Using Technology in Home-School Partnerships During Covid-19

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Abstrak: Keterlibatan orang tua dalam membimbing anak belajar di rumah dan pemanfaatan teknologi dalam memfasilitasi kerja sama rumah-sekolah sangat diperlukan di masa pandemi Covid-19. Studi kasus kami membahas pengalaman Yanti, seorang ibu karir yang tinggal jauh dari keluarganya, berkolaborasi dengan pihak sekolah anaknya, dan peran teknologi dalam kolaborasi tersebut. Kami menemukan bahwa teknologi menawarkan manfaat penting bagi Yanti, seperti komunikasi jarak jauh yang intensif dengan anak, meninjau pembelajaran anak dari jarak jauh, dan memungkinkan komunikasi dengan sekolah. Namun, tantangan seperti sikap sekolah dalam mendukung keterlibatan orang tua, kurangnya keterbukaan sekolah untuk menerima masukan dari orang tua, dan ketidaksiapan sekolah untuk beradaptasi dengan teknologi sangat terlihat jelas. Yanti berusaha mengatasi tantangan tersebut dengan intens bertanya kepada guru dan anak serta berinisiatif untuk membangun komunitas orang tua. Meski Yanti juga mempekerjakan guru privat untuk menjaga anaknya tetap di jalur progres pembelajaran, di sisi lain, kondisi ini justru bisa melemahkan kerja sama antara orang tua dan sekolah karena orang tua tidak terlalu bergantung pada sekolah lagi. Oleh karena itu, untuk membangun kerja sama yang kuat antara orang tua dan sekolah, sekolah dapat menyesuaikan budaya sekolah dengan menyediakan pembaruan pembelajaran siswa yang lengkap, menyambut masukan orang tua, dan beradaptasi dengan era digital dengan mengoptimalkan teknologi.
Kata Kunci: Covid-19, Teknologi, Digital, Keterlibatan orang tua, Kerja sama rumah-sekolah

Abstract: Parental engagement in guiding children to study at home and the use of technology in home-school partnerships are necessary during the Covid-19 pandemic. Our case study described the experience of a career mother who lived away from her family in collaborating with her child's school, and how technology can be used in that collaboration. We found that technology offered benefits to her, such as intensive distance communication with her child, reviewing her child's learning remotely, and allowing communication with her child's school. However, challenges such as the school's attitude in supporting parental engagement, the lack of openness of the school to receive input from parents, and school unpreparedness to adapt to technology were visible. Yanti attempted to overcome the challenges by intensely asking teachers and the child and initiating to build a group of parents. Although she also employed a private tutor to keep her child on track, this approach might weaken parent-school collaboration as the parents did not rely too much on school anymore. Therefore, to establish strong home-school partnerships, the school might adjust the school culture by providing complete student learning updates, welcoming any parents' input, and adapting to the digital era by optimizing technology.
Keywords: Covid-19, Technology, Digital, Parental engagement, Home-school partnerships

INTRODUCTION

The Covid-19 Impact on Education

There has been an impact on learning due to the global pandemic (i.e., Covid-19). Students are currently absent from the classroom in large numbers. Worldwide, schools have been closed in order to protect students from the potential hazards associated with the outbreak (Sintema, 2020). There has been a significant shift toward new types of learning in which instruction is provided remotely with the use of online platforms (Festiyed et al., 2022).

In addition, this outbreak affects the role of parents in supporting their children's

educational development and home-school partnerships. Usually, from morning to afternoon, their children are active at school with their teachers and friends face-to-face, but now those times are decreasing. As a result, parents ultimately have to invest more time and energy than before to guide their children to learn at home (Brown et al., 2020). Parents take several forms of teacher's role during this online learning process. Moreover, teachers and parents increasingly communicate to discuss the development of children's learning at home (García & Weiss, 2020)

Home-school Partnerships and Student's Learning

The parents' roles in helping students learn during uncertainty are two considered vital. Even prior to the outbreak, in fact, many years, parental engagement has been measured as one approach to enhance students' learning (Avvisati et al., 2010; Epstein et al., 2019; Muller, 2012). It is depicted, the higher parent's involvement, the better the children's learning outcomes (Dabney et al., 2013; Liu & White, 2017; Liou et al., 2019; Nadelson, 2013; Sha et al., 2016; Sheldon & Jung, 2015). More specifically, parental engagement impacts students' attendance and learning at home (Goodall, 2016; Harrison, 2011; Kurnia et al., 2022; Liou et al., 2019; Muller, 2012; Pushor, 2010; Sianturi et al., 2018). Goodall (2016) reported that students whose parents provide adequate supports show higher attendance than their other schoolmates.

