UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
*Contak person : **0852-6824-1677***

Evaluation of Information Technology Use in the Quality of Physical Education Sports and Health Learning at MTsN 2 Bengkulu City

Khairiah Khairiah,[1] Eem Merani Destiana [2], Reindo Febrianto [3]
[1]Universitas Islam Negeri Fatmawati Sukarno Bengkulu
[23]MTsN 2 Kota Bengkulu
khairiah@mail.uinfasbengkulu.ac.id [1], eemmeranidestiana01@gmail.com [2],
reindofebrianto03@gmail.com [3]

Received : 02-06-2025 Revised : 02-06-2025 Accepted: 07-12-2025 Published on: 08-12-2025

Abstract: The quality of technology-based learning is still difficult to improve because human resources remain weak in terms of device ownership and technology literacy. This study aims to evaluate the use of information technology in improving the learning quality of Physical Education, Sports, and Health (PJOK) at MTsN Kota Bengkulu. A descriptive qualitative method was employed, using the CIPP (Context, Input, Process, Product) approach. Data were collected through observation, interviews, and documentation. The research findings show that the use of information technology in Physical Education, Sports, and Health learning—such as instructional videos, fitness applications, and online learning platforms—can enhance students' motivation and understanding. The integration of information technology also encourages more collaborative and contextual learning. Most teachers have utilized information technology in the learning process, although several technical challenges remain, such as limited ownership of technological devices, the level of information technology literacy among teachers and students, and the lack of technological infrastructure in madrasahs. Thus, it can be concluded that the use of information technology is capable of improving the quality of Physical Education, Sports, and Health learning in madrasahs. Therefore, it is recommended that to further improve the quality of Physical Education, Sports, and Health learning, the evaluation of information technology use in madrasahs should be strengthened.
Keywords: Evaluation of Information Technology Utilization, Quality of Physical Education, Sports, and Health Learning.

Abstrak: Mutu pembelajaran berbasis teknologi masih sulit ditingkatkan karena sumberdaya manusia masih lemah pada tingkat kepemilikan perangkat dan literasi teknologi. Penelitian ini bertujuan untuk mengevaluasi penggunaan teknologi informasi dalam meningkatkan mutu pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan di MTsN Kota Bengkulu. Menggunakan metode kualitatif deskriptif, pendekatan CIPP (Context, Input, Process, Product). Pengumpulan data melalui observasi, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa penggunaan teknologi informasi dalam pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan seperti video pembelajaran, aplikasi kebugaran, dan platform pembelajaran daring dapat meningkatkan motivasi dan pemahaman siswa, integrasi teknologi informasi mendorong pembelajaran yang lebih kolaboratif dan konkstual. Sebagian besar guru telah menggunakan teknologi informasi dalam proses pembelajaran meskipun masih terdapat beberapa kendala teknis, seperti keterbatasan kepemilikan perangkat teknologi, dan tingkat literasi teknologi informasi guru dan siswa, serta minimnya infrastruktur teknologi di madrasah. Dengan demikian dapat disimpulkan bahwa penggunaan teknologi informasi mampu meningkatkan mutu pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan di madrasah. Sehingga dapat disarankan untuk meningkatkan mutu pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan, maka tingkatkanlah evaluasi penggunaan teknologi informasi di madrasah.
Kata kunci: Evaluasi Penggunaan Teknologi Informasi, Mutu Pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

Introduction

Information technology is a very important and interesting component to study, because the rapid development of technology today has brought significant changes in various fields of life, especially in the world of education. As stated by Asmawi, dkk., (2019) the impact of the development of information technology in the field of education is very significant, such as the process of communication and information from educators to students containing educational information, which has elements of educators as sources of information, media as a means of presenting ideas, concepts and educational material, and the students themselves.[1] Information and communication technology has a positive impact on the advancement of science and communication, creating innovations in the learning process that enable teaching and learning activities to be more interactive, effective, and efficient.[2] Physical Education, Sports and Health (PJOK), as an integral part of the education curriculum, has also begun to undergo a transformation by utilising technology as a learning support medium.[3] PJOK learning already uses information technology, and technology-based learning media can help visualise abstract concepts and motivate students to be more active in the learning process.[4] Information technology can increase the effectiveness of learning through easy access to information and flexibility in the methods of delivering material.[5] Physical education in learning activities that give proportional and adequate attention to the main subjects in technology-based learning.[6] Specifically, MTsN 2 Bengkulu City already uses information technology such as learning videos, fitness applications, and the digital platform for physical assessment and evaluation, providing great opportunities to improve students' understanding and engagement. In Physical Education, Sports, and Health (PJOK) lessons, the challenges in the learning process are also increasingly complex. Until now, PJOK learning has been more focused on physical practice carried out in the field.

