

## Re-thinking Multigrade Classrooms as an Alternative Educational Environment

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### Abstract

The same content and learning environments offered to students from different cultural backgrounds in schools, as well as the lack of diversity, fail to address different learning needs, isolate learners from the society. For this reason, there has always been a search for alternative education models. Mixed age groups are taught together in multigrade classes, which is a primary school practice in Turkey that arises from necessity. Thus, the positive effects of this practice can be benefited from considering the multigrade class practice as an alternative education environment for teachers. This study aims to present suggestions to the educators to help them carry out their multigrade classroom activities more effectively and to draw attention to the advantages of the multigrade classroom practices. 14 pre-service teachers took part in the study as participants. The data were obtained through semi-structured interviews held in 2020-2021 academic year. The results of this study emerged in two different categories as physical arrangements and practice-based arrangements. The participants presented suggestions both for the inside and outside the classroom, and for the decoration and materials and instructional process, the institutional functioning of the school, and the type of communication in the classroom.

**Keywords:** Multigrade schooling; Alternative education; Mixed age; Teacher training.

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## Introduction

The UNESCO Convention Against Discrimination in Education was adopted in 1960, drawing on the articles of the Universal Declaration of Human Rights (1948) that declared the prohibition of discrimination and the right to education for everyone. The term “education” in this convention refers to all types and levels of education and comprises access to education, the quality of education, its standards and the conditions under which it should be delivered. The education system should be sufficiently diverse, inclusive and flexible to meet the learning needs of children from differing socioeconomic backgrounds, which requires the education system to be adaptable (Tomasevski, 2004, as cited in Pigozzi, 2008). Schools that aim to shape the society around an ideal are obliged to act and provide education in line with the targets set by the central authority. Schools under the strict control of social classes dominated by the state can also be called “mainstream” schools (Kaya & Gündüz, 2015). The same content, method, and learning environments offered to students from different cultural backgrounds in these schools, as well as the lack of diversity, fail to address different learning needs and isolate learners from the society, labeling them as a “failure”. Therefore, there have always been criticisms, resistances, reactions and quests for alternatives for non-formal school education, which protects, both with its content and functioning, the interests of the politically, economically and culturally powerful class (Aksoy, İnce, & Çoban Sural, 2020). While the literature refers to formal education as "mainstream", "standard/customary" or "traditional", terms such as "alternative", "second-chance", "re-participation" and "democratic" are used for schools that are restructured outside of this paradigm (McGregor et al., 2017). Definition of alternative education varies by learning environments, the reasons why students are placed in these environments, and the content of the education service. The emergence of alternative education, on the other hand, was born out of the need for educational practices that adopt a child-centered approach, autonomy in learning speed, and non-competitive assessment system, based on the idea that some students can learn better in a different structured environment than in traditional public schools (Lange & Sletten, 2002). Many educators, such as J. J. Rousseau, I. Illich, L. N. Tolstoy, A. S. Neill, P. Freire, aim to free schooling from the total control of dominant groups and to give this process a more liberal structure.

The climate of the schools affects their success at fulfilling the duties assigned to them by the society (Şenel & Buluç, 2016). As the civil rights movement gained momentum with the emphasis on human rights and democracy, educational priorities were shifted to the innovative education movement by those who were dissatisfied with the traditional curriculum (Conley, 2002). Alternative schools emerged in the United States in the late 1960s and 1970s (Kim & Taylor, 2008). Reilly and Reilly (1983) state that there are three types of alternative schools, which are (1) non-state schools (such as church schools, military schools), (2) upper socio-economic preparatory schools for the children of wealthy families who have reached college age, and (3) compensatory schools for students who are not successful in traditional schools (Aydın, 2015). Since the Fifth Five-Year Development

