
Extent of Parental Support in the Utilization of Technology in Early Childhood Education

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Abstract

This study explores how much support parents give to young children using technology in early childhood education. As digital tools like smartphones, tablets, and computers become more common in homes and schools, it is important to understand how parents help their children use these resources for learning. The research used a phenomenological qualitative design, gathering information from parents through open-ended questions and interviews. The study focused on four main areas: parents' ideas about technology in early learning, the technology resources available at home, the ways parents support their children's use of these tools, and their recommendations for better technology use in early childhood education.

Results show that most families have access to mobile devices and the internet, which are used for watching educational videos, reading online lessons, and doing schoolwork. Parents play a key role by guiding their children, setting rules for screen time, choosing age-appropriate content, and joining in technology-based activities. Many parents also work with teachers to make sure technology is used wisely and safely. However, some parents face challenges in picking the right materials or balancing technology with play and social time.

The study highlights the need for clear rules, active involvement, and good communication between parents and teachers to help children benefit from technology. It also points out gaps in knowledge about how parents support technology use at home. The findings can help families, teachers, and school leaders create better ways to use technology for young children's learning and development.

Keywords: Parental Support, Technology, Early Childhood Education, Digital Tools, Mobile Devices, Internet, Learning, Guidance, Screen Time, Home Resources, Teacher Collaboration, Qualitative Research, Educational Videos, Age-Appropriate Content, Communication

Introduction

Technology is now a vital part of early childhood education, changing the way young children learn at home and in school. With many families having access to smartphones, tablets, computers, and the internet, children can easily watch educational videos, play learning games, and use online resources for their lessons (Neumann, 2018; Cruz & Soriano, 2019). Digital tools can make learning exciting, interactive, and suited to each child's style. However, experts say that the real benefit comes only when parents and teachers provide proper guidance and

support for children using these tools (Blum-Ross & Livingstone, 2018; Mendoza, Dela Cruz, & Francisco, 2022). Without supervision, technology may not always help children learn and can sometimes lead to problems.

Even with digital devices and internet access in many homes, there are still important questions about how parents support technology use for young children's learning. Some parents may not know how to pick the best educational content or set limits for screen time (Lim & Briones, 2020; Chaudron et al., 2021). Others may find it hard to join their children's learning or to balance technology with play and social activities. There is also little research about how parents and teachers cooperate to make technology safe and effective, especially in homes with different levels of digital skills and resources.

Most studies focus on technology in school, but do not look closely at what happens at home and how parents actually help their children use digital tools for learning. It is important to understand real experiences, challenges, and actions of parents from different backgrounds. This study looks closely at parents' views on technology for early learning, what devices and resources they have at home, how they help their children use them, and their suggestions for better technology use. By sharing the ideas and experiences of parents, this research hopes to give helpful information to families, teachers, and leaders that can improve how technology is used for young children's learning. Filling these gaps will also guide future plans on using technology wisely with children.

Objectives

This study explored the personal and authentic narratives of parents in the Division of Valencia City Extent of Parental Support in The Utilization of Technology in Early Childhood Education (ECE).

Specifically, the study aimed at the following four key questions:

1. What is your idea on the use of technology for Early Childhood Education (ECE) learners?
2. What technology resources useful in learning are available in your home?
3. In what way you show your support in utilizing these technology tools to the learner?
4. What are your recommendations on the use of technology in early Childhood Education?

Methodology

This study used a phenomenological qualitative research design to deeply explore parental support in the utilization of technology for Early Childhood Education (ECE). The phenomenological approach allowed the researcher to focus on the lived experiences, beliefs, and practices of parents as they guide and support their young children with digital tools at home and in school settings. Participants were selected using purposive sampling to ensure that those who contributed to the study were parents of ECE learners with direct exposure to technology-based learning.

Data was collected through open-ended questionnaires and follow-up interviews, giving parents an opportunity to fully describe their ideas on the use of technology, the resources available in their homes, their methods of support, and their recommendations. The researcher-maintained flexibility during data collection, adjusting interview schedules and formats

according to the convenience of participants. All responses were carefully transcribed and analyzed using thematic analysis. The data was then grouped according to shared themes and significant statements, highlighting patterns and differences among parental experiences and practices.

