

Usability of ICT for Teaching Islamic Studies Concepts in Senior Secondary Schools

Rahmat Abidemi Sanusi^{1*}, Hammed Olalekan Bolaji² 🝺

^{1,2,} Al-Hikmah University Ilorin, Ilorin, Nigeria

ARTICLE INFO

ABSTRAK

Article history: Received January 28, 2024 Accepted April 15, 2024 Available online April 25, 2024

Kata Kunci: TIK, Kegunaan, Pengajaran Kajian Islam, Zakat

Keywords: ICT, Usability, Teaching Islamic Studies, Zakat



This is an open access article under the <u>CC BY-SA</u> license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

ABSTRACT

Kegunaan alat informasi dan komunikasi yang tepat dalam pengajaran konsep studi Islam akan meningkatkan kinerja siswa dalam mata pelajaran tersebut. Namun belum ada penelitian yang membahas tentang tingkat penggunaan perangkat ICT di kalangan guru PAI SMA. Penelitian ini bertujuan untuk mengetahui tingkat kegunaan alat TIK di kalangan guru PAI SMA berdasarkan ketersediaan dan aksesibilitas. Desain penelitian survei deskriptif digunakan dalam penelitian. Dua pertanyaan penelitian digunakan untuk penelitian ini. Instrumen penelitian yang digunakan adalah kuesioner yang diadaptasi berjudul Usability of ICT in Teaching Islamic Studies Concept (UICTTISC). Teknik purposive sampling digunakan untuk memilih lima belas guru PAI sebagai sampel penelitian. Data yang dikumpulkan dari penelitian ini dianalisis melalui statistik deskriptif, dengan fokus pada penghitungan frekuensi dan persentase dasar. Temuan penelitian menunjukkan bahwa tingkat aksesibilitas guru PAI terhadap alat TIK untuk mengajar PAI cukup tinggi. Informasi terkini dalam penelitian ini berimplikasi pada pengembangan kebijakan pendidikan untuk memaksimalkan pemberdayaan TIK dan kedepannya dapat meningkatkan kualitas pembelajaran. Sebagai upaya perbaikan, pemerintah harus melatih dan melatih kembali para guru tentang kegunaan TIK yang tepat dalam pengajaran Agama Islam di Sekolah Menengah Atas.

Proper usability of information and communication tools in teaching Islamic studies concept enhances students' performance in the subject. However, there has been no research that discusses the level of use of ICT tools among high school Islamic studies teachers. This study aims at working on the level of usability of ICT tools among high school Islamic studies teachers based on availability and accessibility. Descriptive survey research design was used in the study. Two research questions were used for the study. The research instrument used was an adapted questionnaire titled Usability of ICT in Teaching Islamic Studies Concept (UICTTISC). A purposive sampling technique was used to select fifteen Islamic studies teachers as a sample for the study. The data collected from the study were analyzed through descriptive statistics, focusing on frequency counts and basic percentages. The findings of the study revealed that Islamic studies teachers' accessibility level of ICT tools to teach Islamic Studies was high. The latest information in this research has implications for developing educational policies to maximize ICT empowerment and in the future can improve the quality of learning. As an improvement effort, government should train and re-train teachers on the proper usability of ICT in teaching Islamic studies in Senior Secondary Schools.

1. INTRODUCTION

Education can help develop human potential (Agustiari et al., 2021; Suryantini et al., 2021). Currently education has been integrated with ICT. The significance of information and communication technology in teaching and learning can never be underestimated (Amelia & Solikhah, 2024; Lumanto, 2022). Information and communication technology makes teaching easy, interesting and accessible (Aka, 2017; Anshori, 2018). Examples of communication technology are various ICT gadgets such as telephones, computers, and many more (Muntaqo, 2017; Suryadi, 2015). ICT is electronic devices or gadgets for collecting, processing and communicating process information such as computer systems and those which disseminate information, such as telecommunication systems (Fauzi et al., 2023; Nurhayati, 2018). ICT

