



## USE OF LEARNING MEDIA IN FORM PLATFORM LINK AT THE COLLEGE OF TARBIYAH SCIENCE OLD PADANG OF OLD MOUNTAIN

### PENGGUNAAN MEDIA PEMBELAJARAN DALAM BENTUK LINK PLATFORM DI FAKULTAS ILMU TARBIYAH PADANG LAMA GUNUNG TUA

Ahmad Ihsan Pardamean Siregar<sup>1\*</sup>, Irpan Haj Siagian<sup>2</sup>, Zulhimma<sup>3</sup>

<sup>1</sup>Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidempuan, Email: [ahmadihsanpardameans@gmail.com](mailto:ahmadihsanpardameans@gmail.com)

<sup>2</sup>Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidempuan

<sup>3</sup>Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidempuan, Email: [zulhimma2211@gmail.com](mailto:zulhimma2211@gmail.com)

\*email koresponden: [ahmadihsanpardameans@gmail.com](mailto:ahmadihsanpardameans@gmail.com)

DOI: <https://doi.org/10.62567/micjo.v3i1.2089>

#### Abstract

This research examines the implementation and effectiveness of using learning media in the form of link platforms for students at the Islamic Education College (STIT) Padang Lawas Gunung Tua as a form of Community Service (PKM). This activity aims to improve digital literacy and pedagogical technology competence of students as prospective educators in the digital era. The implementation method involved 3rd and 5th semester students through two intensive training sessions that included concept presentations, technical demonstrations, and hands-on practice in creating link platform-based learning media such as Google Sites, Canva, and simple Learning Management Systems (LMS). Evaluation results show that this training successfully improved students' understanding of technology concepts and applications in learning. There was an increase in practical skills in managing digital content, creating interactive media, and integrating multimedia in one easily accessible platform. Students also demonstrated new awareness about the importance of digital literacy and ethics in using online content. Additionally, a commitment emerged to apply these skills in future teaching practices. It is concluded that this hands-on practice-based training is effective in strengthening students' pedagogical technology competencies while also contributing positively to developing the quality of prospective educators at STIT Padang Lawas Gunung Tua. Similar sustainable activities with intensive mentoring are recommended to strengthen impact and build a sustainable digital learning ecosystem.

**Keywords :** Digital Learning Media, Link Platform, Digital Literacy, Pedagogical Technology, Islamic Higher Education.



### Abstrak

Penelitian ini mengkaji implementasi dan efektivitas penggunaan media pembelajaran berupa platform link bagi mahasiswa Sekolah Tinggi Ilmu Tarbiyah (STIT) Padang Lawas Gunung Tua sebagai bentuk Pengabdian kepada Masyarakat (PKM). Kegiatan ini bertujuan untuk meningkatkan literasi digital dan kompetensi teknologi pedagogis siswa sebagai calon pendidik di era digital. Metode implementasi melibatkan mahasiswa semester 3 dan 5 melalui dua sesi pelatihan intensif yang mencakup presentasi konsep, demonstrasi teknis, dan praktik langsung dalam membuat media pembelajaran berbasis platform tautan seperti Google Sites, Canva, dan Sistem Manajemen Pembelajaran (LMS) sederhana. Hasil evaluasi menunjukkan bahwa pelatihan ini berhasil meningkatkan pemahaman siswa tentang konsep dan aplikasi teknologi dalam pembelajaran. Terjadi peningkatan keterampilan praktis dalam mengelola konten digital, membuat media interaktif, dan mengintegrasikan multimedia dalam satu platform yang mudah diakses. Siswa juga menunjukkan kesadaran baru tentang pentingnya literasi digital dan etika dalam menggunakan konten online. Selain itu, muncul komitmen untuk menerapkan keterampilan ini dalam praktik pengajaran di masa depan. Disimpulkan bahwa pelatihan berbasis praktik langsung ini efektif dalam memperkuat kompetensi teknologi pedagogis mahasiswa sekaligus berkontribusi positif terhadap peningkatan kualitas calon pendidik di STIT Padang Lawas Gunung Tua. Kegiatan berkelanjutan serupa dengan pendampingan intensif direkomendasikan untuk memperkuat dampak dan membangun ekosistem pembelajaran digital yang berkelanjutan.