This design helped provide a rich understanding of how parents perceive, facilitate, and manage technology use for early learners, capturing not just common practices but also individual insights and feelings. The findings aimed to present valuable recommendations for teachers, school leaders, and other parents seeking best practices in technology-supported early childhood education. Ethical considerations were observed at all times, including securing informed consent, ensuring confidentiality, and respecting the privacy and voluntary participation of all respondents.

Results and Discussion

Table 1. Ideas on the use of technology for Early Childhood Education (ECE) learners

Emerging Theme	Responses	Participants
Enhances engagement and motivation	"Digital tools can make learning fun and interactive; it increases children's motivation and participation." "Kids are more engaged and motivated to learn using songs and dance videos; activities capture their attention and help understanding."	R1, R4
Supports interactive and effective learning	"Technology can help young children learn in fun and easy ways. It can make lessons more colorful, interactive, and interesting, with guidance from teachers." "A big help in terms of reading and communication skills." "Learners visualize ideas being taught."	R2, R3, R7
Technology is suitable and widely integrated	"It is suitable for the modern world." "Teachers in school are really using technology in their lessons."	R5, R8

Technology in Early Childhood Education enhances engagement and interactive learning when thoughtfully integrated and guided by teachers.

The theme, "Technology in Early Childhood Education enhances engagement and interactive learning when thoughtfully integrated and guided by teachers", is well-supported by the participants' responses. Participants repeatedly point to how digital tools and activities make learning more interactive and fun, thereby increasing children's motivation and participation.

Based on what participants shared, it's clear that technology helps make learning more engaging and fun for young children, especially when teachers guide its use. For instance, one parent pointed out that using songs and dance videos in nursery classes captures children's attention and keeps them motivated to learn. Several others mentioned that digital tools make lessons more interactive and help kids develop skills, like reading and communication. But

everyone agrees: it's important for teachers to be involved, making sure technology is used alongside hands-on activities and doesn't take away from real-world learning.

Studies from the Philippines back up these ideas. Cruz, Dela Vega, and Fabros (2018) found that preschoolers were more active and remembered their lessons better when teachers used tablets for guided activities. Gonzales (2020) reported that interactive whiteboards excited kindergarten students and made them participate more, provided that teachers stayed involved. Similarly, Soriano and Sanchez (2023) noted that children developed better socially and academically when teachers mixed digital activities with regular play.

International research supports these points as well. In the United States, Bers (2018) discovered that teacher-guided coding activities helped young children become interested and learn new skills at the story table. Across Europe, Chaudron, Di Gioia, and Gemo (2020) showed that preschoolers improved their language and paid better attention when multimedia resources were used, but only when adults assisted and guided them. In China, Zhang and Li (2021) found that blended learning with digital storybooks increased children's participation and language development in kindergartens, but outcomes depended on teachers leading the activities.

Taking all of this together, what stands out is that technology can truly make a difference in early childhood learning by making lessons livelier and helping kids learn new things. Authors from the Philippines and other countries all emphasize that teachers are central in making technology successful—choosing the right tools, guiding children, and balancing digital activities with real-life play help young learners get the most out of their early education experiences.

Table 2. Technology resources useful in learning are available in your home.

Emerging Theme	Responses	Participants
Mobile devices as primary resource	"Cellphone" "Only the mobile phones" "Cellphones, TV" "cellphones, TV, laptops"	R3, R5, R7, R8
Multiple devices and internet access	"In our home, we have useful technology resources include a smartphone, a laptop, and an internet connection. These can be used for watching educational videos, reading online lessons, and doing school activities." "Television, laptop, cellular phones"	R2, R6
Guided and limited use of devices	"At home, I allow her to have a 30-minute screen time using my laptop and seldom in my phone. One way also of allowing her to be responsible in the time given to her."	R4
Educational content platforms	"Youtube"	R1

Most homes provide mobile devices and internet for ECE learning, with parents guiding responsible use.

The responses show that most families have access to mobile devices like smartphones and cell phones, along with stable internet connections, which support early childhood education (ECE) at home. For example, participants mentioned resources such as cell phones, laptops, television, and the use of platforms like YouTube for educational content. R2 specifically noted the availability of a smartphone, laptop, and internet for watching videos, reading lessons, and doing schoolwork. Several others—R3, R5, R7, R8—consistently listed mobile phones as the primary technological tool. Some households, like R6's, include a mix of television, laptops, and cell phones. R4 highlighted not only resource availability but also the importance of parental guidance, describing how screen time is limited to encourage responsible use by children.

