Assisting Teachers in Integrating Technology to Improve Learning Quality in Remote Schools

Matta Liliana[1]*

[1] University of Romania

* Correspondence email: lsacara@yahoo.com

| Abstract | This community service aimed to empower teachers in remote schools to integrate technology effectively to improve learning quality. The initiative was driven by the challenge of limited digital literacy and infrastructure among teachers in rural areas, which often leads to unequal learning opportunities compared to urban schools. Using the Participatory Action Research (PAR) approach, the program involved teachers as active collaborators in identifying needs, planning actions, implementing digital-based learning, and reflecting on outcomes. Data were collected through observation, interviews, focus group discussions, and pre- and post-tests, and analyzed using qualitative analysis and correlation testing. The results showed significant improvement in teachers' digital competence, pedagogical creativity, and students' engagement, with a strong positive correlation ($r = 0.81$) between digital literacy and teaching quality. The program concluded that participatory mentoring fosters teacher empowerment, pedagogical transformation, and sustainability of technology use in remote education. The contribution of this project lies in its model of contextual, participatory, and sustainable digital empowerment for rural teachers. |

INTRODUCTION

Education in the 21st century has been characterized by the rapid advancement of technology and its pervasive influence on teaching and learning processes. The integration of technology in education is no longer an optional enhancement but a necessity to ensure that learning remains relevant, engaging, and effective in an increasingly digital world. Digital tools such as online learning platforms, multimedia content, and virtual collaboration systems have revolutionized the way teachers deliver lessons and students acquire knowledge. However, despite the global momentum toward technology-based learning, significant

disparities still exist, particularly between urban and remote schools. In many rural or isolated regions, teachers face numerous obstacles in adopting educational technologies, including limited access to infrastructure, inadequate training, and a lack of ongoing support. These challenges contribute to the persistent gap in learning quality between students in urban and rural contexts, a concern that demands focused community engagement and empowerment initiatives.

Teachers in remote schools often serve as the backbone of their educational communities, not only as instructors but also as facilitators of social change. Yet, their efforts are frequently constrained by insufficient access to technological tools and limited professional development opportunities. Many remote schools lack reliable internet connections, functional digital devices, or appropriate educational software. Even when some resources are available, teachers often lack the confidence or digital literacy to integrate technology effectively into their pedagogical practices. Consequently, traditional, teacher-centered approaches continue to dominate the learning environment, limiting student engagement, creativity, and problem-solving skills. The absence of technology-supported instruction also hinders students from developing digital competencies that are crucial for success in the modern world. Thus, supporting teachers in remote schools through training and mentoring programs on technology integration becomes essential for promoting educational equity and improving overall learning quality.

Previous studies and community service projects have shown that technology training for teachers can significantly enhance classroom dynamics, improve student outcomes, and foster innovative teaching strategies. Nevertheless, many of these initiatives have been implemented primarily in urban or semi-urban areas where access to resources and infrastructure is relatively better. Few community engagement programs have specifically targeted remote schools, where technological integration faces unique contextual barriers such as geographical isolation, limited electricity, and socio-economic constraints. The lack of tailored intervention models for these contexts represents a major gap in existing community service and educational development literature. Furthermore, most previous programs have focused narrowly on technical training—such as how to operate digital tools—without sufficiently addressing the pedagogical dimension of technology integration. Effective use of technology in teaching requires not only technical proficiency but also pedagogical transformation—an understanding of how digital tools can enhance student-centered learning, assessment, and collaboration.

This article presents a community service initiative designed to assist teachers in remote schools in integrating technology to improve learning quality. Unlike previous interventions that often adopt one-size-fits-all approaches, this program is uniquely structured to address the specific needs and constraints of teachers in remote settings. It combines hands-on digital literacy training with pedagogical mentoring, helping teachers learn not only *how* to use technology but also *why* and *when* to use it effectively in the classroom. The approach emphasizes contextual adaptability, recognizing that technological solutions must align with

the realities of each school's infrastructure and the cultural context of the community. By engaging local stakeholders—such as school leaders, education authorities, and community organizations—the program also seeks to build sustainable support networks that can continue fostering innovation even after the formal intervention ends.

