

## Sustainability of early childhood education inspired by the Reggio Emilia Approach during the emergency times: A phenomenographic research

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### Abstract

Distance/online education has been an important solution to ensure the continuity of education during the pandemic. The current research utilized the phenomenographic analysis to explore experiences of 260 Reggio Emilia-inspired early childhood educators in Turkey on their online/distance educational practices during the lockdown. The findings showed that only %35 of the educators was able to do either synchronous online education or distance education inspired by Reggio Emilia philosophy. Some of them tried to do distance education more similar to the Reggio Emilia preschools in Italy while some could not do anything at all. While they were asked about what online/distance education inspired by Reggio Emilia should include, they stated the following features: Hands-on, inquiry-based, parent-involved, rich home environment, nature/outdoor-involved, small group work, interactive, interest-based, need-based, and homework-based. However, it is understood from their experiences that they do more synchronized online education instead of other ways of distance education or distance learning, which is emphasized more in Reggio Emilia philosophy. The results show how dramatic the situation is for the sustainability of early childhood education inspired by Reggio Emilia during the pandemic, as only these 91 participants out of 260 Reggio Emilia-inspired educators remained inspired by Reggio Emilia during the closure. They stated on which subject they should receive in-service training.

**Key words:** Preschool; Distance education; Reggio Emilia; Phenomenography

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### Introduction

Using technology is always prevalent in Reggio Emilia preschools for some reasons, like using video-cameras to conduct documentation, using computer software to represent ideas of children, and going into the Internet to conduct research or to communicate with others (Bergen, 2000; Castagnetti, 2021; Mitchell, 2007; Trepanier-Street, Hong, & Bauer, 2001). However, using online or distance communication tools for distance education was not prevalent in Reggio Emilia preschools until the COVID-19 pandemic exploded. In the new normal, similar to educators all around the world (e.g. Silva, 2020), Reggio Emilia educators looked for ways to ensure the continuity in education through online/distance communication tools although they believe that it is more appropriate to do face-to-face education for young children (Castagnetti, 2021). The current research aimed to explore the practices and solutions of the educators in Turkey regarding online/distance education practices during the pandemic.

### Literature

Luckily, Reggio Emilia educators in Italy reopened the schools for face-to-face education in Italy in September 2020. Marina Castagnetti, an experienced Reggio Emilia teacher at Diana School in Italy, stated that they moved to face-to-face education immediately in September 2020 after the quarantine ended and strictly obeyed the hygiene and pandemic etiquette (Castagnetti, 2021). There is not much research on online/distance education in Reggio Emilia or Reggio-inspired preschools but Reggio Emilia teachers in Italy continually organize webinars and web conferences on their practices and projects.

Until reopening, Reggio Emilia educators used different ways of distance education, like sending home educational materials and supporting parent-involvement activities, making phone calls, asynchronous storytelling, playing and inventing together at home-suggestions, conducting a project, and book suggestions for recipes/different activities/stories (Reggio Children, 2020). They stated that they did these primarily to continue being a community, to stay in touch with each other, to play together and to have children quality time at home during the closed times. They stated in their website that Reggio Children and the Preschools/Infant/Toddler Centres – Istituzione of Reggio Emilia Municipality are developing ideas and

taking actions to keep the community and the school together and play together (Reggio Children, 2020). Moreover, Castagnetti (2021) said that thanks to the physical structures of the buildings, coming back to face-to-face education in Reggio schools was not much difficult for them.

Educators in Turkey also looked for solutions to continue education with young children during the quarantine after all the schools were shut down in March 2020 and unfortunately they could not be opened fully yet up to now (May 2021) because of the high risk of the pandemic. The research conducted in Turkey by Inan (2021) showed that the Reggio Emilia-inspired educators had difficulties in adapting Reggio Emilia into their online/distance education. More specifically, Inan (2021) stated that 226 educators inspired by the Reggio Emilia approach in Turkey encountered the following problems during online/distance education: "Having no mental involvement of children online because of shorter attention span during early years, less interaction online, a risk of direct instruction (i.e., lecturing) online, bored kids online, technological problems like bad Internet connection or sound delays, no hands-on education online, limited variety of activities online, and even no physically participation online" (p.6). To cope with the difficulties, they received no support or just limited support from parents or colleagues. Moreover, the research also shows that those educators mostly were not cognizant of different ways of doing distance early childhood education other than just doing synchronous online education (Inan, 2021). As Turkey is following the development of distance education on the world one century back from developed countries (Bozkurt, 2017), it might be harder for all Turkish educators including early childhood educators to keep up with the distance education. In short, it is seen that they needed help for their professional development. The current research also aimed to conduct a needs assessment to help them get more out of online/distance education.

