Profile of Elementary School Islamic Education Teachers in Utilizing Digital Platforms for Learning in the Era of Society 5.0

¹Wiku Aji Sugiri, ²Agus Mukti Wibowo, ³Sigit Priatmoko, ⁴Rizki Amelia ^{1,2,3&4}Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia ¹wikusugiri@uin-malang.ac.id, ²mukti@pgmi.uin-malang.ac.id, ³sigitpriatmoko@uinmalang.ac.id, ⁴rizkiamelia@uin-malang.ac.id

Abstract. There has been massive use of digital platforms in the era of Society 5.0. It has happened for at least the last ten years. Various platforms appear in various formats. However, not all of them can be used appropriately in learning. This research aims to describe the profile of elementary school Islamic education teachers in utilizing digital platforms for learning. The research subjects were elementary school Islamic education teachers in various regions. This research method is qualitative, with a descriptive approach. The data collection technique used was a survey with open questionnaires and interviews. The number of respondents in this study was 720. The results of the study show that elementary school teachers are familiar with various existing digital platforms. Instagram, WhatsApp, and YouTube are the 3 digital platforms most frequently accessed by respondents. More than 40% of respondents stated that they had installed these 3 platforms on their gadgets. Google Meet and Zoom Meeting are the platforms frequently used to facilitate online learning (52%). These conditions certainly provide opportunities related to the development of innovative and interesting learning models

Keywords. Islamic Education Teacher; Digital Platform; Era Society 5.0

Abstrak. Telah terjadi penggunaan platform digital secara masif di era society 5.0. Hal tersebut telah terjadi setidaknya dalam kurun waktu sepuluh tahun terakhir. Berbagai macam *platform* muncul dengan banyak format. Namun tidak semuanya dapat dimanfaatkan secara tepat dalam pembelajaran. Penelitian ini bertujuan untuk mendeskripsikan profil guru pendidikan agama Islam sekolah dasar dalam memanfaatkan platform digital untuk pembelajaran. Subjek penelitian adalah guru pendidikan agama Islam jenjang sekolah dasar yang berada di berbagai daerah. Metode penelitian ini yaitu kualitatif, dengan pendekatan deskriptif. Teknik pengumpulan data yang digunakan adalah survei dengan kuisioner terbuka serta wawancara. Responden dalam penelitian ini sejumlah 720. Hasil penelitian menunjukkan bahwa guru pendidikan agama Islam telah familiar/terbiasa dengan berbagai macam platform digital yang ada. Instagram, WhatsApp, dan Youtube merupakan 3 platform digital yang paling sering diakses oleh responden. Lebih dari 40% responden menyatakan telah menginstall 3 platform tersebut pada gadget-nya. Google Meet dan Zoom Meeting menjadi platform vang sering digunakan untuk memfasilitasi pembelajaran secara daring (52%). Kondisi tersebut tentu memberikan peluang terkait pengembangan model pembelajaran yang inovatif dan menarik.

Kata Kunci. Guru Pendidikan Agama Islam; Platform Digital; Era Society 5.0

A. INTRODUCTION

We are in an era called Society 5.0, where human life is influenced and dependent on technology (Sholeh et al., 2023; Widiasanti et al., 2023). Every aspect of our lives, from watching movies to ordering food, is run by technology. Not only that, technological advances also encourage the development of the education system, especially in terms of learning (Sudibjo et al., 2019). In the past, learning tended to be carried out classically in the classroom, now learning can be presented digitally. Therefore, schools must be able to adapt by making adjustments to existing developments (Sajidan et al., 2020).

Developments in education today are very complex (Lestari & Misbah, 2022). Education not only discusses theories that students must understand. More of that, education has presented a more adaptive learning pattern. One is by utilizing digital technology for learning (Bassar et al., 2021). Teachers and students can learn whenever and wherever they want (Ardiansyah & Meillynia, 2022).

Technology development means students and teachers are in a global learning environment connected via a network (A. Akbar & Noviani, 2019; Amelia et al., 2023). Some of the roles of technology in learning are infrastructure, open source materials, learning facility aids, research information sources, consultation media, and online learning media (Cholik, 2021). Current technology can store data very efficiently, we can access it anywhere and anytime, can present information in a variety of different media formats, and can respond to what is needed based on existing data. With the rapid development of technology, teachers and students must be able to adapt to utilize it in learning (Aspi & Syahrani, 2022).