The level of parental engagement is influenced on how schools partner with parents (Sianturi et al., 2022a). Schools acknowledge that engaging parents is essential if schools desire to improve students' academic outcomes (Sianturi et al., 2022a; Epstein et al., 2019; Harrison, 2011). When schools can build culturally responsive home-school partnerships, parents tend to participate more in their children's education (Sianturi et al., 2022b). Therefore, teachers should maintain a strong relation with parents. To keep students on track of their learning,

teachers usually give students homework, and parents can observe children's activities at home, guide their children to finish homework, help if they might find difficulties, and navigate their children's progress (Brooks, 2009; Epstein et al., 2019).

Issues on Home-school Partnerships

Regardless of the outcomes of home-school partnerships on students' education, researchers have mentioned several challenges parents faced related to schools' attitude and ways of interacting with parents. Some parents might be easily engaged in the school system, but others might not. *Firstly*, schools' programs that often represent a series of formal school agendas and the rigid and structured arrangement reduce parents' responses to participate with schools (Auerbach, 2012; Jatmika, 2018). *Secondly,* the way schools start their communication with parents when children have a problem hinders parents to forge their connection with schools. Parents express their perspectives that the first impression emerging upon communication with the school is my child might be in trouble (Sianturi et al., 2022b; Cardona et al., 2009; Lea, Thompson, et al., 2011). *Thirdly,* there is an indication of unbalanced power in parent-teacher relationships. Some teachers have recognized themselves are not equal collaborators with parents (Auerbach, 2012; Harrison, 2011; Muller, 2012; Smrekar & Cohen-Vogel, 2001), in which parents are mostly needed only to help students learn at home and invited to come to school to inform about school's program but not involved in the planning process of the program (Brooks, 2009; Ma Rhea, 2012; Sheldon, 2003; Schutz, 2006).

Using Technology in Home-school Partnerships

The advantages offered by technology have enhanced the use of technology in the educational field, even more during the pandemic restrictions when online learning is promoted. In the digital era, mainly since the 21st century, teachers, parents and children have been interconnected by technology

(Lewin & Luckin, 2010; Patrikakou, 2016). Schools utilize technology not only for instruction but also for engaging parents. Scholars have examined how technology can facilitate collaboration between parents and schools (Edwards-Gaura et al., 2014; Goodall, 2016; Patrikakou, 2016; Thompson et al., 2015; Watkins, 2013; Zieger & Tan, 2012).

Technology enable an effective parent-teacher communication (Sianturi et al., 2022c; Edwards-Gaura et al., 2014; Harris & Goodall, 2008; Henderson & Mapp, 2002; Patrikakou, 2016; Thompson et al., 2015). Parents and teachers can communicate with technological tools such as cell phones (Goodall, 2016; Rogers & Wright, 2008). Before the advent of this technology tool, communication between parents and schools was seen as rare because face-to-face communication would require suitable timing for both parents and teachers. In addition, communication was considered random because it limited the theme of communication to certain cases of students (Kraft, 2016). Especially during the pandemic, digital tools have made two-way communication possible for teachers and parents (Chen & Rivera-Vernazza, 2022).

Although technology has been adopted in home-school relations in general, studies examining how the use of the technology in guiding their children at home during this pandemic are limited, in the context of Indonesian schools in particular. This study aimed to explore parent' experiences working with schools and how technology can be used in home-school partnerhips during the Covid-19 restriction. This study adds to the literature regarding the use of technology in home-school parnerhips during the Covid-19 outbreak.

METHODS
Research Design and Participant
This study was essentially a qualitative case study. A case study attempts to obtain a comprehensive picture that allows the exploration and understanding of complex issues through in-depth investigations of a single, bounded unit, e.g., individual, event, group, or community (Merriam, 2009; Yin, 2011; Zainal, 2007). The purpose is to identify the variables and interactions of participants that relate to the events in participants' past and events currently taking place in their everyday lives (Yin, 2011; Zainal, 2007). We employed a case study approach as our study design in reference to what Yin (2011) considered a case study approach. We considered that our study's objective was to answer the "how" question to uncover a current phenomenon of Yanti's experience in engaging in her child's learning to use technology during the pandemic.