However, due to time constraints, weather conditions, inadequate facilities, and large numbers of students, the effectiveness of PJOK learning is often an obstacle. Therefore, innovation in PJOK learning,

[1] Asmawi, Syafei, and Muhammad Yamin, 'Pendidikan Berbasis Teknologi Informasi Dan Komunikasi', *Prosiding Seminar Nasional Pendidikan*, 3 (2019), 50–55.

[2]Khairiah Khairiah, 'Digitalization, Webometrics, and Its Impact on Higher Education Quality During the COVID-19 Pandemic', *Evolutionary Studies in Imaginative Culture*, 8.2 (2024), 802–15 <https://doi.org/10.70082/esiculture.vi.732>.

[3]Winanda Amilia, 'Peran Guru Dalam Pemanfaatan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi Di Sekolah Dasar', *Jurnal Inovasi Pendidikan Dan Pembelajaran Sekolah Dasar*, 6.1 (2022), 38–48.

[4]Wahyu Irfan Rojali and others, 'Evaluasi Pembelajaran Daring Mata Pelajaran Pendidikan Jasmani Olahraga Dan Kesehatan SMA Pada Era Pandemi Covid-19', *Jurnal MensSana*, 6.1 (2021), 92–99 <https://doi.org/10.24036/menssana.06012021.24>.

[5]Nur Maulida Prita, Kiftian, Irma, 'Peran Guru Dalam Penggunaan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi (TIK)', *Jurnal Penelitian, Pendidikan Dan Pengajaran: JPPP*, 3.3 (2022), 225–34 <https://doi.org/10.30596/jppp.v3i3.12978>.

[6]Hermawansyah, 'MANAJEMEN LEMBAGA PENDIDIKAN SEKOLAH BERBASIS DIGITALISASI DI ERA COVID -19', *Fitrah: Jurnal Studi Pendidikan*, 2021.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

including the integration of information technology, is an important step in creating a more effective and efficient learning process. The success of learning is not only measured by assessing student learning outcomes, but also by the design and implementation of the learning programme. However, in practice, the use of information technology in PJOK learning does not always run smoothly. Many factors influence the successful use of technology in schools, ranging from the availability of infrastructure and teacher competence to student readiness. Some teachers still experience difficulties in operating technological devices or selecting appropriate learning media, including at MTsN 2 Kota Bengkulu. On the other hand, not all students have equal access to digital devices, especially those from economically disadvantaged backgrounds. Based on these issues, Evaluation of the Use of Information Technology in the Quality of Physical Education and Health Learning at MTsN 2 Bengkulu City.

The purpose of this study is to evaluate the use of information technology in physical education, sports and health (PJOK) learning. To facilitate the achievement of the above objectives, the author formulated four questions as follows: (1) What is the context of information technology use in the quality of PJOK learning at MTsN 2 Bengkulu City?; (2) What is the input of information technology use in the quality of PJOK learning at MTsN 2 Bengkulu City?; (3) How is the process of using information technology in the quality of PJOK learning at MTsN 2 Bengkulu City?; and (4) How are the products of using information technology in the quality of PJOK learning at MTsN 2 Bengkulu City? These four questions were evaluated in the following section.

Methodology

Research on the Evaluation of the Use of Information Technology in the Quality of Physical Education, Sports and Health Learning at MTsN 2 Bengkulu City. Using a descriptive qualitative approach with a CIPP (Context, Input, Process, Product) evaluation model developed by Daniel L. Stufflebeam (1971).[7] This model provides a systematic and comprehensive programme evaluation framework, focusing on four main dimensions: context, input, process, and product.[8] The use of the CIPP model in this study isintended to evaluate the effectiveness of information technology use in Physical Education, Sports, and Health (PJOK) learning at MTsN 2 Bengkulu City. The problem can be proven by the lack of facilities and infrastructure and PJOK teachers who still lack understanding of technology, as well as students who do not all have digital access due to economic factors. (1) Context Evaluation: at this stage, researchers identify the needs, challenges, and opportunities in the use of information technology in PJOK learning. Data collection techniques were carried out through interviews with the school principal and PJOK teachers, as well as documentation of school policies related to the digitisation of learning. This evaluation helped to understand the rationalisation and basis of the ongoing technology integration programme.[9] (2) Input Evaluation: The components analysed included human

[7]Daniel L. Stufflebeam, *The Relevance of the CIPP Evaluation Model for Educational Accountability* (Michigan: ERIC, 1971).

