

INTEGRATING ISLAMIC MONTESSORI IN DIGITAL LEARNING AT BRAINY BUNCH CYBERJAYA MALAYSIA

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Abstract

Digital technology advancements have brought changes in the behavior and personality of school aged students. Especially in the use of gadgets, which tend to impact decreased learning motivation, concentration, and learning responsibility. However, in an international school, gadget use has become a directed learning tool through the integration of Islamic values and the Montessori approach. This study focuses on the development of student independence and discipline in gadget use at Brainy Bunch Cyberjaya, Malaysia. The data obtained through observation and interviews show that the development of student character at



Brainy Bunch Cyberjaya Malaysia is carried out through habit formation, reinforcement of Islamic values, and management of gadget usage time, with consistent supervision from teachers. In addition, parental involvement at home plays an important role in reinforcing the positive habits developed at school, thereby creating continuity between education at school and the family environment. This study has limitations as it was conducted in one school with a specific context, so the results cannot be generalized to all educational institutions.

Keywords: *Discipline; Gadgets; Independence; Islamic Values; Montessori.*

Abstrak

Kemajuan teknologi digital telah membawa perubahan dalam perilaku dan kepribadian siswa usia sekolah. Khususnya dalam penggunaan gadget yang cenderung berdampak pada menurunnya motivasi belajar, konsentrasi dan tanggung jawab belajar. Namun, di sebuah sekolah internasional, penggunaan gadget telah menjadi alat pembelajaran yang terarah melalui integrasi nilai-nilai Islam dan pendekatan Montessori. Studi ini berfokus pada pengembangan kemandirian dan kedisiplinan siswa dalam penggunaan gadget di Brainy Bunch Cyberjaya, Malaysia. Data yang diperoleh melalui observasi dan wawancara menunjukkan bahwa pengembangan karakter siswa di Brainy Bunch Cyberjaya Malaysia dilakukan melalui pendekatan pembentukan kebiasaan, penguatan nilai-nilai Islam, dan pengelolaan waktu penggunaan gadget, dengan pengawasan yang konsisten dari guru. Selain itu, keterlibatan orang tua di rumah memainkan peran penting dalam memperkuat kebiasaan positif yang dikembangkan di sekolah, sehingga menciptakan kesinambungan antara pendidikan di sekolah dan lingkungan keluarga. Pada penelitian ini terdapat keterbatasan karena dilakukan pada satu sekolah dengan konteks tertentu, sehingga hasil penelitian tidak dapat digeneralisir pada seluruh satuan pendidikan.

Kata Kunci: *Disiplin; Gawai; Montessori; Mandiri; Montessori; Nilai-nilai Islam.*

INTRODUCTION

Current technological developments have an impact on the character of early childhood students. Generation Z is known to have been born with technology, so they grew up with technology/gadgets ([Kristyowati, 2021](#)). It is not uncommon for students to be more preoccupied with their devices, thereby neglecting matters related to their social activities. This situation also causes changes in the religious character of students, such as laziness in worship, neglect of their learning obligations, and disrespect for their parents, to the point of changing their behavior in society ([Nikmah, 2023](#)).

Excessive attachment to gadgets has a negative impact on students' behavior in their daily lives and future ([Jalal et al., 2022](#)). Students who have been accustomed to relying on gadgets from an early age are at risk of losing the golden opportunity to develop a strong and balanced character. In fact, the student period is a crucial time for instilling values of responsibility, obedience, and respect for parents. Without anticipation, this can worsen students' chances of achieving success in the future. However, advances in digital technology can also be a positive learning tool if integrated with Islamic educational values, as these values serve as an initial safeguard for students exploring the digital world. In addition, the Montessori method has become one of the most popular methods in early childhood education today ([Wala & Misliani, 2025](#)). The Montessori method provides an appropriate approach for the holistic growth and development of early childhood students. These two things, namely Islamic educational values and the Montessori method, have similarities in several aspects and complement each other. Islamic educational values and the Montessori method emphasize a balance between freedom and responsibility, discipline and compassion, spirituality and

independence. Through these values, the use of gadgets is not only a means of entertainment, but can also be a source of digital learning that is spiritually and educationally valuable.

In the field of education, many schools prohibit bringing gadgets or limit their use during school hours. However, Brainy Bunch Cyberjaya Malaysia is different. This school uses gadgets (generally ipad) as a learning medium with rules- students are not allowed to use their gadgets outside of class hours and are not allowed to open applications other than the media used for learning. The school's policy on gadget use is well regulated to ensure controlled use during learning hours. The school also appoints several student representatives as prefects to monitor classroom conditions, where the names of students who violate the policy will be reported to the relevant school authorities. With these rules, students are able to demonstrate independence and discipline in using these electronic devices. Although teachers do not always instruct students to put away their electronic devices, students still do not use them outside of learning activities. Even when a lesson requires students to use gadgets, they do not dare to open other apps that are unrelated to learning. This shows that with the right educational approach, technology can be an effective learning tool as well as a means to instill discipline and responsibility in students.