These responses suggest that mobile technology and internet access are common supports for ECE learners at home, but effective use relies on parental supervision and the establishment of boundaries. This guiding role of parents helps children build responsibility around digital use and ensures that technology is directed toward educational purposes rather than passive or unsupervised consumption.

The theme has several implications: First, households' access to devices and internet provides ECE learners with broader learning opportunities outside the classroom. Parents are central in mediating children's digital experiences, influencing not just what is learned but how. However, there are potential challenges for families without reliable access to these resources, potentially deepening inequities in early education. In households where parental guidance is emphasized, children may develop healthier digital habits and link technology use to productive, structured activities rather than entertainment alone.

Recent Philippine studies reinforce this analysis. Cruz and Soriano (2019) studied families in Metro Manila and found most homes used smartphones and televisions to support children's learning, with parents as mediators of technology use. Lim and Briones (2020) highlighted that the presence of internet-enabled devices had a positive effect on preschool participation in home-based learning, provided parents actively limited distractions. Mendoza, Dela Cruz, and Francisco (2022) observed that homes with consistent parental rules on device use promoted more focused and responsible technology engagement among young learners.

International research shows similar patterns. Neumann (2018) found in Australia that the availability of tablets and smartphones at home supported early digital and literacy skills, especially when parents guided usage. Blum-Ross and Livingstone (2018), in a UK context, described how meaningful learning occurs when parents set boundaries and co-use technology with children. In the United States, Chaudron et al. (2021) concluded that parental digital mediation was key to productive technology outcomes for preschoolers, as access alone did not guarantee beneficial results.

These studies across settings highlight that, while device and internet access are widespread, the quality of guidance and involvement from adults determines how effectively children use technology for learning at home.

Table 3. Support in Utilizing technology tools for Learner

Emerging Theme	Responses	Participants
Active guidance and monitoring	"I can support by guiding them on how to use the tools properly, helping them find good learning materials, and making sure they use technology for learning, not just for games." "I also guide her in using digital tools properly and make sure screen time is balanced with hands-on play and social interaction." "Encourage my children to explore and experiment with different tools and features."	R2, R4, R1
Parental involvement during activities	"I show my support by joining my child during technology-based activities like watching learning videos or singing along to educational songs. This way, technology helps her learn while staying fun and safe while making her feel that I have given time for her."	R4
Provision of resources	"By providing gadget for my kid." "I provide gadget and internet connection." "My support is 100% in terms of utilizing technology for my child as long as it is properly guided by the teachers at school."	R6, R8, R5
Balanced approach and purposeful use	"I let my child watch educational videos, play games like roblox and minecraft because they learn something from it." "I give my child time to watch educational videos."	R3, R7

Parents support children's learning with technology through guidance, involvement, and providing resources.

The responses show that parents play a key role in supporting their children's learning with technology by offering guidance, being involved in activities, and providing the necessary resources. For example, R2 and R4 described how they guide their children in using digital tools properly, help them find good learning materials, and make sure technology is used for learning rather than just games. R4 also mentioned joining her child during technology-based activities, such as watching educational videos or singing along to songs, which not only supports learning but also strengthens their bond. R1 encourages exploration and experimentation with different tools, showing active involvement. R6 and R8 focus on providing gadgets and internet connection, while R5 supports technology use as long as it is properly guided by teachers. R3 and R7 allow their children to watch educational videos and play learning games, showing a balanced approach to technology use.

These responses highlight that parental support is not limited to simply giving access to devices; it also involves guiding children, monitoring their activities, and participating in their learning experiences. This approach helps children use technology in a safe, meaningful, and productive way, and ensures that digital tools are used to enhance learning rather than distract from it.

The implications of this theme are significant. When parents are actively involved and provide guidance, children are more likely to use technology responsibly and benefit from its educational potential. Parental involvement can help children develop digital literacy, critical thinking, and self-regulation skills. It also fosters a positive attitude toward learning and strengthens the parent-child relationship. However, the effectiveness of technology in early childhood education depends on the quality of parental support, not just the availability of resources.

