Inequality of digital learning for social sciences: Critical role of strategic management of education

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Abstract

This study aims to investigate the inequality of digital learning during the pandemic. The focus of the research is on digital learning in the field of social studies which is located in Indonesia. The research method used is qualitative research using observation, interview, and documentary studies that investigate the inequality of online learning in social studies and strategic education management studies conducted by MI teachers. This study concludes that the inequality that occurs is not much different from elementary schools in general. However, MI has the advantage of the competence aspect of its teachers who also have Islamic religious knowledge so that they are able to provide moral support to students and parents who have a central role during digital learning carried out from home. This study has implications for the importance of the government's role as a facilitator and policyholder to support a better learning system to minimize the disparity in digital learning which is increasingly worrying during the pandemic.

Keywords: Education inequalities, online learning, social studies, digital divide, strategic education management.

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1. Introduction

In the 21st century, basic education that is able to meet world standards where all students have equal access to school is the right of every child around the world. The education policies carried out by the government in each country make the program productive. For example, countries such as the United States, Nigeria, and the Gambia have adopted the Education For All (EFA) policy to provide opportunities for all children to have equal access to public education (Lawal, 2022). The pandemic has threatened and deepened the education crisis, affected education policy, and caused elementary school children to have difficulty adjusting to digital learning (Obiakor & Adeniran, 2020). Children have to leave and lose their education due to school closures and are economically incapable in the midst of a crisis situation (Sabates, et al., 2021). In the end, education remains inaccessible to millions of children. More than 72 million children of primary school age are not in school and they experience very poor living conditions (Omomo, 2022). Education inequality and the digital divide are the main factors causing the youth's lack of basic education. This digital inequality and gap occur due to various aspects, including marginalization and poverty. What is clear is that children must be equipped with the skills and competencies that are important to them (Iivari, et al., 2020). In developing and poor countries, children do not have access to basic education because of inequalities stemming from gender, social status, cultural identity (ethnic, language, and religion), and health. These children are on the periphery of the education system and are deprived of the learning that is critical to their intellectual, social, and future development. Affecting factors such as unemployment, disease, illiterate parents multiply the risk of inequality. It is undeniable that many children from underprivileged backgrounds are forced to leave their education and choose to work to help their parents (Eilam, 2022; Siska & Rudagi, 2021; Nadya & Syafri, 2019).

In Indonesia, education has become a major concern for decades. The government has adopted a policy of determining budgets and education programs to respond to the COVID-19 pandemic and reorganizing internally (Santosa, 2020). The Ministry of Education and Culture (Kemendikbud) together with Commission X of the Indonesian House of Representatives set 20% of the APBN or Rp. 550 trillion as education funds. Of the 20% budget, the Ministry of Education and Culture manages 14.8% or IDR 81.5 trillion with mandatory funding which includes financing for the Smart Indonesia Program of 17.9 million students, Smart Indonesia Cards (KIP) including ADIK with a target of 1,102 million students, allowances for non-resident teachers. PNS with a target of 363,000, Operational Assistance for State Universities (BOPTN) and Funding Assistance for Legal Entity PTN (BPPTN-BH) for Higher Education for 75 PTN, Vocational BOPTN for 43 PTN. In accordance with the mandate of the law, apart from the Ministry of Education and Culture, the education budget is also managed by other ministries/institutions that carry out the function of education, namely the Ministry of Religion (Kemenag). The Local Government Law also mandates the General Allocation Fund (DAU) and the Special Allocation Fund (DAK) (Kemendikbud, 2021).

The policy of democratization of education is a manifestation of the government’s concern for education in Indonesia. Unfortunately, current practice in the field creates various inequalities that have widened after the pandemic. In particular, elementary school/madrasah Ibtidaiyah education children experience problems with low-quality education, curriculum changes, educational facilities and infrastructure, evaluation systems, teacher certification, and problems with the online learning process (Rozak, 2021; Wahyuningsih, 2019). The problem of online learning is the dynamics of the lives of teachers and students. Even though online learning is sometimes interpreted as a panacea in times of crisis (Dhawan, 2020). It is very difficult to encourage elementary school students to understand digital learning, this is different from educating Middle School and College students. Primary education
students need extra guidance from parents and teachers to use learning applications and understand learning materials and school assignments done at home (Baety & Munandar, 2021; Mukhtar et al., 2020). The literature finds that there are obstacles in online learning in basic education namely that teachers lack mastery of learning materials and methods; teachers are less creative and innovative in teaching; lack of teacher readiness in teaching, lack of interaction between teachers and students; low concentration of students while studying at home (Putri & Suyadi, 2021).

