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 <https://doi.org/10.55463/hkjss.issn.1021-3619.60.70>

Learning Hybridization in Montessori School during Pandemic

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Received: September 5, 2022 ▪ Reviewed: November 2, 2022

▪ Accepted: December 8, 2022 ▪ Published: February 15, 2023

Abstract:

This study describes learning strategies and the stages of their implementation in Islamic Montessori schools during the pandemic. Conditions during the pandemic require teachers to be adept at using IT to innovate in their learning. This research was a case study. Subjects are teachers whose taught used the Montessori approach for at least 2 years. Data were collected using interviews, documentation, and observation. The data was analyzed using the Spradley technique. Triangulation techniques and thick descriptions are used for the validity of the data. The main findings from Montessori learning at Budi Mulia Dua Islamic schools during the pandemic were carried out using three strategies, namely, Save Distancing Private Class (SDPC), Online Class (OC), and delivery of lesson kits. The use of the results of this research is especially for teachers in Montessori to be able to conduct activities during a pandemic using the original Montessori learning stages through the three strategies. SDPC is most likely to apply the complete Montessori learning stages from greeting to closing. Modification of the Montessori stages was carried out when the OC strategy was implemented. Meanwhile, the Montessori stages cannot be applied to the lesson kit delivery strategy because children study at home under parental guidance. The novelty in this research is that the COVID-19 pandemic has made the implementation of learning require various innovations so that it can be carried out in a quality manner and still pay attention to the needs of children. The strategy is adjusted to government policies that follow developments in cases that occur in the country in general. This variation in strategy also determines the continuity of education services in schools, including this Budi Mulia Dua (BMD).

Keywords: learning strategies, Montessori, pandemic.

大流行期间蒙台梭利学校的学习杂交

摘要:

本研究描述了大流行期间伊斯兰蒙台梭利学校的学习策略及其实施阶段。大流行期间的情况要求教师善于使用信息技术来创新他们的学习。这项研究是一个案例。受试者是使用蒙台梭利方法教学至少 2 年的教师

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。数据是通过访谈、记录和观察收集的。使用斯普拉德利技术分析数据。三角测量技术和详细描述用于数据的有效性。大流行期间布迪穆利亚杜瓦伊斯兰学校蒙台梭利学习的主要发现是使用三种策略进行的，即节省距离私人课堂、在线课堂和提供课程包。使用这项研究的结果是为了让蒙台梭利教师能够在流行期间通过三种策略使用原始蒙台梭利学习阶段进行活动。节省距离私人课程最有可能应用到结束的完整蒙台梭利学习阶段。在实施在线课程策略时，对蒙台梭利阶段进行了修改。同时，蒙台梭利阶段不能应用于课程包交付策略，因为孩子们在父母的指导下在家学习。这项研究的新颖之处在于，新冠肺炎大流行使学习的实施需要进行各种创新，以便能够以高质量的方式进行，同时仍然关注儿童的需求。该策略根据政府政策进行调整，以跟踪该国总体情况的发展。这种策略的变化也决定了学校教育服务的连续性，包括这个布迪穆利亚杜瓦。

关键词：学习策略，蒙台梭利，流行病。

1. Introduction

The quality of education is identical to the quality of school management as a whole. The results of research on the quality of education involve emotional support, classroom organization, and instructional support (Leyva et al., 2015). Consistent social support throughout the day in stimulating academic skills protects children from problematic behavior and gets prosocial skills that children need in life (Johnson et al., 2017). Another can be seen from the classroom setting that can make children skilled in self-regulation and have good cognitive and academic abilities. Quality education if it has good classrooms and teacher-child interaction by using various supporting facilities and infrastructure.

However, major changes have occurred recently in education due to the COVID-19 outbreak (Karakose, 2020), including teaching strategies for educators, new innovations seeking solutions to educational problems, and an expansion of the gap in digital use (Tam & El-Azar, 2020). This change also requires teachers to reform the way of teaching at various levels. This change requires teachers to be ready to switch from face-to-face learning to distance learning, which includes four factors, namely behavior, Subjective Norm, Perceived Behavioral Control, and ICT Efficacy (Zabarani et al., 2022). Changes in teaching methods in the COVID-19 era were identified as follows: (1) the existence of interconnectedness in the education process throughout the world, (2) the existence of a new role for educators, (3) a shift in the focus of education on providing life skills, and (4) the expansion of the role of technology in education. The most visible changes were the closing of schools and the implementation of learning from home (SFH), which affected many parties.