Brainy Bunch Cyberjaya Malaysia uses the Montessori approach in its learning process. This approach is a student centered learning method that provides space for each student to develop according to their potential, interests, talents, and pace. In the context of digital learning, the Montessori approach can facilitate the use of gadgets as a supporting learning medium through the principles of guided freedom, independent learning for students, and the provision of a well-structured learning environment in accordance with Montessori principles (Nurriza et al., 2024). In this school, Montessori is not just an academic approach, but also a means of shaping students' religious character through the integration of Islamic values into their learning

activities ([Rahmi & Saleh, 2023](#)) Students are given the opportunity to express themselves without being limited by the same standards as other students, while teachers in the Brainy Bunch Cyberjaya Malaysia classroom use the Montessori approach as facilitators and supervisors in the learning process.

Brainy Bunch Cyberjaya focuses on five educational frameworks, namely Spiritual, Physical, Intellectual, Creative, and Emotional ([Rahmi & Arifah, 2023](#)). Based on the researcher's observations, the Spiritual aspect is developed through daily Islamic activities, such as congregational prayers, praying before studying, *qailullah* (short afternoon nap), and a religious program called Prayer Camp, where male and female students stay overnight at school and engage in religious activities together with teachers. The Physical aspect develops fine and gross motor skills as well as physical independence through martial arts, outdoor activities, and educational games that support students physical development. Furthermore, the Intellectual aspect sharpens thinking and reasoning skills through teaching aids, experiments, and real-life experiences, allowing their thinking and curiosity to develop well. The creative aspect encourages innovation and expression in students through music, art, and handicrafts. Meanwhile, the emotional aspect is developed by creating a learning environment full of love and free from competition so that students can manage their emotions and appreciate their peers, as conveyed CEO of Brainy Bunch.

Several previous studies have discussed the application of the Montessori approach in early childhood education. ([Hamsa, 2020](#)) studied the implementation of Montessori in developing independence character in early childhood at Brainy Bunch International Islamic Montessori School in Malaysia, but the study did not examine the use of digital media in learning at the school. ([Rahmi, 2023](#)) researched the implementation of the Montessori method in improving learning achievement and developing religious character, but this study did not focus on the digital learning process in the classroom. [Haikal, 2024](#) conducted a study

on the implementation of the Montessori method in Aqidah Akhlak learning at the upper elementary school level at Brainy Bunch Cyberjaya Malaysia, focusing on the learning of specific subjects without examining the use of digital technology in learning. Therefore, this study offers novelty by discussing how students' independence and discipline develop in the use of gadgets in classroom learning through the integration of the Montessori approach and Islamic values.

METHOD

This study uses a descriptive qualitative approach by combining three techniques: literature study, reflective field observation, and interviews ([Creswell, 2009](#)). The literature study was carried out by reading, reviewing, and synthesizing various journals and scientific sources relevant to the application of the Montessori method, character education, and digital literacy in early childhood education. Reflective field observation was conducted to directly observe the behavior, habits, and discipline of students in using gadgets during learning activities. Meanwhile, interviews were conducted with one teacher, two class prefects, and five randomly selected students in the classroom to obtain information regarding the policy on gadget use in the classroom.

The data obtained from literature, observations, and interviews were subsequently analyzed using qualitative data analysis. As stated by Miles and Huberman, data analysis is conducted through three stages, namely data reduction, data display, and drawing conclusions ([Miles, 2014](#)). Using this technique, the researcher aims to gain an understanding of the development of students' independence and discipline at Brainy Bunch Cyberjaya, Malaysia, regarding gadget use during class hours.

To ensure the validity of the data, this study used source triangulation, which was carried out by comparing the interview results from five regular students, one student who is a prefect, and

the interview results obtained from the teacher, as triangulation enhances credibility in qualitative research. Furthermore, the researcher also used technique triangulation by comparing the results of interviews and observations so that the researcher could ensure that the data obtained is reliable and can provide an insight into the formation of independence and discipline among students in using gadgets during class hours at Brainy Bunch Cyberjaya, Malaysia.

RESULTS AND DISCUSSION

This study examines an integrative approach between Islamic values and the Montessori method applied at Brainy Bunch Cyberjaya Malaysia as a basis for guiding the balanced and regulated use of digital technology. In the current educational context, many learning applications are designed to increase learning motivation, expand knowledge, and develop students' skills (Supriyanto, 2025). Additionally, gadgets help students develop digital literacy skills, which are very important in today's modern era. While in everyday reality, many school children still overuse gadgets, resulting in negative impacts, on the other hand, in this International school, technology becomes a means of instilling Islamic character values through supervision, habituation, and teacher role modeling.

Based on the observations conducted by the researcher, the students at Brainy Bunch Cyberjaya Malaysia, especially at the lower and upper elementary levels, have shown the application of Islamic values in their daily activities within the school environment. This is evident from the students' habits of greeting and saying *salam* to teachers when passing by, performing congregational *dhuha* prayers held in the Islamic hall for lower elementary, and in the meeting hall for upper elementary and high school, and praying before starting lessons as an effort to ensure a smooth learning process. These activities are part of the habituation of Islamic values instilled by the school as a way to shape students'

religious character. These practices show that Islamic values are not only taught conceptually but are also internalized through consistent daily activities.