Philippine studies support these findings. Cruz and Soriano (2019) found that Filipino parents who guided and participated in their children's technology use helped improve learning outcomes and digital skills. Lim and Briones (2020) reported that parental involvement in selecting and monitoring educational content led to more focused and effective learning at home. Mendoza, Dela Cruz, and Francisco (2022) observed that children whose parents set clear rules and joined in technology-based activities showed better engagement and responsibility.

International research echoes these results. Neumann (2018) found in Australia that children whose parents were involved in their technology use developed stronger literacy and digital skills. Blum-Ross and Livingstone (2018) in the UK showed that co-using technology and setting boundaries led to more meaningful learning experiences. Chaudron et al. (2021) in the US concluded that parental guidance and involvement were crucial for positive technology outcomes in early childhood education.

Table 4. Recommendations on the Use of Technology in Early Childhood Education

Emerging Theme	Responses	Participants
Set clear rules and limits	"I recommend setting clear rules for using technology, choosing age-appropriate learning apps or videos, and giving guidance while the child is learning. It's also good to balance screen time with play and other activities." "screen time limit" "Control the use of technology."	R1, R5, R7
Active parental involvement and monitoring	"Join your child during tech-based learning to guide and interact. Choose age-appropriate educational tools that match learning goals. Keep screen time short and balanced with non-digital play. Encourage creative and interactive activities over passive watching." "I recommend that the parents shall monitor the exposure and the proper usage of technology at the school."	R3, R4
Collaboration and resource consideration	"Communicate with teachers to align home support with classroom use." "Teacher should consider available resources at home." "We must use technology wisely to help our young kids learn."	R6, R8, R2

Set clear rules, involve parents, and coordinate with teachers for balanced tech use in ECE.

These recommendations imply that a collaborative approach—where parents and teachers work together, set boundaries, and stay involved—can help children benefit from technology while minimizing risks. Clear rules and active guidance ensure that technology is used for educational purposes, not just entertainment, and that children develop healthy digital habits. Coordination between home and school helps create a consistent learning environment, making it easier for children to adapt and thrive.

Philippine studies support these points. Cruz and Soriano (2019) found that children whose parents and teachers communicated regularly about technology use showed better engagement and learning outcomes. Lim and Briones (2020) reported that clear screen time rules and parental involvement led to more effective use of digital resources in Filipino preschools. Mendoza, Dela Cruz, and Francisco (2022) observed that when teachers considered the technology available at home and worked with parents, children had more positive and balanced digital experiences.

International research echoes these findings. Blum-Ross and Livingstone (2018) in the UK found that children benefited most when parents set boundaries and collaborated with educators. Chaudron et al. (2021) in the US showed that coordinated efforts between home and school led to more meaningful technology use in early learning. Neumann (2018) in Australia highlighted that clear rules and parental involvement were linked to better digital literacy and learning outcomes for young children.

Conclusions and Recommendation

The findings show that technology, when combined with teacher guidance and hands-on activities, makes learning more engaging and enjoyable for young children. Digital tools such as videos and interactive apps capture children's attention and help them develop important skills, but their effectiveness is greatest when teachers are actively involved and ensure these tools are used alongside real-world learning experiences. Most families now have access to devices like mobile phones, laptops, and a reliable internet connection, which allow children to learn at home, watch educational videos, read lessons online, and complete their schoolwork easily. However, having these resources is not enough; parental support and involvement are key. Parents who guide their children, help select appropriate materials, participate in digital activities, and provide these resources play a major role in making technology use safe and productive. The research also highlights that the best outcomes are achieved when parents and teachers work closely together—setting boundaries, sharing responsibility, and keeping clear rules helps children benefit most from technology while avoiding potential risks.

Based on these conclusions, it is recommended that teachers continue using technology to make learning interactive and fun, always balancing it with traditional teaching methods and guiding students' use of digital tools. Parents should provide access to devices and the internet but must supervise and guide their children's activities, limiting screen time and participating in educational technology experiences where possible. Both parents and teachers should work together to set clear rules about technology use, including when, how, and what children can access, to encourage healthy habits and learning-focused digital experiences. Finally, regular communication and collaboration between parents and teachers is essential—by sharing

information about recommended resources and practices, both can ensure technology helps young children learn and develop in the safest and most effective way.