The outbreak that became a pandemic and brought various changes also brought various impacts in all fields. The impact of the COVID-19 pandemic in the education sector occurred in the implementation of learning, including (Adi et al., 2021): there were obstacles in the teaching and learning process that afflicted areas with minimal internet access; cooperative and collaborative learning is hampered; students with

strong internal motivation will not be affected by this condition, but in contrast to children with less intrinsic motivation, and learning in front of electronic devices is increasing, which is worrying for children's health. This impact can also have an effect on educators, parents, and society in general, including teachers who must use various electronic devices (Holt, 2021) who have been less familiar in their teaching practices. The impact for teachers is seen in the focus on work and personal matters that are difficult for teachers to do because working at home causes personal matters to be mixed with work, which is difficult to avoid. Teachers also experience boredom working from home because there is less time to interact and discuss with colleagues.

However, this change in education strategy has made all educational institutions to try adjusting learning policies in the pandemic conditions that occurred through the minister of education and culture of the Republic Indonesia circular letter number 4, 2020. There have been ups and downs in the implementation of education in Indonesia depending on the loose and tight conditions epidemic that became a pandemic this year. Policy changes occur inconsistently, which can change at any time followed by learning patterns carried out by schools. The policies implemented in Indonesia are full online learning and then blended between online learning and limited classes. ECE teachers are required to be able to present distance learning through various media. Although some learning approaches cannot easily be applied to online or distance learning, one of them is Montessori.

The Montessori approach is implemented centered on processes Powell (Powell, 2016), rather than outcomes in learning. Distance learning is applied by teachers using various media, most of which cannot see the process of children working. However, the teacher asks parents to send their children's work using the media they have. Furthermore, Montessori is an approach that provides individualized learning using standard media and methods. From morning until noon, learning is carried out with a definite schedule and stages, namely greeting, group activities, free learning time, outdoor activity, snack time, and storytelling at closing (Brewer, 2014, p. 54). All of these are

performed as a teacher innovation to implement distance learning in early childhood.

The collection of information about various distance learning efforts for early childhood is conducted in early childhood teachers and schools. Initial observations at the Montessori Islamic School found that teachers made many innovations so that they could always provide appropriate educational services for their students. Strategies that are sought to minimize the risk of transmission of COVID-19 during the pandemic (He & Harris, 2020). However, learning for early childhood that uses digital media intensely will effect in attention and behavior problems (Thing et al., 2022). The focus of this problem is the implementation of the Montessori approach in Islamic schools during the COVID-19 pandemic. The focus of the problem can be broken down into the following two (1) "How to innovate learning hybridization at the Montessori Islamic School during the COVID-19 pandemic?" (2) "What are the stages of implementing learning hybridization at the Montessori Islamic School during the COVID-19 pandemic?"

2. Theoretical Review

A pandemic is an outbreak that simultaneously infects a wide geographic area, not only the area of origin of the disease (Setyo Utami, 2021). This pandemic period was the outbreak of the coronavirus disease 2019 (COVID-19), which is a coronavirus of the type sars-cov-2. All aspects of life around the world are affected by the spread of this virus, and all fields are paralyzed. Many innovations were carried out during this pandemic, especially in the use of online media for learning. Research proves that digital competency development is an effort to adapt oneself to life skills (Kassymova et al., 2020). Teachers must develop teaching competencies according to the demands of the times (Triyono et al., 2020), one of which is by using technology and various media such as Whatsapp, Classroom, Zoom, and others (Iftakhar, 2016). Therefore, learning innovation during the pandemic is mostly done by using various media -based IT by implementing appropriate strategies that can be accepted by all levels of education.

2.1. Hybridization

Hybridization is a process of mixing two or more technologies and/or cultures that produce new forms without eliminating each other, but also not being fully used (Christensen et al., 2013; (Sujudi, 2020). Hybridization consists of two types, namely, new hybridization and old hybridization (Nederveen Pieterse, 2009, pp. 99). New hybridization is a fusion between real objects in culture and technology that produces new forms, while the old hybridization is a fusion of culture and technology because of interactions in trade and conquest.

It hybridization is carried out consciously or

unconsciously (Stockhammer, 2012, pp. 12–13). Language for humans to interact is an example of the result of hybridization that is not realized or unconscious. However, the translation of newcomers' culture and technology is a conscious (intentional) hybridization process. Burke describes the existence of real objects, situations, and responses to as the main ideas in planning the implementation of hybridization (Stockhammer, 2012, p. 18).

