunities and challenges in developing digital learning media. Following this, in-depth interviews were conducted with a purposively selected number of students. These methods were essential to obtain students' perspectives and experiences regarding specific challenges they face, opportunities they perceive, as well as their suggestions and recommendations for more effective development of learning media. Observation was also made during learning process in the class.

Data from the questionnaire, interviews and observation were analyzed descriptively and categorized thematically. Specifically, descriptive analysis was used to process the quantitative data from the survey, while thematic analysis was employed to identify the main themes from the qualitative interview data. By combining these approaches, the research aimed to provide a comprehensive overview of students' perspectives on the development of Islamic education learning media in the digital era.

C. Result and Discussion

In the current condition, marked by the massive and radical development of digital technology for Islamic education has brought about two different outcomes: opportunities and challenges. On one hand, it allows teachers to create more interactive and engaging learning experiences for students. On the other hand, it requires teachers to adapt their teaching methods and develop new digital competencies (Obaid, 2023). To maximize the potential opportunities and minimize the challenges, it is necessary to have a clear understanding of student's perspectives on the development of learning media in Islamic education. In the future, students will become teachers, and their experiences while being educated and accustomed to using digital gadgets daily will shape their teaching practices. Therefore, exploring students' perspectives on the development of Islamic education learning media in the digital era can provide not only insights but also valuable knowledge about the interesting possibilities and challenges they face.

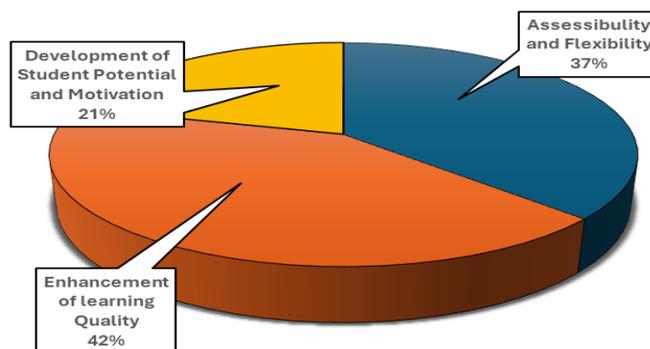
1. Opportunities in Developing Islamic Education Learning Media in the Digital Era

Based on the data obtained, the development of Islamic education learning media in the digital era presented several key opportunities. Firstly, opportunities for developing Islamic education learning media in the digital era could be classified into three types: accessibility and flexibility, enhancement of learning quality, and development of student potential and motivation. Specifically, accessibility and flexibility meant that students and teachers could easily accessing the learning materials at any time and from anywhere, making education more convenient and adaptable for their schedules. Additionally, it also meant for improving the quality of learning involved, enhancing both teaching methods and educational content, ensuring that students receive a richer and more effective education, developing student potential and motivation emphasizes how digital

media can inspire students, and boosting their intrinsic motivation and fostering personal growth.

The results of the observation showed that the Islamic Religious Education Study Program provided substantial facility supports to realize these opportunities. The facilities available included a fully equipped computer laboratory, an Islamic Religious Education laboratory that could be used for various practical and learning activities, a learning studio space, high-speed internet access, and a learning platform and various licensed digital software. These facilities were actively used for teaching and student projects to create and evaluate digital-based learning media. These resources supported students and lecturers to innovate and experiment with various tools and techniques to develop effective media. In addition, budget allocation for education and teaching became the focus of budget management at the study program level. To support the education process, various funding support from departments and various directorates at the university were also available in grants. For example, learning development grants, book writing grants, and various grants related to learning provided by the Directorate of Academic Development (DPA). Various research and publication grants provided by departments and the Directorate of Research and Community Service (DPPM) also greatly supported the development of the learning process. These efforts collectively increased the program's capacity to utilize digital advances in Islamic education.