also describe as a product of electronic communication, related devices and other related resources in the modern period used in the acquisition of knowledge, skills and efficiency. Information and communication technology (ICT)can also be seen as the collection of computer and telecommunication systems such as telephone, fax machine, and telex to improve the quality of research, teaching learning and communication through its gathering, processing, storing, connecting, analyzing data as well as circulation of information (Hariyadi, 2023; Maduekwe, 2015). UNESCO defined information and communication technology as a combination of all the computers, telecommunication and relevant ICT equipment used in educational institutions including hardware, software, network for collection, storage, processing, transmission and presentation of information as well as appropriate service (Walukow et al., 2022; Jacob et al., 2020).

The invention of ICT and its introduction into teaching and learning has minimized educational challenges (Hidayatullah et al., 2023; Sari & Makaria, 2022). The pervasiveness of information and communication technology (ICT) has manifested drastic changes in everyday life activities of man including education (Subandowo, 2022; Jamun, 2018). Utilization of ICT in teaching can bring about significant changes in teaching and learning (Adisel & Prananosa, 2020; Dewi & Hilman, 2018). The rapid changes in information and communication technology (ICT) and its relevance and usability for teaching and learning is a symbol of anticipating fabulous achievement. The usability of ICT in education under conducive condition not only enhance and enrich potential skills across various fields but also strengthen students' retention, reproduction and self-efficacy. The interconnecting ability of information and communication technology (ICT) has brought closer to the education industry profound progressive changes that can make society prosper in all ramifications. Utilization of modern ICT facilities affords the students, teachers and school administrators access, assess and even retrieve all important documents within a very short period (Anshori, 2018; Victor & Bolanle, 2017). The senior secondary school education system is a set of formal educational systems practised in Nigeria. Secondary education is education children acquire after completion of Basic (primary) education and before tertiary education. This is in line with the system of 6-3-3-4 system of education in Nigeria (Onanwa & Wisdom, 2020; Olagbegi, 2015). Thus, it's of two stages, a Junior secondary section and a senior stage and each stage is to attain a designed knowledge for three years. While senior secondary education is the second stage with an already designed comprehensive core -curriculum to broaden the student's intellectual abilities. Hence, this is a stage where a selection of subjects of their choice is made and train them ahead in their various fields of profession.

The content of Islamic Studies was in the first instance limited to Qur'an and its exegesis (Tafsir) and Islamic jurisprudence (Figh) that has five (5) divisions and the subject was referred to as Islamic Religion Knowledge (I.R.K). The introduction of the 6-3-3-4 system of education, the content of Islamic Studies in secondary schools contained three major parts: Hidayah (Guidance), Fiqh (Jurisprudence), and Tarikh (Historical Development of Islam). Each of the three parts also comprises three units. The parts and units are Hidavah (Guidance) including Our'an, Hadith (prophetic savings), and Tahdhib (Punishment). Figh (Islamic Jurisprudence) encompasses Tawhid (Theology), Ibadah (Worship), and Mu'amalah (Human Relation). Tarikh (Historical Development of Islam) contains Sirah (Life history of Prophet Mohammed (S.A.W) and the leadership of four orthodox caliphs), the spread of Islam to West Africa, and the contribution of Muslims to the world's civilisation. Islamic studies education refers to all behaviour or activities that modify, and transform an individual to become a complete or better person. Religious education studies in which a person acquires through the basis of the Quran and an act of worshipping in line with the Islamic fundamental principles, as well as supplications based on pillars of Islam such as Salat, Zakat, Fasting, and pilgrimage (Hajj). Islamic education is the implementation of Islamic knowledge acquired in the schools as it is stated in the curriculum. More so, Islamic studies constitute religious elements heresy and moral education which are designed in the National Policy on Education.

