

## Mentoring and Implementation of Digital Parenting Concepts for Teachers and Parents in Semarang City

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### **Abstract**

*The development of digital technology in the era of the industrial revolution 4.0 has brought significant changes in early childhood education. However, the low digital literacy of teachers and parents creates a gap in child mentoring. This service activity aims to strengthen collaboration between RA teachers and parents in implementing the concept of healthy and educational Digital Parenting. The method used is Service Learning with the stages of needs analysis, training, and evaluation carried out in a participatory manner. Data was obtained through observation, questionnaires, and participant feedback, and then analyzed using thematic analysis techniques. The results show an increase in digital literacy, the ability to use technology creatively and safely, and the building of collaboration between schools and families in digital parenting. This program has succeeded in encouraging the application of the tricenter principle of education in facing the challenges of early childhood care in the digital era.*

**Keywords:** Parents, teachers, early childhood.

## **Introduction**

The development of digital technology in the era of the industrial revolution 4.0 has brought major changes in the world of education, especially in early childhood learning patterns (Choy et al., 2024). The learning process that originally took place conventionally has now shifted to digital-based, where children are increasingly familiar with gadgets, the internet, and various forms of interactive media (Ponti, 2023). This phenomenon presents two sides at once: on the one hand, technology opens up wide access to creative and interesting learning resources; But on the other hand, uncontrolled digital exposure can have a negative impact on children's cognitive, social, and emotional development (Irzalinda & Latifah, 2023). This condition becomes even more complex when most parents and teachers do not have adequate digital literacy to guide children in using technology in a healthy and productive way. As a result, there is a gap between the rapid development of technology and the ability to provide assistance by families and early childhood education institutions (Sitorus et al., 2023), including in the Raudhatul Athfal (RA) environment. This situation demands the active involvement of teachers and parents in building a healthy and educational digital parenting environment for early childhood.

The concept of digital parenting is evolving as parents increasingly need to regulate children's interaction with digital technology. Mascheroni et al (2018) Explains that digital parenting includes the active involvement of parents in directing, mediating, and regulating children's behavior in using digital media. Smahel (2016) emphasizing the importance of implementing consistent discipline and supervision to prevent children from excessive use, while Palupi and Wates (2015) added the need for clear boundaries regarding children's behavior when accessing digital devices. Red (2009) expanding this view by emphasizing that digital parenting is not only supervisory, but must also contain educational and protective dimensions, both in online and offline contexts. Further, the research Sofia et al, (2023) It shows that the application of digital parenting principles in early childhood is proven to be able to stimulate logical thinking skills and form habits of using digital media wisely.

Although a number of studies have highlighted the importance of digital parenting in families, most of these studies still focus on the role of parents individually, not yet placing educational institutions as partners in shaping children's digital behaviors. In fact, the Raudhatul Athfal (RA) institution has

a strategic position as the first formal educational environment for early childhood, where the role of teachers has the potential to strengthen digital parenting practices at home (Maryani & Fitriyah, 2022). In this context, the lack of digital literacy among both teachers and parents is a real obstacle in the application of effective digital parenting principles. Thus, there are theoretical and practical gaps in literature and field practice, namely the lack of a collaborative model between RA teachers and parents in assisting children to face the challenges of the digital era, especially in the early childhood Islamic education environment in Semarang City.

This service activity aims to strengthen collaboration between Raudhatul Athfal (RA) teachers and parents in implementing the concept of digital parenting effectively in the era of the industrial revolution 4.0. Through mentoring and training, teachers and parents are expected to be able to understand and implement a balanced digital parenting pattern between supervision, guidance, and the use of technology as an educational means for early childhood. Cross-role collaboration like this has been shown to increase the effectiveness of early childhood education because it builds continuity between learning at home and at school (Goodall & Montgomery, 2014). This program is also directed to improve digital literacy, so that teachers and parents have the skills to manage children's digital media use in a creative, safe, and ethical way.

This mentoring activity and the application of the concept of digital parenting has an important role in improving the quality of early childhood education in Semarang City. Through cooperation between teachers and parents, the learning process becomes more directed because children receive the same support at home and at school. Improving teachers' abilities through training and digital literacy also helps them use technology more creatively and according to children's needs. In addition, active involvement between teachers, parents, and the community forms a learning environment that supports each other and instills moral and Islamic values in digital parenting. That way, this activity not only provides direct benefits to RA institutions, but can also be an example for the development of digital parenting patterns that are in line with the values of Islamic education and the development of the times.