The study was conducted remotely. With purposive sampling, we involved participants with these criteria: 1) being a parent who has a child of the middle school age studying in an urban Indonesian school during the study; 2) having experience in using technology in her/his collaboration with the child's school; 3) having a specific circumstance (demand of work or family) during the pandemic. We only had one participant in our study. Dörnyei (2007) noted that qualitative studies do not matter the sample presenting the population. Yanti (pseudonym) was the selected participant who met all criteria. She provided her consent for her participation, data to be recorded and transcribed, and we allowed her to withdraw at any time. When she completed the study, she was 42, from the middle social-economic status background, held a master's degree, and had one boy child (14 years old). Her child's school, a private school, was located in an urban area. Due to work and family circumstances, she had to work hard to support her family financially. In addition to her responsibility as a mother, she took charge of her mother, who had a serious health condition. The work demands mutated her temporarily to work outside the city, causing her to be separated from her child, husband, and mother. This situation was not straightforward for her, especially the pandemic

conditions that required online learning for her child.

Data Collection and Analysis

We used semi-structured interviews to collect our data. During epidemic outbreaks, in particular, the interviews considered the fundamental needs of individuals responding to the pandemic, how qualitative data were utilized in such conditions (Vindrola-Padros et al., 2020; Ziegler & Mason, 2020). The outlines of the interviews covered information of her experiences, in particular, of communicating and working with her child's school about her child's learning in order to develop an understanding of how the use of digital technologies to mediate the home–school relationship might support the child's learning during the Covid-19 pandemic. All interviews lasted between 1 and 1.5 hours in Yanti's preferred time. The entire process of the interviews was video recorded, and all data recorded was further transcribed verbatim.

Merriam (2009) stated that conveying an understanding of the case is an essential consideration (p.203). The qualitative case study researchers might encounter constraints in attempting to imply information. Having attention to data management is particularly paramount during this stage. In this stage, interpreting the information means the researchers decide what to exclude or include. It is necessary for researchers always to clarify which information is a factual description and which is the researchers' conclusion or opinion under these circumstances (Yin, 2011; Zainal, 2007). The strategy of member checking was employed to verify the trustworthiness of the study. We asked Yanti to check the interview transcriptions and provide any related feedback. We used thematic coding to manage our data. To develop the credibility of our data interpretation, the second investigator verified the codes created by the first investigator. Any disagreement and feedback were discussed.

RESULTS AND DISCUSSION

Results

Our study findings were related to the mother's experience working with her child's school using technology during the Covid-19 outbreaks. All results were based on Yanti's perspective, who was currently separated at a distance from her family. For Yanti herself, as a parent, guiding her child in his learning at home was vital for their child's education. That is why, in Yanti's view, the relationship between school and parents was beneficial. However, according to Yanti's experiences, this relationship did not significantly produce such a significant impact as expected, mainly during the chaos of the Covid-19 restrictions, which limited the space for her child to learn. Fortunately, however, the presence of technology brought several benefits for her. In this session, we elaborated on the benefits of technology that Yanti gained about her child's learning, the challenges she experienced in working with her child's school pertaining to his learning, the efforts she made to support her child's learning run smoothly, and the negative effect of the lack of collaboration.

The Benefits of Using Technology

Intensive distance communication with the child. The presence of technology helped Yanti stay in touch with her child. Despite the long-distance and work demands, with technology, Yanti remained to play her role as a parent to educate her child. With communication tools such as the synchronous nature of teleconferencing applications and asynchronous nature of teleconferencing of message board posts, Yanti was able to communicate one way and two ways according to the flexible time for her and her child. Yanti did not feel far away from her child because every day after work or even on the sidelines of a break on workdays, she could still send her child a message to share how she eats and her daily life. Her son could also tell stories and show some of his online learning activities with the video call feature.

Reviewing a child's learning remotely. Initially, Yanti was so worried about the condition of this pandemic on her child's learning development. The long-distance led Yanti to think about how she could guide her child to study while she was miles away. Until at first, Yanti thought of resigning from her job to reunite with her child, husband, and mom and focus on educating her son. However, family finance, especially her mom's health, led Yanti to persist in working finally. Another consideration she perceived was through the presence of technology. Even though Yanti was out of the city where her family resided, technology opened access for her to monitor her child's learning progress. Through her child's online learning account, Yanti had access to review her child's learning remotely.