Chart 1. Opportunities in Developing Islamic Education Learning Media



The pie chart on Opportunities in Developing Islamic Education Learning Media illustrated that there were three opportunities in developing Islamic learning media: accessibility and flexibility, enhancement of learning quality, and development of student potential and motivation. The results indicated that the largest opportunity, chosen by 42% of respondents, was the development of

learning media to enhance learning quality. Secondly, 37% of students chose accessibility and flexibility, indicating that digital platforms enable learners to access educational materials anytime and anywhere, thus accommodating diverse learning schedules and environments. Thirdly, 21% selected the development of student potential and motivation, suggested that digital learning tools could foster greater student engagement, creativity, and enthusiasm for learning.

a. Accessibility and Flexibility

Digital technology makes it simple for students to reach learning resources and materials for Islamic religious education. Respondents mentioned several factors that contribute to this accessibility and flexibility.

Tabel 1. Indicator of accessibility and flexibility.

No	Indicators	Numbers of Respondents
1.	Flexible and inclusive	31
2.	Easy access to learning resources	15
3.	Supports collaboration and knowledge exchange	10

This research outcome highlighted insight into the implementation of learning media development in Islamic education. The research findings indicated that the main opportunity in developing Islamic religious education learning media in the digital era is accessibility and flexibility (Rizqi et al., 2020). This fact underscored the importance of making learning resources accessible and flexible for students (Maamun Abdullah, 2019). Furthermore, the findings highlighted that flexible and inclusive learning media in teaching are highly valued by respondents. To meet this condition, adaptive and customized learning experiences were required to cater to the diverse needs of students in Islamic education. This could certainly be achieved using digital platforms, which allow easy access to learning resources such as e-books or online databases (Rizqi et al., 2020). These platforms provided students with the opportunity to obtain learning flexibility that suited both their conditions and chosen environments. In the end, this results showed that students gain a more meaningful learning experience (Wang et al., 2020).

Furthermore, this research also yielded findings that showed digital learning media supported collaboration and knowledge exchange among students. This demonstrated by several opportunities, such as students collaborating with their peers, engaging in discussions, and sharing knowledge and ideas, thereby

enhancing their learning experience in Islamic education (Rizqi et al., 2020). The research findings emphasized that accessibility and flexibility were crucial in developing effective learning media for Islamic education. In accordance, results also revealed the importance of learning resources that are easily accessible, adaptable, and inclusive, enabling students to learn at their own pace and in their preferred environment. This research also indicated that using digital platforms and resources can provide flexibility and inclusivity in Islamic education (Wang et al., 2020). Additionally, these digital platforms could support collaboration and knowledge exchange among students, fostering a more interactive and engaging learning environment (Maamun Abdullah, 2019).

b. Enhancement of Learning Quality

Improving learning quality becomes one of the goals of developing Islamic education learning media (Maamun Abdullah, 2019). In the current digital era, there is a significant opportunity to enhance the quality of Islamic religious education through the development of learning media. Table 2 provided indicators of opportunities that chosen for improving the quality of learning, based on respondents' answers.

Tabel 2. Indicator of enhancement of learning quality

No	Indicators	Numbers of Respondents
1.	Facilitating knowledge transfer	15
2.	Improvement in content quality	13
3.	Advancement in technology development	6
4.	Efficient and effective learning	11
5.	Engaging and interactive learning	16
6.	Improving teacher quality	1

Findings from the previous chapter explained that knowledge transfer was one of the indicators of improving the quality of learning, which was a result of the development of Islamic education learning media in the digital era. This was supported by data containing responses from 15 respondents, affirming that digital learning media could facilitate the transfer of knowledge from teachers to students. Additionally, similar support was found in research findings highlighting that the development of learning media could lead to an improvement in content quality (Wang et al., 2020). Thirteen respondents specifically stated that the use of digital platforms and resources created opportunities for Islamic education to

provide more comprehensive and accurate learning content (Maamun Abdullah, 2019).