The effective utilization of ICT for teaching Islamic studies is based on its functions. Information and communication technology ICT tools refer to learning tools or assisting equipment to do assignments for the students, collect data and documents, communicate and conduct research (Zahwa & Syafi'i, 2022; Mahyudin et al., 2016). Proper usability of ICT in teaching Islamic studies can bring effectiveness and efficiency to the educational system. Thus, instructors use computers to make lesson plans through software, power oints are captured for well delivery of presentations. In addition, Distance education is of great use of ICT and e-learning (Nurgiansah, 2021; Widianto, 2021). Utilization of information and communication technology (ICT) in teaching and learning makes the work well performed, adequately handled and perfectly understood. Many researchers have worked on the utilization of ICT in teaching, its benefits and challenges. The report showed that inadequate usability of ICT facilities in senior secondary schools in Nigeria has been said to be among the causes of students' poor performance in both internal and external examinations. However, there has been no research that discusses the level of use of ICT tools

among high school Islamic studies teachers. This study aims at working on the level of usability of ICT tools among high school Islamic studies teachers based on availability and accessibility. This research was conducted at Ogbomoso, Oyo State, Nigeria. It is hoped that the latest information in this research can become a parameter for the use of ICT devices and can maximize learning among upper secondary Islamic studies teachers. This research has implications for developing educational policies to maximize ICT empowerment and in the future can improve the quality of learning.

2. METHOD

This study adopted a descriptive survey research design because it is used when data is collected for testing hypotheses generated or answering the research question formulated. The general population for this study was all Islamic studies Teachers in all secondary schools from all five Local Government Areas in Ogbomosho. The targeted population comprised all Islamic studies teachers in secondary schools in Ogbomosho. A purposive sampling technique was used to select three (3) Islamic secondary school teachers from each local government area. However, fifteen (15) Islamic studies teachers were used in the study as a sample. The instrument used in this study was an adapted questionnaire from Obakhum and the questionnaire was titled Usability of ICT in Teaching Islamic Studies (UICTTIS). The questionnaire contained six (6) items and the Likert scales; (A) Never (B) occasionally (c) almost every time (D) every time were used. Percentage was used to analyze the demographic data of the respondents and answer the research questions in the study. The instrument grid used in this research can be presented in Table 1 and Table 2.

Table 1. Grid of the availability	of ICT uses in	Teaching Islamic Studies
-----------------------------------	----------------	--------------------------

SN.	Aspect	Indicator	Number of Items
1	Completeness	My school has a sufficient number of ICT devices	
		Multimedia resources are accessible for teaching	4
		Availability of a digital library	4
		There are Educational Software for teaching	
2	Quality	ICT devices are in good condition	2
	-	ICT devices are connected to the internet	2
		Jumlah	6

Source : (Obakhume, 2011) with modifications

Table 2. Grid of the Accessibility of ICT Uses in Teaching Islamic Studies

Aspect	Indicator	Number of Items
Ability to use	I am able to start the computer.	
	I utilize the computer for instructing my students.	
	I can use Microsoft	
	I surf the internet to find materials for teaching.	6
	I utilize educational software like CAI for teaching.	
	I am capable of operating a printer that is linked to	
	the computer.	
	Jumlah	6

Source : (Obakhume, 2011) with modifications

The data collected from the study were analyzed through descriptive statistics, focusing on frequency counts and basic percentages. This methodological approach facilitated the clear and comprehensible summarization and presentation of findings, offering insights into the observed patterns and distributions within the dataset. The data that has been analyzed is then entered into a table for easy understanding

3. RESULT AND DISCUSSION

Result

The data collection process included the participation of selected subjects, ensuring diverse representation across categories. These subjects were carefully selected to reflect a broad spectrum of demographics or specific characteristics relevant to the research focus. The population sampled male

teachers of Islamic studies more than female teachers sampled for the study from secondary schools in Ogbomoso, Oyo State Nigeria. Detailed subject data can be presented in Table 3.

