

Integrating ICT to Improve Students' Achievement in Thematic Learning Islamic Education in the Indonesian School in Bangkok

Nurul Qomariah*

Universitas Muhammadiyah Surakarta, Indonesia

Email: nurul.qomariah91@gmail.com

Budi Murtiyasa

Universitas Muhammadiyah Surakarta, Indonesia

Email: budi.murtiyasa@ums.ac.id

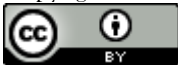
Galih Albarra Shidiq

Kasetsart University, Thailand

Email: galihalbarrashidiq.s@ku.th

*Corresponding Author

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Abstract

This research aimed to identify how technology helped students develop their achievement by applying ICT-based learning media in thematic learning of Islamic Education at the Indonesian School in Bangkok. One of the important issues in elementary school is the need for more materials and resources for teaching and learning. Currently, technology is providing a better solution to solve the problem. In many cases, technology in education can improve students' knowledge and open their minds. This study used a qualitative method with a phenomenological approach of collecting data analysis consisting of interviews, documentation, and observation. The findings of this study explored the roles of students when they learned a technology by applying ICT-based learning media, which

improves students' motivation and inspire them to learn and provides a better understanding of learning in the classroom. However, these findings suggested that future studies could focus more on students' learning processes and teachers' abilities related to 21st-century skills.

Keywords: ICT, learning strategy, thematic learning, islamic education

INTRODUCTION

The Indonesian School of Bangkok is one of the Indonesian schools abroad (SILN). The Indonesian School of Bangkok is a school established by the Indonesian government be a means of education services for Indonesian citizens who are abroad, specifically in Bangkok. The Indonesian School of Bangkok follows the policies of the Indonesian government. It implements the national curriculum in compliance with the Ministry of Education, Culture, Research, and Technology Republic of Indonesia. This school consists of Indonesian students who are in Bangkok also, the majority of the children of diplomats as well as Indonesian Embassy staff and educators from Indonesia who have passed the SILN teacher selection stage (Regina, 2019).

This school comprises kindergarten, elementary, junior, and high school levels become one environment under the Ministry of Education, Culture, Research, and Technology Republic of Indonesia and also the The Ministry of Foreign Affairs of the Republic of Indonesia. The next one relates to curriculum, policies, and others so follow the rules of Indonesia. The teachers consist of teachers who come from Indonesia who meets the requirements as SILN educator and also has passed the tests both the

written tests, skills, interviews, teaching practice, and a series of other tests, including the skills of educators in the 21st century (Aini, 2019; Kim et al., 2019).

In the 21st century, skills, information, and communications technology (ICT) plays an important role in pursuing students' skills improvements and global challenge competencies (Bodmani, 2019; Trilling & Fadel, 2009). Continuously, UNESCO promoted ICT education for teachers and students to support the achievement of Sustainable Development Goals (SDG), obtained through needs-driven, results-based, and well-resourced policies and concerted actions across the entire society such as educational sectors and stakeholders of learning communities (Vyas-Doorgapersad, 2022). Similarly, the Indonesian Government also mentioned in the Curriculum 2013 that ICT in education should be taught and promoted by teachers in their teaching strategies to achieve the goal of students' learning (Herlinda et al., 2020). Therefore, ICT integration has continuously related to 21st-century skills and national curricula challenging to pursue a goal of education.

Teachers at the Indonesian School of Bangkok have been using 21st-century skills. Teachers need to develop these abilities through a variety of training offered as well as in Indonesia and globally. The teacher professional competency development policy is policy made based on interests and several reasons, factors, and situational assessments (Mahfud, 2018), therefore every school or institution has the right and also the authority to take and make decisions to develop existing educational

institutions, with the policy key created does not conflict with that policy has been made by the government, then the policies that exist in Indonesian School of Bangkok concerning teachers and educators is the same with the existing education policies in Indonesia, it's just this institution adds that by following the factor of being abroad. One of the policies taken in schools is the use of ICT to support the learning process. So, ICT at the primary school level has become a necessity to support innovation in learning media and learning management (Dewi & Hilman 2018; Aka, 2017; Maria & Sediono, 2017).