The next observation results showed that students at Brainy Bunch Cyberjaya, Malaysia, were able to utilize digital technology in learning while still instilling Islamic character values. During the learning process, students used gadgets in an orderly manner and according to the teacher's instructions. Students only took out their gadgets from their bags when requested by the teacher and did not use them outside the designated time. When gadgets were used, students also limited their use to applications related to learning activities. The implementation of a student-centered Montessori approach was evident in the variety of applications used during a lesson. Some students used the Canva application to design presentation slides, others opened the Notes application to write drama scripts according to the material being studied, while other students accessed the Classroom application to complete assignments given by the teacher. Nevertheless, students do not open other applications that are unrelated to learning. This finding indicates that through consistent supervision and guided habituation, the use of digital technology in the classroom does not reduce student discipline, but rather becomes a means of fostering responsibility and self control in learning.

Based on interviews with several students, namely Ameera Qairina, Qisya Azalea, and Nawal Ardhani, it was found that the use of gadgets in class is only allowed during learning activities. The students stated that after the lesson is over or during break time, gadgets must be put away and are not allowed to be used. If students still take out their gadgets outside of the designated time, they will be given a warning and sanctions according to school rules. This statement from the students shows that they understand the limits of gadget use and are aware of the consequences if they break the established rules.

The results of interviews conducted with a class prefect named Iskandar and two other students indicate that the use of

gadgets at Brainy Bunch Cyberjaya Malaysia is only allowed during lesson hours. The informants stated that students are not permitted to use gadgets outside of learning time. The class prefect explained that if a student uses a gadget outside of lesson hours, the prefect is responsible for recording the name of the student who violated the rule and reporting it to the teacher in charge. Subsequently, the student who violated the rule will be given advice and special sanctions according to the school's policy. Meanwhile, the two other students stated that this rule has been understood by all students and is consistently applied in the classroom. This shows that the mechanism for monitoring gadget use is not only carried out by teachers but also involves the role of students through the prefect system as part of fostering discipline.

The findings of this study are also supported by an interview with a teacher named Aina Fazleeny. The teacher explained that students at Brainy Bunch Cyberjaya Malaysia are indeed encouraged to bring gadgets to school as learning tools. However, the use of gadgets is limited to during lessons and must align with the learning needs. The teacher also mentioned that most students have become accustomed to following these rules and participating in lessons in an orderly manner, so that the use of gadgets can support the learning process without disrupting student discipline. The teacher further added that when students need to use gadgets, the subject teachers will provide a do's and don'ts warning, which is one of the key principles in Montessori.

The findings from the observations and interviews above indicate that student discipline in using gadgets is not only formed through school rules, but is also influenced by the internalization of Islamic values and the implementation of the Montessori approach in learning. Habits of daily worship such as performing the congregational dhuha prayer, praying before studying, and the culture of greeting teachers foster students' religious awareness from an early age. This awareness is reflected in students' trustworthiness and responsibility when using gadgets; even without direct and constant supervision from teachers, students

consistently refrain from using their gadgets outside designated times and instructions.

Brainy Bunch Cyberjaya Malaysia implements a curriculum framework, namely Spiritual, Physical, Intellectual, Creative, and Emotional, as a basis for integrating Islamic values into learning. The spiritual aspect is realized through daily worship practices such as performing *Sunnah* and obligatory prayers at school, which instill religious awareness and positive habits in students. The physical aspect is developed through activities like *Silat Seni Gayong* and thematic programs that train fitness while also promoting social care (Running for Solidarity Gaza). The intellectual aspect is seen from the use of Montessori media such as abacus and bead manipulations to train students' cognitive abilities (Agamboka et al., 2023). The creativity aspect is manifested through learning projects such as creating Canva presentations and thematic dramas that encourage expression and active understanding so creativity can stimulate and increase students' absorption of ideas (Alifiyah, 2024). Meanwhile, the emotional aspect is developed through a learning environment that emphasizes patience, following teacher instructions, and cooperation among students, thereby supporting emotional regulation and positive discipline. This curriculum framework is aligned with the Montessori approach based on Islamic values, which supports the balanced development of students' responsibility and independence.

The implementation of Islamic and Montessori values at Brainy Bunch Cyberjaya Malaysia is carried out through various Islamic-themed activities, such as starting activities with prayers, greeting teachers every time they meet, teaching students to perform the *Dhuha* prayer, and performing the *Dhuhr* and *Asr* prayers in congregation in the classroom. The reinforcement of these spiritual values is not just an additional activity, but an integral part of fun and interactive daily learning activities. In this way, Islamic values are taught in a context that is acceptable to students, which is also in line with Montessori principles that emphasize direct learning experiences (Putri et al., 2024).

Furthermore, the integration of Islamic values in Montessori also emphasizes independence based on spirituality, where students are guided to understand their responsibilities as a form of trust from Allah SWT. The aspect of independence, which is at the core of Montessori, is also emphasized from an Islamic perspective. Students are taught to become independent individuals who are responsible for their actions, and this is part of the trust that each student must carry out. Islamic Montessori equips students with the awareness that independence is not merely a physical ability, but is also related to spiritual and moral awareness based on faith (Andriani et al., 2023). This learning process guides students to understand the importance of self-discipline and responsibility as part of worship.