### **Limitations**

Since the current research investigated an understudied but valuable topic, it was difficult to compare the results with relevant previous research. However, it is worth conducting this pioneering research so that future researchers can find some previous data to discuss in their future work and educator can use the implications to improve their teaching. Moreover, considering the number of participants, the research was very comprehensive. However, a focus group study can be done to gain deeper knowledge in the future. It is easy to reach many people through Google Forms but it is difficult to do an interactive data collection. It is often good to have interactive data collection tools, such as interviews because qualitative research allows for unstructured questions as the research query arises during interviews, but it is not possible to interact with participants via Google Forms and ask questions as needed.

### **Methodology**

#### **Research Model/Design**

The current qualitative research utilized the phenomenography method, which investigates the qualitatively different ways of experiencing or thinking about different phenomena (Marton, 1986). This method deals with the essence of experiences and subsequent perceptions of a phenomenon and supports focused-research and examination of cases in detail (Ashworth, & Lucas, 1998, 2000; Marton 1994; Webb, 1997). It helped the researcher explore what is in participants' minds and map the qualitatively different ways in which Reggio Emilia-inspired educators experience, perceive, and conceptualize various aspect of online/distance education during the pandemic.

#### **Data Collecting Tools**

Data were collected through an online tool (i.e., Google Forms) to reach as many educators as possible and to get the variety of perceptions. The tool included both demographic and open-ended questions. Social media and personal communication media were also used to acknowledge the participants about the research and to invite them to participate into it. Data collection lasted for more than a month.

#### **Participants**

The research included 260 participants, who were from 36 different cities in Turkey as well as Brescia, Italy, and Baku, Azerbaijan (see Figure 1) but the data that come from cities outside the country were excluded in the data analysis. Informed voluntary consent was obtained from the participants, the real names were concealed and no identifying information was included to accomplish the confidentiality of participants in the research.

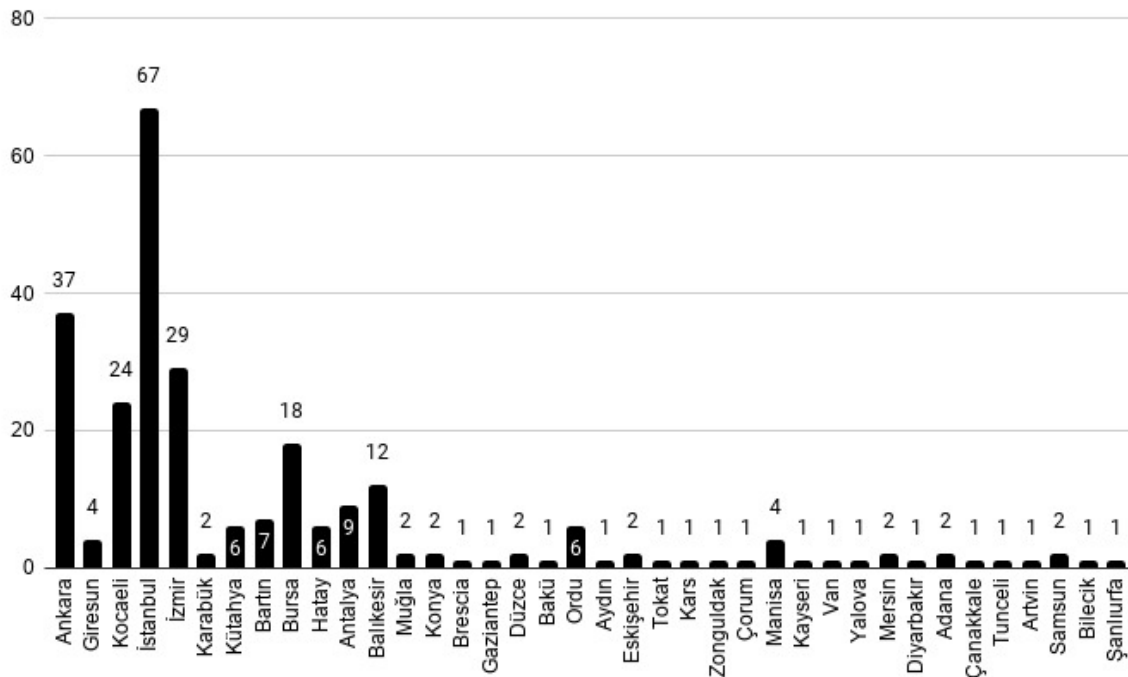


Figure 1. Cities where the educators live

The total of the years that they worked as being inspired by the Reggio Emilia approach varied between less than a year and more than 5 years. Some of them attended Reggio Emilia Study Tours in Italy and took some seminars while some of them learned about Reggio Emilia through books and websites only. Accordingly, it can be said that some of the participants were still in the process of learning how to be inspired by Reggio Emilia approach. The ratio of the participants worked at either public or private educational institutions is shown in Figure 2.