[8]M.Pd Dr. Hj. Khairiah, *KINERJA GURU DALAM PERSPEKTIF BUDAYA ORGANISASI, KEPEMIMPINAN DAN MOTIVASI KERJA*, 2020.

[9]Daniel L. Stufflebeam, *The Relevance of the CIPP Evaluation Model for Educational Accountability* (Michigan: ERIC, 1971)

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

resource readiness, the availability of technological facilities and infrastructure, as well as policy support and training. Data was obtained through observation of school facilities, in-depth interviews with teachers and students, and document review in the form of lesson plans, digital teaching media, and learning modules. This is in line with the views of Arikunto and Jabar (2004), that input determines the extent to which a program can be successful.[10] (3) Process Evaluation, on the implementation and application of technology in learning activities. The activities analysed included material delivery strategies, student engagement, and technical obstacles encountered. Data collection techniques included classroom observation, interviews with physical education teachers, and documentation in the form of learning videos and learning outcome records. This approach is in line with the opinion of Worthen & Sanders (1987), that process evaluation is important to determine whether the programme is being implemented as intended.[11] (4) Product Evaluation. This evaluation focused on the final results of technology integration, including improvements in student understanding, learning motivation, active participation, and students' ability to reflect on PE material. Data was collected through analysis of student evaluation results, interviews with teachers about learning outcomes, and student testimonials. Product evaluation measures the effectiveness and long-term impact of a programme.[12]

The subjects of this study were PJOK teachers and students in grades VIII and IX at MTsN 2 Bengkulu City. The subjects were selected purposively, based on the consideration that these teachers and students were actively involved in PJOK learning and had used information technology in the learning process. The data collection techniques used included direct observation of PJOK learning activities, in-depth interviews with teachers and students, and documentation such as teaching tools, learning videos, and student learning outcome records. This study also utilised secondary data in the form of school policies related to the implementation of technology in learning.

To ensure data validity, the researcher used source and method triangulation techniques. Source triangulation was carried out by comparing information obtained from various informants, such as teachers, students, and the principal. Meanwhile, method triangulation was carried out by comparing the results of interviews, observations, and documentation. This step is important to avoid bias and ensure that the data obtained truly reflects the conditions in the field objectively and comprehensively.

Data analysis was conducted inductively through a process of data reduction, data presentation, and conclusion drawing. The collected data was analysed by identifying the main themes related to the use of information technology in PJOK

[10]Suharsimi Arikunto & Cepi Safruddin Abdul Jabar, *Evaluasi Program Pendidikan* (Jakarta: Bumi Aksara, 2004), hlm. 31

[11]Blaine R. Worthen & James R. Sanders, *Educational Evaluation: Alternative Approaches and Practical Guidelines* (New York: Longman, 1987), hlm. 88

[12]Daniel L. Stufflebeam, *The CIPP Model for Evaluation*, dalam *The International Handbook of Educational Evaluation*, ed. Stufflebeam & Kellaghan (Boston: Kluwer Academic Publishers, 2003), hlm. 31–62.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

learning. The researchers examined interaction patterns, obstacles encountered, and the impact of technology use on learning effectiveness. The results of this analysis were then used as a basis for formulating conclusions and recommendations relevant to the development of technology-based PJOK learning at MTsN 2 Bengkulu City.

Discussion

The results of the CIPP model evaluation of the use of information technology in PJOK learning at MTsN 2 Bengkulu City through four stages, namely: (1) the context of the use of information technology in the quality of PJOK learning at MTsN 2 Bengkulu City; (2) the input of the use of information technology in the quality of PJOK learning at MTsN 2 Bengkulu City; (3) the process of using information technology in the quality of PJOK learning at MTsN 2 Bengkulu City; and (4) the products of using information technology in the quality of PJOK learning at MTsN 2 Bengkulu City.