The first idea is to hybridize real objects in the form of furniture, sculptures, architecture, pictures, and literature. The situation is the second idea in conducting hybridization in the form of a context or location where the meeting of culture and technology occurs. And the response is the third idea in the form of a response from the social environment community in response to the arrival of new culture or technology in their area. The response given by society to the arrival of new culture or technology includes accepting, rejecting, separating, or adjusting Burke in (Stockhammer, 2012).

2.2. Montessori

Montessori is a curriculum and learning approach by creating the environment, not just adapting to the environment to survive (Colgan, 2016). Montessori schools are developing around the world, which are implemented child's centered learning process (Powell, 2016), not just outcomes. The main components in Montessori learning are children, environment, and teachers (Isaacs & Barbara, 2015). Here, learning is carried out by adjusting the circumstances around the school. The pandemic period requires that the implementation of learning be carried out remotely so that teachers must look for strategic innovations so that learning is carried out and its quality is maintained.

2.3. Early Childhood Learning Strategies

Learning is a process of transferring information to develop children's abilities by providing learning facilities so that all children's potentials develop properly (Gagne, 2005, p. 1). Early childhood is a human being aged zero to eight years with various potentials (Essa, 2016). Therefore, learning for early childhood is a process of developing abilities through the provision of learning facilities for the potential of children aged zero to eight years.

Learning strategy is the most important component in the curriculum because it becomes a bridge for competencies that must be mastered and the learning process (Mariani, 2002). Strategy becomes part of the class we teach, so there is no strategy that is the best, but the one that best fits the situation. The learning strategy according to Rubin, 1987 consists of communication and social strategies (Shi, 2017). More about strategies in learning, teachers need strategies in communicating with students so that the message conveyed can be received. Teachers also should understand the social environment of the school, so that

the learning strategies applied do not conflict with the surrounding culture

3. Method

3.1. Methods and Design

This research was conducted to obtain an overview of the implementation of learning at the Montessori Islamic School during the COVID-19 pandemic. Therefore, qualitative research is used to obtain descriptive data results in the form of words or spoken from people and observable behavior in the form of case studies to investigate contemporary phenomena or cases in depth in the real world (Yin, 2017) to answer the questions of what, why, and how the montessori learning strategy used by Budi Mulia Dua's montessori madrasa during the pandemic (Yin, 2017, p. 1).

3.2. Samples and Location

Sources of data were selected by purposive sampling to determine key informants intentionally who were full of information according to the research focus (Yin, 2017, p. 88), which are teachers who had taught for at least 2 years at the Montessori Islamic School in Yogyakarta. The teacher has taught for 2 years using the Montessori approach as a subject requirement because they are mastered in philosophy, theory, and implementation of learning using various strategies. Teachers have received Montessori training and can implement it by hybridizing to suit the conditions of this pandemic.

3.3. Data Collection

Data were collected using techniques interviews, documentation, and strengthened by observations on online learning during the pandemic. Interviews were conducted online and structured were used in this study. Interviews were conducted using zoom media individually referring to structured questions prepared previously. In each interview, the researcher conducted interviews with only one informant, so that the five informants were interviewed separately and at different times. Observations were made on learning conducted both online and offline. Researchers observed the learning hybridization process during this pandemic referring to the observation guidelines. Observations include descriptive, focused, and selected observations. Documentation data collection techniques were also used in this study on school-owned documents and photographs that were relevant to the research problem. The data collected refers to the research questions: (1) How is the innovation of learning hybridization at the Montessori Islamic School during the COVID-19 pandemic? (2) What are the stages of implementing learning hybridization at the Montessori Islamic School during the COVID-19 pandemic?

3.4. Data Analysis

The research data were analyzed using Spradley's (Spradley, 1980) model analysis, which consisted of domain, taxonomy, component, and theme analysis. Domain analysis is performed by coding, sorting data, and finding the parent concept. Taxonomic analysis was carried out to obtain relationships that existed in all domains. Component analysis is carried out to produce data that is grouped into themes, then theoretical analysis is formulated and the relationship between each data is clearly seen. Theme analysis as the last analysis was carried out to find a common thread that integrates all the domains found. The validity of the data is also maintained to avoid bias, namely, meeting the criteria of credibility and generality by conducting technical triangulation, as well as a thick description by explaining the data in detail according to the research focus.