Allowing communication with the school. Technology also supported Yanti in communicating with her son's teachers. Although she could not meet her son's teachers in person at school, she was able to talk to the teachers virtually. In her communication with the teachers, she usually conferred about her son's learning progress and occasionally provided input to the school. That technology enabled the school to increase active participation from stakeholders, particularly parents, in improving the learning system, school management, and curriculum.

Constraints in Supporting Child's Learning
Although there are some benefits that Yanti felt from the presence of technology to support her child's learning, it was undeniable that several challenges arose. Surprisingly, the challenge was seen as mainly coming not from her. She stated that there were no obstacles in the availability of technological tools or the ability to use the technology—unfortunately, the challenges derived from the school. The challenge was related to the school culture that has not adapted to the existing situation. The culture guided the attitude of the school in interpreting the teacher-parent relationship and the use of technology.

The attitude of the school in conducting the teacher-parent relationship. The attitude of the school in conducting teacher-parent cooperation was not optimal. Mainly, throughout this pandemic, Yanti noticed the lack of information on her child's learning developments conveyed by the school. During her busy work, Yanti always allocated her time to check the extent of her child's online learning. The results obtained, however, were not as much as she expected. Though she was highly enthusiastic about monitoring her child's progress, she noticed that her teacher was inactive in monitoring students' progress.

> You can imagine that I reside in another city, then the school classes are online, and it's getting worse and worse. Even if looking at Rendy's conversation with his teacher, if he is with his teacher, his tendency, I see as if he is afraid. That's why I said this, "You should ask the teacher, ask this, what page?" "I know mom, but the teacher won't give, won't answer" [Yanti's son response]. The teacher will give, answer. Won't answer, seriously? (Interview 02:41)

Yanti followed up because she was in doubt whether the teacher was truly slow to respond. She opened the Microsoft (MS) Teams chat and noticed when her son asked the teacher, "Sir, sorry, this was me yesterday, the network was disconnected, how to use this, would you like to explain?" and it turned out that the teacher took a very long time to answer. Yanti provided a solution for her son to ask questions and send a direct message via WhatsApp, but the teacher also took too long to respond.

Additionally, the teacher's inactivity in monitoring students' learning was visible from the length of time to record children's learning outcomes. Children's learning progress reports would be uploaded after two weeks, while children's grades and homework were often delayed. As a matter of fact, Yanti hoped that the children's learning reports should be

uploaded every day so that parents could monitor their children's development.

According to Yanti, the way teachers respond to parents' questions did not reflect openness. For example, Yanti once asked about her child's progress, but the teacher responded, "Just open it from the MS Teams of your child." In Yanti's mind, she intended to discuss in more detail relating to her child's learning. However, the teacher's response was out of what she assumed. According to Yanti, the teacher's attitude presented his unwillingness to see the conditions of online learning being carried out.

Yanti was disappointed. She desired that those teachers could become her partners to maximize her child's learning, mainly during the pandemic. As an ally in her child's education, Yanti longed for good cooperation between the teachers and herself. Moreover, with technology, Yanti perceived it would make it easier for teachers to regularly inform their children's development. If their children experienced initial difficulties, they could immediately find solutions, and these difficulties did not gradually lead to big problems.

Nevertheless, what she found; the school only communicated with parents when a "big problem" occurred. For example, the new teacher would ask, "Mrs. Yanti, why hasn't Rendy submitted his homework yet?" after several few days, on the due date. Upsettingly, Yanti felt that the teacher should have informed about this in advance and, if possible, should inform the parents about the collection time so that parents could navigate whether their children's assignments had been completed or not. She argued, "Communication with parents after there is indeed a problem, it shouldn't be like that. Just daily, before there is a problem, just talk normally, it's okay." She opined, regular and relaxed communication was essential; there was no need to wait for serious problems to contact parents.

The lack of openness of schools to receive input. The schools' disagreement about their respective roles in improving student learning often also drove schools to be less open to receiving input from parents. As a party who regarded fully responsible for children's learning, input from parents was often not taken into account. The school tended to provide input to parents regarding learning difficulties and learning achievements that needed improvement. It was infrequent for the school to receive input from parents or ask parents about other things that need to be improved in school education. Rarely, teachers built an intense dialogue with parents to confer topics related to educating children, such as different perspectives.