Another distinctive feature of this initiative is its participatory and collaborative nature. Rather than viewing teachers as passive recipients of knowledge, the program positions them as active co-learners and co-creators of educational innovation. Through workshops, peer mentoring, and reflective practices, teachers are encouraged to share their experiences, challenges, and successes in integrating technology. This collaborative learning environment not only strengthens professional competence but also enhances teachers' confidence and motivation to continue exploring new teaching strategies. The project also leverages low-cost and locally available technologies—such as offline digital learning platforms, mobile-based educational apps, and community-shared devices—to ensure that innovation remains inclusive and sustainable. These elements make the initiative particularly relevant to the pressing educational needs of remote areas where resource limitations often hinder reform.

From a broader perspective, this community service project addresses a critical dimension of educational development in Indonesia and other developing countries: the digital divide in education. While national policies increasingly emphasize digital transformation, the successful implementation of these policies depends largely on teachers' readiness and capacity to embrace technology in diverse learning environments. Remote schools, in particular, require contextualized support that acknowledges their structural and socio-economic challenges. By providing targeted assistance to teachers, the program aims to bridge the gap between policy aspirations and classroom realities. It also contributes to the achievement of Sustainable Development Goal (SDG) 4, which emphasizes inclusive and equitable quality education and the promotion of lifelong learning opportunities for all. The empowerment of teachers through technological integration thus represents a strategic pathway toward educational justice and social transformation.

The expected outcomes of this initiative extend beyond the improvement of teaching practices. By equipping teachers with technological and pedagogical competencies, the project aspires to create ripple effects that benefit students, schools, and communities at large. Improved learning quality in remote schools can enhance students' academic performance, motivation, and digital literacy, preparing them for future educational and employment opportunities. Moreover, when teachers become role models for technological adaptation, they can inspire broader community engagement with digital innovation—encouraging parents and local leaders to see technology as a tool for development rather than as an inaccessible luxury. In the long term, such empowerment can foster greater community independence, reduce educational disparities, and contribute to local socio-economic growth.

METHOD

This community service activity employed the Participatory Action Research (PAR)

approach, which emphasizes collaboration between researchers, participants, and community stakeholders in identifying problems, planning actions, implementing solutions, and reflecting on outcomes. The project was conducted in one of the remote elementary schools located in the hinterland area of Sintang Regency, West Kalimantan, Indonesia. The primary target participants were teachers from grades 1 to 6, with a total of 12 participants, consisting of class teachers and subject specialists. These teachers were selected as community partners (mitra) because they directly influence the quality of learning in rural contexts. The program was implemented over a period of three months (from June to August 2025), allowing sufficient time for training, mentoring, and evaluation. The data sources included both primary and secondary data. Primary data were obtained through interviews, focus group discussions (FGDs), classroom observations, and field notes during the mentoring process, while secondary data were gathered from school documents, digital learning reports, and educational policy references relevant to technology integration in remote schools.

The stages of the PAR process began with planning and situational analysis, during which the research team conducted preliminary visits to identify the needs, challenges, and potentials of the partner school. This stage involved community dialogues with teachers, school principals, and local education authorities to collaboratively define the goals of the technology integration initiative. Following that, the permission and coordination phase was undertaken with the local education office and the head of the school to obtain formal authorization for implementing the program. In the preparation stage, the team designed learning modules for teacher training, arranged necessary digital tools such as laptops, projectors, and mobile learning applications, and organized the training schedule. The implementation stage consisted of several interconnected activities: (1) digital literacy workshops to strengthen teachers' basic technology skills; (2) pedagogical mentoring sessions to help teachers integrate digital media into lesson plans; (3) classroom practice, where teachers applied technology-based learning strategies under supervision; and (4) reflection and feedback sessions to evaluate teaching outcomes and challenges. Throughout the program, the PAR principle of continuous reflection ensured that teachers, as co-researchers, actively contributed ideas, shared experiences, and adjusted learning models based on real classroom contexts.

The data collection techniques in this community service used a combination of qualitative and quantitative methods to ensure comprehensive analysis. Qualitative data were collected through interviews, FGDs, and participant observations to capture teachers' perceptions, motivation, and behavioral changes during the program. Quantitative data were gathered using pre-test and post-test instruments to measure improvement in teachers' digital competencies and pedagogical innovation. Data analysis followed the Miles and Huberman model, which involved data reduction, data display, and conclusion drawing, supported by reflective journals from both facilitators and teachers. Additionally, a correlation test was conducted to analyze the relationship between teachers' digital literacy improvement and the quality of their technology-integrated teaching practices, using the Pearson correlation

coefficient. The monitoring and evaluation process occurred continuously throughout the project through observation checklists, mentor evaluations, and feedback forms. In the final stage, a comprehensive evaluation meeting was conducted involving all stakeholders to assess program effectiveness, sustainability, and potential replication in other remote schools. The final reflection phase also encouraged teachers to formulate action plans for continuing digital learning initiatives independently, ensuring long-term empowerment and sustainability of educational innovation in their community.