Plan published in 1984, that the education service in Turkey cannot be met with only public resources and the share of the private sector in education services should be increased has been regularly emphasized (Ardakoç, 2021). However, companies and politicians in their rush to privatize public schools have shrunk their school budgets, replaced teaching with standardized tests and put the blame on teachers and students (Paton, 2014). As alternative education has developed over the last 50 years, the public sector has seen the need for alternative pathways for students and has attempted to solve the growing educational problems. Quinn et al. (2006) state that students learn best in schools with alternative learning environments where they believe that the teachers, employees and administrators care about and respect them, value their ideas, support them, set fair rules, are flexible when trying to solve problems, and adopt a non-authoritarian approach. There are many types of schools that implement alternative practices, among which Waldorf, Montessori, Regio Emilia Inspired, Summerhill, Contract, Magnet, Small schools and Home schools are the most notable. These student-centered schools have different philosophies, curricula, teaching methods and techniques, learning environments, and materials. These alternative schools are not widespread enough in Turkey, and the research conducted in this field has mostly focused on Montessori schools offering pre-school education (see Büyüктаşkapu, 2012; Danişman, 2012; Durakoğlu, 2011; Hesapçıoğlu, 2006; Kayılı and Arı, 2011; Oğuz and Köksal Akyol, 2006) and Waldorf schools (see Akdağ, 2006; Bayhan and Bencik, 2008; Gürkan and Ultanır, 1994; Kayahan Yüksel and Kartal, 2020; Kotaman, 2009), and home school (see Aydın and Pehlivan, 2000; Aymen Peker and Taş, 2017; Çivici and Özaslan, 2021; Hendek, 2019; Taşdan and Demir, 2010; Taşdemir and Bulut, 2015; Tösten and Elçiçek, 2013).

While some alternative school types are structured by age groups (e.g. 0-3, 3-6, 6-12, 12-15, 15-18 years old in Montessori schools), all of these school types include children from different age levels in a learning environment/class, in other words, there is a mixed age practice. Mixed age groups are taught together in multigrade classes, which is a public school practice in Turkey that arises from necessity. Multigrade classes are the classrooms where students in different age groups are taught by a single teacher, formed by combining more than one classroom (Berry, 2000; Erbaş and Karakaş, 2021; Erdem, 2008; Sağ, 2010; Şahin, 2003). This practice, called multigrade class teaching in the literature, is applied only at the primary school level by traditional schools in Turkey. Multigrade class teaching has emerged as a necessity rather than a choice due to the inadequacy of the number of teachers and classrooms/school buildings as well as the low number of students in rural school districts (Dursun, 2006; Köksal, 2005). Driven by a negative view towards the multigrade class teaching, the multigrade schools were closed and the students were bussed to the schools in the nearest province/district center. “Transported education is a practice aiming to ensure that primary and secondary school students who have problems in accessing school for various reasons are transported to the designated schools on a daily basis to receive education” (MEB, 2021, p. XXI). Although this method attempts to solve the problems, the students who are transported to another

school, experience problems of adapting to their social environment at school, wasting much time for the commute, and having to get up very early in the morning, as well as experiencing some important safety problems such as traffic accidents due to the poor road conditions (Tektaş and Yurdabakan, 2013), which have both physically and psychologically adverse effects on the students (Ari, 2003; Yengin Sarpkaya and Dal, 2020).

Since there is usually only one teacher in schools with multigrade classrooms, this teacher assumes the duties, authorities and responsibilities of a principal as a 'principal authorized teacher' as well as the responsibility of teaching. According to Aksoy (2008), this increases the workload of the teacher. The studies conducted (e.g. Doğan, 1995; Dursun, 2006; Sağ & Sezer, 2012; Schreglmann, 2019; Şahin, 2003) highlight the difficulties experienced by teachers working in multigrade classes and their disadvantages, but also point out that the teachers in these schools can turn these into an advantage. There may be opportunities where the peer learning process can be used effectively due to the mixed age order, and the classroom teacher has a more free environment in her classroom activities, considering that she is also the school principal. Thus, the positive effects of this practice can be enjoyed by considering the multigrade class practice as an alternative education environment for classroom teachers. İnce and Şahin (2016) state that the development of teaching practices that will make the classroom functioning effective for teachers working in the multigrade classroom, and the organizing curriculum in line with the principles that are important for teaching in multigrade classrooms, such as individualized teaching and working with groups by level, may have a significant positive impact on teachers' job satisfaction. Here, it is crucial that pre-service teachers, who have not started their teaching yet but have some theoretical knowledge about alternative education, can see multigrade classrooms as an alternative learning environment. As such, the subject of this study is to determine the opinions of the pre-service primary school teachers on their ability to use the alternative education activities they learned during their undergraduate studies. Thus, this study aims to present suggestions to the educators to help them carry out their multigrade classroom activities more effectively and to draw attention to the advantages of the multigrade classroom practices. For this purpose, the answers to the following questions were sought:

1. Which alternative education practices can be used by classroom teachers who work/will work in schools where multigrade class teaching is implemented?
2. For what reasons can these alternative educational practices be used?