One form of digital technology currently used massively is gadgets (C. A. Putra, 2017). Gadget usage has increased over time to reach 45 million users. Initially, gadgets were only used by office workers, business people, and officials. However, as time goes by, gadgets have become a habit and trend followed by everyone, including students (Hudaya, 2018). Gadgets are usually given to children by their parents as entertainment. Initially, gadgets were only filled with music so children wouldn't get bored. However, gradually, they feel bored and free from parental supervision (Nikmawati et al., 2021). Children use gadgets to communicate, access social media, play games, watch YouTube videos, etc. The intensity of children's use of gadgets is quite high at various times, such as when they wake up, before and after studying, and even a full day during school holidays (Nizar & Hajaroh, 2019).

The massive use of gadgets is certainly not only for children. Adults are the largest percentage of users. One of the users is an elementary school Islamic education teacher. Elementary school Islamic education teachers have an important role in learning. Character education is the main task of teachers. However, if learning is presented classically, it will certainly be very boring.

Islamic education commonly known as PAI, is one of the subjects commonly found in public and private schools that has an important position in shaping students' behavior and praiseworthy morals. Two things become the Basis for Islamic religious education: the Religious Basis and the Juridical Basis. Religious Basis comes from Islamic teachings contained in the Qur'an and Hadith. Juridical Basis The Basis for implementing religious education comes from the legislation in force in Indonesia which directly or indirectly can be used as a guide for implementing religious education (Salsabilla et al., 2021).

Islamic education learning is currently faced with challenges. The challenges come from internal and external sources. External challenges are in the form of educational curriculum policies that continue to experience renewal. Meanwhile, internal challenges come from the professionalization of schools and all their components. One of them is teacher professionalism (Wahid & Hamami, 2021). Islamic education teachers in elementary schools today are expected to have more roles in applying digital technology in learning. This research aims to describe the profile of elementary school Islamic education teachers in utilizing digital devices (in this case gadgets) to facilitate learning.

B. METHOD

This research uses a qualitative method with a descriptive approach. This research aims to determine teachers abilities to utilize digital platforms in learning, determine which platforms are frequently used, and analyze the emerging psychological aspects. The data collection technique used was a survey with an open online questionnaire (Google form) and interviews. There were 720 respondents in this study. Interviews were conducted by contacting several respondents via WhatsApp, telephone, and direct meetings. Interview subjects were selected randomly (random sampling).

C. RESULT AND DISCUSSION

This research involved 720 respondents spread across several regions. Respondents are free to determine the answers to questions that can be obtained. The general identity of respondents can be seen in the following table.

Table 1. Age of Respondents

Age of Respondents	Total	
< 18	255 (35,4%)	
18—25	442 (61,4%)	
26—35	11 (1,5%)	
> 35	12 (1,7%)	

Table 2. Respondent's Educational Level

Educational Level	Total
Senior High School	255 (35,4%)
Bachelor	442 (61,4%)
Master	22 (3,1%)
Doctor	1 (0,1%)

Table 1 shows that most respondents were aged 18—25 years. On average, respondents have completed undergraduate education and are currently pursuing undergraduate education. From Table 2, it can be seen that 465 (64.6%) respondents had completed undergraduate-level education. Of the respondents, 255 (35.4%) were temporary teachers pursuing a bachelor's degree in education.

All respondents stated they had gadgets like smartphones, laptops, tablets, and computers. Some respondents stated that they had personal gadgets since 2000. This indicates that teachers, as research subjects, have become accustomed to accessing digital devices. Teachers' ability to develop digital literacy is believed to increase student motivation and learning outcomes (Landa et al., 2021; Syahid et al., 2022).

The high use of gadgets by respondents also supports existing statistical data. Several articles explain that Indonesia's number of gadget users is quite high. Indonesia has the opportunity to grow very fast and big. The biggest need right now is support from the government so that Indonesia's digital industry can catch up with other countries. Internet penetration must be increased quickly. It should not only focus on Java but also spread to other regions in Indonesia. The government must also pave the way and provide various incentives so the digital industry can grow and access funding (Rahmayani, 2015).