## **Methods**

This service activity uses the Service Learning method as the main framework, which integrates the learning process with community service. This method was chosen because it is able to connect real experience in the field with the development of participants' academic and social competencies, so that the learning process becomes more reflective and oriented towards solving real problems (Bringle & Hatcher, 199 C.E.). This method allows collaboration between service teams, RA teachers, and parents through a partnership with IGRA Semarang City. In its implementation, the activity is enriched with several approaches, namely community development, constructivist, participatory, persuasive, and educational, which are designed to ensure the active involvement of participants and the sustainability of the training results. This approach encourages participants to learn from hands-on experience, engage in open dialogue, and contribute to contextual solutions to the challenges of digital parenting in RA.

The implementation of activities is carried out through four main stages, namely needs analysis, planning, implementation, and evaluation. In the analysis stage, the service team used the questionnaire distribution method through Google Form to identify problems faced by RA teachers and parents related to the use of digital technology in early childhood education. The planning stage involves the preparation of training materials that contain aspects that require special assistance in the concept of Digital Parenting, as well as coordination with IGRA Semarang City to determine participants and training schedules. The implementation stage includes socialization activities, workshops, and intensive mentoring that emphasizes the direct practice of using digital technology in an educational manner. Furthermore, the evaluation stage was carried out using a combination of evaluation methods involving the active participation of participants, questionnaire analysis before and after training, and direct observation of the involvement of teachers and parents in activities.

Data obtained from observations, questionnaires, and participant feedback were analyzed using thematic analysis techniques. Thematic analysis is one of the approaches used in analyzing qualitative data with the aim of identifying patterns or themes that emerge from data that has been collected by researchers (Braun & Clarke, 2006). This approach was chosen because it was able to provide a deeper understanding of the participants' experiences

during the training and mentoring process. The analysis process was carried out systematically through several stages, including data organization, repeated reading, discovery of the main theme, and interpretation of inter-theme relationships that describe changes in participants' knowledge, attitudes, and skills in the application of the Digital Parenting concept. Using thematic analysis allows the results of qualitative data to be interpreted more meaningfully, thus providing a comprehensive understanding of the effectiveness of the implementation of activities.

The service activity was carried out in the Raudhatul Athfal (RA) environment under the coordination of IGRA Semarang City in November 2023, with the culmination of Digital Parenting training and assistance on November 30, 2023 at RA Muslimat Mijen Semarang. The participants of the activity consisted of 57 RA teachers and parents of students from a total of 60 invitees, who acted as the main partners in the implementation of the concept of digital parenting at home and at school. The selection of this location is based on the need to increase digital literacy within IGRA Semarang City which has a direct impact on early childhood care practices. During the activity, supporting data was collected through observation and participant feedback to assess the effectiveness of the implementation and formulate follow-up for the sustainability of the program.

## **Results**

Community service activities that focus on mentoring and implementing the concept of Digital Parenting for RA teachers and parents in Semarang City have succeeded in achieving its main goal, which is to increase digital literacy and strengthen healthy and educative technology-based childcare practices. Through a series of trainings, workshops, and hands-on mentoring, participants showed a significant improvement in understanding the use of digital technology to support the early childhood learning process. RA teachers are able to use digital media more creatively in learning activities, while parents are starting to apply digital parenting principles such as limiting the time of using gadgets, content supervision, and active assistance to children's online activities. The results of this activity also show the formation of closer collaboration between schools and families in fostering mutual awareness about the importance of using technology wisely in the digital era.

The initial stage of the implementation of the activity is focused on analyzing the needs to identify the problems faced by teachers and parents in

accompanying children using digital technology. The service team distributed questionnaires through Google Form to RA teachers and parents under the coordination of IGRA Semarang City to map the level of digital literacy and mentoring patterns that have been carried out at home and at school. The results of the analysis showed that most respondents faced obstacles in the use of digital learning media and supervision of children's activities on the internet, mainly due to limited understanding of security features and device controls. In addition, it was found that communication between teachers and parents regarding the use of digital technology is still limited and has not been coordinated effectively. These findings are the main basis for the service team to design training materials that are relevant, contextual, and in accordance with the actual needs of RA partners in Semarang City.

The training phase was held on November 30, 2023 at RA Muslimat Mijen Semarang, under the coordination of IGRA Semarang City. This activity is designed in the form of an interactive workshop that combines material delivery, group discussions, and hands-on practice. In the main session, participants were introduced to the concept of digital parenting and the application of parental control features through applications such as Google Family Link. Through simulation and direct mentoring, teachers and parents are trained to manage the time to use gadgets, filter out content that is not appropriate for children's age, and monitor children's online activities in an educational and non-repressive way. The training approach is carried out in a participatory manner so that participants can adapt the application of technology to the context of their daily lives, both at school and at home. This activity is also a means to strengthen collaboration between teachers and parents in realizing a safe and productive digital parenting environment for early childhood.