### **Method**

This study, which aims to determine the opinions of pre-service primary school teachers, was carried out using a qualitative research design. The case study design was adopted to find an answer to the research question. Creswell (2002/2013) defines case study as a qualitative approach in which

researchers collect in-depth information about one or more constrained systems in real life with multiple sources of information at a given time. Criterion sampling, one of the purposive sampling methods, was used in the study. This sampling method is defined by Patton (2014) as the “routine determination of all states in the data system that show the characteristics of predetermined criteria for an in-depth qualitative analysis”.

### **Participants**

The criterion of having taken the elective course called "Alternative Education Models in Primary Schools" in the primary school teaching undergraduate program was used in selecting the pre-service teachers to participate in the study. Before the data collection, the participants were informed about the subject and scope of the research and were asked whether they wanted to volunteer for participation. 14 volunteer teacher candidates who met this criterion took part in the study as participants. All of the participants were in their third year in the primary school teaching program. 11 female and 3 male participants were aged between 20 and 23. Ethical approval of the research was given by Hacettepe University Ethics Commissions (dated 13 April 2021 and numbered 1546607). In addition, since the pre-service teachers who made up the participant group were over the age of 18, their consent to participate in the study was obtained through their written permission.

### **Data Collection and Analysis**

The data were obtained through semi-structured interviews held in March of the 2020-2021 academic year (22.03.2021-28.03.2021). Due to the ongoing Covid-19 pandemic on these dates, the interviews were conducted via Zoom and all the interviews were recorded to avoid any data loss. The data obtained from the records were written down by the researcher without any data elimination. The opinions of the pre-service teachers were obtained by asking the semi-structured interview questions prepared by the researcher. The interviews with the participants lasted an average of 20-25 minutes. The transcribed interview records were analyzed by the researcher by applying the content analysis method. After a portion of the data was analyzed, another researcher who is an expert in the field was asked to analyze some of the data to ensure the reliability of the analysis. Based on the exchange of views between the two researchers during the data analyses and comparisons, the categorization and coding process was finalized.

In qualitative research, the validity of the data and the accuracy of the results are very important. Reporting the data in detail and explaining how the researcher has obtained the results are two key criteria of validity in a qualitative research (Yıldırım & Şimşek, 1999/2011). In the current study, the detailed explanation of the findings is one of the factors affecting the validity. In the next part of the study (see the Results), the research process is presented in a transparent manner by presenting the participant views regarding each category, without modification. To strengthen the

validity of the research and to minimize the "data collector bias" (Fraenkel & Wallen, 1990/2012), the interview question created by the researcher was clarified by taking the opinion of another researcher who is an expert in the field of educational sciences. One of the ways to ensure the reliability of a research is to ensure the adequacy of technical processes at the data collection phase. Therefore, the interviews were recorded to avoid any data loss during the interviews. Another factor affecting reliability is the adequacy of transcriptions. During the transcription of the collected data, all the statements expressed by the participants were written down and included in the analysis without any modification or elimination.

## Results

The data analyses revealed two categories regarding alternative education practices, which is the focus of the study. The categories and codes revealed by the data coding process and some code examples are shown in Table 1 below.