Wiku Aji Sugiri, et. al.: Profile of Elementary School Islamic ...

By 2023, there have been 354 million gadgets used in Indonesia. This figure is derived from the number of gadgets connected to the internet. The number of active gadgets in Indonesia exceeds the total population of Indonesia as a whole. It is because, based on data from Badan Pusat Statistik (BPS), Indonesia's population will have reached 278.69 million by mid-2023. This means that one person will likely use more than one gadget (Saskia & Pertiwi, 2023).

Regarding internet access, the average Indonesian uses the internet for 7 hours and 42 minutes daily. On the other hand, the report notes that most, or 98.3%, Indonesian internet users use gadgets (Annur, 2023). Data on the high number of gadget users connected to the internet also provides recommendations for Islamic education learning models. Elementary school Islamic education teachers, should begin to be adaptive in utilizing digital technology. Learning should be packaged more innovatively by utilizing gadgets. It is believed that students' motivation will increase. They will get new learning experiences. Their digital literacy will also increase.

Furthermore, there is the teachers perception of the usefulness of the gadgets they own. These perceptions are mapped in the following table.

Statement	Total
Very helpful	466 (64,7%)
Help	194 (26,9%)
Quite Helpful	50 (6,9%)
Not helpful	6 (0,8%)
Very Unhelpful	4 (0,6%)

Table 3. Teachers Perceptions of the Usefulness of Gadgets

Of the total respondents, it turned out that there were 10 (1.4%) teachers who stated that the gadgets they owned were not able to help them in their daily activities. This is in line with the opinion of (Liu et al., 2012), who stated that our gadgets sometimes have the potential to cause redundancy or disruption in daily life. Respondents also stated that the gadgets they owned could help them access everything they wanted. This can be seen in the following image.

Figure 1. Teachers Response to the Potential of Gadgets in Accessing Everything



Even though the positive percentage of the benefits of gadgets is quite high (>90%), teachers must also be aware that there are impacts that arise. The impact of gadgets is divided into at least two, positive and negative. The positive impact of gadgets in learning namely (a) communication becomes more practical, (b) it increases the ability to imagine, (c) it makes it easier to find and collect information, (d) it has the potential to increase intelligence, (e) increases self-confidence, and (f) more adventurous. Meanwhile, the

negative impacts are (a) teachers and students have the potential to become closed individuals, (b) disturbed health, (c) sleep disorders, (d) like to be alone, (e) have the potential to cause mental disorders, and (f) cause addiction (Rosiyanti & Muthmainnah, 2018).

Currently, elementary school Islamic education teachers are accustomed to accessing various social media. This certainly provides an opportunity for teachers to develop social media-based learning. The profile of social media use by teachers is presented in the following table.

Social Media	Total
Instagram	481 (66,8%)
Facebook	92 (12,8%)
Twitter	119 (16,5%)
TikTok	339 (47,1%)
Youtube	429 (59,6%)
EtcÉ	244 (33,9%)
	211 (55,570)

Table 4. Social Media Frequently Accessed by Teachers

*Each respondent can choose >1 social media

Social Media	Total	
WhatsApp	708 (98,3%)	
Telegram	99 (13,8%)	
Instagram	135 (18,8%)	
Facebook Messenger	17 (2,4%)	
EtcÉ	28 (3,9%)	

*Each respondent can choose >1 social media

Tables 4 and 5 show that teachers have great opportunities to connect. Social media that is accessed can be a bridge for communication between teachers and students. Teachers digital literacy abilities will positively impact learning (A. E. Putra et al., 2023; Yuliana et al., 2023). In terms of content, elementary school Islamic education teachers are used to sharing images, videos, news, and the like (see Table 6). This certainly provides an illustration that elementary school Islamic education teachers can present teaching materials in a multi-content manner (not just focusing on one teaching material). Of course, this must be accompanied by an analysis of student needs in learning (Kristiantari, 2015).