Context Of Information Technology Use In The Quality Of PJOK Learning

The context of information technology utilisation in PJOK learning at MTsN 2 Bengkulu City shows that PJOK teachers at MTsN 2 Bengkulu City have utilised several forms of information technology in the learning process. One of the most commonly used technologies is educational videos that show detailed demonstrations of sports movements. These videos are usually taken from platforms such as YouTube or made by the teachers themselves, then played in class or shared via WhatsApp groups and Google Classroom. The use of videos greatly helps students understand basic techniques that are difficult to explain verbally. In addition to videos, some teachers also use fitness applications such as Google Fit and digital stopwatch applications to measure students' physical fitness. PE teachers can also collect more objective and structured data and compare students' progress over time. This technology also provides space for students to learn independently and monitor their progress directly. The use of information technology in Physical Education, Sports, and Health (PJOK) learning is an important part of the education curriculum that aims to develop the physical, psychomotor, social, and emotional aspects of students.

The use of information technology can improve the quality of PJOK learning. As shown by the results of Setiawan I's (2020) research, this information technology application is used when students take fitness tests or do routine exercises such as running, push-ups, and sit-ups.[13] PJOK does not only emphasise physical activity, but also equips students with knowledge and a positive attitude towards a healthy and active lifestyle.[14] PJOK learning often faces challenges due to its characteristics, which require a large space for movement, special equipment, and active student involvement in field practice. In this context, information technology is a solution to bridge the need

[13]Mortigor Afrizal Purba and Agus Defri Yando, 'Pemanfaatan Teknologi Informasi Dalam Pendidikan Dan Pembelajaran Di Era Revolusi Industri 4.0', *Prosiding Seminar Nasional Ilmu Sosial Dan Teknologi (SNISTEK)*, 2.3 (2020), 96–101.

[14]Bambang Karyadi, 'Pemanfaatan Kecerdasan Buatan Dalam Mendukung Pembelajaran Mandiri', *Educate: Jurnal Teknologi Pendidikan*, 8.2 (2023), 253–58 <https://doi.org/10.32832/educate.v8i02.14843>.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

for flexible, effective, and adaptive learning.[15] Information technology in learning refers to all forms of hardware, software, and digital systems used to deliver, support, or manage the learning process. According to the Technology Acceptance Model (TAM) theory developed by Davis (1989), the use of technology in education is greatly influenced by perceived ease of use and perceived usefulness.[16] Therefore, PE teachers tend to accept and use technology because they feel that it is easy to use and provides real benefits in improving the learning process.

The actual issue faced in the use of information technology in PJOK learning is that the level of consistency in the use of technology is still a challenge. Some teachers have shown continuous efforts to integrate technology into their lesson plans, while others are still incidental, depending on the availability of tools and internet networks. This consistency is also greatly influenced by teacher motivation, support from the school, and the training received. Schools that actively facilitate the development of teachers' digital competencies tend to have a better level of technology integration in learning. In terms of readiness, most PJOK teachers at MTsN 2 Bengkulu City already have a basic understanding of the use of information technology, but not all of them have mastered the creation of interactive and contextual digital content. Teachers who are tech-savvy are usually more creative in compiling tutorial videos or using learning applications, while those who are less familiar rely more on standard media such as PDF files and YouTube videos.

Therefore, strengthening teachers' capacity in digital literacy is an important requirement for improving the quality of technology- based PJOK learning. In addition to teachers, student readiness also plays an important role in determining the success of information technology integration in learning. The majority of students are accustomed to using devices such as smartphones and laptops, but their use for learning purposes still requires guidance. Some students show high enthusiasm in participating in online quizzes and learning videos, while others tend to be passive or experience access difficulties due to device limitations and internet quotas. In general, it can be concluded that the level of information technology utilisation in PJOK learning at MTsN Kota Bengkulu is quite good, especially in the delivery of theoretical material. However, there is still room for improvement, particularly in terms of consistency, creativity in media use, and strengthening the capacity of teachers and students. Continuous evaluation and support from the school are crucial to the long-term success of the integration of technology in PJOK subjects.