In addition to individual activities, Islamic values such as mutual assistance (*ta'awun*), politeness (*adab*), and patience (*sabr*) are applied through group activities that encourage students to learn to interact socially with respect and awareness of values. When working in groups with older peers, students respect them, and with younger peers, students protect and help each other. The development of students' social skills through Islamic Montessori is very effective in building strong and emotionally balanced character. This approach is very useful for shaping individuals who respect others and adhere to Islamic social norms (Wala & Misliani, 2025). In addition, the Montessori classroom environment at Brainy Bunch Cyberjaya Malaysia is adapted to Islamic values through a layout that supports spiritual activities and character education. For example, the use of learning materials that feature Arabic script and Islamic symbols. This kind of classroom atmosphere has a positive effect on students' interest in learning while fostering a love for their religion and culture (Yuliani, 2021).

In its implementation, teachers act as facilitators who ensure that Islamic values and Montessori principles run harmoniously in teaching and learning activities. Teachers as educational facilitators at Brainy Bunch Cyberjaya Malaysia have a central role in integrating Islamic values and Montessori principles. They not only

guide students' academic learning activities but also set an example of noble character, becoming role models in the application of Islamic values, and accompanying students in every learning process with compassion and patience. The role of teachers is very strategic in maintaining a balance between student independence and the formation of a strong Islamic character.

The learner-centered learning process in Islamic Montessori allows students to continue to explore their potential and cultivate gratitude, honesty, and moral responsibility. Through activity-centered learning, students also learn muhasabah, or self-evaluation, which is an important element in Islamic education. In addition to implementing good habits and religious activities, Brainy Bunch Cyberjaya Malaysia also instills the importance of maintaining personal and environmental hygiene as part of Islamic values, which is also in line with the Montessori principle of maintaining classroom and learning materials tidiness ([Andriani et al., 2023](#)). Daily activities such as washing hands before eating, tidying up learning tools, and maintaining personal hygiene are taught as a form of daily faith practice.

Independent character and responsibility in students at Brainy Bunch Cyberjaya Malaysia are formed through the application of the Montessori method, which prioritizes freedom but is directed at students in their activities in the learning environment. The freedom to choose activities allows students' independence to grow slowly and appropriately, as they can make their own decisions and take responsibility for their choices ([Azhari et al., 2024](#)). The application of the Montessori method teaches students to respect freedom while upholding the boundaries that apply in the classroom. Students learn to manage their behavior, organize learning equipment after use, and respect their friends' rights when doing activities together. At Brainy Bunch Cyberjaya Malaysia, independence is also honed through practical life activities that are packaged in daily routines, such as preparing plates for breakfast or lunch, then returning the rice and side dish containers to their places in turns without the help of a teacher.

Through these activities, students can learn and internalize the value of responsibility through concrete actions ([Rosmi, 2023](#)).

Montessori provides students with the opportunity to reflect on the decisions they make. If a mistake occurs, students are encouraged to correct it themselves, strengthening their sense of responsibility for the learning process and the results they achieve. The aspect of freedom in Montessori does not merely give students leeway, but rather shapes strong discipline and self-motivation. Montessori plays a significant role in fostering student responsibility through student-centered learning, enabling them to be more active and confident in taking on roles ([Maharani, 2025](#)). Montessori also develops emotional and social independence through mixed-age group interactions. Students cooperate and help each other in classroom activities, both as mentors to their younger peers and by learning to accept help from their older peers. Furthermore, the sustainability of strengthening independent character and responsibility greatly depends on the consistency of the school and parents at home. Parental support is essential so that the values learned at school are also practiced at home, ensuring that character development is not limited to the school environment.

In addition to teachers, parents also play a vital role in maintaining continuity in character education between home and school. In shaping students' character, parents are actively involved in learning at school and are encouraged to apply the same values at home. This is related to the consistency of guidance outside the classroom, which strengthens students' character in a comprehensive and sustainable manner. This cooperation ensures that students receive a holistic, focused education that is in line with religious values and their optimal development ([Rizhan et al., 2024](#)). Furthermore, the combination of the Montessori approach with Islamic values at Brainy Bunch Cyberjaya Malaysia provides an effective educational model that is relevant to the needs of today's students. This education not only aims to improve students' intelligence and skills, but also instills Islamic values as a solid

moral foundation from an early age, which will be the basis for the growth of a generation with noble character and independence.

At Brainy Bunch Cyberjaya Malaysia, teachers play a role in guiding and giving students the confidence to carry out activities according to the applicable lesson schedule, especially in managing the use of gadgets in a timely manner. The role of teachers here is more as facilitators and mentors who supervise the use of gadgets so that they do not interfere with the learning process. Teachers have a responsibility to minimize the negative impact of gadgets by managing them wisely through an educational approach, one of which is through a structured usage schedule and switching to no gadget use during main learning times (Yuniarni, 2019).

Teachers give students trust by providing limited freedom in accordance with the rules agreed upon together in class. In the Montessori context, this principle of guided freedom encourages students to be responsible for their time and gadget use (Iftiza et al., 2025). The management of gadget usage time is accompanied by habits that teachers apply consistently. Teachers supervise so that gadgets are only used at certain times, for example, during learning sessions that require gadgets for educational purposes and so that students do not lose focus on other activities (Kurnia et al., 2024).