In addition to providing technical skills, the training also emphasizes the importance of understanding the positive and negative impacts of the use of digital technology on children. Through the presentation of case studies and open discussions, participants were invited to reflect on how the use of gadgets can affect children's cognitive, social, and emotional aspects. Teachers and parents show high enthusiasm in sharing personal experiences and strategies for child supervision at home. Of the total 60 invitations sent to RA teachers, 57 participants were actively present, reaching a participation rate of 95%. Based on the results of observations during the activity, participants

were not only physically present but also showed active participation in various activities, such as group discussions, case studies, and simulations of using the Family Link application. They seemed enthusiastic about exploring the potential of the app and understanding how to integrate it into the children's learning environment.

The achievement of goals in the implementation of Digital Parenting activities for IGRA teachers in Semarang City is an evaluative basis to assess the effectiveness of training. A series of indicators are used to ensure the achievement of results, including improving technical skills, understanding the concept of parental control, and awareness of the impact of digital on children. The evaluation showed a marked improvement in teachers' ability to understand and integrate digital learning media safely and creatively. The participants also successfully implemented the Parental Control feature and child assistance strategies in a contextual manner in the school and family environment. Awareness of the benefits and risks of digital technology is increasing, demonstrated by the active participation of teachers in creating open dialogue spaces with parents.

They also appreciate the interactive training methods, providing a space to exchange ideas and experiences. In addition, participants provide constructive feedback that can serve as a foundation for future improvement and development of the program. The existence of this positive response confirms that this activity succeeded in meeting the expectations of the participants, providing added value in their understanding of Digital Parenting, and supporting the efforts of IGRA Semarang City in improving the quality of early childhood education through the application of digital technology.

As a follow-up to the activity, the service team together with IGRA Semarang City formed a WhatsApp group that functions as a medium of communication and continuous assistance for participants. Through this platform, teachers and parents can share experiences, discuss obstacles, and get additional guidance in applying *the principles of Digital Parenting* at home and at school. In addition, advanced training is planned that focuses on strengthening teachers' skills in creating digital learning media that are safe and suitable for early childhood. This activity also opens up opportunities for long-term collaboration between the service team and IGRA Semarang City as a strategic partner in the development of digital literacy in RA institutions.

Based on the results of the evaluation, the team recommended that similar programs be developed in other regions to expand the impact and ensure the sustainability of digital parenting practices in the early childhood Islamic education environment.

## **Discussion**

The results of the service activities show that the implementation of the Digital Parenting program for teachers and parents in Semarang City has a real positive impact on increasing digital literacy and awareness of childcare in the technological era. Through a series of training and mentoring, participants experienced a transformation in their perspective and skills towards the use of digital media as a means of learning. RA teachers are able to design more creative technology-based learning activities, while parents show progress in the ability to manage, supervise, and guide children in the healthy use of gadgets. In addition, this activity also strengthens the synergy between schools and families in building an educational environment that supports the development of early childhood as a whole. These findings provide an important basis for understanding the factors that led to the program's success and their relevance to previous theories and research.

The increase in digital literacy experienced by teachers and parents is the result of the application of a constructivist learning approach, where participants actively build understanding through hands-on experience. During the training, participants not only received the material, but also engaged in the practice of using digital learning media and reflecting on their application in the early childhood education environment. This experiential learning pattern encourages a deeper and more sustainable transformation of understanding. This kind of approach is in line with the view By (2012) which confirms that digital literacy develops optimally when individuals are actively involved in the process of exploring technology and reflecting on its use. In addition, improving participants' digital skills also strengthens the aspects of critical and creative thinking in the use of educational technology, as described in the 4C competency model of the 21st century, namely critical thinking, creativity, collaboration, and communication (Partnership for 21st Century Learning, 2019). Thus, the results of this activity show that participatory-based training can be an effective means of strengthening digital literacy while fostering ethical awareness of the use of technology in the family and school environment.



The success of the implementation of Parental Control in Digital Parenting training activities is not only due to the technical aspect, but also to a participatory approach that involves teachers and parents directly in the learning process. Participants are not only introduced to digital supervision features such as Google Family Link, but are also encouraged to understand the parenting values behind their use, namely responsibility, trust, and two-way communication between parent and child. The results of the discussion and simulation showed that the participants were able to apply a supervision strategy that was not repressive, but educational and contextual. These findings are in line with research, Mascheroni et al (2018) which emphasizes that the success of digital parenting lies in the balance between regulation and dialogue in the digital family. The same approach is also reinforced by these findings also in line with Smahelova et al (2017) which emphasizes the importance of parental intelligence and sensitivity in managing children's engagement in the digital world through consistent discipline and empathetic communication. In addition, the results of this training prove the relevance of the views (Rode, 2009) that effective digital parenting does not only focus on the use of control devices, but also on the development of a digital literacy culture in the family environment. Thus, the combination of technical knowledge and parenting awareness is a key factor in the success of this program, which encourages the formation of healthy and sustainable digital mentoring practices at home and at school.