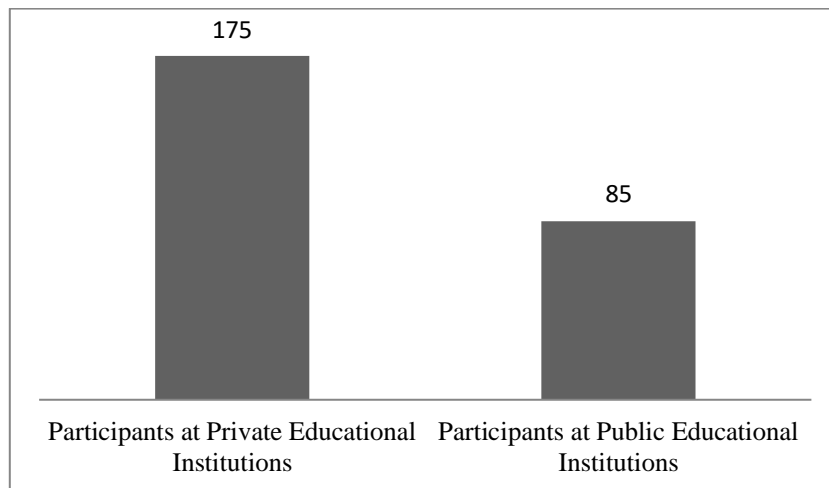


Figure 2. Number of the educators who worked at public and private preschools

### Data Analysis

The data were analyzed through phenomenographic lenses. Marton (1986) states that phenomenographers first creates categories from participants' descriptions, which are going to be the primary and most important outcomes of phenomenographic research. Parallel to this notion, Billsberry et al. (2019) state that phenomenography is not about giving all subjects voices, but it is about understanding how subjects make sense of particular phenomena. Accordingly, the researcher in the current study followed the three steps:

1st Step: Educators inspired by the Reggio Emilia approach were asked to describe their experiences of online/distance education.

2nd Step: The researcher looked to identify the distinctly different ways in which Reggio Emilia-inspired educators understand the same phenomenon.

3rd Step: The researcher analyzed concepts for common patterns to understand the relationships between them and did the categorization.

**Findings**

The participants were asked if they did online/distance education during the pandemic. The ratio is presented in Figure 3.

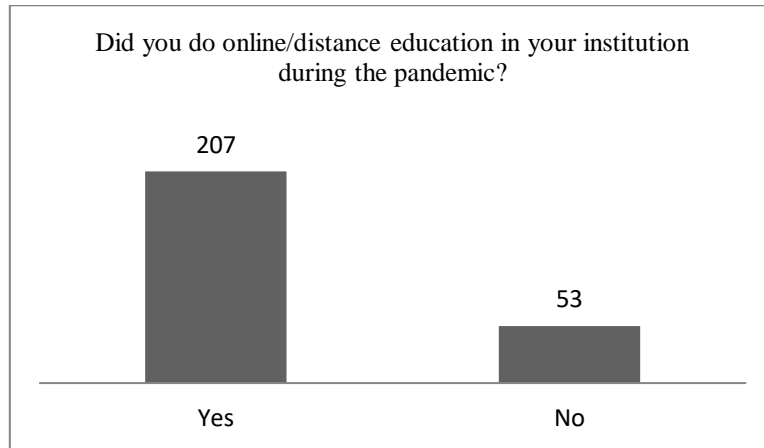


Figure 3. Number of educators who did online/distance education and who did not

Except for a small percentage, most of the participants taught online or remotely after all schools were closed in March 2020. Figure 4 presents more comprehensive findings.

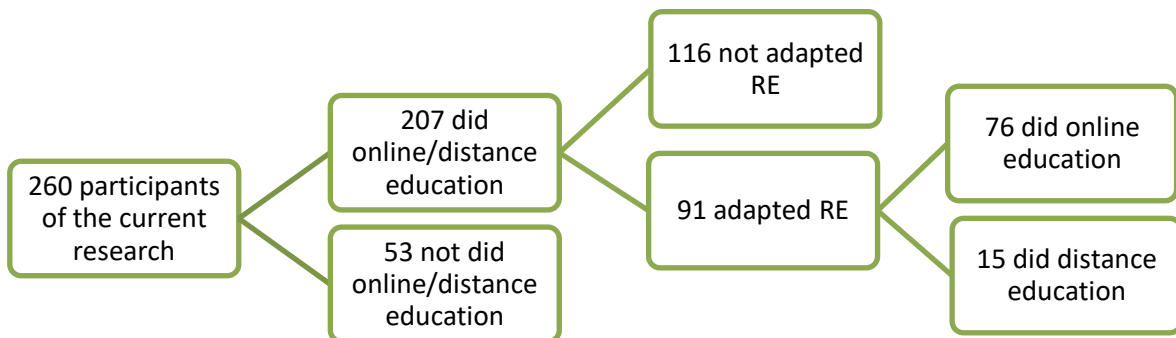


Figure 4. Number of educators who involved in various online/distance education processes

Figure 4 displays how dramatic the situation is. Although 207 out of 260 did online/distance education with children, only 91 out of 207 stated that they tried to adapt Reggio Emilia approach to their online/distance education. Moreover, only 15 out of 260 conducted more comprehensive distance education while others either stuck to online education or did not even conduct Reggio Emilia-inspired education during the lockdown.