Gender	Frequency	Percentage (%)
Male	9	60%
Female	6	40%
Total	15	100%

Table 3. Gender Distribution of the Respondents

Based on the results of the analysis that has been carried out, it is known that has been carried out that computers, whiteboards, internet, projectors, smartphones and television are available ICT tools used in teaching Islamic studies in secondary schools in Ogbomosho Oyo state, Nigeria. Television is the only ICT tool that is not available for use by teachers to teach Islamic studies in secondary schools in Ogbomosho Oyo State, Nigeria. This implies that the above ICT tools are available for usability in secondary schools teaching Islamic studies in Ogbomosho Oyo state, Nigeria. In more detail the usability in teaching Islamic studies concept (Zakat) in secondary school in Ogbomosho Oyo State, Nigeria can be presented in Table 4.

Table 4 . Usability	Tools for Teaching	Islamic Studies in	Ogbomoso O	vo State, Nigeria

	A =Not a Pric			B =Low		C =Moderate		D =High	
SN	ICT Tools	No	%	No	%	No	%	No	%
1	Computer	2	13.3%	3	20%	5	33.3%	5	33.3%
2	Whiteboard	1	7%	1	7%	6	40%	7	47%
3	Internet	3	20%	4	26%	5	33.3%	3	20%
4	Projector	2	13%	3	20%	5	33.3%	5	33.3%
5	Smart Phone	3	20%	2	13.3%	4	26.1%	6	40%
6	Television	15	100%	0	0%	0%	0%	0%	0%

Computers, boards, projectors, smartphones and the internet are accessible ICT tools used for teaching Islamic studies concepts (Zakat) in secondary schools in Ogbomosho Oyo state, Nigeria. Television is the only tool not accessible in secondary schools for teaching Islamic studies. This implies teachers of Islamic studies in secondary schools in Ogbomosho Oyo state have access to ICT tools for teaching Islamic studies. In more detail, the research results accessibility of ICT tools for teaching Islamic in secondary schools in Ogbomosho Oyo state, Nigeria can be presented in Table 5.

Table 5. Accessibility of ICT Tools for Teaching Islamic in Secondary Schools in Ogbomosho Oyo state, Nigeria.

		A = Ac	B = Not Accessible		
SN	ICT Tools	No	%	No	%
1	Computer	12	80%	3	20%
2	White Board	11	73%	4	27%
3	Projector	12	80%	3	20%
4	Smart Phone	15	100%	0	0%
5	Internet	13	87%	2	13.3%
6	Television	0	0%	15	0%

Discussion

The findings of this study revealed that television is not included among the ICT devices utilized in the teaching of Islamic studies at senior secondary schools in Ogbomosho, Oyo State. Despite the broad range of technological tools available for educational purposes, television, which has been a traditional medium for disseminating educational content, appears to be absent from the current pedagogical practices in this specific context. Television is one of the media used for communication (Suparlan, 2021; Nurliana, 2020). The results of this research are in line with previous research which states that the role of television in the world of education is underutilized or is starting to be sidelined (Qi et al., 2023; Victor & Bolanle, 2017).

The research findings indicate that ICT devices commonly used in education include computers, whiteboards, smartphones, projectors, and the internet. This suggests that the presence of ICT tools can enhance the learning process, making it more engaging and efficient. Additionally, the integration of ICT can foster a more enjoyable learning environment. This is in line with previous research which shows that several application technologies integrated into education make the learning atmosphere more enjoyable (Silitonga, 2021; Lutfi et al., 2020). The prevalent use of these technologies highlights the significance of incorporating ICT in contemporary education, showcasing a shift towards more dynamic and interactive teaching practices.

The study found that senior secondary school teachers have very high access to almost all ICT devices. Besides that, this study found that high school teachers have very high access to almost all ICT tools. The research results show that all teachers master the use of smartphones, the dominant teachers master the use of computers, whiteboards, projectors and the internet. Meanwhile, television is not used in learning. With such high accessibility, teachers can effectively integrate these tools into their teaching methods, creating a more interactive and engaging educational environment.