**Table 1. Categories and Codes Obtained Through the Analysis**

Categories	Codes	Examples
Physical arrangements	Classroom spaces	Corners, centers
	Out-of-class spaces	School building, yard, surroundings
	Decoration	Wall color, mirror, carpet, proportionally-appropriate furniture
	Materials	Map, activity papers
Practice-based arrangements	Instructional process	Learner-centered, differentiated instruction, interaction, project-based
	Organizational procedures	School council, use of music, arrangement of breaks
	In-class relationships	Cooperation, freedom, counseling

### Results Regarding Physical Arrangements

During the interviews, the subject that was stressed by the participants the strongest was the physical arrangements of the classroom and the school. 4 codes regarding this subject emerged as a result of the data analysis: views on spaces (in and out of the classroom), decoration, and materials. Regarding the "Classroom Spaces" code, the majority of the participants stated that "corners/centers" can be used effectively in classroom physical arrangements, regardless of class level. One of the participants stated that the teacher's desk may not be used by the teacher in the classroom. The participants stated that they were inspired by school types such as Montessori, Summerhill and Tolstoy School for the views they presented under this code. Some excerpts illustrating the results are presented below.

*Designed environments, just like in Montessori schools, increase the child's already existing learning interest. Each student should be able to freely choose which corner he/she wants to work in and should proceed according to his or her needs. If necessary, when the student*

*completes the activity in the lesson, he/she should go to that corner to be able to do a completely different activity in the remaining time without interrupting anyone. The number of students in multigrade classes is less than in regular classes, and the space is sufficient. This is actually very easy to do. (ST)*

*I would set a corner of the classroom as the story corner. I would design a bookcase with story books and a separate area for one or two learners to sit and read. I would make story hours by creating a corner where students could read stories. (MY)*

*My student and I must be equal in the classroom environment. There is no need for a teacher's desk where I sit all the time and show my authority. Wherever my students put their stuff, I'll put mine there. If this can happen in the Tolstoy school, in the Free schools, why not in the multigrade classroom! (FT)*

As for the "out-of-class spaces" code, the participants expressed their opinions on issues such as the school building and the effective use of the school environment. Some suggested transferring practices from Waldorf and Reggio Emilia Inspired schools to multigrade classes, and emphasized the advantages of having multigrade classrooms in small settlement units such as villages. The following quotations from the data exemplify the participant views on this subject:

*When I learned about Waldorf schools, when I learned about the fact that the school is intertwined with nature and even the information about the use of those wooded areas around the school, I realized that village schools are actually the applied version of this. The fact that the multigrade classes are in the villages facilitates the inclusion of activities such as planting, animal care and agriculture into the education. In this way, learning by doing can be realized. I think the practices in Waldorf schools are easily transferable. (DB)*

*Just like Waldorf schools, the school building can be interesting because in order to encourage children to come here, I think that this building should first visually attract their attention. (BS)*

*As in Reggio Emilia schools, the environment should be accepted as the third teacher in this school. During the summer months, a library can be set up in the garden, and book recommendations or book summaries can be made to the villagers by the children. As in Waldorf schools, children can collect in this school. Collecting develops a sense of discipline and responsibility in individuals. Therefore, the areas where children will collect and exhibit their collections can be located in the halls of the school or in an empty classroom, if any. (OY)*

It is seen that decoration examples in schools such as Reggio Emilia Inspired schools and Montessori are presented as suggestions in the results obtained regarding the "Decoration" code. Some participant views on this issue are presented below.

*I think that the color of the walls in the school or the places of the furniture in the school should be changed periodically. It would be very difficult if it was in a big public school, the approval of the school principal is required, it even affects the whole school, but in a village school, the only person responsible of the school is the teacher. This is actually a great power for the teacher. (DB)*

*The classroom environment in the Montessori model can be a very appropriate environment for multigrade classes. In Montessori, items are always scaled for children. The floor of the classroom may be completely covered with carpet, and there is nothing preventing this. Students can put their shoes in the shoe racks of the proper size and thus, it can be ensured that students take responsibility in the classroom. (DZ)*

*As in Reggio Emilia Inspired Schools, mirrors can be used in most places. This is because children's awareness of their emotions is also very important for their development. A mirror can be used especially for students who are younger than the others in the class to become aware of their own reactions and mimics. (AS)*

*The design of the interior of the building can be no different from a house, as in Waldorf schools, and unused items at home can be brought to school. It is hard to do these in a metropolitan city, but by doing these in village schools, collaborative work is done with the village people, which is a clear advantage. (BS)*

Regarding the "Materials" code, some examples of the importance and use of the material in Montessori schools are presented as suggestions. Some participant views on this subject are presented below.