The participants were asked how they adapted the Reggio Emilia philosophy to their online/distance education. The data is presented in Table 1.

**Table 1.** How did you adapt Reggio Emilia philosophy in online/distance education?

The Way	Categories	Example Excerpts from Answers
Synchronous online education	*Doing unstructured activities online	"We did unstructured activities online and we tried to use home-natural materials."
	*Just chatting online to keep in touch	"Keeping the bond with the child at every stage and including the family in the process."
	*Doing structured activities online	"We were connected remotely in order to stay in touch, not exactly education-oriented."
	*Showing educative videos they recorded before	"I prepared lessons plans with experiments and story-telling activities." "By preparing video shoots."
	*Conducting discussions to provoke children's inquiry	"Based on the curiosity of the children, we determined the topics and activities; we searched and shared with each other online." "We used materials from the nature. We produced projects and solutions on a problem with mutual exchange of ideas."
	*Making decisions with children together on what to search for	"Since my group is a young age, we made designs from natural materials."
	*Doing compositions online	"Due to the 3-year-old age group and the distance education period, we mostly included interactive fun games in front of the screen. With our curiosity wall application within the philosophy of Reggio Emilia, we shared the topics they wanted to research at home."
	*Playing online	
	*Conducting projects online	
	*Small group work at Zoom's special room	"At the beginning of online classes we talked about daily things and we derived project ideas from those conversations." "I considered Zoom platform as if it is piazza where children come together and meet."
Distance education (other than synchronous online education or mix)	*Encouraging children to interact with nature	"I gave children tasks that they can do by interacting with the nature."
	*Working on their own interests/projects at home	"We started with the feelings of the students and then planned activities based on the topics and materials they were curious about. We prepared diaries with activities that parents can support the program and can do with their children at home, and share them with the parents weekly."
	*Doing multiple things, such as showing educative videos they recorded before, solving problems online, doing activities online, interacting on the phone	"Since they are young (3-year-olds) and it is the distance education period, we mostly included interactive fun games in front of the screen. We shared the topics they wanted to research at home with our curiosity wall application, which is included in the philosophy of Reggio Emilia. We also added activities upon their questions/inquiries." "We sent home packets of educative materials."
	*Sending homes packets	"I encouraged children to do activities at home, like watering plants at home, examining the soil inside the pot, counting the forks at home etc."
	*Supporting parents to accomplish activities at home	"By assigning tasks to families, we tried to carry out distance education in a certain manner in the form of different activities each day by offering materials that will enable the child to express herself."
	*Orienteering	"I did orienteering by asking parents for support."

Table 1 shows that in terms of the synchronous online education, 76 of 91 educators did structured or unstructured activities online, just chatted online to keep in touch, showed educative videos that they recorded before, discussed with children to provoke their inquiry, made decisions with children on what to search for, did compositions online, played online, conducted projects, and did small group work at Zoom's special room.

On the other hand, only 15 of participants conducted more comprehensive distance education. Instead of sticking to the screen synchronously, they used multiple ways of distance education, namely "Working on their own interests/projects both online and at home," "Doing multiple things, such as showing educative

videos they recorded before, solving problems online, doing activities online, interacting on the phone,” “Sending homes packets,” “Supporting parents to accomplish activities at home,” “Orienteering.” One of the participants, who did distance education through family participation, did not know what she was doing is a kind of distance education. Moreover, the data shows that teachers from public preschools as well as private preschools successfully adapted Reggio Emilia approach to their online/distance education. One of the excerpts from public preschool teachers is as follows:

By planning activities that involve families as much as possible and real-life assets whose answers can be easily accessed at home rather than already known/familiar questions/activities... By offering optional activities according to my students' feedback and giving them the opportunity to choose according to their interests. By using my feline cat friend, Kashmir, as a learning companion to motivate children, by giving them the opportunity to closely observe his development and life and give him respect. By communicating more with my disadvantaged students. By using the opportunities offered by the museums. By using the imaginative effect of sound recordings independent of visuals. By sharing Reggio's philosophy quotes with the family and trying to get them to be owned. By comparing with more questions than answers. By trying to use a participatory model that spans the day and is open to individual interaction, instead of sending a ready-made program. By using the students' contents/questions to decide the program.

The participants were asked how should online/distance education be while following Reggio Emilia approach. The data is presented in Table 2.