Many empirical studies have examined integrated ICT at the school level. For example, Hasin & Nasin (2021) found a lack of teachers' expertise can affect students' achievements, such as a deficiency in teaching and their classroom managerial. Ogunode et al (2021) reported that the challenges in teaching and learning ICT consist of facilities, internet services (cost and unstable network), electricity, and computer literacy that impacted students' lower skills. Ntorukiri et al. (2021) explained that ICT integration has not been reputable in teaching and learning in the school curriculum and discovered that the high costs of computer hardware and software cause the low investment in ICT infrastructure. However, Agyei (2020) concluded that integrated ICT in the school could be taught by the teacher using demonstrations and practical materials on how to use technology and giving inspiration to students to learn and provide a better understanding of what ICT integration looks like in classroom practice.

Teachers in the Indonesian School of Bangkok have been using ICT implementation during the Covid-19 pandemic particularly because learning activities are conducted online, and this is a requirement. Schools and the government certainly support this by providing various ICT-based teaching training same as in Indonesia. Teachers in the Indonesian School of Bangkok must develop competency by participating in several teachers capacity-building activities such as (1) curriculum implementation training; (2) reinforcement character building; (3) learning and assessment workshops High Order Thinking Skill (HOTS) based; (4) curriculum-based implementation workshops STEM; (5) mind map based learning; (6) Smart Schools; (7) Sea creative camps; (8) writing training for one teacher for one book; (9) workshop on making computer-based questions; (10) meeting and association with foreign schools; (11) Association and training with Indonesian Embassy staff; (12) all seminar based international (Khariyah, 2019).

Studies have reported that ICT education at the school level still found problems, especially in implementation (Hasin & Nasin, 2021; Ogunode et al., 2021; Ntorukiri et al., 2021; Agyei, 2020). To access the limitation, this study focused on addressing the integration of ICT to improve students' achievement in thematic learning in the Indonesian school of Bangkok. Additionally, the implication of this study is to support the students, curriculum developers, policymakers, other teachers, and other researchers to emphasize ICT integration in education explicitly. Thus, we hope that results support further research on students' 21st-

century skills views of ICT education for ASEAN countries and lead to further research on integrated ICT to students' achievement in thematic learning.

This study chose thematic Islamic education subjects because these subjects were an effort to form the Muslim personality of Islamic students. Islamic education also trains students' sensibility in such a way that attitudes and behavior are dominated by deep feelings of Islamic ethical and spiritual values. They are trained, so that seeking knowledge is not just to satisfy intellectual curiosity or just for the benefit of the material world, but also to develop themselves as rational and godly beings who will provide physical, moral, and spiritual well-being for families, society, and humans.

METHODS

This research used a qualitative design with a phenomenological approach consisting of collecting and analyzing data to understand the phenomena. The qualitative data consists of interviews, documentation, and observation (Creswell, 2012; Patton, 2014). The design of this study used the transformative design, which helped to support the data collection form to be a complete understanding of a research problem results from collecting qualitative data (Creswell, 2012).

The subject of this study is the amount of 10 students and a teacher from 6th grade in an Indonesian school in Bangkok, Thailand. The subject chosen is based on the problematic issues in the Indonesian Foreign School which accept students should have a better understanding of ICT facing

global competition between school and school at the overseas education level. Besides that, the subject has learned to follow the national curriculum and use the same syllabus, textbook, and learning material as the elementary school students in Indonesia and have been supplied by the Ministry of Education and Culture, Indonesia. Therefore, to assess the limitation of this study focuses on exploring the sample with an amount of 10 students and a teacher from sixth grade in the elementary school of an Indonesian school in Bangkok, Thailand.