4. Results

The results of this study answer two predetermined problem formulations. The first formulation of the learning strategy at the Montessori Islamic School during the COVID-19 pandemic obtained results as described below.

4.1. Learning Strategy Innovation at the Montessori Islamic School during the COVID-19 Pandemic

Three learning strategies were developed by the Islamic Montessori School during the COVID-19 pandemic, namely, SDPC, OC, and sending a lesson kit. The first is the Save Distancing Private Class (SDPC). This is carried out every morning during this pandemic by limiting the number of children per day of education services (Figure 1).

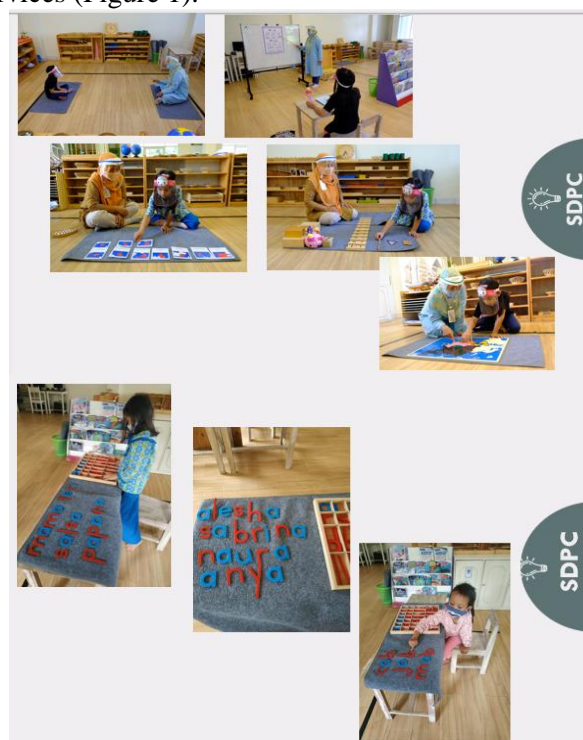


Figure 1. Save distancing private class (SDPC)

Only half of the class every day, which is 7 to 8 children who are taught by 3 teachers, so that one teacher only guides 2 to 3 children. SDPC activities are implemented using strict health protocols for both children and teachers. In the classroom, children are divided into 3 groups with their respective teachers. Montessori learning is performed individually or one on one. This means that one teacher gives a presentation on a topic to one child in a small group, while another child waits for their turn.

The second strategy is Online Class (OC). Learning in this strategy is held online using various possible applications. They are google meet, zoom, whatsapp video call, and others. OC does not limit the number of children attending classes. 15 children in each class will study simultaneously online (Figure 2).

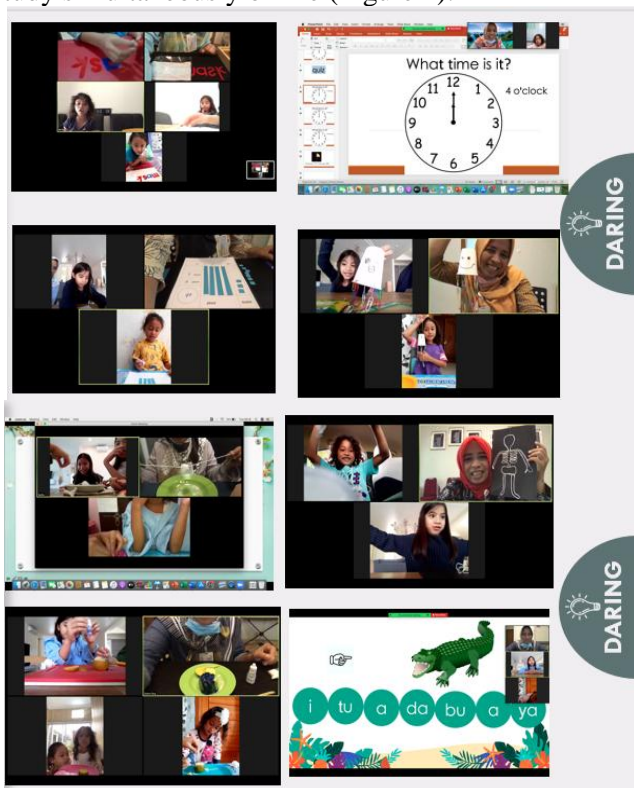


Figure 2. Online class (OC)