**Table 2.** How should online/distance education be while following the Reggio Emilia approach?

Categories	Example Excerpts from Answers
*Hands-on	"It should definitely allow children to be more active and participatory."
*Inquiry-based	"It should support inquires of children."
*Parent involvement	"It can be carried out in cooperation by providing material support to children beforehand and giving detailed information and instructions to parents about the process."
*Rich home environment	"By ensuring the necessary technological systems and frequently used materials are available at home."
*More nature	"Nature should be our tool, we should develop materials."
*Small group work	"Can be divided into small groups."
*Interactive	"Must have prepared the necessary equipment before the lesson on children's dreams, imaginations and curiosities."
*Interest-based	"The teacher should not provide a pre-prepared program. There must be interaction with the children first."
*Need-based	"I think it should be based on time, interest, need, and intention."
*More homework-based	"In my opinion, it should be demanded that more emphasis should be placed on empirical homework and that family support should be more than ever."
*No way	"I don't believe there will be an online formulation. But it can be supported remotely."
*No way by online but distance education	"I think it's hard to do it online."
*No idea	"I have no idea!"

Table 2 shows that online/distance education should be “Hands-on,” “Inquiry-based,” “Parent involvement,” “Rich home environment, nature/outdoor,” “Small group work,” “Interactive,” “Interest-based,” “Need-based,” and “More homework-based” while following the Reggio Emilia approach. On the other hand, some of the participants claimed that there is no way to conduct Reggio Emilia-inspired education online by stating “No way,” and “No way by online but distance education.” Some stated that they have no idea about how to conduct online/distance education while following the Reggio Emilia approach. Most of the educators asked for support to create more effective online/distance education. Here are some example excerpts:

“Our facilities were limited due to the age group and because it was made from a screen. Maybe a mini activity set suitable for projects can be prepared with materials and the environment in the school can be created at home. However, sometimes there were problems in even preparing the material we asked from the parents. For this reason, our application process has become difficult.”

"In big cities, it is a situation that creates quite a challenge for students who are stuck in high-rise buildings. For this reason, have a little difficulty answering this question."

"Children become foam in the technology environment because there is no play and interaction, they could not use a mouse with their hand skills, their attention dropped, the stimulus collapsed because they were at home, they did not want to participate."

"I think that it will be more suitable face to face in this age group."

"I don't know how it can be without touching children from afar. I would be glad if you help me in this regard."

The participants were also asked on which subject they want to receive an in-service training concerning the difficulties, they experienced during the pandemic, and what topics they would like to be addressed in Reggio Emilia Online Educator In-service Training? The data is presented in Table 3.

**Table 3.** On which subject do you want to receive an in-service training?

Categories	Example Excerpts from Answers
*Online/distance education itself	"When such a process is encountered for the first time, how to apply discovery and research activities with distance education."
*Activities outside	"How can I learn the approach itself and spend time with children outside in line with this approach and how should the most effective teaching method be by following distance and social rules?"
*Education system	"Nature-themed events."
*Documentation	"To fully understand the Reggio Emilia method, how can it be addressed to a wider audience? How can the uniformity of the education system be overcome? "
*Technology and media literacy	"Documentation and how to make teaching and learning visible."
*How to find thread of interest	"I don't know how digital culture and literacy in children connect with Reggio Emilia. First of all, I would like to receive support in bringing these issues."
*Inquiry-based education	"To the topic of how to take the attention of children."
*Low physical interaction	"How about pedagogically effective listening, really understanding the curiosity of the child on the screen? What kind of system or program can we add to this online? Or is this possible? I would like to know about this and receive training for it."
*Home-based activities	"If we can start, activities with less contact."
*Book suggestions for parents	"Like methods that will be more suitable in a home environment."
*Provocation/taking attention	"List of reading suggestions to improve parents' understanding."
*Community of learning	"What should the teacher follow in order to facilitate the child's learning, what should be the clues s/he will leave for the child, what environments should be prepared for the child to discover his / her talents / interests?"
*Hearts-on education	"How can we manage to be a community on screen and get feedback?"
*Project-based education	"How to love learning should be emphasized."
*Teacher's role	"How to determine project topics."
*Everything	"Teachers' role."
	"I want all subjects, but especially project development."

The answers show that educators would like to learn more about "Online/distance education itself," "Activities outside," "Education system in Turkey," "Documentation," "Technology and media literacy," "How to find thread of interest," "Inquiry-based education," "Low physical interaction," "Home-based activities," "Book suggestions for parents," "Provocation/taking attention," "Community of learning," "Hearts-on education," "Project-based education," "Teacher's role," and "Everything." Interestingly, the participants wanted to learn almost everything about the approach itself not just online/distance education. For example, one of the participants stated, "I would be very happy to learn all aspects of Reggio Emilia education academically and to be presented with practical examples." Moreover, it looks like educators are looking for ways to conduct face-to-face education online. For example, one of the participants stated, "How is it possible to determine the subject and event that the child is interested in within the time and observation limits of distance education?" Another participant stated, "We had difficulty in the remote

implementation phase of the project. I think that it is a problem to fully internalize the projects since it is remote. How can we do this successfully? We would be very happy if this issue is addressed in the training.”