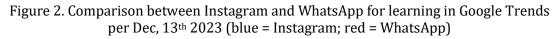
Table 6. Teacher Response	s Regarding Content	t Sharing Habits With Social Med	ia

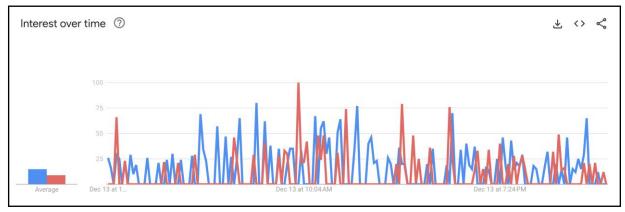
Teacher Responses	Total
Very often	123 (17,1%)
Often	152 (21,1%)
Enough	269 (37,4%)
Seldom	127 (17,6%)
Very rarely	49 (6,8%)

Instagram is a medium that can be used in learning. It makes it easier for students to access because many of the students already use this social media, so they are familiar. Instagram itself has provided many features to support its use. Instagram's various features are very interesting and supportive if used as media in the learning process. The way Instagram works is similar to other social media, namely by uploading content, Wiku Aji Sugiri, et. al.: Profile of Elementary School Islamic ...

sending messages to each other, exchanging opinions through the comments column, or sending direct messages (Laily et al., 2022).

Instagram for learning is believed to match the characteristics of teachers and students in the era of Society 5.0. Teachers can package learning with the microlearning method, where material can be presented as small pieces. Students will understand the material more easily because it only takes a few minutes to understand. Microlearning on Instagram can be through training videos, podcasts, presentations, texts and assignments. Microlearning videos are usually for one learning purpose only, are self-paced, can be delivered through various devices, and can be used repeatedly (S. Akbar et al., 2023).





Next is the utilization of WhatsApp in learning. WhatsApp is the most popular application in Indonesia (Pustikayasa, 2019). Some benefits of WhatsApp for learning are the ease of disseminating material, communicating, and discussing. Whatsapp is also believed to improve student learning outcomes (Utomo & Ubaidillah, 2018). With these various conveniences, elementary school Islamic education teachers are expected to be able to utilize them optimally to facilitate learning.

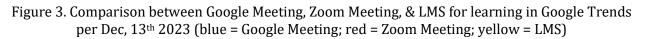
The final profile is related to digital platforms often used by teachers in online learning. Teachers are used to presenting learning online. Some often-used platforms include Google Meet, Zoom Meeting, e-Learning (LMS), and Google Classroom. With this, the teachers ability in online learning is good.

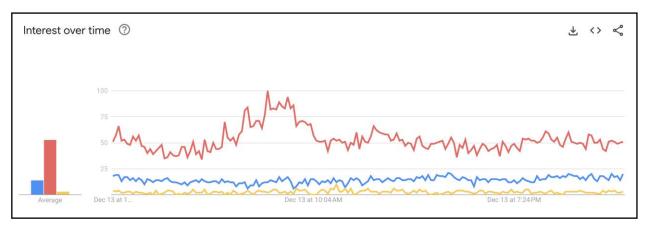
Digital Flatformis Frequency obea by reachers in omme Learni		y reachers in online Learning
	Digital Platform	Total
	Google Meet	423 (58,8%)
	Zoom Meeting	335 (46,5%)
	e-Learning (LMS)	433 (60,1%)
	Google Classroom	381 (52,9%)
	Lainnya	74 (10,3%)

Table 7. Digital Platforms Frequently Used by Teachers In Online Learning

*Each respondent can choose >1 social media

Learning using the Google Meet application has a very high influence on student interest in learning. This is because it is very easy for learners to carry out; the time is flexible and can be carried out where each student is (Septantiningtyas et al., 2021). With Google Meet, students have more freedom to express themselves and interact with each other (R. W. P. Putra, 2021). Using Google Meetings in learning is as successful as Zoom meetings. Both applications can facilitate learning, presented in synchronous and asynchronous forms (Nuryanto, 2021).