Sending a lesson kit, which is a Montessori apparatus, is a third strategy in BMD. Lesson kits were delivered home or picked up at school. All these lesson kits will be used by children to learn from home under the guidance of their respective parents. Lesson Kits were prepared by the teacher in each class. Then, all the lesson kits are taken by the parents on Friday, and then the children do it at home. All of these are taken in the school lobby in turn for each class so that there is no crowd in the school lobby. The teacher handed the lesson kit to the parents who were still in the vehicle. The next on Friday, the parents collected the assignments in the Lesson Kit and pick up the Lesson Kit the following week (Figure 3).



Figure 3. Home-delivered lesson kits

The results of the domain, taxonomy and component analysis are summarized in the following Figure 4.

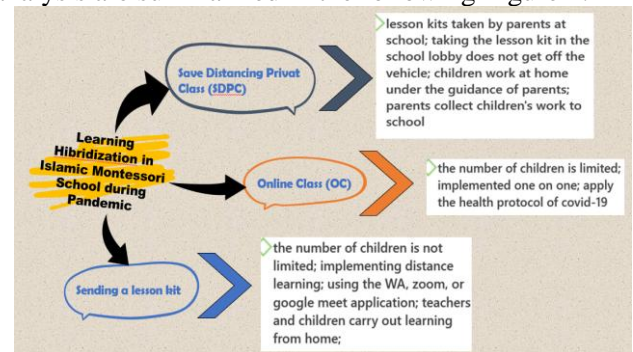


Figure 4. Summary of domain, taxonomy, and component analysis of Montessori learning hybridization during the pandemic

The second problem related to the implementation stage of the strategy at Montessori Islamic Schools during the COVID-19 pandemic, the data obtained are as follows. The stages of implementing learning strategies are carried out differently for the three. The original learning stages of the Montessori approach include: greeting, playground time, opening, free learning time, individual learning, break time, and closing. All of these stages were carried out on the SDPC strategy, while the OC was carried out in stages: motor activities, opening, religious materials, Montessori materials, and closing.

4.2. Save Distancing Private Class (SDPC)

The first strategy implementation in the Montessori stage is a greeting. This stage during the COVID-19 pandemic was carried out by welcoming the child at the school yard, then asking the child to wash their hands using running water and soap, keeping a distance when entering the building, greeting the teacher without being rude or simply cupping both hands in front of the chest. At this stage the child takes off the shoes and puts them on the shoe rack, then enters class to put the bag on the shelf.

Stage two is physical activity or playground time. Activities are held with gymnastics, yoga, or playing traditional games. The implementation of playground time is carried out in small groups, and one teacher supervises three children (figure 4).

R8: "...they were outside at the playground time for 30 minutes. Children warm up first for 30 minutes. Sometimes, on Thursday or Wednesday, we do traditional games once a week. On Friday, there is a gymnastics. Now, there are even suggestions for doing yoga for kids..."



Figure 4. Playground time stage: a) Playground time – play “engklek”; b) Physical activity - Yoga kid

Stage three is opening. This is done in circle time classically in a circle. During the pandemic, there are 7 nine children. Activities at the opening include morning prayer activities, daily prayer rote, hadist, and short letters in the Qur'an, religious stories, and discussion of activities for a hole day (figure 5).

R6: “Islamic religious activities begin with opening prayers, praying during the day, 30 minutes before prayer, there is tausiah material (memorization of the verses of the Qur'an, prayer, faith, Islamic stories)...”

R8: “...The first 30 minutes there are prayers and memorization. We formulate that ourselves for religious and moral value materials... so we put the Islamic ones at the beginning, in the form of memorizing letters in the Qur'an, memorizing prayers, having hadiths, selected Qur'an verses, there are also morals, and worship (wudhu/ablution, prayer, and dhikr after prayer)”

R9: “...There is prayer, memorizing short letters of the Qur'an, memorizing hadith, singing... After that apperception...”



Figure 5. The opening stage: prayer and Iqra

The opening continues with the presentation of the topic. This stage contains activities where the teacher explains the activities that children can choose to do. The presentation also includes procedures for conducting Montessori assignments using the appropriate apparatus (Figure 6).