Another research finding related to the improvement in learning quality was the advancement of technology. Six respondents mentioned that the development of learning media in the digital era allowed for the integration of advanced technologies, such as augmented reality and virtual reality, which could enhance the learning experience and made it more engaging for the students (Hermita et al., 2023). Moreover, research findings indicated that the use of learning media in Islamic education could promote efficient and effective learning (Maamun Abdullah, 2019). Eleven respondents highlighted that digital learning media could optimize the use of time and resources, resulting in more efficient and effective learning (Al Hakim et al., 2023).

The development of learning media in the digital era has significantly contributed to creating engaging and interactive learning experiences, as evidenced by the findings of this research. Sixteen respondents highlighted that digital learning media allows students to actively participate and explore content, thereby fostering a more interactive and engaging learning environment. Additionally, other research findings supported the notion that the advancement of learning media in the digital age could improve the quality of teachers. One respondent noted that digital learning media equips teachers with new tools and resources, directly enhancing their teaching methods and strategies (Yamamoto et al., 2017).

c. Development of Student Potential and Motivation

In the development of Islamic education learning media, there are important aspects to be developed, namely the development of students' potential and motivation (Maamun Abdullah, 2019). This is also stated by Yamamoto who emphasize that digital media provides various tools and resources that can help students realize their full potential and increase their motivation to learn (Yamamoto et al., 2017). Interactive and engaging learning experiences result in several things, including first, students can explore their interests; second, they can develop critical thinking skills; and third, they can utilize their creativity. Table 3 contains indicators of the development of students' potential and motivation based on respondents' answers.

Tabel 3. Indicator of development of student's potential and motivation

No	Indicators	Numbers of Respondents
1.	Exploration of student potential and creativity	11
2.	Boasting motivation enthusiasm	8
3.	Active learning and varied learning experiences	9
4.	Improvement in learning achievement	3

Research findings indicated that the development of Islamic education learning media in the digital era had the potential to enhance student potential and motivation (Hermita et al., 2023). The findings of this research revealed that there were various indicators of the development of potential and motivation that emerge from the use of digital learning media. Specifically, eleven respondents expressed that the presence of digital media provided them with a means to express themselves and hone their talents. Moreover, this was also supported by findings from eight other respondents about the increase in their motivation and enthusiasm for learning due to the more engaging and interactive nature of the learning presented. Additionally, nine respondents stated that they participated more actively and gained a deeper understanding of the lesson materials utilizing digital media (Martin & Betrus, 2019). This active involvement contributes to the overall improvement in their academic achievements, as reported by three respondents (Yamamoto et al., 2017).

Overall, the research findings indicated that the development of digital learning media for Islamic education in the digital era brought a positive contribution to students' potential and motivation (Hermita et al., 2023). Furthermore, the development of this learning media also provided several opportunities for students, including the chance to explore their potential and creativity, increase motivation and enthusiasm, facilitate active learning and varied experiences, and contribute to overall academic achievement improvement (Brooks et al., 2014).

2. Challenges in Developing Islamic Education Learning Media in the Digital Era

Students of Islamic religious education had filled out a questionnaire and revealed challenges in the development of learning media for Islamic religious education in the digital era. Furthermore, these challenges were categorized into

three types: inequality and accessibility, the role and challenges of teachers, and the quality and utilization of digital media.

One of the most significant challenges was the weakness of human resources, especially lecturers, some of whom lack digital literacy and expertise in developing innovative learning media. This limitation hinders the ability of Islamic religious education study programs to fully integrate and utilize digital devices in teaching. In addition, limited internal budgets could be a challenge. Budget management for the learning process is not only for the development of learning media, but also for many other aspects. This encouraged the study programs to create a priority scale in managing their budgets.

To overcome these weaknesses, various efforts had been made by study programs. Among them were collaborating with departments to organize programs to improve lecturers' digital competencies. In addition, study programs were active in seeking external funding to improve learning facilities, collaborating with technology providers and education stakeholders. These steps aimed to create an environment that supports lecturers and students with the tools and skills needed to address the challenges of developing Islamic education learning media in the digital era.