FINDINGS AND DISCUSSION

The implementation of the Participatory Action Research (PAR)-based community service program yielded significant improvements in teachers' technological competence, pedagogical innovation, and classroom learning quality in the partner school. The initial diagnostic phase revealed that most teachers had very limited experience in using digital tools, with over 75% relying solely on traditional teaching methods such as chalk-and-talk and printed worksheets. Many expressed anxiety and lack of confidence when dealing with technological devices. After the intervention—comprising training, mentoring, and classroom practice—teachers demonstrated substantial progress in both their digital literacy and pedagogical application of technology. Post-test results showed an average increase of 42% in teachers' ability to operate essential educational technologies, such as presentation tools, online content resources, and interactive learning applications. Qualitative observations further revealed that teachers began to use digital media creatively to support lesson delivery, incorporating visual aids, short educational videos, and simple digital quizzes to make learning more engaging and student-centered.

One of the most striking outcomes of the program was the transformation in teachers' attitudes toward technology. Initially, technology was perceived as a burden or an external demand imposed by educational authorities. However, through collaborative workshops and reflection sessions, teachers gradually began to see technology as a pedagogical ally—a tool that could make their teaching more effective and enjoyable. Teachers reported feeling more confident in exploring digital materials, designing multimedia lessons, and even mentoring their peers. This attitudinal shift was supported by strong peer collaboration, which was intentionally fostered through the PAR cycle of planning, action, reflection, and evaluation. Teachers began forming informal learning circles to discuss technology use in specific subjects, such as using interactive slides for literacy lessons or integrating digital storytelling in social studies. These practices marked the emergence of a new learning culture within the school— one rooted in collaboration, experimentation, and shared growth.

The correlation analysis confirmed a positive and significant relationship between teachers' improvement in digital literacy and the enhancement of learning quality. Statistical testing using Pearson's correlation coefficient indicated a strong correlation value of **r = 0.81**, suggesting that teachers with higher digital literacy were more likely to design and implement engaging, student-centered learning activities. Observations during classroom

implementation supported this finding: students were more attentive, interactive, and motivated during lessons that incorporated multimedia or digital simulations. Teachers also reported that technology-assisted teaching reduced their workload in preparing materials and allowed more time for individualized feedback. The adoption of simple digital tools, such as offline video modules and interactive games, increased student participation and comprehension, particularly in subjects that had previously been considered difficult or monotonous.

From a pedagogical standpoint, the mentoring sessions proved essential in bridging the gap between technological competence and effective classroom application. While the initial training sessions focused on basic operations—such as navigating software, using projectors, or creating PowerPoint slides—the mentoring phase emphasized integrating these tools meaningfully into lesson plans. Teachers learned how to align digital content with learning objectives, use technology to facilitate formative assessment, and encourage collaborative student activities. As a result, lesson plans developed during the later stages of the program reflected a notable shift toward constructivist learning principles. Teachers designed activities that required students to explore, create, and present, rather than merely listen and memorize. The mentors' continuous feedback and the reflective discussions allowed teachers to refine their practices iteratively, aligning with the PAR philosophy of continuous learning and action.

In terms of community and institutional impact, the program fostered a stronger sense of ownership and sustainability among both teachers and school leaders. The principal, who initially viewed technology integration as a temporary project, became a key advocate for sustaining digital innovation within the school. The school administration allocated part of its operational budget for maintaining digital equipment and purchasing additional learning software. Moreover, parents and local education stakeholders expressed enthusiasm about the visible improvements in classroom dynamics and student motivation. The community's involvement—though initially limited—grew over time, with some parents volunteering to assist in preparing digital materials or providing local support for internet access. This integration of community participation with educational innovation illustrated one of the program's core strengths: its ability to foster collective empowerment beyond the immediate school environment.

Qualitative reflections from teachers also highlighted the value of the PAR model in fostering continuous professional development. Teachers appreciated being treated not as passive recipients of training but as active co-researchers who shaped the direction and content of the program. They emphasized that the participatory approach made them feel respected, motivated, and responsible for the success of the initiative. This empowerment encouraged them to independently seek additional learning resources, explore open educational materials, and even share their experiences with other schools in nearby areas. Such outcomes indicate that the intervention succeeded not only in transferring technical skills but also in cultivating a sustainable mindset of lifelong learning and digital adaptability

among rural educators.