Figure 6. Opening stage: topic presentation

R8: “We give the initial presentation to the child with limited words. So, we only talk a little bit. Then, the child will really see. We slow the hand, and we demonstrate it slowly. For example, spooning (pouring), we demonstrate slowly while looking at the child, and the Montessori concept goes from left to right like that, like the direction of writing... I present with a smile, I say “good job”

Stage four is free learning time. This stage gives children the freedom to go around the classroom to observe the activities they choose, which they are interested in. This stage is given to children to obtain an overview of activities, apparatus, and procedures for doing the activities. So that the choice of activities they take can be done with pleasure.

Stage five is individual learning. This stage is done after the child decides what activity to do. Activities in the individual learning stage can choose one of the language, mathematical, practical life, sensorial, or cultural activities. At this stage, the child works in a mat, either a table mat or a floor mat. This mat serves to limit the child's work area. Children are not allowed to work out of mat.

R8: “And when we have presented, the children will be free to choose which materials... Children work, we always use mats. So, a small mat, how to roll, at the beginning we teach...”



Figure 7. Individual learning stage: Montessori area

Stage six is break time, which contains playing activities, snack time, toileting, and so on. Stage seven is the last stage in Montessori learning, namely, closing, which contains story-telling activities, prayers, and closing greetings (Figure 8).



Figure 8. Closing stage: prayer after studying

4.3. Online Class (OC)

The online class (OC) learning stage consists of physical-motor activities, opening, religious material, core material, and closing. The first stage is the provision of physical-motor activities carried out through gymnastics with the aim of stretching the child's physical-motor skills before learning is carried out (Figure 9).



Figure 9. Exercise before studying

Stage two is opening. This stage consists of routine activities to pray before studying. Furthermore, after praying, the activity continued with the delivery of religious material, such as learning about the prophets, memorizing daily prayers, Iqra, and others (figure 10).

R8: "Then in Islam, we have an introduction to the pillars of Islam, the pillars of faith, Asmaul Husna, stories of the prophets. As for how to collaborate with Montessori, always start the activity by reading "Bashallah" and end with "Hamdallah," then later when we explain plants, animals, etc., we always remind the children that everything is God's creation. Continue to be grateful, we must be grateful for all that. So, at the beginning we always include religious elements, and during activities we also give examples with objects that are around us and we associate them with religious and divine stories."



Figure 10. OC religious material: a) Introduce the prophets; b) Memorizing daily prayers; c) Iqra; d) Tahfiz

Stage three OC is the core material. This stage contains learning using Montessori materials and apparatus, including practical life, sensorial, language, mathematics, and culture. This material is delivered only a few in one day of learning on this OC strategy because not all of them can be delivered simultaneously online (Figure 11).

R6: "The preparation itself from 5 areas is always checked and prepared."

R8: "Then this is for 5 areas, ma'am.. Areas of practical life (daily life), social, culture (culture), mathematics, and language."

R10: "...Montessori materials (practical life, math, language, culture, sensorial)."

MENGENAL 25 NABI DAN ROSUL

- Lagu : 25 Rosul
- (1)Adam (2)Idris (3)Nuh (4)Hud (5)Sholeh (6)Ibrahim (7)Luth (8) Ismail (9)Ishaq (10) Ya'qub (11)Yusuf (12)Ayyub (13)Syu'aib (14) Musa (15) Harun (16)Dzulkifli (17)Daud (18)Sulaiman (19)Ilyas (20)Ilyasa (21)Yunus (22)Zakaria (23)Yahya (24) Isa (25)Wal-akhirul khotimul anbiya Muhammad al-Musthofa

DOA MASUK KAMAR MANDI

DOA MASUK KAMAR MANDI

اللَّهُمَّ إِنِّي أَعُوذُكَ مِنَ الْخُبْثِ وَالْخَبَائِثِ

ALLOOHUMMA INNII A'UUDZUBIKA MINAL KHUBUTSI WAL KHOBAAITSI

Artinya :
Ya Allah, aku berlindung dari godaan syetan laki-laki dan syetan perempuan