In addressing the digital learning gap, previous research identified the importance of strategic education management, but despite these efforts, teachers are very less aware of the importance of strategic management and strategic planning in elementary schools. This study focuses on Islamic education at Madrasah Ibtidaiyah considering that MI strategic management still requires further study as previous research recommended investigating the inequality of digital learning during the pandemic (Mukniah & Abidin, 2021). A previous study on learning from home (BDR) during the COVID-19 pandemic in elementary schools conducted by The SMERU Research Institute (2020) revealed three sharp highlights about the problem of inequality in schools. First, there are various learning facilities, various learning practices from home, and various support from parents and guardians. This condition causes inequality in learning between students because students who have limited support feel the most obstacles to suspended face-to-face learning during the pandemic. Second, the competence and ability of teachers in teaching are very religious, especially to create innovative learning models and understanding internet access. Teachers in urban areas tend to be more active in teaching because they are supported by internet access that is more adequate than in remote areas. Third, the quality of the implementation of learning from home tends to be minimal due to the diversity of learning abilities among students. Therefore, it is very important to improve the quality of the implementation of learning from home to ensure that no student is left behind by his friends (Alifia et al., 2020).

Based on the background of the problem that has been mentioned by the researcher. This study investigates the inequality of digital learning in social studies at private MI Salatiga. MI Salatiga city is one of the top 5 elementary school/madrasah education areas in Indonesia, so that the participants of social studies study teachers at private MI will be more diverse, and sufficient observation and interview data will be obtained to support the objectives of this study. In addition, private MI in social studies has become an object of research for several reasons identified from preliminary observations and previous literature studies. Although the government has distributed School Operational Assistance (SOA) funds to all education units in Indonesia, the majority of SOA funds are intended for state schools, while private schools must seek more funds (Kurnia, et. al., 2021). Initial research identified problems because of this. This is because private MI digital learning relies heavily on funding, the main source of which is tuition fees. Parents of students cannot afford to pay for education and facilitate their children to support digital learning because of the economic crisis during the pandemic. On the other hand, private MI has difficulty paying teacher salaries, so teachers need greater effort in providing digital learning in their classes (Nurochim, 2021). It is stated that MI has advantages in the study of Islam which cannot be separated from the values of character as taught by Islam (Shaturaev, 2021). The study found that Madrasahs tend to apply traditional learning methods and often experience many problems in implementing technology in order to modernize (Mulyanto et al., 2019). Facilities that are less supportive and educators who have difficulty keeping up with technological developments are also problems in the field. This is because some of the teachers come from traditional pesantren.

Previous research recommended more in-depth research related to social studies subjects in MI. This is based on the fact that MI is a religion-based elementary school. Therefore, it is necessary to examine whether digital learning in this subject is different from other elementary schools. Social studies studies
are very important for children in elementary school, they learn to acquire knowledge, skills, attitudes and sensitivity in dealing with the environment and adapting to individuals/groups of the surrounding community. The novelty of the research can be found from the theme of educational inequality which focuses on online learning in social studies studies in MI. Because previous research has not found a more appropriate education management strategy to address the digital learning gap.

Based on the background of the research problem that this study investigates two themes: education inequality in the aspect of online learning and strategic education management. The research focuses on the inequality problems faced by social studies subject teachers and the education management strategies that teachers use to overcome these various online learning inequalities.

2. Method

2.1. Research design

This research focuses on private Islamic boarding schools and uses descriptive qualitative research methods. Qualitative research is research that deals with dynamic things that occur in the field where a phenomenon occurs and is experienced by research subjects (Moleong, 2013). The purpose of this research is to investigate the inequality of digital-based learning in the field of Social Studies and Strategic Education Management that has been carried out. Therefore, qualitative research is very suitable for this research because it investigates the behavior, attitudes, motivations, perceptions, and actions of the subject, namely the social studies study teacher. The location of the research is Madrasah Ibtidaiyah Salatiga, Central Java Province, Indonesia.