While the teachers' perspective, adolescent students were mature, did not need special guidance, Yanti's perspective differed. It can be seen when Yanti attempted to consult her child's problems with her teacher, but another teacher replied, "But Rendy has to learn to be independent, you know, Mrs. Yanti." She disagreed with the teachers. Although her child was already a teenager, Yanti was sure that parental intervention was still necessary. It might be a different approach because it was in accordance with the stage of child development. She explained her point of view: indeed, children should be trained to be independent, it was precisely at this stage of development the cooperation between teachers and parents was critical so that any children might not experience failures in adolescence.

One time, Yanti made a slightly emphatic comment,

> I'm far away, Sir; please help me too. I took my child to this school, I mean, because I work, and my husband work, that's why I looked for a good school, which can help me monitor the child's development, but if in the end this is all thrown to me, while my position is also not close... yes, it's just like a lie I send my child in an expensive school, has good reputation." Oh my God, forgive

58

me, such words can come out like that…Because I feel like it's not really helped. It seems that my past teachers were only public-school teachers, but they remained to maintain communication with parents. (Interview 08:21)

However, Yanti commented that it seemed that the teacher did not put it in his mind nor respond to this. Therefore, after discussing with her husband, they planned to transfer their child to another school, which they might be more able to collaborate. However, once again, they worried if their child's learning might decline due to the pandemic. Maybe the child would have difficulty finding friends to discuss at his new school because of the pandemic condition, so that later he would be lazy to study.

School unpreparedness to adapt to technology. Another challenge that Yanti encountered in collaborating with teachers was the school's unpreparedness in using technology for partnerships to the fullest. Yanti argued, "Technology already exists, it is good, but the school's mindset..." She regarded technology such as MS. Teams offered complete features to support online learning and parents' communication. Regrettably, this tool was only set out for online learning and schedules for implementing it. Features such as chatrooms could be used as a tool to communicate learning progress, or the difficulties experienced by students while studying.

> It's halfway, MS Teams is directly integrated with the students, right? The teacher can communicate in the chat, e.g., "Rendy, today in this subject, his concentration is lacking.", Why isn't that used? (Interview 35:46)

In addition, technology was not fully used as a communication tool in online classroom teaching nor in the process of evaluating students' learning. The results of the students' learning review (e.g., assignment review, feedback, comments on schoolwork) were really needed by parents, and with technology,

it would be much easier for both teachers and parents.

> The teachers never give a review of schoolwork… If it's even better now, the correct answer is this: the teachers just write down the correct answer and feedback. So, later on, parents will also be better off, you know, if they want to use it (Interview 36:41).

The technology used was not in line with the nature of schoolwork. Yanti saw that the forms of homework for several subjects, such as mathematics and physics, were not appropriately designed with technology. The tasks given were more likely written questions whose answers could be directly found from the Internet. She considered that it did not fully spur the child's thinking. In addition, for learning that requires practice, it seemed that technology was not used properly. Yanti perceived that schools should be more creative in using technology, so that even if learning was virtually conducted, students could have a chance to accomplish something meaningful in their learning, although not as much as offline learning.

> Well, if you've studied math, physics, I think it's lacking. Because you can't find it, you have to make cubes or something, right; you have to practice together, that's a bit difficult. However, if the form has to be practical, it can't just be from there. Due to current forms, later the child will just browse the Internet and copy, paste, and done. (Interview 43:29)

She argued that providing students with visual representations of mathematics is helpful to enhance their understanding of mathematics. By leveraging technological visualizations, mathematics could be transformed in a meaningful and engaging manner. With digital tools, teachers might integrate visual exercises into their teaching. Although mathematics and STEM classrooms today have access to a range of technology-based teaching opportunities, she perceived that some teachers were not aware of them.

In addition, Yanti also perceived that the school's unpreparedness to adapt technology influenced teachers' competence in online teaching. Teachers were not used to how to establish relationships and closeness with students in a virtual environment. For example, teachers were not ready to routinely read chats and reply to chats from students immediately. In a pandemic with online learning, students could not communicate with their teachers face to face. If it was a pandemic, every time students had difficulties during learning, students could just ask questions. However, in conditions of online learning such as this, the MS Teams' chat feature should be able to be utilized to keep track of children's understanding or whether there were difficulties they were experiencing so that no child was left far behind in learning. However, according to Yanti's view, this did not occur.