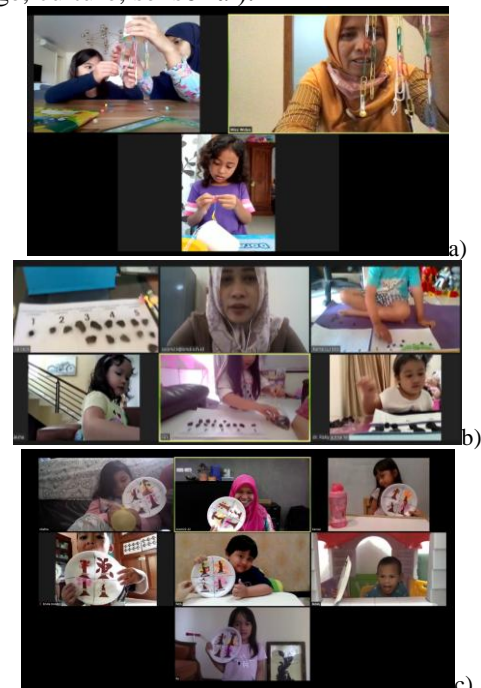


Figure 11. Montessori material: a) Sensorial area; b) Mathematics area; c) Culture life area

The fourth stage is closing in the form of prayer activities after studying (Figure 12).



Figure 12. Closing

From the data obtained, it can be summarized the analysis of domains, taxonomies, and components regarding the stages of learning in Montessori schools during the pandemic as follows (Figure 13).

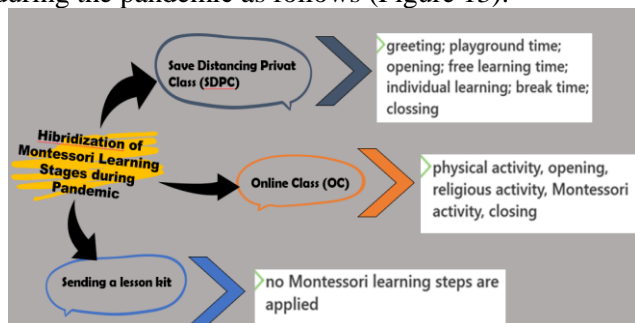


Figure 13. Summary of domain, taxonomy, and component analysis of the hybridization of Montessori learning stages during the pandemic

Based on the domain, taxonomy, and component analysis images on the two findings from the research questions above, it can be seen that the hybridization of Montessori learning during the pandemic includes Save Distancing Private Class (SDPC), On Line Class (OC), and Sending a lesson kit. These three learning strategies are a form of hybridization as an innovation carried out by teachers in conducting learning during a pandemic, such as the conditions described by Tam and El Azar (2020). Teachers make changes to teaching methods to adapt to existing pandemic conditions by expanding the role of technology and teachers as part of changing learning during a pandemic as described by Zabarani et al (2022). The three hybridizations in this learning strategy are carried out to overcome the obstacles faced by teachers in their classes, especially in terms of teacher demands in using electronic media (Holt, 2021).

The analysis was carried out referring to the purpose of this study, namely, identifying hybridization in learning strategies as an innovation at the Montessori Islamic School during the co-19 pandemic and the stages of its implementation. Given that the quality of learning is determined by emotional support, class organization, and instructional support (Leyva et al., 2015; Ishimine & Tayler, 2014; Hamre et al., 201), whereas during a pandemic, these three things could not

be implemented. The pandemic has forced many schools to conduct distance learning using various media (Holt, 2021) without the three components that determine the quality of existing learning. Meanwhile, the Montessori approach is carried out using an individual approach (Isaacs & Barbara, 2015), which requires teachers to always interact directly with children.

Furthermore, this condition makes the teachers at the Budi Mulia Dua Islamic school try to innovate in finding learning strategies. This study found that BMD carried out distance learning to prevent the spread of COVID-19 during the pandemic (He & Harris, 2020) using three strategies, namely, Save Distancing Private Class (SDPC), Online Class (OC), and delivery of lesson kits (Diagram 1).

The SDPC is conducted to limit the number of children in the class to maintain a distance and avoid body contact to prevent the spread of the COVID-19 virus (Figure 1). This situation is a slightly difficult to apply to early childhood who do not really understand the conditions of this pandemic. However, teachers always try to discipline children to continue implementing health protocols in limited learning in the classroom.

OC is held between SDPC implementation times by using various meeting applications such as google meet, zoom, whatsapp video call, and others (Figure 2). This is in accordance with the opinion (Luthra & Mackenzi, 2020) that pandemic conditions expand the use of technology in education. If SDPC limits the number of children who attend class, on the other hand, there is no limit to the number of children who can attend classes. This happens because teachers and children teach and learning from their respective homes without meeting, so there is no physical contact between them.