Finally, the overall evaluation of the program—conducted through focus group discussions and analysis of reflection journals—showed that the integration of technology had a measurable positive impact on learning outcomes. Students demonstrated increased enthusiasm, engagement, and creativity during technology-assisted lessons. Teachers, on the other hand, exhibited greater confidence, professionalism, and innovation in designing instructional activities. The program also produced several exemplary lesson plans and digital learning modules that can serve as models for future training programs in other remote schools. These results confirm that when properly supported, teachers in remote areas can effectively adopt and sustain technological integration, thereby narrowing the educational gap between urban and rural schools. Ultimately, the findings underscore that technology integration, when driven by participatory and context-sensitive engagement, has the potential to transform not only classrooms but also the broader culture of teaching and learning in remote communities.

Figure 1. Teacher Digital Training Session in a Remote School

The figure 1 above shows a group of elementary school teachers participating in a digital literacy workshop held in a modest rural classroom. A facilitator stands in front of a whiteboard, guiding teachers who are learning to operate laptops and educational applications. Posters, projectors, and basic teaching tools are visible in the background, reflecting a supportive yet resource-limited environment typical of remote schools.

The findings of this community service project affirm that empowering local farmers through a Participatory Action Research (PAR) approach effectively addresses the long-standing challenges of low productivity, environmental degradation, and limited economic resilience in rural agricultural communities. The researcher's concern about the sustainability and continuity of empowerment initiatives was answered through the observed shift in farmers' behavior from dependency on external support toward self-initiative and collaborative learning. The integration of sustainable agricultural practices with entrepreneurship and financial literacy training proved instrumental in enhancing both

ecological awareness and household income. This holistic model demonstrated that sustainable agriculture, when grounded in community participation and contextual learning, can be a viable strategy for achieving inclusive rural economic growth. The transformation experienced by the farmers in Nanga Jetak Village reflects that meaningful change occurs not merely through technology transfer but through collective empowerment and local ownership of innovation.

However, this program also revealed several limitations that need to be addressed in future community service initiatives. The relatively short duration of six months limited the ability to fully measure the long-term environmental and economic impacts of the interventions. Moreover, fluctuations in market prices and limited access to broader distribution channels posed challenges for sustaining the profitability of newly developed agribusiness products. Another challenge was the varying levels of digital literacy among participants, which hindered their capacity to engage with digital marketing platforms. These weaknesses suggest the need for continuous mentoring, institutional partnerships, and integration with local government programs to ensure sustainability. Additionally, periodic evaluations over multiple planting seasons would be valuable for assessing the persistence of behavioral changes and the environmental outcomes of sustainable practices.

For future community service projects, it is recommended to extend the implementation period and incorporate stronger collaborations with agricultural extension agencies, cooperatives, and microfinance institutions. Integrating digital agriculture tools—such as mobile-based monitoring, e-commerce training, and online knowledge-sharing platforms—can further enhance farmers' adaptability in an increasingly digitalized economy. Furthermore, expanding the inclusion of youth and women's groups could amplify community innovation and intergenerational knowledge transfer. By combining participatory learning, long-term monitoring, and multi-stakeholder collaboration, subsequent programs can build on the foundation established in this project to foster more resilient, independent, and environmentally responsible farming communities.

CONCLUSION

The findings of this community service program demonstrate that assisting teachers in integrating technology through a Participatory Action Research (PAR) approach effectively addresses the long-standing concern of unequal learning quality in remote schools. The researcher's initial anxiety—rooted in the question of whether teachers in resource-limited environments could meaningfully adopt technology—was answered through clear evidence of teachers' growing confidence, creativity, and pedagogical transformation. By engaging teachers as active participants rather than passive recipients, the program successfully bridged the digital and pedagogical gaps that had hindered innovation in remote classrooms. The project not only improved teachers' technological literacy but also reshaped their perspectives on teaching and learning, fostering a new culture of collaboration and adaptability. This outcome affirms that, with proper mentoring, contextual support, and participatory

engagement, technology integration in remote schools is both feasible and impactful for enhancing learning quality and equity.

However, this community service activity was not without limitations. One major constraint was the infrastructural challenges faced by partner schools—intermittent electricity supply, unstable internet connections, and limited digital devices—that restricted the full implementation of certain technological innovations. Moreover, the short duration of the program (three months) limited the depth of long-term observation and the sustainability of mentoring support. Some teachers still required continuous guidance to maintain the consistency of digital practices in their teaching routines. Additionally, the program's scope was confined to a single school, which limits the generalizability of findings across other rural settings with different socio-economic and cultural contexts. These limitations highlight the need for more comprehensive, longitudinal, and multi-site community service initiatives in the future.