**Kata Kunci :** Media Pembelajaran Digital, Tautan Platform, Literasi Digital, Teknologi Pedagogis, Perguruan Tinggi Islam.

## 1. INTRODUCTION

The transformation of education in the digital era has become an unavoidable global phenomenon.(Kholifah, 2022)The Industrial Revolution 4.0 has fundamentally changed the educational landscape, requiring educators to not only master the content of teaching materials but also to be able to integrate technology into the learning process. Advances in information and communication technology have created a new paradigm in education, where learning is no longer limited to conventional classrooms but can be accessed anytime and anywhere through digital platforms.(Ghazy et al., 2025)This situation presents both an opportunity and a challenge for higher education institutions, particularly Islamic universities, to prepare prospective educators who not only possess strong pedagogical and personal competencies but also possess adequate technological competencies.

The concept of Technological Pedagogical Content Knowledge (TPACK) is a highly relevant framework in this context. TPACK is an integration of three main knowledge domains: technological knowledge, pedagogical knowledge, and content knowledge, which modern educators must master.(Suradi, 2025)Mastery of these three domains enables teachers to design learning that is not only pedagogically effective but also optimally utilizes technology to improve the quality of learning. In the context of Islamic higher education, mastery of TPACK becomes increasingly important because prospective educators are not only required to teach science but also to instill Islamic values that are in line with current developments.(S, 2025).

The Padang Lawas Gunung Tua Islamic Education College (STIT), as the only Islamic university in North Padang Lawas Regency, has a strategic responsibility to produce qualified future educators who are ready to face the challenges of the digital era. With a vision of



becoming a study program capable of producing academically superior educators with Islamic character, professionalism, and independence, STIT Padang Lawas is committed to continuously improving the quality of learning and the competencies of its students. However, initial observations indicate that although students are familiar with the use of social media and digital applications for personal purposes, their ability to transform these technologies into systematic and effective learning media still needs to be improved.

The gap between technology use for entertainment and educational purposes is a problem that requires serious attention. Many students are highly adept at using digital platforms like Instagram, TikTok, or WhatsApp for communication and entertainment, but struggle to use the same platforms or other platforms to create structured and interactive learning content. This situation highlights the need for planned educational interventions to help students understand that technology is not just a communication tool but also a powerful learning medium when used appropriately. The ability to curate digital content, integrate multimedia, and present it in formats that are easily accessible to students are essential competencies for aspiring educators in the 21st century.

The use of link platform-based learning media offers practical and efficient solutions to overcome various obstacles in modern learning. (Alfiansyah, 2024) Platform links like Google Sites, Canva for Education, Padlet, or a simple Learning Management System (LMS) allow educators to integrate various types of content in one easily accessible location. Students simply click a single link to access all learning materials, from text and images to videos and interactive quizzes. This approach is not only time- and cost-efficient but also facilitates more flexible learning that can be tailored to individual learners' needs. Furthermore, using platform links also helps educators manage and organize learning materials more systematically, making the learning process more structured and easier to evaluate.

Based on this background, the Community Service (PKM) program is designed to provide practical training to STIT Padang Lawas students in using link-based learning media platforms. This activity is expected to improve students' pedagogical technology competencies, strengthen their digital literacy, and prepare them to become adaptive and innovative educators in the digital era. Thus, STIT Padang Lawas can contribute significantly to improving the quality of Islamic education in North Padang Lawas Regency and its surroundings, while also addressing the challenges of educational transformation in the era of the industrial revolution 4.0.