Input Of Information Technology Use In The Quality Of PJOK Learning

The use of information technology in Physical Education, Sports, and Health (PJOK) learning at MTsN 2 Bengkulu City has had a significant positive impact on learning effectiveness. Technology enables teachers to deliver material in a more interesting and interactive way, especially in terms of theory, which is usually considered less interesting by students. With the availability of learning media such as videos demonstrating sports

[15]Khairiah.

[16]Meita Dwi Solviana, 'Pemanfaatan Teknologi Pendidikan Di Masa Pandemi Covid-19: Penggunaan Gamifikasi Daring Di Universitas Muhammadiyah Pringsewu Lampung', *Al Jahiz: Journal of Biology Education Research*, 1.1 (2020), 1–14 <https://doi.org/10.32332/al-jahiz.v1i1.2082>.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

techniques, animations of human anatomy, and interactive quizzes based on applications, it has become easier for students to understand abstract concepts that were previously difficult to explain using only conventional methods such as lectures or blackboards. One indicator of increased learning effectiveness due to the use of technology is students' understanding of the material. Based on interviews with several PJOK teachers, they revealed that students showed improvement in answering evaluation questions after the material was delivered using learning videos. This happened because students could directly see the movements, techniques, and procedures of sports visually and could replay the footage as needed. This visualisation was very helpful, especially for students who had visual and kinesthetic learning styles. In addition to increased understanding, student engagement or participation in the learning process also increased. Students' motivation to learn has also increased with the presence of information technology in PJOK learning. In interviews, several students stated that learning felt more enjoyable and less boring when teachers used media such as videos or exercise applications. They felt more interested in understanding the material and more confident in trying sports practices because they already had an idea of the correct movements from previous videos. This motivation is very important because PJOK learning requires active participation and a positive attitude towards physical activity.

From the results of evaluations conducted during several PJOK meetings, it can be seen that students are more active in asking questions and discussing when the material is delivered with the help of technology. For example, when the teacher showed a video of the basic techniques of volleyball, many students asked questions about hand position, serving techniques, and game strategies. This interaction shows that students do not only absorb the material passively, but also analyse and critique the information they receive.[17]

However, not all information technology has an entirely positive impact. In some cases, the use of technology actually causes students to become dependent on visual and digital material, so that they become less accustomed to reading textbooks or listening to the teacher's verbal explanations. This shows that technology must be used proportionally, as a tool, not as the only source of learning. Therefore, teachers need to combine digital approaches with traditional methods to maintain a balance in learning strategies. From the teachers' perspective, the use of technology also has an impact on increasing professionalism and creativity. Teachers are required to continue learning and developing learning media that is interesting and relevant to the characteristics of students. Thus, the use of information technology in PJOK learning at MTsN 2 Bengkulu City has proven to be able to improve the effectiveness of learning in various aspects: understanding of material, student engagement, and learning motivation. However, the use of technology must continue to be evaluated and adjusted to the

[17] A Khairiah Khairiah, Ali and M Mulyadi, 'Misperceptions of Leadership in Education Management in the Metaverse Era', *Migration Letters*, 20.6 (2023), 465–81 <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85175843897&partnerID=40&md5=20c3ba40b853a348a08e0059507d6860>.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

needs and real conditions in the field so that its impact is truly optimal and sustainable in supporting holistic physical education goals.

The Process Of Using Information Technology In The Quality Of Physical Education Learning

The use of information technology in PJOK learning at MTsN 2 Bengkulu City has many benefits, but it also presents a number of challenges. One of the main obstacles faced is the limited availability of technological devices for both teachers and students. Not all teachers have laptops to support the use of learning applications. Meanwhile, some students only have access to their parents' devices or have to share them with other family members, so they do not have free access to digital materials. Another significant obstacle is the issue of internet connectivity. Although the school is located in an urban area, not all students have stable internet access at home. When learning takes place online or teachers share materials through platforms such as Google Classroom or WhatsApp, some students are unable to access the materials optimally due to weak signals or insufficient internet quota. This causes inequality in access to information and has an impact on students falling behind in understanding PJOK learning materials. After conducting an evaluation, various obstacles were identified and adaptive solutions were developed so that the integration of information technology in PJOK learning at MTsN Bengkulu City could run more optimally. Support for collaboration with various parties, including teachers, students, parents, and educational institutions, ensures that the use of technology is not just a formality but truly an effective tool in improving the overall quality of learning.