Lastly is the use of a learning management system (LMS). In general, LMS is software designed to create, distribute, and organize the delivery of learning materials (Rahmawati et al., 2021). Specifically, a Learning Management System is a web-based software program for the documentation, management, monitoring, reporting, administration, and distribution of educational content, training programs, technical manuals, instructional videos or digital library materials, and learning and development projects (Nadeak, 2021). This LMS system can help teachers or lecturers plan and create syllabi, manage learning materials, manage student lecture activities, manage grades, recapitulate attendance, display grade transcripts, and discuss and conduct quizzes (Vijila, 2022).

D. CONCLUSIONS

There has been massive use of digital platforms in the era of Society 5.0. This has happened for at least the last ten years. Various platforms appear in many formats. Research shows that elementary school teachers have good initial skills in using and utilizing digital platforms. All teachers have personal gadgets that can connect. These conditions have provided great opportunities to develop innovative and fun learning models. With teachers' massive use of digital platforms, it is hoped that teachers' digital literacy skills will also increase. In this era of society 5.0, digital technology-based learning models can be implemented. Digital Technology-Based Learning Methods are learning approaches that use information and communication technology as the main tools in the learning process. This method involves using electronic devices, software, applications, online platforms, and other digital resources to deliver learning materials and interact and collaborate between teachers and students.

REFERENCES

- Akbar, A., & Noviani, N. (2019). Tantangan dan Solusi dalam Perkembangan Teknologi Pendidikan di Indonesia. Prosiding Seminar Nasional Program Pascasarjana Universitas PGRI Palembang. https://jurnal.univpgripalembang.ac.id/index.php/Prosidingpps/article/view/2927
- Akbar, S., Salminawati, S., & Rakhmawati, F. (2023). Pengembangan media pembelajaran pai berbasis reels instagram untuk meningkatkan minat belajar siswa. Jurnal EDUCATIO: Jurnal Pendidikan Indonesia, 9(2), 733. https://doi.org/10.29210/1202323204

- Amelia, R., Febriani, R. O., Rofiki, I., Sugiri, W. A., & Priatmoko, S. (2023). The level of science self-regulated learning of preservice teacher using mobile learning in the Covid-19 pandemic era. 040008. https://doi.org/10.1063/5.0123721
- Annur, C. M. (2023). Pengguna Internet di Indonesia Tembus 213 Juta Orang hingga Awal 2023. https://databoks.katadata.co.id/datapublish/2023/09/20/penggunainternet-di-indonesia-tembus-213-juta-orang-hingga-awal-2023
- Ardiansyah, A., & Meillynia, B. V. (2022). Pembelajaran di Era Emergency Remote Teaching: Analisis Faktor Penghambat Partisipasi Diskusi Online Mahasiswa dan Strategi untuk Mengatasinya. J-PAI: Jurnal Pendidikan Agama Islam, 9(1), Article 1. https://doi.org/10.18860/jpai.v9i1.17785
- Aspi, M., & Syahrani, S. (2022). Profesional Guru dalam Menghadapi Tantangan Perkembangan Teknologi Pendidikan. ADIBA : JOURNAL OF EDUCATION, 2(1), Article 1.
- Bassar, A. S., Ruswandi, U., & Erihadiana, M. (2021). Pendidikan Islam: Peluang dan Tantangan di Era Global dan Multikultural. J-PAI: Jurnal Pendidikan Agama Islam, 8(1). https://doi.org/10.18860/jpai.v8i1.9577
- Cholik, C. A. (2021). Perkembangan Teknologi Informasi Komunikasi / ICT dalam Berbagai Bidang. Jurnal Fakultas Teknik Kuningan, 2(2), Article 2.
- Hudaya, A. (2018). Pengaruh Gadget Terhadap Sikap Disiplin dan Minat Belajar Peserta Didik. Research and Development Journal of Education, 4(2). https://doi.org/10.30998/rdje.v4i2.3380
- Kristiantari, R. (2015). Analisis Kesiapan Guru Sekolah Dasar dalam Mengimplementasikan Pembelajaran Tematik Integratif Menyongsong Kurikulum 2013. JPI (Jurnal Pendidikan Indonesia), 3(2). https://doi.org/10.23887/jpi-undiksha.v3i2.4462
- Laily, I. M., Astutik, A. P., & Haryanto, B. (2022). Instagram sebagai Media Pembelajaran Digital Agama Islam di Era 4.0. Munaddhomah: Jurnal Manajemen Pendidikan Islam, 3(2), Article 2. https://doi.org/10.31538/munaddhomah.v3i2.250
- Landa, Z. R., Sunaryo, T., & Tampubolon, H. (2021). Pengaruh Literasi Digital Guru dan Manajemen Pembelajaran Terhadap Minat Belajar Peserta Didik di SMA Pelita Rantepao. Jurnal Cendekia: Jurnal Pendidikan Matematika, 5(1), Article 1. https://doi.org/10.31004/cendekia.v5i1.529
- Lestari, I., & Misbah, M. (2022). Orientasi Baru Pendidikan Islam Era Millenial. J-PAI: Jurnal Pendidikan Agama Islam, 8(2). https://doi.org/10.18860/jpai.v8i2.16692
- Liu, T.-C., Lin, Y.-C., Tsai, M.-J., & Paas, F. (2012). Split-attention and redundancy effects on mobile learning in physical environments. Computers & Education, 58(1), 172–180. https://doi.org/10.1016/j.compedu.2011.08.007
- Nadeak, D. M. T. E. Y. (2021). Model Pembelajaran Blended Learning dengan Pendekatan Knowledge Management System untuk Sekolah Dasar XYZ. https://doi.org/10.5281/ZENOD0.5656069
- Nikmawati, N., Bintoro, H. S., & Santoso, S. (2021). Dampak Penggunaan Gadget terhadap Hasil Belajar dan Minat Belajar Siswa Sekolah Dasar. Jurnal Edutech Undiksha, 9(2), 254. https://doi.org/10.23887/jeu.v9i2.38975