## Discussion

The participants provided valuable information to decision-makers and educators about how dramatic the situation of online/distance education was. The current study showed that 53 out of 260 participants did not do any online or distance education at all but only 207 did online/distance education. In addition, only 91 out of 207 participants stated that they tried to adapt the Reggio Emilia approach to their online/distance education, while 116 out of 207 educators inspired by Reggio Emilia at the time of closure did not adopt the Reggio Emilia approach. In addition, only 15 out of 91 participants were able to do comprehensive distance education, while 76 were able to do only synchronous online education, inspired by the Reggio Emilia approach. Accordingly, the findings shows that only these 91 participants remained inspired by Reggio Emilia. The rest have either not adopted the Reggio Emilia approach in their online/distance education or have never done online/distance education. This result shows how dramatic the situation is for the sustainability of early childhood education inspired by the Reggio Emilia Approach during the pandemic.

In terms of the synchronous online education, educators did “Just chatting online to keep in touch,” “Doing activities online,” “Showing educative videos they recorded before,” “Conducting discussions to provoke children’s inquiry,” “Making decisions with children together on what to search for,” “Doing compositions online,” “Playing online,” and “Conducting projects.” The data of the current study revealed that many of the participants were not aware of many possibilities of distance education other than synchronous online education and complained about not having much interactive education during online education. The educators were not for or against online education, but they looked like they tried whatever they could do during the pandemic enclosures. They were not cognizant of educational solutions like interactive education tools, e.g., Google Jamboard, drive, forms, docs, and slides. There is even a program called Spiky.ai, which is a system sentiment detective to detect sentiments of children during online education by checking their faces, mimics etc. On the other hand, it can be stated that educators in the current study tried to keep children in front of the screen to educate them. However, the research in the related literature says that online preschool or online lecturing is not high-quality education for young children, and if it happens long hours or in a developmentally inappropriate way, it becomes more disastrous (Allvin, 2020; Copple & Bredekamp, 2009; Dale, 2020; Reimers & Schleicher, 2020; WHO, 2019). Instead, educators should think other ways of distance education to reach out children. For example, in their research Atilas et al. (2021) state that teachers reported various levels of resources and support needed for the creation and delivery of education. For example, “Teachers prepared packets that included instructions for the caregivers as well as storybooks, paper, crayons, and all necessary materials, including, for example, soil and seeds for the children to plant.” (p. 6). Quality of augmented reality is also another issue (Yilmaz, Akyol, 2017).

Similar to the results of the current research, Muhdi, Nurkolis and Yuliejantiningasih (2020) state that 95% of teachers participated in their research use the WhatsApp application and do not know other ways of teaching distance. It shows that even the variety of media used by teachers in online learning is limited, namely by the WhatsApp application. Those teachers mostly gave assignment and then did evaluation by using portfolio evaluation and product evaluation and sent the results online and offline. Bozkurt (2020) states that distance education should be based on process-evaluation not product-evaluation, which is good for Reggio Emilia teachers because they are already doing process-evaluation which is called documentation (Rinaldi, 1998). Moreover, Juwah (2006) claims that interaction in online learning is more than interaction with a teacher. There should be “Interaction with concepts,” which is children’s contact with other people’s conceptualizations, “Interaction with assignments,” which is the application and testing of new concepts into meaningful tasks, and “Interaction with others,” which involves with creation and testing of new concepts during conversations with teachers and other children and reflecting on those concepts.

As it is stated before, there are other ways for distance education than virtual classes. However, it is still acceptable to conduct virtual classes if it is short, interactive, small group work, and age appropriate (Dayal & Tiko, 2020; Dore et al., 2021; Kim, 2020). Kim (2020) states that 30 minutes is long enough for virtual lesson because of short attention span of little kids and there are some possibilities to keep children hands-on and create more interactive platform, “For example, the ‘share screen’ function allows participants to present pictures, video clips, or use other visual/audio presentations from a computer. Whiteboards can be pulled up by a teacher to draw or write, while at the same time, explaining ideas and interacting with children online.” (pp. 148-9). Kim also offered another online hands-on activity in which she asked students to “bring a household object that could make a sound and download a virtual instrument to be played for an online music session” (p.150). The research done by Kim (2020) showed that online education works



well with 4 children if they are aged 4–5 years. Kim states that online education works well with 6 to 8 children only if the teacher is highly capable of managing the processes to engage high number of children effectively. She also states that educators need to manage individual differences, developmental needs, learning styles, personality, and interests of children and have a good communication with parents. Dayal and Tiko (2020) stated that to keep the virtual screen familiar to children, each meeting should be run by the respective educator from their own classroom. This needs to be done to make sure that children can see the furniture, charts or whatever they have in their own classroom and feel as if they are in their classrooms. Moreover, Dayal and Tiko state that teachers need to be aware of that exposing children to screens for long periods of time is detrimental. They can ask children to move around the house to accomplish a task given by the teacher. In their study, Dayal and Tiko state, for example, children can take their teacher on a virtual tour of their house to show her the kitchen, the fridge and the rooms.