The collaboration between RA teachers and parents in the Digital Parenting program reflects the application of the tricenter of education principle, which is the synergy between family, school, and society in shaping children's character and abilities. In this activity, teachers and parents play the role of equal partners who jointly build an understanding of the healthy and responsible use of digital technology. Through meetings, workshops, and reflective sessions, two-way communication is established that strengthens the relationship between home and school. This kind of partnership pattern is in line with the school-family partnership theory put forward by Epstein & Sheldon (2022), which emphasizes that the success of children's education is highly dependent on the collaborative involvement of all parties. These findings are reinforced by research (Paccaud et al., 2021) which shows that effective collaboration between schools and families increases mutual trust, satisfaction, and shared responsibility in the educational process. Research

(Gowinda, 2023) It also emphasized that partnerships between schools, families, and communities in early childhood education play an important role in strengthening children's character values and digital literacy. Thus, the synergistic involvement between parties in this Digital Parenting activity does not only reflect the application of the tricenter of education principle as mandated in Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System (2003), but also a model of real collaboration in facing educational challenges in the digital age.

Although collaboration between teachers, parents, and the community in Digital Parenting activities has shown positive results, the implementation process is inseparable from various structural and cultural challenges. Some obstacles arise in the form of limited communication between educational institutions and families, gaps in understanding the concept of digital parenting, and uneven levels of community participation. These findings are in line with the collaborative barrier model described by Hornby & Lafaele (2011), that differences in socio-economic background, time, and perception of educational responsibility often hinder parents' active participation. Moreover Goodall & Montgomery (2014) Found that cooperation between schools and families often does not run optimally. Many schools only involve parents in administrative activities, such as meetings or reporting, without encouraging deeper involvement in the child's learning process. As a result, communication between the two parties still tends to be one-way and has not fully created a mutually supportive relationship. In the context of this activity, the challenge appears to be the limited consistency of communication and alignment of perceptions between RA teachers and parents regarding digital supervision practices at home. However, this training can be seen as the first step to build a more participatory and sustainable communication bridge between schools, families, and communities in facing the complexities of early childhood education in the digital era.

Digital Parenting activities for teachers and parents at RA Semarang City provide a concrete picture of how cross-role collaboration can build new awareness in childcare in the digital era. This training not only improves the digital literacy of participants, but also fosters a reflective culture in the use of technology as a means of education. The application of the tricenter principle of education seems relevant in this context, as the success of the program depends on balanced engagement between the school, family, and

community. From a practical perspective, this activity shows that strengthening the capacity of teachers and parents in assisting technology-based children can be a preventive strategy against the negative impact of digital media. Meanwhile, from the theoretical side, the results of this activity broaden the understanding of digital parenting practices in the Islamic education environment of early childhood which was previously limited to literature studies. In the future, follow-up in the form of ongoing mentoring and follow-up research is needed to evaluate the extent to which these behavioral changes and collaborations can last in the long term. Thus, the program not only serves as a temporary intervention, but also as a foundation for the formation of an adaptive, ethical, and resilient digital education ecosystem.

### **Conclusion and Suggestion**

The implementation of Digital Parenting activities for teachers and parents of RA under the coordination of IGRA Semarang City has succeeded in achieving its main goal, which is to increase digital literacy and strengthen healthy and educational technology-based parenting practices. Through the stages of needs analysis, interactive training, and ongoing mentoring, participants showed significant improvements in understanding and skills in using digital technology wisely in the context of early childhood education. RA teachers become more creative in integrating digital media into learning, while parents are more aware of the importance of supervision, screen time restrictions, and active assistance of children in cyberspace. Collaboration between teachers, parents, and the education community is concrete evidence of the application of the tricenter principle of education in the context of the digital era.

This activity makes an important contribution to strengthening the capacity of teachers and parents as the main partners of early childhood education. Through participation-based and hands-on practice-based training, the program not only equips participants with technical skills, but also fosters ethical and reflective awareness of their role as educators and caregivers in the digital world. The impact of the activity extends to the formation of a collaborative communication network between schools and families, as well as increasing the motivation of participants to continue learning and sharing experiences through online platforms facilitated by the service team. Thus, this activity not only has an impact on improving individual competence, but

also contributes to strengthening the early childhood education ecosystem in Semarang City.

Although the results of the activity showed positive achievements, some limitations still need to be noted. The limited number of respondents, short implementation time, and focus on activities in one area make the results not yet generalize widely. In addition, the variation in technological capabilities between participants poses its own challenges in the equitable distribution of training results. Therefore, in the future, it is necessary to carry out similar activities with a larger number of participants and a wider range of areas so that the findings and impacts are more representative. Thus, the results can be close to generalization to the research theme regarding strengthening digital parenting and tricenter collaboration in the digital era.

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