*As in Montessori schools, additional materials on the solar system, the world, and countries can be used. For example, various maps and models of the world should be kept, even the map of the village can be drawn cooperatively as a project with a class trip, and tasks can be done according to the level of each student. It would be very difficult to do this in a city center for sure due to the permits required, security considerations, and road tolls. (MC)*

*For example, every activity that students do is important in Montessori. In my opinion, walls should never be allowed to be empty, many colorful materials made by students can be hung on the walls. It's not really something specific to the multigrade class either, every class should be like this. (AT)*

### **The Results Regarding the Practice**

The views expressed by the participants regarding the view of multigrade classrooms as an alternative learning environment are under three codes related to the instructional processes, the functioning of the school as an institution, and the types of in-class communication in the category of "Practice-based arrangements". The presence of mixed-age practice in the classroom has a significant effect on the opinions of the participants on the transferability of some practices in alternative school types that they had previously learned about to the multigrade classroom environment. Some verbatim quotations exemplifying the results on instructional dimensions such as content, feedback, evaluation, differentiated instruction, and peer learning within the scope of the instructional processes code are presented below.

*The curriculum tells the teacher that you should use the strategy of teaching through discovery, so maybe it is not completely discovery, but it says to place the child in the center, then dialogue becomes important. For example, in Montessori, the teacher does not give feedback to the student but instead the student is expected to identify his or her own mistakes, and this was very interesting to me. Students learn from each other, so even feedback should be considered thoroughly. Why shouldn't we do this too, not only in the multigrade schools, but also in the schools in the centres. Of course, this is very well used if both first graders and fourth graders are together in the multigrade class. (DB)*

*Anchor activities should be used very often because some of the students in the classroom are learning to read and write in the first grade and some are in the fourth grade. I think that anchor activities will be very important and effective in a classroom where there is so much learner diversity. So there are fast and slow learners in every classroom. (ST)*

*We want students to be people who research and examine. That's why the methods in Reggio Emilia should be studied and used. Creating projects should be a part of the school, the age differences in the multigrade classes and the proximity of the villagers are something that supports the distribution of tasks in the project. (OY)*

*If you observe how much the students have improved compared to their initial level during the evaluation process, you have created the right environment. Instead of separating students by their age with sharp lines, if they have learned something new or can do something that they did not know before, even if they are older, we need to call this as progress. All alternative schools do this, they care about each and every child, I think (BS)*

As regards the "Organizational procedures" code, which is another code in the "Practice-based arrangements" category, some opinions were reported about the school administrative processes and the institutional culture within the scope of the relationship between the stakeholders. The results

indicate that some of the practice examples and communication types in various alternative school models can be adapted. Some quotations from the data related to these findings are presented below.

Quotations about the administrative processes:

*I think it is completely unnecessary to decide when and how long the students will take a break. Therefore, students should be aware that they can take a break whenever they want. I wish they were free to choose the courses like in Summerhill schools, but that is not possible due to the central authority of the Ministry of National Education. I mean there does not have to be sharp limits. If the teacher is living in a hostel in a village, the closing hours of the school can be flexible. Children should be able to get to the school at any time because the school is theirs. (NA)*

*There could be a "School Council" in the school. In this council, the votes of the teacher and the students are counted equally. Bi-weekly meetings can be arranged, for example, for anything related to the school, and decisions can be made together. This is used in Free Schools. By means of the council, students learn about democratic life by personal experience rather than just getting lectured about democracy. (DZ)*

*I know for a fact that pentatonic music is used in the transition between activities in Waldorf Schools. ...Actually, I recommend this to be used in school breaks. ...I researched about it after our Alternative Education class. It opens up perception by increasing the frequency of the alpha and beta waves in the brain. (AS)*

Quotations about in-class communication:

*In Waldorf, there is a greeting-like interaction that we call the moment of focused attention. I'm not saying that it should be copied entirely from Waldorf, but I do think that in the classroom there should be a special interaction between the teacher and each student. (FT)*

*Students should be able to express their opinions freely. When I say this, I do not mean the authority of the teacher. When I think that there are students of different ages in a class, I mean especially the younger ones to express themselves without being shy in front of the older grades. Discussion groups with children of all ages can be set up. (ST)*

### **Discussion, Conclusion and Recommendations**

Multigrade classroom teaching is a common practice, particularly in rural areas of developing countries, to ensure children's access to universal basic education. However, in developed countries, it is not always viewed as a necessity, but as a pedagogical choice (Aksoy, 2008). It is critical that teachers and pre-service teachers know and consider the pedagogical advantages of this practice,

which was born out of necessity in Turkey. The views of the primary school teacher candidates on the ability to use alternative education practices in multigrade classrooms are limited to the qualifications and perspectives of the participants. The findings obtained from the study emerged in two different categories as physical arrangements and practice-based arrangements.