- Nizar, A., & Hajaroh, S. (2019). Pengaruh Intensitas Penggunaan Game Gadget Terhadap Minat Belajar Siswa. El Midad, 11(2), 169–192. https://doi.org/10.20414/elmidad.v11i2.1901
- Nuryanto, M. (2021). Fostering Success and Motivating EFL Learners Using Zoom Meeting: A Synchronous Learning Strategy. Anglophile Journal, 1(2), 1. https://doi.org/10.51278/anglophile.v1i2.174
- Pustikayasa, I. M. (2019). Grup Whatsapp sebagai Media Pembelajaran. Widya Genitri : Jurnal Ilmiah Pendidikan, Agama Dan Kebudayaan Hindu, 10(2), 53–62. https://doi.org/10.36417/widyagenitri.v10i2.281
- Putra, A. E., Rohman, M. T., Linawati, L., & Hidayat, N. (2023). Pengaruh Literasi Digital terhadap Kompetensi Pedagogik Guru. Murhum : Jurnal Pendidikan Anak Usia Dini, 4(1), 201–211. https://doi.org/10.37985/murhum.v4i1.185
- Putra, C. A. (2017). Pemanfaatan Teknologi Gadget Sebagai Media Pembelajaran. Bitnet: Jurnal Pendidikan Teknologi Informasi, 2(2), 1–10. https://doi.org/10.33084/bitnet.v2i2.752
- Putra, R. W. P. (2021). Improving the Students' Motivation in Learning English through Google Meet during the Online Learning. English Learning Innovation (Englie), 2(1), Article 1. https://doi.org/10.22219/englie.v2i1.14605
- Rahmawati, Y., Yogha, S., & Maosul, A. (2021). Development of learning media patisserie based on hybrid learning. IOP Conference Series: Materials Science and Engineering, 1098(4), 042094. https://doi.org/10.1088/1757-899X/1098/4/042094
- Rahmayani, I. (2015). Indonesia Raksasa Teknologi Digital Asia. Website Resmi Kementerian Komunikasi dan Informatika RI. https://www.kominfo.go.id/content/detail/6095/indonesia-raksasa-teknologidigital%20asia/0/sorotan_media
- Rosiyanti, H., & Muthmainnah, R. N. (2018). Penggunaan Gadget Sebagai Sumber Belajar Mempengaruhhi Hasil Belajar Pada Mata Kuliah Matematika Dasar. FIBONACCI: Jurnal Pendidikan Matematika dan Matematika, 4(1), Article 1. https://doi.org/10.24853/fbc.4.1.25-36
- Sajidan, Saputro, S., Perdana, R., Atmojo, I. R. W., & Nugraha, D. A. (2020). Development of Science Learning Model towards Society 5.0: A Conceptual Model. Journal of Physics: Conference Series, 1511(1), 012124. https://doi.org/10.1088/1742-6596/1511/1/012124
- Salsabilla, U. H., Agustin, A., Safira, F., Sari, I., & Sundawa, A. (2021). Manfaat Teknologi Bagi Mata Pelajaran PAI di Masa Pandemi Covid-19. Edunesia : Jurnal Ilmiah Pendidikan, 2(1), 125–132. https://doi.org/10.51276/edu.v2i1.93
- Saskia, C., & Pertiwi, W. K. (2023, October 20). Ada 354 Juta Ponsel Aktif di Indonesia, Terbanyak Nomor Empat Dunia. KOMPAS.com. https://tekno.kompas.com/read/2023/10/19/16450037/ada-354-juta-ponselaktif-di-indonesia-terbanyak-nomor-empat-dunia
- Septantiningtyas, N., Juhji, J., Sutarman, A., Rahman, A., Sa'adah, N., & Nawisa. (2021). Implementation of Google Meet Application in the Learning of Basic Science in the Covid-19 Pandemic Period of Student Learning Interests. Journal of Physics: Conference Series, 1779(1), 012068. https://doi.org/10.1088/1742-6596/1779/1/012068