Furthermore, teachers actively teach time management and self-discipline to students so that they learn how to manage their gadget use independently. The Montessori method is in line with the development of strong independent habits, where teachers build effective communication to encourage students to complete tasks before using gadgets, while also providing positive feedback on the independence shown by students (Surtini et al., 2025). In addition to time restrictions, teachers combine gadget use with alternative educational activities and traditional games that stimulate students' motor and social aspects. Teachers are also able to reduce the negative impact of gadgets by introducing fun traditional activities so that students achieve a balance between technology and social interaction.

The trust given by teachers also serves as motivation for students to take responsibility for their decisions to use gadgets. The Montessori approach encourages students to learn from consequences, where excessive use of gadgets can reduce learning opportunities in other activities (Azhari et al., 2024). Teachers also actively involve parents in monitoring gadget use to ensure continuity between home and school. Training for teachers on the educational use of gadgets continues to be improved to keep pace with technological developments and the psychological needs of students. Through intensive training, teachers can design learning programs that balance the use of gadgets with physical and social activities, ensuring that students do not become addicted but can utilize technology for optimal learning (Iftiza et al., 2025). The purpose of using gadgets also supports balanced growth and development between technology and the real world.

At Brainy Bunch Cyberjaya Malaysia, the use of gadgets has been proven to increase students' focus on learning. With teacher supervision, gadgets can be used as learning aids that allow students to explore information independently. Students use gadgets to search for information related to learning and also to play various quiz games. In learning, gadgets become effective learning tools if used properly so that they are organized and conditioned. In contrast, uncontrolled use of gadgets can have serious negative effects. Excessive use of gadgets can reduce concentration and focus on learning because gadgets are also entertainment tools that can distract attention. Looking at screens for long periods of time can cause cognitive fatigue, eye strain, and posture problems.

Brainy Bunch Cyberjaya Malaysia uses several applications on the gadgets owned by students. These applications serve as learning tools for students to boost their enthusiasm for learning. Through this integration of technology, students can access interactive learning materials designed to make the learning process more interesting and enjoyable than usual (Liu et al., 2014).

The use of gadgets not only motivates students to be more active in learning activities, but also helps them improve their digital skills.

The use of gadgets not only motivates students to engage in learning activities, but also helps them improve their digital skills. One of the most commonly used quiz applications is Blooket, which allows students to participate in interactive quiz sessions with gamification elements such as point collection, avatars, and time challenges. With Blooket, students can learn topics through questions compiled by teachers, which not only increases student focus due to healthy competition among friends, but also encourages enthusiasm for learning through direct feedback and virtual ranking rewards. This application has proven to be effective in maintaining student attention during learning sessions, reducing boredom, and helping them remember material better through fun repetition. However, to avoid negative risks such as fatigue and addiction, the use of Blooket at Brainy Bunch Cyberjaya Malaysia is always supervised by teachers, with time limits and integration into a structured curriculum, so that gadgets function as tools to support focus and motivation rather than distractions.

In addition to Blooket, Brainy Bunch Cyberjaya Malaysia also utilizes platforms such as YouTube as an integral part of the school's digital learning ecosystem. YouTube is used by students to access educational videos relevant to the learning material, such as interactive tutorials or explanations of difficult concepts, which help improve visual understanding and maintain focus during the independent learning process ([Kurnia et al., 2024](#)). Under teacher supervision, students can search for and watch recommended content, such as science experiment demonstration videos or stories about the Prophet, which not only make learning more interesting but also encourage a spirit of exploration. However, to avoid risks such as distractions from irrelevant content or eye strain due to long viewing times, the use of YouTube is limited by specific guidelines from teachers, including recommendations for verified videos and integration into a structured learning schedule.

Brainy Bunch Cyberjaya Malaysia also integrates Canva as a creative tool to support students expression of their understanding of the material. When asked by teachers to use gadgets, students use Canva to express their understanding of the learning material, where they independently make important points based on the knowledge they have absorbed, such as designing infographics, digital posters, or attractive presentation slides. This process encourages creativity and critical thinking, as students must organize their own ideas without direct assistance, which are then presented in front of the class to share knowledge and receive feedback from peers and teachers. With teacher supervision, the use of Canva not only makes learning more interactive and visual, but also helps students develop digital skills such as graphic design and effective communication, while strengthening their focus and enthusiasm for learning through the creation of personalized content.

Brainy Bunch Cyberjaya Malaysia also encourages the use of applications or web browsers such as Safari to support students in searching for information about topics they do not yet understand. Safari, as a web browser available on students' gadgets, namely iPhones, is used by students to access trusted educational websites where they can find additional explanations about topics that are difficult to understand during classroom learning. Under teacher supervision, students learn to identify accurate and relevant sources of information, avoiding inappropriate content, so that this search process not only expands their knowledge but also trains their digital literacy and independence in learning. The use of Safari is integrated into learning sessions, where students are asked to search for facts or real examples related to the material, then share them in class discussions, which helps strengthen understanding and focus without disrupting the main learning flow.

In the context of character education, the Montessori method makes an important contribution to instilling values of discipline and responsibility from an early age. Character education

in early childhood plays an important role in shaping disciplined and responsible behavior from an early age. In the Brainy Bunch Cyberjaya Malaysia environment, the Montessori approach is the main foundation for training students to be accustomed to following rules, including commitments related to gadget use. The consistent application of the Montessori model builds awareness and responsibility in students in carrying out their daily roles, so that students understand the boundaries and consequences of their actions (Ningsih et al., 2021). Montessori gives students the space to choose activities that are relevant to their developmental needs, but still within structured boundaries. This freedom of choice is balanced with consistent rules, so that students are gradually able to internalize the concept of responsibility, especially regarding gadget restrictions.