The participants presented suggestions both for the inside and outside the classroom, and for the decoration and materials that can be used in terms of physical arrangements. Concerning the practice dimension, they made suggestions regarding the instructional process, the institutional functioning of the school, and the type of communication in the classroom, depending on whether there are only one or two teachers in the school. Examining all the findings, it is clear that the existing practices in different alternative school models are transferred or adapted. It is seen that these schools are Montessori, Waldorf, Summerhill, Free schools, Tolstoy school, Reggio Emilia Inspired schools and Magnet schools. Considering the diversity of school models inspired by the suggestions offered by the participants, it shows that the theoretical knowledge of pre-service teachers who will take an active role in schools in the future is sufficient.

It is seen that all of the participants' views on physical arrangements are related to Montessori's concept of "designed environment". Montessori schools have an organized environment equipped with materials, and this environment is planned to best address the needs of the child (Yıldız, 2021). In this pre-prepared environment, freedom of movement and activity is recognized so that the child can develop him(her)self (Montessori, 1995). Another type of school in which the environment has a key role, as in Montessori schools, is the Reggio Emilia Inspired School. In this approach, there are three educators in the classroom as the teacher, child, and environment (Kayır, 2015). The prepared environment gives important clues about the importance of "creating the order", which is also the first step of classroom management. Classroom management involves the strategies and behaviors used by the teacher to maintain the order in the classroom (Burden, 1995). The order to be preserved must be created by the teacher; which requires making the necessary physical arrangements in the classroom, creating classroom rules and norms, and thus essentially making the classroom ready for students. Regarding the creation of order in multigrade classrooms, suggestions were made about designing environments where students can choose freely and are at the center of the learning process, and where they can move freely in the classroom, unlike the traditional classroom design.

The participants, who made suggestions on the effective use of all the spaces in the classroom, presented some examples for the use of "corner and center" in the classroom, and stated that due to the nature of the multigrade classrooms, mixed-aged children in the classroom should be able to benefit from that by interacting with each other at the same time, unlike the traditional classroom environment. Pattillo and Vaughan (1992) define learning centers as an environment that

offers the opportunity to learn through concrete experiences with real objects and where student choices are valid. The centers have two types of practices: learning-oriented and interest-oriented. While learning centers (e.g. science, language, mathematics centers) are used for repetition of certain courses or for more in-depth learning, students are allowed to explore areas of interest (e.g. arts, sports, drama) in the centers of interest (Tomlinson, 2014). For the learning centers to be used effectively, the teacher should also consider the size of the class, the number of children in the classroom, and the interests and needs of the children when arranging the learning centers (Orcan Kaçan et al., 2021). Having these six learning centers in pre-school education classrooms in Turkey is recommended: a group study center, a book center, a music center, a dramatic play center, an art center, and a science center (MEB, 2013). Studies show that in line with these suggestions, teachers include these centers in their pre-school classes. Orcan Kaçan et al. (2021) found that the majority of preschool teachers included group works, books, music, dramatic plays and science centers in their classes, and determined that the center they put the weakest emphasis was a temporary learning center. This recommendation offered by the Ministry of National Education (MEB) is not implemented at the primary school level, which is the continuation of pre-school education and corresponds to the age period of 6-10, and primary school classes are organized with traditional approaches in the mainstream schools of Turkey. Avcı and Yüksel (2014), in their books in which they describe differentiated teaching practices, include a wide range of materials, such as library, arts, board games, exploration, drama, reading, writing, science, computer, mathematics, and language that will appeal to student interests and learning styles. They also stress the importance of designing the centers in the classroom. Various suggestions are made regarding the location or usage style of the teacher's desk, which is located in the traditional classroom layout and belongs only to the teacher and represents the authority in the seating arrangement. The most appropriate spot for the teacher's desk is at the back of the classroom, as revealed by numerous studies (Krych, 2015) which was once located on a physically isolated, elevated platform in the center of the classroom, indicating the teacher's status relative to the student and the direction of the information flow (Proshansky & Wolfe, 1974). There is also an alternative theory that getting rid of the teacher's desk altogether is the best option. As in many alternative education environments (e.g. Montessori and Waldorf), furniture or items in learning environments should be student-oriented, and all the items in the classroom should be tailored to the student.