The instrument of this study used interview form, observation, and documentation to address the current learning activities by exploring students' understanding and knowledge. Interviews conducted by researchers conducted to the subject is a teacher and 10 students in grade 6 of the Indonesian School of Bangkok. Observations made by researchers in Thematic Learning Islamic Education in the Elementary School in Indonesian School of Bangkok itself is one method of observing phenomena that exist directly. The observation showed anything events, behavior, and activities and confirmed with the results of the study so that it is clearer in receiving and getting a picture of events or can be done in recording and documentation. Another photograph documentation is carried out directly by looking at existing documents such as books, values, records, etc. Documentation used as data validation. Furthermore, documentation is useful as a collection of data where the data is a record, such as student data, textbooks, etc.

The data analysis technique used by the research uses the Miles and Huberman model. According to Miles et al. (2018) data analysis in qualitative research, is carried out when data collection takes place, and after completing data collection within a certain period. Activities in qualitative data analysis are carried out interactively and continuously until complete so that the data is saturated. In this study, the data collected from informants, including students and teachers of 6th grade at the Indonesian School of Bangkok were recorded in detail and thoroughly. Then, the results of the record are summarized and focus on important things so that the results of data reduction provide a clear description to make it easier to describe conclusions. After the reduction process, the data is presented in the form of brief descriptions and the like. The presented data drew conclusions and verification. In this study, later conclusions and verification will be presented in the form of narrative texts that explain the use of ICT in improving the learning of Islamic education in 6th-grade students at the Indonesian School of Bangkok.

RESULT AND DISCUSSION

According to the research findings, the Role of ICT in Islamic Education Thematic Learning supported the learning process and improve the quality of student learning processes and outcomes. Students participate in learning activities more interactively and are more motivated to complete the learning activities. Moreover, student learning outcomes have improved, allowing learning objectives shown in Table 1.

Table 1. Student Learning Outcomes from Thematic Learning in Islamic Studies Grade 6

No	Description	Average of grades
1.	Before using ICT	7,13
2.	After using ICT	8,25

Since the COVID 19 pandemic, teachers faced a serious problem, especially in technology that expects to use many innovative media and develop interesting learning activities to keep students motivated in online learning. In the new normal moving, students and teachers are returning to their classrooms to participate in direct learning and teachers may still use the various innovations that have been made. However, the research finding, and present various data and information facts in a certain form, such as descriptive words resulting from in-depth interviews with informants conducted by direct observation then the data that has been obtained is then collected and then analyzed. In order to make this research more objective and accurate, interviews and observations with informants consisting of 6th-grade students at the Indonesian School of Bangkok directly. Apart from that, to strengthen the findings, the researchers also conducted in-depth interviews with 6th-grade teachers who also teach Islamic education at the Indonesian School of Bangkok.

The steps carried out by the researcher include: 1) Arranging interview questions to be asked of informants and supporting informants; 2) Conducting interviews with grade 6 students and teachers at the Indonesian school of Bangkok; 3) Doing documentation and recording supporting data when conducting in-depth interviews; 4) Transfer the

research data in the form of a draft to the research manuscript; 5) Conduct an analysis of the results of the interviews that have been conducted. In conducting qualitative research, the focus of research is how the researcher himself conducts interviews with the aim of obtaining the expected data.

Additionally, this research discovered that the role of ICT as a learning medium is implemented in thematic learning in the Islamic Education of 6th grade using a variety of applications that are constantly evolving with the times. As shown in Figure 1, these applications can take the form of PowerPoint, Canva, Quizizz, Kahoot, Google Forms, and various other gamification that can be accessed via devices such as laptops, mobile phones, and computers.