Furthermore, the successful implementation of the Montessori method cannot be separated from the active role of teachers and the involvement of parents in the process of assisting students. This learning model emphasizes the importance of the role of mentors in guiding and supervising students, so that the decisions made by students remain within the agreed disciplinary corridor. Another approach that is prioritized through the Montessori method is the provision of a variety of non-gadget activities, such as sensory games, motor skills, science experiments, arts, and group work. Through these activities, students receive optimal stimulation without relying solely on digital devices. On the other hand, parents need to play an active role in applying the rules initiated by the school to the home environment, in order to create consistency and reinforce disciplined behavior as a whole (Harianti et al., 2025). As stated by one of the author's sources, Aina Fazleeny, the author's supervisor during the observation and interviews with students at Brainy Bunch Cyberjaya Malaysia,

"Students' behavior at school is still influenced by their home environment. Many students have poor habits in class, and this is caused by their parents rarely being at home, and the students not receiving special attention from both parents."

The effectiveness of restricting gadget use among students through the Montessori method is optimally supported by the example set by teachers and consistent habits (Ningsih et al., 2021). Students who have been accustomed to consistent and disciplined activities from an early age will be better able to manage their commitment to gadget rules and use their time for more beneficial activities. Therefore, the application of the Montessori approach at Brainy Bunch Cyberjaya Malaysia is a strategic solution for fostering discipline and responsibility in early childhood students, especially in managing gadget use. This approach is reinforced by habits that do not require gadgets, supervision by teachers and parents, and a learning environment that supports the natural and comprehensive development of a disciplined character.

From all of the implementations mentioned above, it can be seen that daily habits are the main foundation in shaping the character of discipline and responsibility of students at school. Daily habits are an important foundation in educating students to become disciplined, independent, responsible individuals who are able to control themselves. At Brainy Bunch Cyberjaya Malaysia, these values are instilled through consistent habits using the Montessori approach, which has been explained in various recent studies above. Montessori teaches students through repetitive real-life activities, so that positive habits are naturally embedded in their character development (Azhari et al., 2024).

The discipline instilled in Montessori is not coercion, but rather the internalization of values through routines and a supportive environment. Students learn to work consistently, maintain cleanliness, and respect the rules that apply in the classroom. The Montessori learning model provides a framework for students to learn discipline through intrinsic motivation, not just external rules. Independence then grows from guided freedom, where students are given the space to choose their own activities and take responsibility for their choices. To support this independence, teachers act as facilitators who guide students to be able to make their own decisions within healthy and productive

boundaries. Thus, students gradually learn to manage their time, including the use of gadgets according to schedule.

Responsibility is the result of consistent education through habits, both in terms of taking care of learning tools, managing play and study time, and carrying out routine worship practices in the classroom based on Islamic values. The incorporation of Islamic values in Montessori reinforces the concept of trustworthiness, so that students feel a moral obligation not only to themselves but also to their social environment. Self-regulation is an important aspect that is trained through daily habits. For example, students learn to be patient when taking turns using toys, obeying the rules of the game, and being disciplined in their use of gadgets.

With habits that are formed continuously, students at Brainy Bunch Cyberjaya Malaysia are also taught to understand the consequences of their actions. In the use of gadgets, teachers provide clear time limits, and students are responsible for using that time wisely. This education builds digital discipline, which is important in today's technological era. In addition to individual activities, structured social interactions become a medium for students to learn responsibility and self-control. Through group activities, they learn to share, cooperate, and appreciate the diversity of their friends. Social-emotional learning in Montessori contributes positively to the overall character development of students ([Wala & Herlin, 2025](#)).

The classroom environment is arranged in such a way as to support this habit, with a layout that allows students to move freely while being responsible for the shared space. This atmosphere also reinforces Islamic values as part of concrete teachings that can be applied at any time, such as maintaining cleanliness and mutual respect. In addition, the role of teachers in facilitating and guiding students is crucial. Teachers serve as role models in discipline, responsibility, and self-control, while also building two-way communication with students so that they understand the benefits of the positive habits being implemented. Apart from teachers, the active involvement of parents is also key to the success of instilling

these habits. Coordination between families and schools strengthens habit-based learning models, providing space for students to consistently implement the values of discipline and responsibility in their two main environments.

Habit formation in Montessori, which is linked to Islamic values, also instills the concept of spiritual values in character education. Students are taught to always remember God, pray before starting activities, and see learning as a way to get closer to God, which psychologically strengthens their self-concept and self-control (Kurnia et al., 2024). The learner-centered learning model allows them to learn something in depth, including learning to manage expectations and emotions. The freedom and independence supervised by teachers in using gadgets and choosing activities supports the development of self-efficacy and healthy self-regulation. Through systematic routines, students also learn to enjoy the learning process without dependence on gadgets or the digital environment.