As for the physical arrangements outside the classroom, the participants, who offered their opinions on the effective use of the school building and the school environment in the education process, pointed out the advantages of being able to involve the family in school activities by referring to the advantages of the multigrade classrooms with insufficient facilities, being located in rural districts far from the city center. Research has shown that teachers in village schools have problems such as transportation problems, school budget problems, lack of kindergarten classes,

poverty and language problems (see Aksoy, 2008, 2010; Bingöl, 2002; Çınkır, 2010; Dursun, 2006; Engin, 2018; Erbaş and Karakaş, 2021; Erdem, Kamacı, & Aydemir, 2005; Sağ, 2010; Sidat & Bayar, 2018; Şahin, 2003). In addition to these problems, considering the importance of nature in alternative education practices that stand out as good examples in education, small settlements such as villages are unique learning environments. J. J. Rousseau, who has an important place in the field of alternative education, advocated educating the child with a naturalist approach without interfering with the natural environment in which he or she will be raised. Matsuoka (2010), on the other hand, states that schools with trees, bushes and grass areas have more successful students than schools built with artificial materials and with flat and empty floors in city centers. Waldorf schools aim their learners to be in harmony with the nature by instilling an awareness and love of nature in them (Koca & Ünal, 2018), while in Reggio Emilia Inspired schools, large window designs are used to illuminate learning environments in natural ways and to allow learners to observe their natural environments (Al, 2014). Considering these factors in alternative education environments, the participants further pointed out that it is easier to include the natural areas (woods, forests, streams, fields, hills, etc.) in the villages in the education processes and to plan them in out-of-class activities, compared to the classrooms in the city center due to problems in transportation, limited space, and security.

Concerning the decoration and materials that appear in physical arrangements, the roles of primary school teachers working in multigrade classrooms emerged as the key dimensions. The participants, who reported that these teacher roles make them free in a sense, especially stressed the importance of the color of the walls and the items that can be used in the school. The significance of the material elements in the Waldorf and Reggio Emilia inspired schools (e.g. carpet, sofa corner, shoe rack, mirror) were particularly highlighted. Burden (1995) states that the physical appearance of the school building and classrooms should be suitable for students' physiological needs and teaching activities. Considering that the multigrade classrooms are single or two-grade, the participants mentioned that all areas of the school (e.g. halls, empty room/classroom, school walls) can be used effectively to exhibit the activities performed by the students.

Another category in which the findings are concentrated is the practice-based arrangements, in which the mixed-age practice in the classroom emerges as the critical basis for many regulations. Although mixed-age classes are usually created out of administrative necessity, they may be created for pedagogical reasons in some schools (Berry, 2018). In the current study, the participants stated that it is necessary to evaluate the mixed-age practice in the multigrade classrooms arising from a pedagogical need in Turkey. The participants, who put the student in the center and emphasized the importance of the discovery learning strategy, also drew attention to the necessity of instructional differentiation. They stated that students who learn at a similar learning rate (slow, fast or average) despite being at different grade levels should not be separated from each other with strict lines on the basis of grade level. Şahin (2014) supports this finding of the study by saying that “it is very difficult

to explain and understand the philosophy and logic on which an education system is based, which ignores competence and progress at its own pace, and uses only chronological age as the only factor in placing students in classes” (p. 26). It should also be taken into account that this teaching method should not be used exclusively for multigrade classes, and that there is a need to differentiate teaching in independent classes created according to age level.