> Because I saw in MS Teams, there was no conversation between Rendy and his homeroom teacher. I looked at his phone, saw WhatsApp, it wasn't any chats with the teacher. If I was the teacher, I would consider myself as a "teacher", then I see that there are children's scores below the average, for example, I'll definitely approach my students, what's the problem? (Interview 13:21)

Behind all the challenges described above, Yanti concluded that the main factor was the lack of trust built in the relationship between the school and parents. Effective communication and cooperation could be established if the school were able to cultivate positive results from their relationships by updating all information about the students' progress. They welcomed any parents' ideas and input warmheartedly, and accordingly, they would be attentive to any positive possibilities developed to improve their student's learning and the use of technology.

Efforts Undertaken

The Covid-19 has impacted both the way of undertaking learning and the Yanti child's character. She asserted,

> Hopefully, it's over soon; it's a pity to look at my child. What he needs is social interaction. What shapes his character is when he meets physically with friends. I saw that my son has just started.... His character has started to change. Maybe because it's been a year and a half since he has been at home. Just playing with his dad. He's starting to change. Wherever he goes, he becomes afraid. (Interview 48:46)

Despite several challenges Yanti faced in collaborating with teachers during this pandemic, she never gave up endeavoring so that her child would not undergo a setback. Because of approximately 1.5 years of online learning, she noticed negative changes in her son. Therefore, she conducted the following attempts.

Intensely asking teachers and the child. Yanti made sure to check her child's learning every day. She asked her child about his learning daily. By using an MS Teams account owned by her child, she regularly navigated the daily progress of her child's learning. What she obtained as the results of checking her child's learning, she followed up with her child's homeroom teacher. With no hesitation, she also repeatedly requested the principal to allow her to communicate with her child's subject teachers.

Initiating to build a group of parents. Sharing with other parents was also considered essential. Through the WhatsApp group, Yanti connected several parents. This group was initiated by Yanti herself, not from the school. Through the group, they discussed the difficulties experienced by their respective child and the strategies taken by other parents regarding the problems experienced. By sharing experiences with other parents, she could adopt positive ideas or ways that she might apply to support her child's learning.

Negative Effect of the Lack of Collaboration

This lack of collaboration between school and parents led Yanti to hire a private tutor for additional tutoring, particularly Science and Mathematics subjects. On one side, employing a private tutor might be a worthwhile contribution to Yanti, as she regarded that with the presence of this private tutor, the difficulties of the assignments or materials of such subjects could be resolved. The feedback given by the tutor regarding her child's learning was helpful in monitoring her child's learning success. On the other side, rather, this circumstance precisely might weaken collaboration between parents and school as the parent did not rely too much on school anymore.

Discussion

In this paper, we interviewed Yanti to understand better her experiences working with her child's school using technology during this Covid-19 pandemic. Our points focused on her perspectives on the connections and discontinuities of her child's online learning at home and discussed how digital technologies might play out in such connections. As a parent who was far from her husband and child, Yanti felt that technology helped her support her child's learning. Technological features, such as the synchronous nature of teleconferencing applications and the asynchronous nature of message board posts, offered the flexibility to keep in touch with her child and monitor her child's learning remotely. Previous findings also revealed one benefit felt by parents who have work demands and needs is flexibility, where parents can respond to communication in their spare time (Hollingworth et al., 2011; Lewin & Luckin, 2010; Olmstead, 2013).

However, Yanti faced obstacles in working with the school to support her child's learning. The visible challenges came neither due to availability nor ability from her, but the school's attitude. The attitude of the school was not yet welcome, and the lack of trust in establishing effective communication with parents. The school culture might influence such attitude (Auerbach, 2002, 2010, 2012; Crozier, 2006; Crozier & Davies, 2007; Cardona et al., 2009; Harrison, 2011). Schools' attitudes that were not used to providing complete information updates to parents and the lack of openness of schools to receive input from parents were significant challenges, leading the cooperation established to be less harmonious. Previous studies identified these conditions due to unbalanced power and role sharing teachers and parents (Auerbach, 2012; Muller, 2012; Smrekar & Cohen-Vogel, 2001). Other studies also investigated the teacher's unwillingness to accept Yanti's input in this study because several teachers considered parents were not equal allies in children's education (Auerbach, 2012; Cardona et al., 2009; Muller, 2012; Smrekar & Cohen-Vogel, 2001). The teacher's opinion was that Yanti's child must be accustomed to being independent as he grew mature, while, according to Yanti, he still needed guidance. Although several scholars argued those older children would tend to withdraw from parental dependence as they become more mature (Bouffard, 2008; Harris & Goodall, 2008, 2017; Marshall & Jackman, 2015), but differences in views can be discussed if there is a mutually respectful dialogue (Auerbach, 2012). Literature also highlights that parents might contribute to adolescents with different approaches (Karbach et al., 2013).