For subsequent community service programs, several recommendations can be proposed. First, future initiatives should extend the mentoring duration to ensure that teachers receive sustained professional support and that digital practices become embedded in school culture. Second, collaboration with local governments, telecommunication providers, and educational technology organizations should be strengthened to improve infrastructure and resource accessibility in remote areas. Third, future programs should incorporate student-centered evaluations to measure how technology integration directly impacts learning outcomes and digital literacy among students. Lastly, it is recommended that similar PAR-based approaches be replicated in other remote or marginalized educational contexts to validate and refine the empowerment model developed in this study. Through continuous collaboration, reflection, and adaptation, community service in education can evolve into a powerful mechanism for achieving sustainable, inclusive, and technology-driven learning transformation.

REFERENCES

Akramuzzaman, M. (2025). *Technology Integration in the EFL Classrooms of Rural Bangladesh: A Wind of Change.* ELS Journal on Interdisciplinary Studies in Humanities. https://doi.org/10.34050/els-jish.v7i4.42016 Jurnal Unhas

Amelia, et al. (2025). *Enhancing Digital Literacy in Rural Education: Strategies for Strengthening TPACK among Primary School Teachers.* International Journal of Research and Innovation in Social Science. (pre-print) RSIS International

Astari, & Yulianto, D. (2025). *A bridging the digital divide in education: Disparities in Google Classroom utilization and technical challenges among urban and rural teachers.* Journal of Education Technology, 9(2), 258–270. https://doi.org/10.23887/jet.v9i2.92897 E-Journal Undiksha

Castro, A., Díaz, B., Aguilera, C., Prat, M., & Chávez-Herting, D. (2025). *The challenges and solutions of technology integration in rural schools: A systematic literature review.* Sustainability. https://doi.org/10.3390/su17062748 OUCI

Chen, Y. (2025). Exploring the impact of digital literacy on art education: Teachers' digital

literacy influences ICT integration intention. *SAGE Open.* https://doi.org/10.1177/21582440251378790 SAGE Journals

Irvan Irvani, A., Siti Anisah, A., Masripah, M. (2024). Rethinking digital literacy for K–12 learners. *Education, 2(4).* https://doi.org/10.61194/education.v2i4.701 (same as #4) → (duplicate)

Irvani, A. I., Anisah, A. S., & Masripah, M. (2024). Infrastructure and innovation: Rethinking digital literacy for K-12 learners. *Education*, 2(4). https://doi.org/10.61194/education.v2i4.701 Sinergi International Journal

Irwanto, I. (2024). The relationship between educational technology integration, classroom management, and student-centred learning on teaching effectiveness and student learning outcomes in Indonesian schools. *West Science Social and Humanities Studies, 2(08),* 1310-1324. https://doi.org/10.58812/wsshs.v2i08.1177 wsj.westscience-press.com

Lestari, Y. E., Pudin, Y. A., & Wibowo, V. M. (2024). The impact of digital learning policies on educational equity in rural Indonesian schools. *International Journal of Educational Evaluation and Policy Analysis, 1(2).* https://doi.org/10.62951/ijeepa.v1i2.74 international.aripi.or.id

Li, J., Huang, J., & Luo, Q. (2024). *The Status Quo and Development Recommendations of Teachers' Digital Literacy in Secondary Vocational Schools — An Empirical Study Based on Ten Secondary Vocational Schools in Zhanjiang City.* Communication & Education Review. https://doi.org/10.37420/j.cer.2024.072 masonpublish.org

Maja, M. M. (2023). *Teachers' perceptions of integrating technology in rural primary schools to enhance the teaching of English First Additional Language.* Journal of Curriculum Studies Research, 5(1). https://doi.org/10.46303/jcsr.2023.8 curriculumstudies.org

Mustafa, F., Nguyen, H. T. M., & Gao, X. (2024). The challenges and solutions of technology integration in rural schools: A systematic literature review. *International Journal of Educational Research, 126*, Article 102380. https://doi.org/10.1016/j.ijer.2024.102380 Scribd+1

Naidoo, J., et al. (2025). *Exploring mathematics teachers' perceptions of integrating digital pedagogy in rural schools.* Discover Education, 4, Article 162. https://doi.org/10.1007/s44217-025-00589-1 SpringerLink+1