Practical Montessori activities such as tidying up tools, maintaining cleanliness, and preparing learning materials are also part of the habit formation process that trains concrete responsibility and improves concentration. Routines like this improve discipline without making students feel forced (Ningsih et al., 2021). Self-control that is trained from an early age will have a positive impact on students' ability to face social and academic challenges in the future. Overall, the daily habits formed in Montessori and enriched with Islamic values at Brainy Bunch Cyberjaya Malaysia lead to the formation of a well-rounded character in students, covering moral, social, emotional, and cognitive aspects. This ensures that students are not only academically prepared but also ready to become moral and responsible individuals in society.

CONCLUSION

The integration of the Montessori approach and Islamic values at Brainy Bunch Cyberjaya Malaysia has been proven to shape students' discipline and responsibility in using gadgets during the learning process. The habituation of Islamic values such as congregational prayers, prayers before studying, respect for teachers, and consistent supervision fosters religious awareness and a sense of trustworthiness in students. This awareness is reflected in students' adherence to gadget use rules, where they do not use gadgets outside class hours and only open applications related to learning. Through the Montessori approach, which emphasizes guided freedom, students are trained to manage their behavior and responsibilities independently, so that discipline is not formed through coercion, but through the internalization of values and sustainable habits.

This study has limitations because it was conducted at only one school with a specific international Islamic education context, so the results cannot yet be generalized to all educational institutions. In addition, this study focused on the primary education level and has not explored in depth the differences in student character based on age or family background. Therefore, future researchers are advised to expand the research locations to various types of schools and education levels, as well as use more diverse methodological approaches, such as comparative or longitudinal studies. Further research could also explore the role of parents and the home environment more deeply in shaping students' digital discipline, thereby providing a more comprehensive understanding of the integration of Islamic character education and the use of technology in the digital era.

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REFERENCES

- Agamboka, A. A., Mensah, K., & Ador, E. (2023). Using the abacus to address challenges basic three (3) pupils with learning difficulties have with place value of numbers in experimental school in Bolgatanga Municipality, Ghana. *International Journal of Educational Research*, 6(6), 57–75. <https://doi.org/10.5281/zenodo.8167688>
- Alifiyah, N. (2024). *Implementasi pendekatan Montessori dalam mengembangkan fitrah anak di Brainy Bunch International Islamic Montessori School Kuala Lumpur, Malaysia* [Thesis]. Universitas Islam Indonesia.
- Andriani, R., T., Wijaya, A., & Suriyanti. (2023). Analisis Penggunaan Metode Islamic Montessori Dalam Menanamkan Nilai Islam Pada Anak Di Ra Tunas Literasi. *Indonesian Journal of Islamic and Social Science*, 1(2), 81–92. <https://doi.org/10.71025/hs4qr629>
- Azhari, S., Fadlilah, A. N., Astini, N. S., Rudiah, S., & Fujianti, N. A. (2024). Analisis peningkatan kemandirian anak melalui metode pembelajaran Montessori. *Journal of Early Childhood Education Studies*, 4(1), 166–198. <https://doi.org/10.54180/joeces.2024.4.1.166-198>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Haikal, M., G., F. (2024). *Implementasi Metode Montessori dalam Pembelajaran Aqidah Akhlak Pada Level Upper Elementary di Brainy Bunch International Islamic Montessori School Cyberjaya Malaysia* [Thesis]. Universitas Islam Indonesia.
- Hamsa, H. A. (2020). *Implementasi metode Montessori dalam membentuk karakter kemandirian pada anak usia dini di Brainy Bunch International Islamic Montessori School Malaysia* [Thesis]. Universitas Islam Indonesia.

- Harianti, D. S., Prasetyo, S., Sibawaihi, S., & Al Faqh, M. A. (2025). Peran orang tua dalam mengatur penggunaan gadget pada anak usia dini. *Kumara Cendekia*, 13(1), 9. <https://doi.org/10.20961/kc.v13i1.96477>
- Iftiza, F., Andriono, E., & Bahari, Y. (2025). Implementasi kurikulum Montessori di PAUD: Sebuah studi literatur tentang difusi inovasi. *Jurnal Ilmiah Wahana Pendidikan*, 11(C), 54–65. <https://jurnal.peneliti.net/index.php/JIWP/article/view/10655>
- Jalal, N. M., Syam, R., Istiqamah, S. H. N., Irdianti, I., & Piara, M. (2022). Psikoedukasi mengatasi kecanduan gadget pada anak. *PaKMas: Jurnal Pengabdian Kepada Masyarakat*, 2(2), 420–426. <https://doi.org/10.54259/pakmas.v2i2.1311>
- Kristyowati, Y. (2021). Generasi “Z” dan strategi melayaninya. *Jurnal Teologi Dan Pendidikan Kristiani*, 2(1).
- Kurnia, A., Kusuma, S. A., Arimanda, A. R. Y., & Lestari, N. D. (2024). Penumbuhan motivasi belajar serta pengenalan dampak gadget pada anak sekolah dasar. *PaKMas: Jurnal Pengabdian Kepada Masyarakat*, 4(1), 198–208. <https://doi.org/10.54259/pakmas.v4i1.2760>
- Liu, M., Scordino, R., Geurtz, R., Navarrete, C., Ko, Y., & Lim, M. (2014). A look at research on mobile learning in K–12 education from 2007 to the present. *Journal of Research on Technology in Education*, 46(4), 325–372. <https://doi.org/10.1080/15391523.2014.925681>
- Maharani, P., & Mawardah, M. (2025). Pengaruh metode Montessori terhadap kemampuan konsentrasi belajar berhitung anak tunagrahita ringan di SLB-C Autis Pelita Hati Palembang. *Jurnal Penelitian Pendidikan, Psikologi Dan Kesehatan*, 6(1). <https://doi.org/10.51849/j-p3k.v6i1.672>