2.2. Research subjects

The study was attended by 20 teachers of MI Salatiga who were participants in the Pre-service Teacher Professional Education (PPG) program. The majority of participants were female teachers (70%) and taught at private MIs (78%). The participants are integrated social studies teachers from grades 4-6, who have taught social studies during the Covid-19 pandemic. 60% of the participants live in Salatiga City, while the rest are scattered in the surrounding areas. Based on their educational background, about 65% of the participants are PPG Pre-service graduates with an average age of 27 years.

2.3. Data collection technique

Qualitative data obtained through semi-structured interviews with 20 participants. The researcher selected the 20 participants by considering the teaching location. To complement the data obtained from the participants, the researcher also observed the participants and added a study documentation. Researchers interviewed participants by asking general questions such as learning strategies that have been carried out, challenges, and obstacles during teaching and learning activities carried out during one semester of the 2020/2021 academic year. Researchers also made direct observations about school profiles, educational curricula, and social studies online learning activities. The interview focused on teachers' perceptions of the theory of educational inequality, Online Learning, Social Studies Studies, and Strategic Education Management during the pandemic. To increase the level of trust and test the validity of the data, an in-depth discussion technique was carried out by the principal, and the relevant Education Office.

2.4. Data analysis technique

Data analysis in this study used the steps proposed by Miles, et. al., (2014) namely the process of systematically searching and compiling data obtained from interviews, field notes, and other materials.
such as literature studies and related documents. The goal is to make the findings easy to understand, the reader. Miles and Huberman mention three stages of data analysis. First, doing data reduction which means summarizing and selecting data that is truly credible and relevant. Second, presenting data so that it has clearer and more systematic visibility. The third is drawing conclusions. Conclusions are drawn after the data has been sufficient to answer the problem formulation validly and has strong evidence to support the data collection stage so that the conclusions become credible. The data analysis technique is inductive and then developed on a certain relationship pattern and the data is searched again and again using triangulation techniques.

3. Results and Discussion

The findings reveal that there has been an imbalance in digital learning in social studies so that teachers take the initiative to carry out education management strategies. The inequalities identified are in digital learning infrastructure, support and ability of teachers and parents, internet networks, and the level of student learning independence. In addition, digital learning creates changes in the workload of teachers. Teachers are required to adjust their working time so that learning can be carried out regularly. The workload during online learning is admittedly heavier than during face-to-face learning. This is because teachers cannot provide assessments directly, and have to wait for student assignments to have been submitted and sometimes exceed the specified time limit. When teaching from home, teachers must directly share their time with their families, communicate with parents, and assess assignments.

During the implementation of learning activities during the pandemic, teacher teaching tends to be done online and face-to-face is limited. Teachers with better internet access have a greater tendency to teach social studies online every week but tend to be less likely to give students the opportunity to ask questions than face-to-face before the pandemic. The results of the interviews show that social studies teachers use various digital applications to teach. The majority use the free online study room application developed by the Indonesian Ministry of Education and Culture (Kemendibud), namely the study house. This application has several tools such as virtual laboratories, and several other online features, namely digital classes, electronic school books, question bank sources as well as language and literary works. Meanwhile, to communicate with parents, guardians of students and students, teachers use WhatsApp, Google Meet, and Telegram media. The obstacles that hinder digital learning activities are the inability of some parents to purchase internet quotas and the weak internet network in their area. Student concentration is influenced by three main factors, namely environment, psychology, and internal. Internal problems or disorders of brain development and hormones are produced more so that children tend to be hyperactive (Gilmore, et. al., 2018). And conversely, a child is slow because the hormone produced by the neurotransmitter is lacking so that it can result in slow learning concentration.

Some teachers who experience technology 'stuttering' overcome learning obstacles by taking the initiative to hold private lessons for their students who are specifically taught about social studies studies. The teacher gives suggestions for group learning and intensive tutoring outside of class hours as long as activities at school are still limited due to the Covid 19 pandemic. Thus, it is hoped that students will not be left behind in lessons. Especially students in grades 1-3 and 6 who really need intensive learning. Most of the social studies teachers in grades 4-5 provide more independent study and practical assignments that are likely to be done at home. This is given that social studies subjects require students to know and be able to adapt to their social environment. For this reason, the
management of educational strategies used must follow the three stages that have been described in strategic management theory. (see Figure 1).