Wiku Aji Sugiri, et. al.: Profile of Elementary School Islamic ...

- Sholeh, A., Priatmoko, S., Sugiri, W. A., & Faizah, M. (2023). Building Multicultural-Based Entrepreneurship Education: A Curriculum Review. Proceeding of International Conference on Engineering, Technology, and Social Sciences (ICONETOS), 3(1), Article 1.
- Sudibjo, N., Idawati, L., & Harsanti, H. R. (2019). Characteristics of Learning in The Era of Industry 4.0 and Society 5.0. 276–278. https://www.atlantispress.com/proceedings/icoet-19/125925095
- Syahid, A. A., Hernawan, A. H., & Dewi, L. (2022). Analisis Kompetensi Digital Guru Sekolah Dasar. Jurnal Basicedu, 6(3), 4600–4611. https://doi.org/10.31004/basicedu.v6i3.2909
- Utomo, S. W., & Ubaidillah, Moh. (2018). Pemanfaatan Aplikasi Whatsapp Pada Pembelajaran Berbasis Masalah Untuk Mata Kuliah Akuntansi Internasional di Universitas Pgri Madiun. Kwangsan: Jurnal Teknologi Pendidikan, 6(2), 199–211. https://doi.org/10.31800/jtp.kw.v6n2.p199--211
- Vijila. (2022). The Effectiveness of the Learning Management System in Higher Education. Shanlax International Journal of Arts, Science and Humanities, 10(S1), 46–48. https://doi.org/10.5281/zenodo.7323096
- Wahid, L. A., & Hamami, T. (2021). Tantangan Pengembangan Kurikulum Pendidikan Islam dan Strategi Pengembangannya dalam Menghadapi Tuntutan Kompetensi Masa Depan. J-PAI: Jurnal Pendidikan Agama Islam, 8(1). https://doi.org/10.18860/jpai.v8i1.15222
- Widiasanti, I., Astriani, D., Rahayanti, A. E., Septianto, B., & Widianingsih, L. (2023). Analysis of E-Learning Activities as School Learning Media in the Era of Society 5.0 Using Big Data. Edunesia: Jurnal Ilmiah Pendidikan, 4(3), 1082–1096. https://doi.org/10.51276/edu.v4i3.438
- Yuliana, E., Nirmala, S. D., & Ardiasih, L. S. (2023). Pengaruh Literasi Digital Guru dan Lingkungan Belajar terhadap Hasil Belajar Siswa Sekolah Dasar. Jurnal Basicedu, 7(1), 28–37. https://doi.org/10.31004/basicedu.v7i1.4196