Ability, interest and broad access to ICT tools are very important for teachers and students in learning. Teachers with digital technology can make learning more interactive and dynamic. This is in line with previous research which states that teachers who use technology in learning can make the learning atmosphere more interactive (Wahyudin & Ramadhan, 2023; Jh, 2018). Interactive learning can help develop human resources in line with current developments, because it allows students to be more active, creative and ready to face challenges in the digital era.

The incorporation of Information and Communication Technology (ICT) in education is essential as it enriches the learning experience, making it more engaging, interactive, and relevant to the needs of today's world. To effectively integrate ICT into their teaching practices, teachers must become proficient in using these tools. This proficiency not only enhances the overall quality of education but also ensures that students are well-prepared to thrive in a technology-driven environment. By mastering ICT, teachers can better equip students with the skills necessary to navigate and succeed in an increasingly digital landscape.

This research can provide the latest information regarding the level of use of ICT tools among high school Islamic studies teachers based on availability and accessibility. This research has implications for developing educational policies to maximize ICT empowerment and in the future can improve the quality of learning. The limitations of this research lies in the information provided which is limited to the level of use of ICT tools only. Future research can provide information that helps improve ICT or the application of ICT in the world of education

4. CONCLUSION

The latest information in this research shows that the level of ICT availability in schools is quite high, namely that there are computers, blackboards, projectors, smartphones and the internet which are fully used optimally. ICT tools in schools are used optimally for classroom learning, except television is not used by teachers in Ogbomosho Oyo state, Nigeria. This shows that accessibility to ICT tools is also very high.

5. REFERENCES

- Adisel, A., & Prananosa, A. G. (2020). Penggunaan Teknologi Informasi dan Komunikasi dalam Sistem Manajemen Pembelajaran pada Masa Pandemi Covid 19. Journal Of Administration and Educational Management (ALIGNMENT), 3(1), 1–10. https://doi.org/10.31539/alignment.v3i1.1291.
- Agustiari, N. P. S., Ganing, N. N., & Wiyasa, I. K. N. (2021). Model Pembelajaran Talking Stick Berbantuan Buku Cerita Terhadap Keterampilan Membaca Pemahaman Siswa. Jurnal Media Dan Teknologi Pendidikan, 1(1), 1–7. https://doi.org/10.23887/jmt.v1i1.35519.
- Aka, K. A. (2017). Pemanfaatan Teknologi Informasi dan Komunikasi (TIK) Sebagai Wujud Inovasi Sumber Belajar di Sekolah Dasar. ELSE (Elementary School Education Journal): Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar, 1(2). https://doi.org/10.30651/else.v1i2a.1041.
- Amelia, A., & Solikhah, M. (2024). Meningkatkan Kreativitas Menulis Siswa Melalui Penerapan Teknologi. Jurnal Pendidikan Indonesia, 5(1), 1–8. https://doi.org/10.59141/japendi.v5i1.2663.
- Anshori, S. (2018). Pemanfaatan Teknologi Informasi Dan Komunikasi Sebagai Media Pembelajaran. Civic-Culture: Jurnal Ilmu Pendidikan PKn Dan Sosial Budaya, 2(1), 88–100. Retrieved from https://core.ac.uk/download/pdf/297668739.pdf.