Collaboration between schools and parents is also an important strategy in overcoming limited access to technology. In some activities, schools involve parents to accompany their children during online learning at home, especially during sports practices that require supervision. In addition to increasing the effectiveness of learning, this approach also strengthens the relationship between schools and families as partners in the educational process. In the future, a more systematic strategy is needed to overcome the obstacles to the application of technology in PJOK learning. Schools need to develop a continuous teacher capacity building programme based on practical needs in the field. Local governments and the Ministry of Religious Affairs are also expected to provide more concrete support in the form of equipment assistance and internet subsidies for students from underprivileged families, so that the digital divide does not continue to widen.[18]

The actual issue of information technology use among teachers and the lack of training on the effective use of information technology in learning are also obstacles in themselves. Some PE teachers admit that they do not fully understand how to create interactive digital media such as educational videos, online quizzes, or fitness exercise applications. As a result, the use of technology tends to be simple and limited to the use of media that is already widely available, without innovation or adaptation to the local context and student needs.[19] The

[18]Kusnadi, A. (2018). Evaluasi Pembelajaran PJOK dengan Pemanfaatan Teknologi. Surabaya: Penerbit Universitas Negeri Surabaya, hlm. 77-83

[19]R. Mursid and Erma Yulia, 'Pengembangan Pembelajaran Dalam Teknologi Pendidikan Di Era Ri 4.0', *Prosiding Seminar*

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

lack of infrastructure support in schools also exacerbates the situation. Facilities such as school Wi-Fi networks, projectors, and multimedia rooms, which should support technology- based learning processes, are still not optimal.[20] Reliance on personal resources cannot be a long-term solution because not all teachers have the same resources.[21] However, schools have made a number of efforts to overcome these obstacles. One of them is to hold training for teachers in order to improve digital literacy, although it is still limited in frequency and scope of material. In addition, the school has also begun to improve learning facilities by procuring additional projectors and expanding the internet network within the school environment so that teachers can access online materials more easily when teaching. Thus, the use of information technology in PJOK learning determines the quality of learning in madrasahs.

Products Of Information Technology Use In The Quality Of PJOK Learning

The use of information technology in the quality of Physical Education, Sports and Health (PJOK) learning at MTsN 2 Bengkulu City has shown positive results in improving the quality of learning. PJOK teachers have been able to use various technological facilities such as the madrasah's Wi-Fi network, projectors, and multimedia rooms, learning videos, fitness applications, and online learning platforms, which have enabled teachers to deliver material in a more interesting and interactive way in an effort to support the information technology- based learning process. This not only helps improve students' understanding of theoretical concepts in PJOK, but also provides opportunities for students to learn independently and participate more actively in learning activities. The use of information technology tends to be simple and limited to the use of media that is already widely available, without innovation or adaptation to the local context and student needs. It still relies on personal resources, which cannot be used as a long-term solution because not all teachers and students have the same resources in terms of technology ownership and literacy in madrasahs

The products of information technology use in PJOK learning are very diverse, ranging from hardware to software and online platforms to support and enhance the learning process. The following are products used in learning: (1) software, such as learning management systems (LMS); (a) platforms such as Google Classroom, Microsoft Teams, and Moodle to manage digital classrooms; (b) educational applications such as Duolingo, Khan Academy, Photomath, Socratic, and Quizlet for digital flashcards; (c) collaborative platforms such as Google Meet and Zoom for virtual classroom interaction; and (d) adaptive learning to tailor learning content to student performance and learning speed,

Nasional Teknologi Pendidikan Peran Teknologi Pendidikan Dalam Mengembangkan Dan Meningkatkan Keprofesionalan Pendidik Di Era Revolusi Industri 4.0, 2019, 35–42.

[20]Cahyani Amildah Citra and Brillian Rosy, 'Keefektifan Penggunaan Media Pembelajaran Berbasis Game Edukasi Quizizz Terhadap Hasil Belajar Teknologi Perkantoran Siswa Kelas X SMK Ketintang Surabaya', *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 8.2 (2020), 261–72 <https://doi.org/10.26740/jpap.v8n2.p261-272>.