## 2. RESEARCH METHOD

This Community Service (PKM) activity was held in the Lecture Hall of the Padang Lawas Gunung Tua Islamic Education College (STIT), North Padang Lawas Regency, involving 50 students of the Islamic Religious Education Study Program. Participants were divided into two groups, namely 5th semester and 3rd semester students. 5th semester students were focused on training in developing digital learning media that are more applicable for teaching practice needs, while 3rd semester students were directed to strengthening digital



literacy and introducing the use of platform links as a basis for supporting academic activities. The activity was carried out in two sessions, each on November 7 and 14, 2025, in the afternoon so as not to interfere with the regular lecture schedule.

The activity began with a preparatory phase, which included coordination with campus officials, the development of training modules, and the provision of supporting facilities such as technological devices and internet connections. The implementation phase involved interactive lectures, demonstrations, and hands-on practice. The fifth-semester student session focused on the concept of digital learning media and the creation of link-based content, while the third-semester student session focused on digital literacy, the ethics of online content use, and collaborative practices using link-based platforms.

The evaluation phase is conducted by analyzing the results of the practical assessment rubric, satisfaction questionnaire, and participant observation during the activity. The evaluation results serve as the basis for compiling the PKM report and providing recommendations for developing similar programs in the future. As a follow-up, the implementation team also provides mentoring for students who wish to further develop digital learning media. This systematically designed implementation method aims to ensure that PKM activities are effective, measurable, and have a real impact on improving digital literacy competencies and students' ability to utilize technology as a learning medium.

### 3. RESULTS AND DISCUSSION

#### a. Result

The implementation of the PKM activity on the development of link-based learning media platforms at STIT Padang Lawas resulted in a real change in the mindset and competency of students as future educators. In the initial stage, most participants still had a limited understanding of the use of technology in learning and tended to view digital media only as a presentation tool. However, after participating in a series of material presentations, discussions, and direct practice, students began to understand that technology is an integral part of learning strategies that must be integrated with pedagogy and content in a harmonious manner. This understanding is in line with the demands of 21st-century education, which places digital literacy competency as one of the main skills for prospective teachers.(Fajriyah, 2018)Therefore, this change in mindset is an important foundation for strengthening students' professionalism as future educators.

The improvement in students' conceptual understanding was evident from the initial and final evaluations. Students who were previously unfamiliar with the concept of Technological Pedagogical Content Knowledge (TPACK) were now able to explain the relationship between technology, teaching strategies, and learning materials. They were also able to develop learning plans that combined the use of digital media with active learning methods. These results indicate that the PKM activity significantly improved students' technological pedagogical literacy. This finding aligns with the view that mastery of TPACK is an indicator of teacher readiness in managing technology-based learning.(Rosmaladewi et



al., 2023). Thus, this activity is not only technical training, but also strengthens students' conceptual foundation in designing innovative learning.

In addition to the conceptual aspects, this activity resulted in improved practical skills in designing digital learning media for students. Fifth-semester students were able to create a prototype of Google Sites-based learning media that included structured materials, explanatory videos, infographics, and interactive practice questions in one integrated link. Meanwhile, third-semester students were able to manage learning materials through Google Drive, create collaborative documents, and share learning content with appropriate access settings. The resulting work demonstrates that students have acquired basic skills in developing applicable digital learning media. These skills are important because digital learning media can increase student learning engagement. (Paling et al., 2024) With these provisions, students are expected to be able to apply the results of this training in teaching practice in the field.

This activity also encouraged student creativity in presenting learning materials. The use of design applications like Canva for Education helped students produce engaging and communicative visual media. They were able to create digital posters, infographics, and interactive presentations relevant to the teaching material. This creativity demonstrated that students understood technology not only as a technical tool but also as an effective learning communication tool. This aligns with the principle that good visual design can improve students' information absorption. (Hasanudin, 2025) Therefore, strengthening digital creativity is one of the important achievements of this PKM activity.

Another important outcome is the growing awareness of digital ethics and information literacy among students. Students are beginning to understand the importance of respecting copyright, citing sources, and verifying information obtained online. Furthermore, they understand the importance of maintaining data privacy and ethical communication in the digital space. This shift in attitude is evident in the students' commitment to improving their work by including source attribution and selecting legally licensed content. This awareness is crucial for students to develop the character of responsible educators in the digital space. (Farid, 2023). Thus, the digital literacy that is built is not only technical, but also ethical.