- Dewi, S. Z., & Hilman, I. (2018). Penggunaan TIK sebagai Sumber dan Media Pembelajaran Inovatif di Sekolah Dasar. Indonesian Journal of Primary Education, 2(2), 48–53. Retrieved from https://www.academia.edu/download/101649609/8561.pdf.
- Fauzi, A. A., Harto, B., Mulyanto, Dulame, I. M., Pramuditha, P., Sudipa, I. G. I., ... Wulandari, R. (2023). Pemanfaatan Teknologi Informasi di Berbagai Sektor Pada Masa Society 5.0. PT. Sonpedia Publishing Indonesia.
- Hariyadi, A. (2023). Supervisi Akademik Berbasis TIK Untuk Meningkatkan Kinerja Guru Dalam Melaksanakan Pembelajaran. Equity In Education Journal, 5(1), 65–72. Retrieved from https://e-journal.upr.ac.id/index.php/eej/article/view/8259.
- Hidayatullah, M. T., Asbari, M., Ibrahim, M. I., & Faidz, A. H. H. (2023). Urgensi Aplikasi Teknologi dalam Pendidikan di Indonesia. Journal of Information Systems and Management (JISMA), 2(6), 70–73. https://doi.org/10.4444/jisma.v2i6.785.
- Jacob, O. N., Jegede, D., & Musa, A. (2020). Administration of Information Communication Technology (ICT) in Nigerian secondary schools: Challenges and the ways forward. Electronic Research Journal of Engineering, Computer and Applied Sciences, 2, 50–63. Retrieved from https://www.researchgate.net/profile/Abubakar-Musa-28/publication/358221454_.
- Jamun, Y. M. (2018). Dampak Teknologi Terhadap Pendidikan. Jurnal Pendidikan Dan Kebudayaan Missio, 10(1), 48–52. https://doi.org/10.36928/jpkm.v10i1.54.
- Jh, T. S. (2018). Pengembangan e-modul berbasis web untuk meningkatkan pencapaian kompetensi pengetahuan fisika pada materi listrik statis dan dinamis SMA. WaPFi (Wahana Pendidikan Fisika), 3(2), 51–61. https://doi.org/10.17509/wapfi.v3i2.13731.
- Lumanto, S. B. (2022). Perkembangan Teknologi Media Sosial Terhadap Karaker Anak dan Peran Orang Tua Didalamnya. https://doi.org/10.31219/osf.io/wgpkt.
- Lutfi, L., Kusumawardani, S., Imawati, S., & Misriandi, M. (2020). Evaluasi Penggunaan Aplikasi Kahoot Pada Pembelajaran di Sekolah Dasar (SD) Pada Guru. International Journal of Community Service Learning, 4(3), 186–191. https://doi.org/10.23887/ijcsl.v4i3.27999.
- Maduekwe, A. (2015). Obstacles to the use of ICT in humanities education in Nigeria: Transforming practice for improved learning. In Department of Arts and Social Science Education, Faculty of Education, University of Lagos, Nigeria.
- Mahyudin, R., Alwis, N., & Sri, W. (2016). Pembelajaran Bahasa Arab Berbasis Teknologi Informasi Dan Komunikasi Di Kota Padang. Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban, 3(1), 1–12. Retrieved from http://eprints.umsb.ac.id/258/.
- Muntaqo, R. (2017). Teknologi Informasi dan Komunikasi Dalam Perkembangan Budaya Masyaraka. Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ, 4(1), 12–20. https://doi.org/10.32699/ppkm.v4i1.401.
- Nurgiansah, T. H. (2021). Pemanfaatan E-Learning Dalam Pembelajaran Pendidkan Kewarganegaraan. JINTECH: Journal of Information Technology, 2(2), 138–146. Retrieved from https://www.journal.ar-raniry.ac.id/index.php/jintech/article/download/672/667.
- Nurhayati, A. (2018). Perkembangan Perpustakaan dalam Pemenuhan Kebutuhan Informasi Masyarakat. Unilib: Jurnal Kepustakaan, 9(1). https://doi.org/10.20885/unilib.vol9.iss1.art3.
- Nurliana, N. (2020). Televisi Sebagai Media Dakwah Islam Dalam Kehidupan Masyarakat Indonesia. Urnal Peurawi: Media Kajian Komunikasi Islam, 3(1), 120–135. https://doi.org/10.22373/jp.v3i1.6768
- Obakhume, A.-S. A. (2011). Assessment of School Teachers' Use of Information and Communication Technology (ICT) in Oyo Metropolis of Nigeria. Journal of Educational and Social Research, 1(5), 131–136. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=f438f04abf136cd29dd0e4acf 33492d063376f38.
- Olagbegi, A. O. (2015). A Critical Review of the Revised 9-Year Basic Education Curriculum (BEC) in Nigeria. SFU Educational Review, 8. https://doi.org/10.21810/sfuer.v8i.387.
- Onanwa, A., & Wisdom, A. (2020). Improving Primary Education in Nigeria Through Quality Control. Equatorial Journal of Education and Curriculum Studies, 3(2), 37–43. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3738004.
- Qi, J., Yan, Y., & Yin, H. (2023). Screen time among school-aged children of aged 6–14: a systematic review. Global Heart Research and Policy, 12. Retrieved from https://ghrp.biomedcentral.com/articles/10.1186/s41256-023-00297-z.
- Sari, N. P., & Makaria, E. C. (2022). Tantangan Guru pada Masa Pandemi Covid-19. Jurnal Basicedu, 6(2), 2961–2969. https://doi.org/10.31004/basicedu.v6i2.2561.
- Silitonga, H. (2021). Pembelajaran Menyenangkan Dengan Aplikasi Quizizz di Tengah Pandemi Covid-19. Jurnal Penelitian, Pendidikan Dan Pengajaran, 2(2), 144–150. Retrieved from