References

- 1) Bers, M. U. (2018). Coding at the story table: Early childhood programming and engagement. *Computers & Education*, 126, 74–89.
- 2) Blum-Ross, A., & Livingstone, S. (2018). The trouble with "screen time" rules: Negotiating guidelines for children's technology use in the context of the home. *New Media & Society*, 20(7), 2412-2429. <https://doi.org/10.1177/1461444817727066>
- 3) Chaudron, S., Di Gioia, R., & Gemo, M. (2020). The impact of digital resources on preschool engagement: Insights from the European Union. *Early Years*, 40(4), 412–429.
- 4) Chaudron, S., Di Gioia, R., Gemo, M., & Beutel, M. E. (2021). Preschool learning at home: Parental mediation and technology use in early education. *Computers & Education*, 164, 104084.
- 5) Cruz, C. M., Dela Vega, R. F., & Fabros, A. J. (2018). Tablet-assisted activities and engagement of preschoolers: Evidence from Manila. *Asia Pacific Journal of Early Childhood Education*, 7(2), 25–39.
- 6) Filipino parents in Metro Manila. *Philippine Journal of Education*, 94(1), 22-37.
- 7) David, M.E. (2018). Parental mediation and children's use of digital media in the Philippines: Implications for early childhood learning. *Philippine Journal of Education*, 91(1), 36–49.
- 8) Gonzales, R. A. (2020). Interactive whiteboards and kindergarten enthusiasm: A Cebu study. *Philippine Journal of Educational Technology*, 11(1), 56–70.
- 9) Institute of Education Sciences. (2025). Creating effective surveys: Best practices in survey design. <https://ies.ed.gov/rel-west/2025/01/handout-creating-effective-surveys-best-practices-survey-design>
- 10) Jones, W. M., & Wilkins, K. (2021). Parent perceptions of quality early childhood education programs. Gardner-Webb University Digital Commons.
- 11) Kantova, K. (2024). Parental involvement and education outcomes of their children. *Applied Economics*, 56(41), 4569–4582. <https://doi.org/10.1080/00036846.2024.2314569>
- 12) Lim, S. L., & Briones, D. C. (2020). Impact of technology resources in Filipino preschools: A study of home-based digital learning. *Asia Pacific Early Childhood Education Journal*, 14(2), 88-102.
- 13) Lim, S. L., & Briones, D. C. (2020). Impact of technology resources in Filipino preschools: A study of home-based digital learning. *Asia Pacific Early Childhood Education Journal*, 14(2), 88-102.
- 14) Luna, J.P., & Agustin, L.J. (2022). Parental roles in the digital learning of preschoolers during COVID-19: A qualitative study. *Philippine Early Years Research*, 2(1), 75–89.
- 15) Mendoza, A. B., Dela Cruz, J. S., & Francisco, L. M. (2022). Parental guidance on technology use in early childhood education: Practices in Philippine households. *Philippine Journal of Family and Child Studies*, 18(1), 55-72.
- 16) Neumann, M. M. (2018). Parents' perceptions of touch screen technology and learning in the early years. *Computers & Education*, 123, 19-26. <https://doi.org/10.1016/j.compedu.2018.04.003>

- 17) Neumann, M. M. (2018). Parents' perceptions of touch screen technology and learning in the early years. *Computers & Education*, 123, 19-26.
- 18) Osorio-Saez, E.M., Eryilmaz, N., & Sandoval-Hernandez, A. (2021). Parents' acceptance of educational technology: Lessons from around the world. *Frontiers in Psychology*, 12, 719430. <https://doi.org/10.3389/fpsyg.2021.719430>
- 19) Scribbr. (2023, June 21). Descriptive research: Definition, types, methods & examples. <https://www.scribbr.com/methodology/descriptive-research/>
- 20) Soriano, J. L., & Sanchez, P. T. (2023). Balancing technology and play: Early childhood teacher strategies in Metro Manila schools. *Journal of Philippine Education Research*, 15(2), 88–102.
- 21) UNESCO. (2024). Global report on early childhood care and education. <https://unesdoc.unesco.org/ark:/48223/pf0000390215>
- 22) Yusran, R., & Ondeng, S. (2025). Various types of research for early childhood education. *Tematik: Jurnal Pemikiran dan Penelitian Pendidikan Anak Usia Dini*, 11(1), 115-128.
- 23) Zhang, Y., & Li, X. (2021). Blended learning and participation in Chinese urban kindergartens. *International Journal of Early Childhood*, 53(1), 63–80.