In terms of the distance education other than synchronous online education, some of the educators did more comprehensive distance education, namely “Encouraging children to interact with nature and to work on their own interests/projects at home,” “Doing multiple things, such as showing educative videos they recorded before, solving problems online, doing activities online, interacting on the phone,” “Sending home packets,” “Supporting parents to accomplish activities at home,” and “Orienteering.” Although they are just a few in numbers, those educators did distance education more similar to the Reggio Emilia preschools in Italy. Reggio Emilia educators in Italy states in their website that they did “Sending home educational materials and supporting parent-involvement; asynchronous story-telling activities; playing together at home-suggestions; conducting a Project; book suggestions for recipes, different activities, and stories, and making phone calls” (Reggio Children, 2020). For example, they developed a project entitled “Rhymes and Riddles on Heaven and Earth” to collect nursery rhymes in different languages and create a Golden Record and voyage between heaven and earth, like the ones carried on the Voyager spacecrafts. They are still inviting children to contribute via WhatsApp or email and those rhymes can be heard on [www.reggionarra.it](http://www.reggionarra.it). As seen in this example, Reggio Emilia educators in Italy did more distance learning instead of distance education. However, it is understood from the descriptions of participant educators in the current research that what they are doing is more distance education instead of distance learning, e.g., Sending home packets and weekly programs to teach them something. New research can be conducted to get more information on the question, “Is it distance education or distance learning?” and to see if the education is child-centered, creativity-based, and more children doing something as happened in distance learning (Bozkurt, 2017).

Furthermore, the educators were asked to reflect on how best to promote development and learning inspired by Reggio Emilia approach during online/distance education. They stated that online/distance education inspired by Reggio Emilia approach should include the following features: “Hands-on,” “Inquiry-based,” “Parent involvement,” “Rich home environment,” “More nature/outdoor,” “Small group work,” “Interactive,” “Interest-based,” “Need-based,” “More homework-based.” Mostly they were agreed on family participation and going outside to the nature. One of the participants stated that family participation should be high with cooperation/collective decision-making mechanisms and knowing/trusting each other. Another participant stated that children should be directed to nature more frequently than before. However, Omidvar, Wright, Beazley and Seguin (2019) state that Reggio Emilia educators do not simply take children to the nature. They conducted research in a Reggio Emilia-inspired preschool in Canada. According to them, Reggio Emilia is one of the models that expands children's bio-affinity, develops their environmental attitudes and encourages them to behave in a more environmentally friendly manner by providing children with various indoor and outdoor nature experiences. On the other hand, Omidvar et al continued, results suggest that the Reggio Emilia-inspired teachers emphasize more on anthropocentric educational goals than nature-related ones. Accordingly, it is essential to look more deeply into Reggio Emilia experiences rather than simply taking children to the nature.

One of the most emphasized results of the current study is that family participation is essential to best promote development and learning inspired by Reggio Emilia approach during online/distance education although one of the participants, who did distance education through family participation, did not even know what she was doing was a kind of distance education. COVID-19 pandemic period required more effective and strong communication between teachers and parents. For example, Gayatri (2020) summarizes others' research and states, “the implementation of home learning causes some difficulties in relation with self-regulation of very young children, the readiness to utilize of digital technology and learning materials, parent's beliefs and attitude on online learning compared with traditional learning, and requirements of demanding time and knowledge to accompany the children.” (p.405). Accordingly, parents need to be more active in education of their children than before. However, the findings of the research conducted in Indonesia by Juliana, Pramono, Parani and Djakasaputra (2021) show that parents are having difficulty in maintaining children's enthusiasm toward lessons, finding time for children, having good

Internet connection, understanding of the educational material and fostering children's interest in learning what is offered. They stated that parents worked hard to keep children's attention to material from the teacher, to help them make homework and to accompany them during online education. In short, parents became substitutes for both teachers and friends of their children during distance education. However, children were still bored and in bad mood and distracted by things other than what was presented by the teachers or parents. The teachers offered creating a positive and fun learning atmosphere, imposing discipline, and making learning videos for children as a solution. Moreover, Atilas et al. (2021) state teachers have multiple roles during the pandemic, so teacher dedication was so needed at that time. One of the teachers say "it is NOT easy to teach, plan, create, cook, clean, mother all at the same time, something has to give" (p.7).