In addition to these achievements, the PKM activity also provided students with real-world experience in navigating the challenges of using learning technology. Internet network constraints, differences in participants' initial abilities, and limited training time were all part of the process. Through intensive mentoring, group work, and peer mentoring strategies, all students successfully completed the practical assignments. Thus, the PKM activity not only improved technological competence but also honed students' adaptability, collaboration, and problem-solving skills as future educators.

## **b. Discussion**

The results of the PKM activity show that improving students' understanding of the TPACK concept is the main foundation for building pedagogical competence in the digital era. Prior to the training, students did not fully understand that the success of digital learning is determined by the integration of technology, teaching methods, and material content. After



participating in the training, students were able to see the interconnectedness of these three aspects as an inseparable whole. This change in perspective is an early indicator that the PKM activity has successfully instilled a 21st-century learning paradigm. Improving conceptual understanding of TPACK is an early indicator of the success of the training program. (Fitri, 2025) This demonstrates that students are beginning to understand the role of technology, not just as a tool, but as an integral part of learning strategies. This understanding provides a strong foundation for developing the professional competencies of prospective educators.

The success of improving conceptual understanding is also inseparable from the participatory training approach. Discussions, case studies, and hands-on practice enable students to actively construct their own understanding, rather than simply passively receiving information. This approach has proven effective in helping students internalize learning technology concepts more deeply. Thus, these results reinforce the view that hands-on, experiential training methods are highly relevant in improving the technological literacy of prospective educators. A participatory approach plays a crucial role in building meaningful understanding. Active student involvement encourages the development of critical and reflective thinking. (Nurdiniah, 2024) This process makes learning more contextual and applicable. As a result, students are better prepared to face the challenges of implementing technology in the real world of education.

The improvement in students' practical skills in designing learning media demonstrates that project-based learning can produce real competencies. Students not only learn how to use digital platforms but also learn to design learning flows, select appropriate content, and organize materials systematically. This process trains systematic and creative thinking skills in designing learning. These results demonstrate that technology integration in higher education can improve the quality of graduate competencies. Project-based learning effectively improves students' practical skills. (Novita et al., 2024) These skills are essential for students as future professional educators. They no longer rely solely on conventional methods but are able to create technology-based, independent learning. This also increases graduates' competitiveness in the modern educational workforce.

The students' creativity developed during the activity demonstrated that technology can be a means to express learning ideas more innovatively. The visual media produced by the students demonstrated their ability to simplify abstract concepts into engaging and easy-to-understand displays. This is important because digital generation students are more responsive to visual-based and interactive learning. Therefore, the media design skills acquired by the students will be a strategic asset in creating learning that adapts to the needs of the times. Technology encourages the growth of student creativity in designing learning media. (Khairun et al., 2023) This creativity demonstrates students' ability to innovate according to the characteristics of today's learners. The ability to present material in an engaging manner will increase student motivation to learn. Therefore, media innovation is a crucial aspect of a successful learning process.



The information literacy and digital ethics instilled during the training are crucial to the outcome of the activity. Amidst the rampant spread of invalid information and copyright infringement in the digital space, prospective educators must possess the ability to use information critically and responsibly. Students' awareness of citing sources, verifying the credibility of information, and maintaining ethical digital communication demonstrates that this training is not only oriented toward technical skills but also toward developing professional character. Information literacy and digital ethics are essential competencies for prospective educators. (Salma et al., 2025) Mastering digital literacy prevents the misuse of technology in learning. Furthermore, a responsible attitude in using information reflects the professionalism of future educators. Thus, this training helps shape academic character with integrity.

The digital ethics values acquired by students also align with the moral and religious principles that characterize STIT Padang Lawas. Students understand that using technology honestly, respecting the work of others, and being responsible for the information they disseminate are part of the Islamic values of trustworthiness and honesty. This integration of technological competency and moral values is a key strength of this PKM implementation. The integration of moral values and technological competency strengthens students' character. (I'tikaf, 2024) This combination makes students not only technically proficient but also ethically mature. Religious values underpin the wise use of technology. Therefore, graduates are expected to become professional educators with noble character.