Figure 1. Student Learning Activity by Using Online Application

However, the interview showed determined the direction and purpose of the study. In this study, researchers conducted in-depth interviews with students and teachers of 6th grade at the Indonesian School

of Bangkok to find data. Following are the findings of interview data conducted by researchers. This case showed the benefit of various ICT-based applications to improve student motivation and learning outcomes. Similarly, Baloul (2023); Stehle & Peters-Burton (2019) concluded that using ICT can encourage students to collaborate more actively and provide information to one another because this technology focuses on improving problem-solving skills rather than computational skills that allow students to discuss with classmates.

In another hand, Ghavifekr & Rosdy (2015); Haleem et al. (2022) also found that integrating ICT into the learning process is thought to improve learning quality, expand access to learning, reduce costs in responding to current demands, and develop ICT skills needed by students. Furthermore, Hasin and Nasin (2021) discovered that teachers who were less fluent in ICT skills influenced student failure in learning, resulting in suboptimal student learning outcomes. Agyei (2020), on the other hand, explains that integrating ICT in schools can inspire students to learn and provide a better understanding of learning in the classroom.

However, observations could be shown to support the interviews which researchers observed by seeing and hearing everything that is done by students and teachers in the classroom. Meanwhile, from the results of observations made by researchers based on the answers given by the informants from the results of the interviews conducted, the researchers have conclusions from the observations including.

Based on the most recent research, teachers use various media in the form of hardware, such as laptops, mobile phones, televisions, projectors, etc. Teachers use the software in the form of applications such as PowerPoint, Canva, Quizizz, Kahoot, and Google Forms in addition to the hardware. According to Ogunji (2013), ICT included radio, television, video, internet, computers, network hardware, software, and equipment and services related to today's technology, such as video conferencing, learning management systems, and blogs.

ICT-based learning media allowed students to participate in learning actively. The ICT-based learning media allowed students to incorporate new ideas into their prior knowledge to produce knowledge at a higher level. Students are also getting more motivated to learn independently and collaboratively to share ideas, suggestions, or experiences. The use of ICT-based learning media for various modes of learning, including audio, visual, and kinesthetic, can be done so that students do not only mechanical tasks but also higher-order thinking activities.

Similar to Hardianto (2011) found the use of ICT-based learning media can provide significant benefits if it is carried out following principles such as active, constructive, collaborative, and participatory. Based on the observations of researchers, students look more enthusiastic when teachers carry out learning using ICT-based media rather than conventionally. Students also expressed their feelings of being happy and motivated by ICT-based learning during the interviews. However, in finding document data, researchers obtained general and detailed data regarding student learning

outcomes in the 6th grade of Islamic education in the Indonesian School of Bangkok. The following includes document data findings conducted by researchers.

CONCLUSION

This research found the importance of the teacher's role in using ICT to support student learning to improve student achievement in schools that are always transforming with technology. Learning activities that were previously only observed in the abstract can now be visualized through ICT. In this case, teachers must continue to increase their capacity in using ICT-based learning resources creatively and innovatively.

The success of the role of ICT must be supported by teachers' quality and school policies. The increase in learning achievement in the thematic field of Islamic religious education occurs because of two things, namely: the use of media makes an increase in student motivation and ICT supports the creation of learning media to make it easier to understand.

This research is useful for the world of education, especially thematic Islamic religious education subjects because this subject is one of the efforts to form a Muslim personality in students. Islamic religious education trained students' sensitivity in such a way that their attitudes and behavior are dominated by a deep appreciation of Islamic ethical and spiritual values. They are trained to seek knowledge not only to satisfy intellectual curiosity or worldly interests, but also to develop themselves as

rational and pious beings who will provide physical, moral, and spiritual well-being for their families, communities, and mankind.

In addition, this study also found weaknesses that are suggested for future research to get more participants in the Indonesian School of Bangkok, the number of students is not too large. The small number of students is due to the limited number of students in the school, so the results obtained are less than optimal. With this research, it is hoped that teachers at the Indonesian School of Bangkok will continue to innovate in using ICT as a learning medium so that student learning achievement will increase.

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