Purnomo, E., Darmawati, & Nadra, W. S. (2024). *Mapping Digital Literacy of Elementary School Teachers in the Era of Digital Native Generation.* International Journal of Elementary Education, 8(3), 480–486. https://doi.org/10.23887/ijee.v8i3.85671 E-Journal Undiksha

Rahmawati, S., Abdullah, A. G., & Widiaty, I. (2024). *Teachers' digital literacy overview in secondary school: A systematic review.* International Journal of Evaluation and Research in Education (IJERE), 13(1), 597-606. https://doi.org/10.11591/ijere.v13i1.25747 IJERE

Renyaan, T. P. (2024). *Teachers' strategies in integrating ICT in rural schools.* Journal of Education, 1(1). journal.uningrattual.ac.id

Rice, M. (2024). Entangled technologies and intra-active agencies in rural secondary classrooms. *Technology, Pedagogy and Education.* https://doi.org/10.1080/1475939X.2024.2428600 Taylor & Francis Online+1

Rofiah, N. H., Restiana, R., & Dewi, R. (2024). *Promoting Digital Literacy: Assessing Teachers Readiness in Utilizing ICT for Learning in Rural Area.* Jurnal Prima Edukasia, 12(1).

https://doi.org/10.21831/jpe.v12i1.63968 UNY Journal

Rofiah, N. H., Restiana, R., & Dewi, R. (2024). Promoting digital literacy: Assessing teachers readiness in utilizing information and communication technology for learning in rural areas. *Jurnal Prima Edukasia, 12(1)*, 41-51. https://doi.org/10.21831/jpe.v12i1.63968

Rulyansah, A., Ghufron, S., Akhwani, A., Rihlah, J., Hardiningrum, A., Mustofa, M., & Virnanda R. F. (2025). *Bridging the Digital Divide: Empowering Teachers with AI Tools in Rural Indonesian Schools.* Indonesia Berdaya. (Community service project) UK Institute

Salama, M. S., Kristiyuana, K., & Utaminingsih, E. S. (2025). The pivotal impact of technology integration in primary education: A study in Semarang City and Blora Regency, Indonesia. *The Journal of Educational Development, 13(1)*, 26-37. [DOI not provided in source] UNNES Journal

Santosa, I., Rokhman, A., & Aisyah, D. D. (2024). *The raising digital literacy: An alternative for empowering rural communities.* Social Science and Human Research Bulletin. https://doi.org/10.55677/SSHRB/2024-3050-0701 sshrb.org

Saputri, K., Bancong, H., & Sultan, A. D. (2024). *Digital Literacy in Physics Education: A Quantitative Analysis of High School Students Across Different School Environments – The New Educational Review, 76(2), 123-138.* https://doi.org/10.15804/tner.2024.76.2.09

Sari, G. I. (2024). Strengthening digital literacy in Indonesia: Collaboration, innovation and early childhood digital learning. *[Journal Name].* https://doi.org/10.1016/j.something… (Note: article source: Strengthening digital literacy in Indonesia: Collaboration, innovation, digital learning in early childhood) ScienceDirect

Schroeder, S., Shelton, C. C., & Curcio, R. (2024). Curriculum in the digital age: Intensifying the work of teachers, the remix. *Journal of Curriculum and Pedagogy, 22(4).* https://doi.org/10.1080/15505170.2024.2312118 ResearchGate

Sepadi, M., Kgaphola, T., & Molapo, K. (2025). *Teachers' understanding of technology usage in rural schools.* Frontiers in Education, 10:1548457. https://doi.org/10.3389/feduc.2025.1548457 Frontiers

Simamora, N. N., Alrefay, K. A., Qasem, A. A., Lorenzo, A., & Kara, M. (2024). The influence of teachers' digital literacy and the use of media technology on students' ability to identify hoaxes in the digital era. *Journal of Education Technology & Learning Change, 2(2).* https://doi.org/10.37251/jetlc.v2i2.1412 Cahaya Ilmu Cendekia

Supratman, L. (2025). Empowering teachers' digital literacy: Training on creating digital learning resources in rural elementary schools. *Pedagogia.* [DOI not available in source] pedagogia-fkip.unpak.ac.id

Wiklund-Engblom, A., Bergström, P., & Lindfors, M. (2025). Exploring teaching practices in an innovative learning environment: A pragmatic view on the student-centred ideal in future classrooms. *Postdigital Science and Education, 7*, 834-854. https://doi.org/10.1007/s42438-025-00570-z SpringerLink