https://scholar.archive.org/work/dtabkqzt3bggrecvyvxbidmeji/access/wayback/http://jurnal.umsu.ac.id/index.php/JPPG/article/download/7082/6074.

- Subandowo, M. (2022). Teknologi Pendidikan di Era Society 5.0. Jurnal Sagacious, 9(1). Retrieved from https://rumahjurnal.net/sagacious/article/view/1139.
- Suparlan, S. (2021). Pengaruh Penggunaan Media Televisi dalam Pembelajaran untuk Memperbaiki Perilaku Siswa di Sekolah Dasar. PANDAWA, 3(2), 269–278. Retrieved from https://ejournal.stitpn.ac.id/index.php/pandawa/article/view/1192.
- Suryadi, S. (2015). Peranan Perkembangan Teknologi Informasi dan Komunikasi dalam Kegiatan Pembelajaran dan Perkembangan Dunia Pendidikan. Informatika, 3(3), 133–143. https://doi.org/10.36987/informatika.v3i3.219.
- Suryantini, N. L. I., Ardana, I. K., & Asri, I. G. A. A. S. (2021). Model Experiential Learning Berbantuan Video Berpengaruh Terhadap Kompetensi Pengetahuan IPA. Jurnal Media Dan Teknologi Pendidikan, 1(1), 1–7. https://doi.org/10.23887/jmt.v1i1.35488.
- Victor, A. A., & Bolanle, R. R. (2017). Extent of information and communication (ICT) utilisation for students' learning in tertiary institutions in Ondo State, Nigeria. IJARIIE, 3(3), 2369–2376. Retrieved from https://eric.ed.gov/?id=ED580940.
- Wahyudin, A. Y., & Ramadhan, R. (2023). Pendampingan Penyusunan Perangkat Pembelajaran Berbasis Mobile Bagi Guru Sman 5 Bandar Lampung. Journal of Social Sciences and Technology for Community Service (JSSTCS), 4(2), 201–207. https://doi.org/10.33365/jsstcs.v4i2.3104.
- Walukow, M. R., Tambingon, H. N., & Rotty, V. N. J. (2022). Pergeseran Paradigma Pembelajaran Informatika di Sekolah. Jurnal Pendidikan Dan Konseling (JPDK), 4(5), 5411–5420. https://doi.org/10.31004/jpdk.v4i5.7517.
- Widianto, E. (2021). Pemanfaatan Media Pembelajaran Berbasis Teknologi Informasi. Journal of Education and Teaching, 2(2), 213–224. https://doi.org/10.24014/jete.v2i2.11707.
- Zahwa, F. A., & Syafi'i, I. (2022). Pemilihan Pengembangan Media Pembelajaran Berbasis Teknologi Informasi. Equilibrium: Jurnal Penelitian Pendidikan Dan Ekonomi, 19(1), 61–78. https://doi.org/10.25134/equi.v19i01.3963.