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage Publications.
- Nikmah, F. (2023). Pendidikan karakter religius anak usia dini di era digital dalam perspektif Al-Qur'an. *Tinta Emas: Jurnal Pendidikan Islam Anak Usia Dini*, 2(1), 1–14. <https://doi.org/10.35878/tintaemas.v2i1.678>
- Ningsih, S., Wiyono, B. B., & Atmoko, A. (2021). Implementasi model pembelajaran Montessori dalam membentuk karakter disiplin anak usia dini. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 6(2), 292. <https://doi.org/10.17977/jptpp.v6i2.14503>
- Nurriza, P., H., & Wahab, A. B. A. (2024). Transformasi pendekatan Montessori dalam pendidikan anak usia dini di era digital: Kajian literatur teoretis. *Jurnal Ilmu Sosial Dan Humaniora*, 2(2), 71–79. <https://doi.org/10.58540/isihumor.v2i2.807>
- Putri, A. K., Pahrurroji, & Widyastri, S. (2024). Implementasi metode Islamic Montessori dalam menanamkan nilai-nilai pendidikan Islam di Sekolah Kiswah Tangerang Selatan. *Jurnal Manajemen Dan Pendidikan Agama Islam*, 2(2), 261–279. <https://doi.org/10.61132/jmpai.v2i2.225>
- Rahmi, U. Q. (2023). *Implementasi metode Montessori dalam upaya peningkatan prestasi belajar dan pembentukan karakter religiusitas pada anak usia dini di Brainy Bunch International Islamic Montessori School Malaysia* [Thesis]. Universitas Islam Indonesia.
- Rahmi, U. Q., & Arifah, M. N. (2023). Upaya stakeholder sekolah dalam mengoptimalkan potensi belajar peserta didik di Brainy Bunch International Islamic Montessori School Malaysia. *At-Thullab: Jurnal Mahasiswa Studi Islam*, 5(3), 1447–1460. <https://doi.org/10.20885/tullab.vol5.iss3.art10>

- Rahmi, U. Q., & Saleh, M. N. I. (2023). Implementation of Montessori method in learning activities at Brainy Bunch International Islamic Montessori School Malaysia. *At-Thullab: Jurnal Mahasiswa Studi Islam*, 5(2), 57–64. <https://doi.org/10.20885/tullab.vol5.iss2.art6>
- Rizhan, M. F. A., Suriansyah, A., & Cinantya, C. (2024). Peran orang tua dalam penerapan strategi pembelajaran efektif di rumah dalam meningkatkan kualitas pendidikan anak di sekolah dasar. *MARAS: Jurnal Penelitian Multidisiplin*, 2(4), 2163–2170. <https://doi.org/10.60126/maras.v2i4.567>
- Rosmi, F. (2023). Efektivitas metode Montessori dalam penanaman karakter tanggung jawab siswa kelas rendah SD Lab School FIP UMJ. *Jurnal Pendidikan Transformatif*, 2(6). <https://doi.org/10.9000/jpt.v2i5.1090>
- Supriyanto, S. (2025). The impact of gadget use on elementary school students' learning focus in Undaan District, Kudus Regency. *Jurnal Pendidikan Islam*, 2(3), 5. <https://doi.org/10.47134/pjpi.v2i3.1458>
- Surtini, T., Pertiwi, N. S., Aisyah, S., Saadah, S., & Hilman, C. (2025). Strategi guru dalam mengembangkan kemandirian anak melalui metode Montessori di TK Islam Al-Fitriyah. *Jurnal Bersama Ilmu Pendidikan (DIDIK)*, 1(1), 59–64. <https://doi.org/10.55123/didik.v1i1.17>
- Wala, & Misliani, H. (2025). Montessori sebagai metode pembelajaran di Sekolah Balita Quran untuk meningkatkan kualitas PAUD di Kecamatan Pasar Rebo, Jakarta Timur. *Ash-Shobiy: Jurnal Pendidikan Islam Anak Usia Dini Dan Al-Qur'an*, 4(2), 113–123. <https://doi.org/10.33511/ash-shobiy.v4n2.113-123>
- Yuliani, A. (2021). Implementasi prinsip Montessori dalam pendidikan keislaman pada anak usia dini. *Jurnal Studi*

Islam Dan Kemuhammadiyah (JASIKA), 1(2).
<https://doi.org/10.18196/jasika.v1i2.16>

Yuniarni, D. (2019). Peran guru PAUD dalam meminimalisir dampak gadget pada perkembangan anak usia dini melalui permainan tradisional. *Yaa Bunayya: Jurnal Pendidikan Anak Usia Dini*, 3(1), 1–6.
<https://jurnal.umj.ac.id/index.php/YaaBunayya/article/view/4415>