Chart 2. Challenges in Developing Islamic Education Learning Media

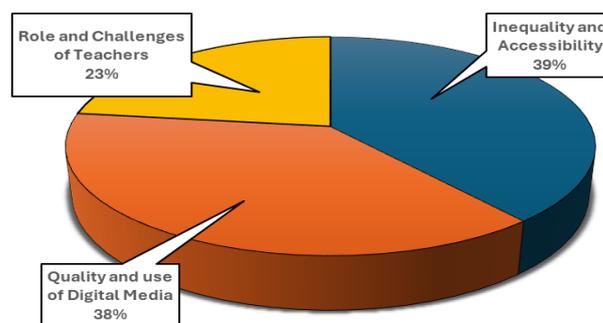


Chart 2 illustrated the challenges of inequality and accessibility as the most dominant issue. Mentioned by most respondents, 39%, this indicated barriers not only in the ability to access and master digital technology, but also economic disparities that impact both students and teachers. In second place, 38% of respondents mentioned other challenges such as the widespread misuse of media, the proliferation of hoax content, the lack of quality content providers, disruptions in learning, and dependence on technology. Thirdly, 23% of respondents expressed concerns about the declining role of teachers in the education process.

Consequently, this poses threatened to their careers and increases demands for them to adopt and integrate new technologies. These findings underscored various obstacles that need to be addressed to effectively leverage digital media in Islamic education

a. Inequality and Accessibility

In the digital age, creating learning media for Islamic education experienced serious conditions both in its inequality and in its accessibility. The unequal distribution of digital resources and technology among students poses a potential barrier to their participation and benefit from digital learning tools (Tyagi, 2019). Consequently, students living in remote areas or with limited internet access may encounter challenges in effectively utilizing digital learning platforms (Bhati et al., 2023).

Tabel 4. Indicator of inequality and accessibility

No	Indicators	Numbers of Respondents
1.	Inequality of accessibility	23
2.	Inequality in digital technology proficiency	23
3.	Economic disparity	3

The findings of this research had underscored this challenge, where 23 respondents expressed concerned about experiencing inequality in accessing digital resources (Tyagi, 2019). These respondents stated that various factors can hinder their ability to fully engage with learning materials and activities due to uneven technology access (Bhati et al., 2023). Furthermore, they also claimed differences in proficiency in using digital technology, indicating that not all students have the same level of skills and knowledge to effectively utilize digital devices in learning. Additionally, 2 respondents identified economic disparities as a factor causing inequality in access to digital resources (Yuliani, 2019). Essentially, these economic disparities exacerbated accessibility inequalities because students from low-income backgrounds may not have the financial capability to purchase necessary technology or reliable internet connections.

b. Role and Challenges of Teachers

In the implementation of digital learning media in Islamic education, teachers play a crucial role. On the other hand, this poses a serious challenge to overcome. Teachers are responsible not only for designing learning models but

also for ensuring the smooth delivery of effective digital learning content. Moreover, they also play a role in guiding and supporting students throughout their learning journey (Brouwer et al., 2013). Therefore, it is evident that the transition to digital learning media presents new challenges for teachers (Al-Hunaiyyan et al., 2021).

Tabel 5. Indicator of role and challenges of teachers

No	Indicators	Numbers of Respondents
1.	Threats to teacher careers	8
2.	Reduced role of teachers in the educational process	14
3.	Greater demands on teachers	6