The delivery of lesson kits is the third alternative to the learning strategy developed as an innovation by BMD. The teacher gives lesson kits to parents in the lobby. Parents accept it without getting out of the vehicle to avoid crowd and physical contact (Figure 3).

Domain, taxonomy, and component analysis in the second question obtained data that the hybridization of Montessori learning at the learning stage was fully performed on the Save Distancing Private Class (SDPC) strategy. All Montessori steps as described by Brewer (Brewer, 2014) from welcoming, optional activities, outdoor play, group activities, snack time, to story time are carried out with several hybridizations as adjustments. Hybridization is carried out on the number of students in one class, techniques for welcoming children without touching, various activities inside and outside the classroom using established health protocols, snack time individually and maintaining distance between children.

The stages of implementing the original Montessori generally include greetings, group activities, free learning time, outdoor activity, snack time, and story-

telling at closing (Brewer, 2014, p. 54). This learning strategy stage was then modified at the Montessori BMD Islamic school during this pandemic (see diagram 2). The steps in the SDPC strategy apply almost all of the original Montessori steps, including: greeting, playground time, opening, free learning time, individual learning, break time, and closing as a whole like the original Montessori stages (figures 4–8). However, the OC strategy was implemented by modifying Montessori's original learning stages, adapted to the circumstances of this pandemic. OC performed using various applications cannot fully use the native Montessori stages. The OC strategy is carried out by modifying the learning stages to be simpler and shorter, including motor activities, opening, religious material, Montessori material, and closing (features 9–11). And the lesson kit delivery strategy cannot be implemented using the Montessori learning stage at all. This happens because the children study at home under the guidance of their parents. The main material needs are sent to the house. And then the teacher is just awaiting a report on the activities the child is doing at home from the parents.

5. Conclusion

Learning using the Montessori approach during the pandemic at BMD was carried out using three strategies, namely, Save Distancing Private Class (SDPC), Online Class (OC), and sending lesson kits. The three strategies were carried out following government policies related to the ebb and flow of the ongoing COVID-19 pandemic. If possible or the number of COVID-19 cases decreases, schools implement SDPC so that children can interact with teachers and friends in a limited number. If cases increase, the teacher chooses to conduct OC as well as sending lesson kits so that learning continues and the process is monitored.

The stages of Montessori learning cannot be fully implemented during a pandemic in distance learning. The choice of SDPC strategies allows teachers to apply Montessori steps within the limitations of face-to-face learning. The OC is carried out by making several modifications to the Montessori stage, which can be done online. The three deliveries of lesson kits do not use the stages of implementing Montessori learning because children study at home under the guidance of their parents.

Therefore, it can be concluded that the COVID-19 pandemic has made the implementation of learning require various innovations and adjustments so that it can be carried out in a quality manner and still pay attention to the needs of children. Learning is adjusted through learning hybridization to suit government policies and follow developments in cases that occur in the country in general. Learning variations because of hybridization adapted to these circumstances also

determine the continuity of education services in schools, including Budi Mulia Dua (BMD). The results of this study provide an overview of how to hybridize Montessori learning, which is very rigid despite this pandemic emergency. Schools must comply with government policies with various restrictions, but they also have to conduct learning properly. So that the results of this study can provide an alternative implementation of learning that adapts between the demands of implementing standard Montessori learning and field conditions.

The implications of the results of this study include the implementation of Montessori learning using standardized steps and media. There is no opportunity for the steps and media used in Montessori learning to be changed. However, the Pandemi condition requires teachers to hybridize Montessori learning so that learning can still be carried out in limited conditions. Hybridization is carried out on the strategy and steps of implementing the learning strategy.

5.1. Limitations and Further Study

This research produces a conceptual theory about the application of online Montessori learning hybridization. However, no models or guidelines for implementing online Montessori learning hybridization have been produced so that these results do not yet know the effectiveness of implementing online learning strategies in other Montessori schools. Therefore, it is necessary to develop an online Montessori learning hybridization model in other Kindergartens so that the quality of online Montessori learning is maintained.

Acknowledgments

This acknowledgment goes for:

1. Supervisor for patiently guiding this writing.
2. Budi Mulia Dua Kindergarten school, which have agreed to be the subject of this research.
3. All parties from Early Childhood Education and others.

Authors' Contributions

Author 1 is a doctoral student who contributed as the main researcher for this research; Authors 2 and 3 were supervisors of Author 1 who contributed as director and provided a review of the manuscript. All authors have read and approved the final published version of the article.

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