The challenges of limited infrastructure encountered during the activity provide a realistic picture of the state of technology implementation in regional educational settings. Unstable internet connections hindered the practical use of digital platforms. However, adaptation strategies such as providing offline materials, arranging alternating access, and group work proved effective in overcoming these obstacles. This demonstrates that limited facilities need not be a barrier to innovation, as long as creativity is present in learning management. Infrastructure limitations present both a challenge and an opportunity for innovation. (Judijanto et al., 2025) This situation trains students to be solution-oriented when facing real-world challenges. Adaptability is crucial for implementing technology in various school settings. This allows students to be better prepared to face the realities of regional education.

The diversity of students' initial abilities in using technology also became an important dynamic during the training. Differences in digital literacy levels demand inclusive and collaborative learning strategies. The peer mentoring approach implemented has proven to accelerate the adaptation process for less proficient participants while simultaneously training more skilled students to share knowledge. This experience strengthens students' communication, empathy, and leadership skills as future educators. A collaborative approach effectively addresses differences in digital literacy. (Rullah et al., 2025). Interaction between students creates a supportive learning environment. Mutual support strengthens academic solidarity. This also fosters soft skills, which are essential in the teaching profession.



The limited duration of the training is a factor that needs to be considered in evaluating the activity. The short timeframe means that not all material can be studied in depth. However, providing advanced materials and integrating digital media into coursework is a strategic solution to maintain continuity of learning. In this way, the skills students acquire don't stop with the training alone but continue to develop in their daily academic activities. Program sustainability is key to strengthening student competency. (Riskawati et al., 2025) Post-training follow-up ensures competency isn't temporary. Students continue to practice and improve their skills independently.

The resistance of some students to the use of technology in learning was also an interesting finding in the discussion. This skepticism about the effectiveness of technology demonstrates that changing the educational paradigm requires a gradual process. Through the presentation of empirical evidence and examples of successful technology applications, most students finally understood that technology is not a threat to conventional methods, but rather a supporting tool to improve the quality of learning. This attitudinal transformation is an indicator of the success of the persuasive approach in training. This change in student attitudes is an indicator of the successful internalization of innovation. (Rosyadi et al., 2024) This process demonstrates the importance of a persuasive approach in introducing technology. Awareness that grows from understanding is more sustainable than coercion, making technology adoption more natural and sustainable.

The continued use of digital learning media after the PKM activity is an indicator of the program's long-term success. The integration of digital-based assignments into lectures encourages students to continuously practice the skills they have acquired. This repeated practice is essential to ensure that students' technological competencies do not decline but instead develop in line with learning needs. Furthermore, the habit of using digital media also fosters an innovative academic culture on campus. Sustained technological practices strengthen this innovative academic culture. (Mansyur et al., 2025) Students are accustomed to thinking creatively when designing learning. This habit will carry over into the world of education. Thus, the PKM program has a long-term impact on the quality of graduates.

Overall, this PKM activity successfully improved students' overall competency, encompassing conceptual, technical, creative, ethical, and adaptive aspects. Students were not only able to design digital learning media but also understood the philosophy, strategy, and moral responsibility involved in its use. With these skills, STIT Padang Lawas students are well-prepared to become professional educators who are innovative, possess integrity, and are responsive to the challenges of education in the era of digital transformation. The PKM program has a comprehensive impact on students' professional readiness. The combination of technological competence and moral character is a key advantage for graduates. This aligns with the institution's vision of producing outstanding and moral educators. Therefore, PKM contributes significantly to improving the quality of future education.