Several significant findings emerged from the study on the challenges faced by teachers in developing digital learning media for Islamic education. Eight respondents expressed concern that traditional teaching methods threaten teachers' positions and could jeopardize their careers in the future. Additionally, 14 respondents voiced apprehension over the diminishing role of teachers in the educational process due to the introduction of digital learning media. They perceive that technology had the potential to replace the need for direct teaching and guidance from teachers (Valverde-Berrocso et al., 2022). They also recognized another crucial aspect: the suboptimal development of character traits in this shift of the teaching role. Six respondents noted that using digital learning media places greater demands on teachers to adapt in various ways (Yuliani, 2019). Teachers today required new knowledge and skill training related to technology use, digital content creation, and online teaching methodologies to effectively integrate digital learning media into Islamic education practices (Brouwer et al., 2013). These findings highlighted the new insights that the roles and challenges of teachers in developing digital learning media for Islamic education need careful consideration.

c. Quality and Use of Digital Media

The quality and utilization of digital media pose another equally important challenge to consider. In this digital era, ensuring the quality of digital learning materials and their effectiveness is crucial for Islamic education. In learning, content, design, and pedagogical approaches are closely intertwined in creating

digital media, so teachers need to ensure their relevance, accuracy, and impact on students' learning experiences.

Tabel 6. Indicator of quality and use of digital media

No	Indicators	Numbers of Respondents
1.	Widespread misuse of media	10
2.	Proliferation of hoax content	17
3.	Lack of quality content providers	5
4.	Distractions in learning	9
5.	Dependence on technology	5

Table 6 showed several challenges related to the quality and utilization of digital media in developing Islamic education learning media in the digital era (Yuliani, 2019). These challenges included, firstly, the widespread misuse of media; secondly, the uncontrolled spread of hoax content; thirdly, the lack of quality content providers; fourthly, disruptions in learning; and fifthly, dependency on technology (Kustitskaya et al., 2020). Based on research findings, 10 respondents mentioned media misuse as a significant challenge in developing Islamic education learning media (Syukron et al., 2020). They noted that inappropriate and harmful content can easily be accessed and shared, thus negatively impacting the learning process. Furthermore, 17 respondents highlighted the issue of hoax content. They expressed concerns about the dissemination of un true information that could mislead students and hinder their understanding of Islamic teachings.

Five respondents emphasized the lack of quality content providers, claiming a shortage of reliable and credible Islamic educational materials in digital media. Students face difficulty finding accurate and trustworthy information (Yuliani, 2019). Additionally, nine respondents identified disruptions in learning as a challenge (Kustitskaya et al., 2020). They pointed out that the use of digital media sometimes causes disturbances, such as irrelevant social media ads or notifications, which can affect students' concentration on learning materials (Yuliani, 2019). Lastly, five respondents mentioned dependency on technology (Jampala & Shivnani, 2019). The existence of digital devices and platforms for learning raises concerns about dependence on these media, leading to a decline in the ability to engage in traditional forms of learning, such as reading physical books or participating in face-to-face discussions (Dontre, 2021).

D. Conclusion

To conclude, this research had outlined various perspectives of students regarding the opportunities and challenges in developing digital learning media for Islamic education have been outlined. These perspectives underscored the potential of developing learning media to support accessibility and flexibility, enhance learning quality, and foster students' potential and motivation. On the other hand, this research also highlighted potential challenges in learning, including issues of inequality and accessibility, the role and challenges of teachers, and the quality and utilization of digital media. These insights were valuable not only for educators but also for learning developers in providing them with strategies to effectively integrate digital learning media into Islamic education. Based on these findings, stakeholders, in the future, can strive to create an inclusive, innovative, and impactful learning environment that aligns with the evolving needs of students in the digital age, while addressing the challenges and leveraging the opportunities previously discussed.

However, this research had certain limitations. It primarily focused on student perspectives, without incorporating views from other stakeholders such as teachers, administrators, or policymakers. Additionally, the study was limited to a specific academic program, which may restrict the generalizability of its findings. For future researchers, it is suggested to broaden the scope by including diverse stakeholders to provide a more comprehensive understanding of the challenges and opportunities in developing digital learning media. Comparative studies across different institutions or regions could also offer valuable insights into varying contexts and practices, enriching the discourse on this critical topic.

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