Similar to the results of the current study, in original schools of Reggio Emilia in Italy educators used various ways of distance education and to provoke children's hands on and interest/need/inquiry-based learning (Reggio Children, 2020). This shows how important 3Hs principle is (i.e., Hands-on, Heads-on and Hearts-on). 3Hs stresses the importance of active engagement by nurturing "body," "mind," and "heart" (Inan, 2019; Inan & Inan, 2015; Inan, Trundle, & Kantor, 2010). Similarly, Bozkurt (2020) indicates that an effective distance education transfers the learning contents and responds to the feelings of interest, understanding and empathy that learners need. When viewed from this angle establishing an open communication with learners, showing that they are understood and cared about, making them feel valued as an individual, as a person, outside of their learner roles is important (Bozkurt, 2020). On the other hand, some of the participants stated that there is "No way" to conduct online/distance Reggio Emilia-inspired education, and some stated that there is "No way by online," but distance education is possible.

The participant educators also stated that they were experiencing difficulties in the following Reggio Emilia approach and requested an in-service training on the following topics: "Online/distance education itself," "Activities outside," "Education system in Turkey," "Documentation," "Technology and media literacy," "How to find a thread of interest," "Inquiry-based education," "Practical suggestions which require low physical interaction," "Home-based activities," "Book suggestions for parents," "Ideas for provocation/taking attention," "How to build a community of learning online," "Hearts-on education," "Project-based education" "Teacher's role" and "Everything." Interestingly, some of the participants wanted to learn more about the approach instead of online/distance education. They wanted to be more knowledgeable about the principles of Reggio Emilia approach, e.g., documentation. Three year-long research conducted on 22 teachers in Turkey by Yilmaz et al. (2020) shows that educators encountered both functional and attitudinal difficulties in implementing documentation even during face-to-face education in Turkey. Similarly, the research conducted by Inan (2021) shows that teachers are having difficulty in making learning visible by using documentation panels, which is one way of documentation. Similarly, in her research Birinci (2018) found that documentation is one of the most remarkable issues that concerned teachers because of the lack of information and time about it (p.288). Accordingly, it is expected that they will encounter more challenges in implementing documentation online. Atilas et al. also (2021) take attention to the lack of preparation for distance education and deficiencies in trainings of pre-and in-service educators to address the educational needs of children distantly. Moreover, it is found that educators in the current research looked for ways to conduct education online similar to face-to-face. As Reggio Emilia educators in Italy do, we need to cothink and create together.

## Conclusion and Suggestions

In recent years, many educators in Turkey have already realized that traditional methods in education were not working for the current century and consequently adhered to Reggio Emilia philosophy as reconceptualization of early childhood education. The findings of the current study showed that pandemic period pushed educators to reconceptualize the meaning of education and to think about their own educational practices more seriously. The results show how dramatic the situation is for the sustainability of early childhood education inspired by the Reggio Emilia Approach during the pandemic as only these 91 participants out of 260 Reggio Emilia-inspired educators remained inspired by Reggio Emilia during the closure. Although they were aware of how to conduct effective online/distance education according to the principles of the approach, they were not compatible with Reggio Emilia. Just a few of them tried to do distance education more similar to the Reggio Emilia preschools in Italy. They believed that online/distance education inspired by Reggio Emilia should include the following features: Hands-on, inquiry-based, parent-involved, rich home environment, nature/outdoor-involved, small group work, interactive, interest-based, need-based, and homework-based. However, it is understood from the descriptions that what they were doing is more distance education instead of distance learning, which more emphasized in Reggio Emilia philosophy. In other words, they did not see the difference between distance education and distance

learning or the difference between simply taking children to the nature and provoking them to be nature sensitive. The current research also showed the topics that the educators seek support for their professional development.

Here are some practical suggestions:

- Education should be flexible, optional, and encourage communication among all protagonists, namely children, families, teachers, pedagogistas and ateliers, thus that educators can get feedback from families and children themselves and collaborate for children's learning and development.
- Educators should use various means of distance education –such as preparing educational packages containing ideas for family-involvement activities to be sent to homes, especially those where there are no supportive facilities such as internet access (e.g., story-telling recordings, ideas for games, and small projects with children on different themes - math, drawing, and more, and book suggestions on recipes, activities and stories).
- Distance education should include stimulations, animations, audio and video-recordings and some other ways that make children more active and push them to interact with others (e.g., Rhymes and Riddles on Heaven and Earth project).
- Educators should cooperate and think together with children, colleagues and parents to figure out what projects they can do.
- Education should be hands-on, so children feel and manipulate and think with their hands.
- Education should be heads-on, so children can ask questions, inquire about things and reflect.
- Education should be from the heart (hearts-on) as it is written on the wall of Diana School: “Nothing without Joy.”
- Educators should do a series of interactive synchronous or asynchronous mini-classes instead of longer classes.
- Educators should prepare activities in which children direct themselves and feel the community.
- Educators should read more about Reggio Emilia principles, documentation. Edwards, Hamel, Leeper-Miller, Ren (2020) provide a documentation rubric (visible learning, powerful story, emotional impact, visual impact) for teachers so that they can improve their reflective practices, which is the core of Reggio Emilia approach. As frequently cited quotation of Albert Einstein, “Education is not the learning of facts but the training of the mind to think.”

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