Figure 1

Social Studies Study Education Strategy Management

Figure 1 explains three things. The first is the formulation of the right strategy by recognizing opportunities, external threats of digital learning, analyzing alternative strategies, setting long-term goals and choosing the main strategy in digital learning. Second, the implementation of the strategy by setting short-term goals, learning motivation, empowering sources that can support digital learning for social studies studies and realizing it as best as possible. Third, controlling and evaluating digital learning. This stage is carried out with supervision from the principal to encourage the smooth implementation of online learning activities. The principal needs to monitor the activities that have been carried out by the teacher. Three factors that can be done to evaluate the strategy are conducting a review of external and internal factors that form the basis of the digital learning strategy used in the previous semester, measuring student learning achievement, and taking corrective action. More in the application of the concept of effective education strategy management should focus on three levels, namely; 1) corporate strategy, namely at the level of the Ministry of National Education organization; 2) business strategy at the Directorate level related to the environment of the Ministry of National Education, and functional strategy in the ranks of fields, sections and schools.

The corporate-level strategy is prepared at the highest level in MI, which discusses the choice of digital learning strategies, allocation of resources, efforts to maintain core competencies such as finance, resources, and the effectiveness of online learning. At the business level strategy focuses on how MI can compete with other primary schools and MI, both public and private. So that it can be a driving force to improve the quality of education and minimize inequality through online learning in social studies. MI needs to develop a part of MI which can be a work team that analyzes and develops the management of the school’s relationship with the community. So that private MI can find out what aspects are desired by the community and MI is considered for implementing strategic plans. The functional level strategy has deep scope in school finance. The school principal delegates development to the deputy principals which will later be developed as a guide to the direction of post-pandemic school policies.

Based on observations, it is known that inequality does not only occur in funding support but also in training for social studies teachers. Several participants who are MI State teachers from around the city of Salatiga admit that they have not received adequate training regarding the use of digital learning. They learn independently through digital learning guidelines and tutorials on YouTube. Meanwhile, teachers who are located in the city of Salatiga and most of them are social studies teachers from private
MI have received training held by Madrasahs. On the other hand, digital learning activities make the role of parents very important. Whereas previous studies have explained that basic education students need extra guidance from parents and teachers to use learning applications and understand learning materials and school assignments that are done at home (Baety & Munandar, 2021; Mukhtar et al., 2020). Most of the parents complained that their children were studying at home independently. The literature mentions that the background of parents and family, in fact, some parents who have a high level of education do not fully support students' learning competence at home. In fact, improving the quality of the implementation of learning from home is very important because it is able to ensure that no students are left behind from their friends (Alifia et al., 2020).

Parents have limited time, mind and energy. In contrast to teachers who have been educated as teachers and have attended qualified pre-service education. Good communication between parents and teachers is key in helping students learn as much as possible. The results of the interviews revealed that during communication, teachers and parents discussed social studies subject matter, discussed practices carried out in the social environment, school assignments and children's learning development. Unfortunately, in terms of communication there has also been an imbalance. Even though communication is really needed so that teachers can continue to monitor the progress of their students so that they are able to provide motivation and flexibility to their students if they are hampered in completing assignments and digital learning.

Inequality of communication between teachers and parents occurs due to the availability of internet networks, busy parents, low digital literacy, and economic factors. Previous research revealed that obstacles in online learning in basic education generally occur because teachers lack mastery of learning materials and methods; teachers are less creative and innovative in teaching; lack of teacher readiness in teaching, lack of interaction between teachers and students; low concentration of students while studying at home (Putri & Suyadi, 2021). In addition, some teachers complained that parents were unresponsive during digital learning activities so that student assignments were not submitted on time. Some of the parents who are far from internet access and have low literacy have difficulty using learning applications, while economic factors make parents have limited data allowance. Even though there was internet quota assistance, this turned out to be ineffective. There are some parents who complain to teachers that they do not receive the education quota. They also find it difficult to have a smartphone because the price is quite expensive, especially when they have to face an economic crisis during the pandemic. The results of the study also found that there was a type of digital learning carried out by social studies study teachers. First, active digital learning, namely the teacher actively communicates with parents regarding student learning at home and is active in discussing with students and using the lecture learning method. Second, passive learning, where the teacher gives assignments and communicates with parents so that they are assisted in completing school assignments, during the process the role of parents is more dominant. Third, independent learning, namely the teacher gives assignments, provides instructions through applications, and demands students to practice learning and study independently. The third type requires students to learn independently using learning applications. Teachers and parents together provide assistance to ensure children's study schedules and also assist in checking children's assignments that have not been.