[21]Siti Maemunawati and Muhammad Alif, *Peran Guru, Orang Tua, Metode Dan Media Pembelajaran: Strategi KBM Di Masa Pandemi Covid-19*, *Laboratorium Penelitian Dan Pengembangan FARMAKA TROPIS Fakultas Farmasi Universitas Mualawarman, Samarinda, Kalimantan Timur*, 2020.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

learning videos such as YouTube as a popular learning resource; (2) hardware. Such as computers, laptops, and tablets, interactive whiteboards, projectors and speakers, and educational robotics; and (3) other innovative technologies in learning such as virtual reality (VR) and augmented reality (AR), artificial intelligence, and e-books and digital materials replacing physical textbooks and digital materials that are more accessible and easier to update.[22] Thus, the use of these information technology products helps create a more interactive, flexible, and personalised learning environment, and can increase students' interest and motivation to learn at madrasahs.[23]

Current issues in the use of information technology in learning include: (1) the digital divide. This refers to the unequal access to technological infrastructure (internet networks and digital devices), which remains a major challenge, especially in remote areas; (2) teacher competence. This means that many teachers still face difficulties in adapting and are not yet fully trained to use technology effectively in the learning process; (3) ethics and data security. This means that the widespread use of technology raises ethical issues related to student privacy and cyber security; (4) distraction. This means that digital devices can be a significant source of distraction for students, who are more interested in social media than focusing on the subject matter; and (5) changes in the role of teachers. This means that technology is changing the role of teachers from being the centre of information to being facilitators. This requires a paradigm shift in learning methods, from traditional models to a more collaborative and student-centred approach.[24] Thus, these issues highlight the need for a balanced approach between technological innovation and the readiness of human resources and infrastructure to ensure that technology truly improves the quality of learning fairly and evenly in madrasahs.

Conclusion

The evaluation of the use of information technology in Physical Education, Sports, and Health (PJOK) learning at MTsN 2 Bengkulu City has shown an improvement in learning quality. The evaluation results were obtained through the CIPP model approach. The use of various technological media, such as learning videos, fitness applications, and online learning platforms, has enabled teachers to deliver material in a more interesting and interactive way. This has not only helped improve students' understanding of theoretical concepts in PJOK, but also provided opportunities for students to learn independently and participate more actively in learning activities. The school has taken a number of strategic steps to overcome these obstacles, such as conducting training for teachers, providing materials in digital and printed form, and collaborating with parents to assist students in the online learning process. However, the existing solutions are still temporary and require further improvement and support from the government and other relevant parties. Moreover, the successful implementation of technology depends not only on facilities and infrastructure, but also on the mental

[22]Khairiah Khairiah and others, 'Delegitimization of Leadership in Overcoming Difficulties in Online Learning during the COVID-19 Pandemic', *World Journal on Educational Technology: Current Issues*, 14.3 (2022), 726–39 <https://doi.org/10.18844/wjet.v14i3.7209>.

[23] Mursid and Yulia.

[24] Khairiah and others.

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

readiness and skills of teachers in maximising the use of information technology.

To improve the quality of technology-based PJOK learning, madrasahs need to strengthen technology ownership and digital literacy for teachers and students, as well as improve infrastructure support in madrasahs. The government and madrasahs also need to allocate a larger budget for the procurement of technological devices and the provision of more equitable internet access. This will optimise the use of information technology in PJOK learning and have a direct impact on improving the quality of education in a more equitable and inclusive manner.

Referensi

Amilia, Winanda, 'Peran Guru Dalam Pemanfaatan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi Di Sekolah Dasar', *Jurnal Inovasi Pendidikan Dan Pembelajaran Sekolah Dasar*, 6.1 (2022), 38–48

Asmawi, Syafei, and Muhammad Yamin, 'Pendidikan Berbasis Teknologi Informasi Dan Komunikasi', *Prosiding Seminar Nasional Pendidikan*, 3 (2019), 50–55

Citra, Cahyani Amildah, and Brillian Rosy, 'Keefektifan Penggunaan Media Pembelajaran Berbasis Game Edukasi Quizizz Terhadap Hasil Belajar Teknologi Perkantoran Siswa Kelas X SMK Ketintang Surabaya', *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 8.2 (2020), 261–72 <https://doi.org/10.26740/jpap.v8n2.p261-272>