#### 4. CONCLUSION

This Community Service (PKM) activity was conducted to assess the effectiveness of training on the use of link-based learning media platforms in improving the pedagogical technology competencies of STIT Padang Lawas Gunung Tua students. The activity involved third- and fifth-semester students through concept presentations, technical demonstrations, and hands-on practice in creating digital learning media. Based on the results of descriptive evaluations and observations of participant achievement during the activity, the following conclusions were obtained:

- a. Link platform-based learning media training has a positive effect on improving students' conceptual understanding of the integration of technology, pedagogy, and learning content within the TPACK framework.
- b. This activity effectively improves students' practical skills in designing and managing digital learning media that are structured, interactive, and easily accessible through a link-based platform.
- c. The training encourages the development of student creativity in presenting learning materials through attractive and communicative visual and multimedia designs.
- d. This activity improves students' digital literacy while raising awareness of the ethics of using online content, such as respect for copyright, citing sources, and responsibility in sharing information.
- e. Collaborative learning approaches and hands-on practice can overcome differences in students' initial abilities in using technology and strengthen their collaboration and problem-solving skills.
- f. Network infrastructure constraints and limited training time can be overcome through adaptive strategies, so that all participants are still able to complete practical tasks according to competency targets.
- g. This PKM activity fosters positive attitudes and commitment from students to apply digital learning media in future teaching practices.
- h. Overall, the link platform-based training model has proven effective in strengthening students' pedagogical technology competencies and supporting the formation of a digital learning culture in the STIT Padang Lawas Gunung Tua environment.
- i. Continuous follow-up programs, intensive mentoring, and institutional support are highly recommended to ensure the long-term development of students' digital competencies and build a sustainable digital learning ecosystem.

#### 5. REFERENCES

- Alfiansyah, A. (2024). Design and implementation of mobile-based network service technology learning media: An innovative approach to education. *Journal Creativity*, 2(1), 121–132.
- Fajriyah, K. (2018). Innovation of thematic learning courses for prospective elementary school teachers to improve digital literacy and 21st century skills. *Malih Peddas*, 8(1), 502667.



- Farid, A. (2023). Digital literacy as a way to strengthen character education in the Society 5.0 era. *Cetta: Journal of Educational Sciences*, 6(3), 580–597.
- FITRI, S. (2025). Reframed Application of TPACK and Experiential Learning in Teacher Training for Technology Utilization. *PhD Research Theory & Concept: Supportive Environment, Learning Innovation, and Educational Management*, 59.
- Ghazy, AC, Ghozali, G., & Wibowo, KA (2025). Educational Transformation: Development of Learning Methodologies and Media in the Digital Era. *Action Research Journal Indonesia (ARJI)*, 7(4), 2974–2997.
- Hasanudin, C. (2025). The Revolution of Learning Media in the Era of Society 5.0 to Encourage Technology-Based Learning. *Seval Literindo Kreasi*. [https://books.google.com/books?hl=id&lr=&id=UFpYEQAQAQBAJ&oi=fnd&pg=PP1&dq=This+is+in+accordance+with+the+principle+that+good+visual+design+can+increase+the+absorption+of+information+of+students%E2%81%B4.+Therefore,+strengthening+digital+creativity+is+one+of+the+important+achievements+of+this+PKM+activity.&ots=OVfUCS-Yvy&sig=IbRmt3SENHGo4-Rxm02QNQDeH\\_8](https://books.google.com/books?hl=id&lr=&id=UFpYEQAQAQBAJ&oi=fnd&pg=PP1&dq=This+is+in+accordance+with+the+principle+that+good+visual+design+can+increase+the+absorption+of+information+of+students%E2%81%B4.+Therefore,+strengthening+digital+creativity+is+one+of+the+important+achievements+of+this+PKM+activity.&ots=OVfUCS-Yvy&sig=IbRmt3SENHGo4-Rxm02QNQDeH_8)
- I'tikaf, MA (2024). Technology Integration in Character Education: Building a Generation of Character in the Digital Era. *AL-MIKRAJ Journal of Islamic Studies and Humanities (E-ISSN 2745-4584)*, 5(01), 1837–1847.
- Judijanto, L., Santoso, RY, & Mansur, A. (2025). Integration of technology and the education sector: Challenges and opportunities from a multisectoral perspective. *Jurnal Ilmiah Edukatif*, 11(1), 47–57.
- Khairun, N., Syafitri, E., Wulandari, S., Sugesti, P., & Indria, S. (2023). Utilization of IT-based learning media by FKIP students at Asahan University. *Geram (Active Writing Movement)*, 11(2), 43–54.
- Kholifah, A. (2022). Islamic boarding school education strategies to address social challenges in the digital era. *Basicedu Journal*, 6(3), 4967–4978.
- Mansyur, A., Sinaga, FA, Siregar, TM, Frisnoiry, S., & Elfitra, E. (2025). Optimizing Collaboration in Technology Integration as a Learning Innovation. *Journal of Learning Innovation in Schools*, 6(1), 033–040.
- Novita, R., Labesani, C., Jahrir, AS, Novince, A., Jon, E., & Widyono, H. (2024). Implementation of Project-Based Learning Methods to Improve Students' Critical Thinking Skills. *Indonesian Research Journal on Education*, 4(4), 3166–3172.
- Nurdiniah, S. (2024). Steps of Teacher Participation in Active Learning Approach at Muslimeen Suksa School, Thailand. *Karimah Tauhid*, 3(8), 8581–8598.
- Paling, S., Makmur, A., Albar, M., Susetyo, AM, Putra, YWS, Rajiman, W., Djamilah, S., Suhendi, HY, & Irvani, AI (2024). Digital learning media. *Tohar Media*. <https://books.google.com/books?hl=id&lr=&id=avoXEQAQAQBAJ&oi=fnd&pg=PP1&dq=These+skills+are+important+because+digital+learning+media+is+able+to+increase+the+learning+involvement+of+students%C2%B3.+With+these+provisions,+students+are+expected+to+be+able+to+apply+the+results+of+this+training+in+the+practice+of+te>