The various inequalities that have been identified require competent management of educational strategies by recognizing errors in the strategy management process itself so that there is no failure in using strategic management to address digital learning inequalities in social studies studies. Observations that have been made found that the category of errors in the strategy management process includes errors arising from the way in which digital learning strategies are used, and includes
misunderstandings in the strategy process due to uncertainty in the strategy process. The errors in question are inability to think strategically, imprecise at the management level, too much emphasis on the form of procedures, separated from the social environment, too much emphasis on forms and procedures, and inappropriate use of resources. This finding is different from previous studies on learning challenges in the form of a shortage of classrooms, the availability of a large number of students in small classrooms, and making it difficult for teachers to facilitate crowded classrooms (Doriye, et. al., Muneja, & Ilomo, 2020). Digital learning is more focused on the availability of access and funding which makes it easier for teachers to teach remotely without having to think about the availability of classrooms. According to Lin, Chen, & Liu (2017), in modern society, the internet breaks through the boundaries of space and time and becomes a ubiquitous learning tool. Designing teaching activities for digital learning and applying technology tools flexibly are key issues for technology-integrated education. Digital learning has a better positive effect on learning motivation than traditional teaching. In addition, digital learning shows a better positive effect on learning outcomes than traditional teaching. And learning motivation showed a significant positive effect on the effect of learning in learning outcomes. More deeply, learning motivation has a positive effect on learning acquisition in learning outcomes.

In the end, inequality in accessing quality education based on Islam by implementing online learning obtained through Madrasah Ibtidaiyah, both public and private during the pandemic, is very religious. Very religious is meant here when experiencing inequality in accessing education, the learning process always includes Islamic values such as belief in trials from God, the value of patience in all situations, mutual care and respect between humans. Madrasah Ibtidaiyah experiences problems with low-quality education, curriculum changes, educational facilities and infrastructure, evaluation systems, teacher certification, and problems with the online learning process (Rozak, 2021; Wahyuningsih, 2019). This means that the problems faced by teachers are not much different from both public and private MI. Inequality has occurred in educational infrastructure, access to information technology, and the educational background of parents of students. The study states that to overcome educational inequality in online learning between urban areas and remote areas is to increase infrastructure development that is able to support learning activities more optimally (Siska & Rudagi, 2021; Dedi Saputra, 2015; Bustomi, 2012).

During the pandemic, learning activities seem to be getting wider and require the role of stakeholders to support the competence of teachers and students. This is because many children from underprivileged backgrounds are forced to leave their education and choose to work to help their parents (Eilam, 2022; Siska & Rudagi, 2021; Nadya & Syafri, 2019). The novelty of the research is shown from the findings on various factors, namely communication problems, student learning independence, and inadequate digital 'literacy' which has caused educational inequality during the pandemic for social studies in MI to widen. This finding deeply investigates the learning process whose data comes from teachers who experience this phenomenon. Previous studies found that the low household education expenditure for education financing is one of the causes of the problem of education inequality (Alifia et al., 2020). This finding explains that students become less fortunate because they lose face-to-face learning opportunities and socialize as one of the goals of social studies. Whereas Madrasas have their own advantages in terms of religion because they are able to create noble character and behavior. What is clear, a conducive learning process, government support, teacher competence, and good communication between teachers and parents are the main requirements in supporting online learning and minimizing inequality that occurs.
4. Conclusion

This research has revealed about the inequality that occurs in digital learning social studies in MI Salatiga city and the management of educational strategies that are carried out to overcome inequality during the pandemic. It is expected to combine with current teaching trends and take advantage of the advantages of digital learning to develop practical teaching strategies for teaching effectiveness. It can be concluded that the digital divide and inequality in private MI is not much different from that of primary schools in general. However, private MI in the city of Salatiga seems to need substantial funding support so that digital learning can be carried out optimally. In addition, MI has advantages from the competence aspect of its teachers who also have Islamic religious knowledge and are technologically literate so that they are able to provide moral support to students and parents who have a central role during digital learning carried out from home. This study supports the role of the government as a policy holder to support a better learning system to minimize the disparity in digital learning that is increasingly worrying during the pandemic in Indonesia. Collaboration should also be carried out in order to provide training for social studies study teachers, especially for basic education in remote areas. Future research needs to investigate the linkage of educational inequality with other factors that support learning theory for better educational goals in the future.

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