Dr. Hj. Khairiah, M.Pd, *KINERJA GURU DALAM PERSPEKTIF BUDAYA ORGANISASI, KEPEMIMPINAN DAN MOTIVASI KERJA*, 2020

Hermawansyah, 'MANAJEMEN LEMBAGA PENDIDIKAN SEKOLAH BERBASIS DIGITALISASI DI ERA COVID -19', *Fitrah: Jurnal Studi Pendidikan*, 2021

Karyadi, Bambang, 'Pemanfaatan Kecerdasan Buatan Dalam Mendukung Pembelajaran Mandiri', *Educate: Jurnal Teknologi Pendidikan*, 8.2 (2023), 253–58 <https://doi.org/10.32832/educate.v8i02.14843>

Khairiah Khairiah, Ali, A, and M Mulyadi, 'Misperceptions of Leadership in Education Management in the Metaverse Era', *Migration Letters*, 20.6 (2023), 465–81 <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85175843897&partnerID=40&md5=20c3ba40b853a348a08e0059507d6860>

Khairiah, Khairiah, 'Digitalization, Webometrics, and Its Impact on Higher Education Quality During the COVID-19 Pandemic', *Evolutionary Studies in Imaginative Culture*, 8.2 (2024), 802–15 <https://doi.org/10.70082/esiculture.vi.732>

Khairiah, Khairiah, Zulfi Mubaraq, Asmendri Asmendri, Suswati Hendriani, Dahniar Th Musa, and Adison Adrianus Sihombing, 'Delegitimization of Leadership in Overcoming Difficulties in Online Learning during the COVID-19 Pandemic', *World Journal on Educational Technology: Current Issues*, 14.3 (2022), 726–39 <https://doi.org/10.18844/wjet.v14i3.7209>

Maemunawati, Siti, and Muhammad Alif, *Peran Guru, Orang Tua, Metode Dan Media Pembelajaran: Strategi KBM Di Masa Pandemi Covid-19*, *Laboratorium Penelitian Dan Pengembangan FARMAKA TROPIS Fakultas Farmasi Universitas*

UIN Fatmawati Sukarno Bengkulu
Jl. Raden Fatah Pagar Dewa Kota Bengkulu
Website: www.uinfasbengkulu.ac.id
URL : https://ejournal.uinfasbengkulu.ac.id/
Email: alkhair@mail.uinfasbengkulu.ac.id
E-ISSN : 2808-4632
P-ISSN : 2808-828X
Contak person : 0852-6824-1677

Mualawarman, Samarinda, Kalimantan Timur, 2020

Mursid, R., and Erma Yulia, 'Pengembangan Pembelajaran Dalam Teknologi Pendidikan Di Era Ri 4.0', *Prosiding Seminar Nasional Teknologi Pendidikan Peran Teknologi Pendidikan Dalam Mengembangkan Dan Meningkatkan Keprofesionalan Pendidik Di Era Revolusi Industri 4.0*, 2019, 35–42

Prita, Kiftian, Irma, Nur Maulida, 'Peran Guru Dalam Penggunaan Media Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi (TIK)', *Jurnal Penelitian, Pendidikan Dan Pengajaran: JPPP*, 3.3 (2022), 225–34 <https://doi.org/10.30596/jppp.v3i3.12978>

Purba, Mortigor Afrizal, and Agus Defri Yando, 'Pemanfaatan Teknologi Informasi Dalam Pendidikan Dan Pembelajaran Di Era Revolusi Industri 4.0', *Prosiding Seminar Nasional Ilmu Sosial Dan Teknologi (SNISTEK)*, 2.3 (2020), 96–101

Rojali, Wahyu Irfan, Ngadiman Ngadiman, Didik Rilastiyo Budi, Panuwun Joko Nurcahyo, and Ayu Rizky Febriani, 'Evaluasi Pembelajaran Daring Mata Pelajaran Pendidikan Jasmani Olahraga Dan Kesehatan SMA Pada Era Pandemi Covid-19', *Jurnal MensSana*, 6.1 (2021), 92–99 <https://doi.org/10.24036/menssana.06012021.24>

Solviana, Meita Dwi, 'Pemanfaatan Teknologi Pendidikan Di Masa Pandemi Covid-19: Penggunaan Gamifikasi Daring Di Universitas Muhammadiyah Pringsewu Lampung', *Al Jahiz: Journal of Biology Education Research*, 1.1 (2020), 1–14 <https://doi.org/10.32332/al-jahiz.v1i1.2082>