- aching+in+the+field.&ots=YNZFRlxa-U&sig=TIAvGIOcx41ne8jppqiKuCMWQr0
- Riskawati, R., Idris, IIN, Herman, NM, Nurhasmi, N., & Sanusi, DK (2025). Strengthening Students' Digital Literacy through Programming-Based Learning Media Training: A Strategy for Empowering Prospective 21st-Century Educators. *Indonesian Community Service Journal*, 5(2), 848–855.
- Rosmaladewi, O., Hastuti, RYY, & Rahayu, P. (2023). Mastery of Technological Content Knowledge (TPACK) of Prospective Teaching Students in Supporting Digital Learning. *Colloquium of the Journal of Non-Formal Education*, 11(1), 171–179.
- Rosyadi, Z., Nu'man, M., Zamroji, N., Rouf, A., & Pratama, MP (2024). Internalization of Moderate Attitudes in Lectures among Students in the Millennial Era. *SINDA: Comprehensive Journal of Islamic Social Studies*, 4(3), 198–206.
- Rullah, AD, Silva, FR, Pratama, ETH, & Purwanto, E. (2025). Communication Strategies to Improve Digital Literacy Among Youth. *Journal of Economic and Community Empowerment*, 2(1), 16–16.
- S, MIO (2025). INTEGRATION OF ISLAMIC VALUES AND TECHNOLOGY IN PAI LEARNING AT PTKI: ANSWERING THE GAP BETWEEN THEORY AND PRACTICE. <https://pascauinmtrm.gubugjournal.id/index.php/maharah/article/view/7>
- Salma, AK, Syafa, IT, Az-Zahra, S., & Mareta, RD (2025). The Importance of Digital Literacy Competence for Prospective Biology Teacher Students in the Society 5.0 Era. *Integrasi*, 1(1). <https://journal.innoscientia.org/index.php/integrasi/article/view/100>
- Suradi, S. (2025). Framework for Unifying Content Knowledge, Pedagogical Knowledge, and Technological Knowledge into Technological Pedagogical Content Knowledge. *Tsaqila | Journal of Education and Technology*, 5(1). <https://aksaqilajurnal.com/index.php/aksaqila/article/view/561>