The teacher's standpoint on parent-teacher collaboration, which always emphasized "wait for a serious problem," narrowed the communication spaces for Yanti and teachers. What happened to Yanti was also in line with what some parents felt in previous studies, that schools tended to contact parents if their children have problems, so that the first thing that comes to mind is "Is my child having a problem?" (Cardona et al., 2009; Lea, Thompson, et al., 2011). Yanti commented that there were likely many positive things that teachers and parents can discuss regarding improving student education if the foundation of the school-parent relationship was strong.

The attitude of schools like this also causes schools to be less able to utilize technology to its full potential. As Yanti noted, the existing technology features had not been optimally utilized, communicating with parents and following up on student homework. With the use of technology, learners have the opportunity to experience mathematical concepts in a more engaging and exciting way. When teachers implement engaging and interactive media and include visual activities in the classroom, students can learn the concepts of mathematics effectively. However, it is unfortunate that the teachers at the school of Yanti's child did not utilise technology for this purpose. The follow-up of homework and daily progress of students is crucial for parents. Previous research even revealed that teacher follow-up was the most dominant factor influencing students in doing homework (Saragih et al., 2019). Previous research revealed that technology that is used properly would allow teachers and parents to work efficiently, where teachers can streamline some duties in collecting and evaluating students' learning, and parents can review it while monitoring their children's learning (Lewin & Luckin, 2010).

Parental engagement is necessary, particularly during this pandemic. In the future, where the hybrid learning discourse is promoted, technology and the engagement of parents will be very helpful. Lawrence and Fakuade (2021) also emphasized that parental involvement is responsible for the commitments of adolescent learners towards online learning during the Covid-19 outbreak restriction. Using technology will have a big impact on student learning if it is followed by the attitude of the school that is also supportive in building strong relationships with parents with mutually respectful dialogue.

CONCLUSION

Cooperation between parents and schools is needed, especially during this pandemic. The presence of technology plays an essential role in increasing parental involvement, especially for career parents like Yanti, who is temporarily separated by distance from her child. Technology offers several benefits that help her remain to guide her child even though they are separated by distance. However, this technology has not been utilized optimally by the school. The adjustment of school culture, both attitude and openness in accepting input from parents, and the readiness of schools to improve themselves using technology greatly impacted establishing harmonious cooperation for improving students' learning during the pandemic.

Although the results of this study provide detailed information and an overview of the conditions of parental involvement in cooperation with schools during the pandemic and how technology is positioned in the cooperation process, we are aware of some limitations. Challenges related to the length of the study and the minimal sample size cause the study's results cannot be generalized in a wider context. Since a case study deals with only one person, we could not ensure the results represent the views and experiences of all parents or the broader body of similar instances. As such, the conclusions drawn may not be transferable to other settings. Since this research is based solely on the experience of one side (in this case, the parent) in the context of a home-school relationship, bias may occur. In addition, the study was conducted in an urban school situation which is most likely not to have internet network disruption; a problem that might be found in rural areas cannot be generalized. Subsequent research needs to explore this involvement from two sides (parents and schools) in larger sample size and represent urban and rural conditions.

This study provides several implications for improving education, typically a collaboration between schools and parents. Schools may need to re-examine their relationship with parents, whether it is strong enough, and focus on improving student learning. Cooperation will

be well established if schools are willing to adjust to the school culture by providing complete learning updates, welcoming parents' input, and adapting to the digital era by optimising technology. Even if the school is equipped with sophisticated technology, if a good attitude from the school does not accompany it, the technology will not significantly impact teacher-parent cooperation. This implication might be even more beneficial, as there is a discourse that hybrid learning might be applied in the future.

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