Regarding the institutional functioning of the school, the suggestions mostly focused on the time allocated for the school. The suggestions made regarding the duration of classes and breaks, starting and ending times are aimed at making the school a freer environment. A similar suggestion was made by proposing a "school council". Their emphasis on the need for students to express their opinions on all issues related to the instruction processes shows the importance of children's right to participate. A statistically significant relationship was identified between children's use of their right to participate and being encouraged to express their thoughts, and children's liking for school, academic performance, health, life satisfaction and happiness levels (de Róiste et al., 2012). It was seen that the participants expressed their opinions about the importance of in-class communication. In this context, the findings that emerged that teacher-student interaction should be private also mentioned the importance of the teacher's role as a classroom guide. In addition, the participants stated that there should be a libertarian (moving around freely in the classroom, expressing opinions etc.), and collaborative environment in the classroom and stated that the active participation of the students in the decisions taken about the school and their classes should be ensured. Further suggestions were made for classroom teachers to establish effective communication with families and involve them in school activities. Regarding the use of music at school, some suggestions were made that music should be listened to at school, during breaks or during lessons. Waldorf schools have practices aiming to use arts (especially eurythmy and pentatonic music) effectively in the class, and the participants stated that these can be transferred to multigrade classes.

Karasar and Platteau (1998) state that the multigrade class practices in the workshops held by the Ministry of National Education and in state programs are perceived as a "glitch" of the current system (cited in Aksoy, 2008), and this point of view has not changed over time. The research published on the disadvantages of the multigrade teaching, such as the poverty of the people of the region, linguistic problems, school budget, and the burden of the teachers' teaching responsibilities as well as their administrative workload should also inform the society and teachers about the pedagogical benefits of this practice. The problems experienced by the multigrade students during the transported education should also be taken into account when considering the current status of the schools closed by citing the disadvantages listed above. According to the MEB statistics for 2021, although the compulsory formal education was increased to 12 years after the 4+4+4 regulation, the schooling rates are far from being satisfactory. Most notably, the primary school enrollment rate has declined from 98.86 percent to 93.23 percent in the last nine years. As such, a significant part of the

Eastern Anatolia, Southeastern Anatolia, Central and Eastern Black Sea provinces are well below the national average, especially in terms of preschool and primary school enrollment (Eğitim Sen, 2021). The fact that the multigrade class teaching was ended in these regions was certainly one of the reasons for this. Köksal (2005) suggests that transferring teachers might be a better solution, rather than transferring tens of thousands of students and closing multigrade classrooms.

The Council of Higher Education (CoHE) has revised 25 undergraduate teacher education programs as of the 2018-2019 academic year, which has resulted in some important changes in the primary school teacher curriculum. As part of these changes, a required course named "Teaching in Multigrade Classes" has been removed from the program (CoHE, 2018). It is an important shortcoming that a course in which pedagogical content about the multigrade class practice, which still has a place in the education system and benefited by tens of thousands of students, has been removed from the curriculum. To overcome this deficiency, the subject of teaching in multigrade classes can be integrated into the elective course called "Alternative Education Models in Primary Schools" in the new undergraduate program. It should be noted that only a few weeks of multigrade classes can be taught as part of the entire semester within the relevant elective course and there may be differences in the determination of the content of the lecturers according to their fields of expertise. The fact that this is an elective course is another indication that it cannot be taken by all the undergraduate students. Therefore, it is recommended that a course that pre-service teachers can learn about teaching in multigrade classes should be included in the curriculum again, as in the previous curriculum. Thus, with this course, the students will be taught about the advantages and disadvantages of teaching in multigrade classrooms, instructional techniques, assessment and evaluation, differentiated instruction, grouping, and self-study strategies. Thus, it can be ensured that pre-service teachers understand the characteristics of the multigrade class and the difficulties of the practice in the complex environment where it takes place dialectically (Bonnar, & Bodkar, 1991; Ilyenkov, 1974; Nelson, & Kim, 2001, as cited in Sağ, 2010).

In addition to the alternative education practices mentioned in this study, pre-service teachers should also be informed about many other types of alternative education. Apart from these suggestions that can be applied in the pre-service education, training and support can be provided for the teachers who have started to serve and who work in the multigrade classrooms, during the in-service training phase to carry out administrative work. It is also known that the curriculum in multigrade classes is the same as the curricula used in independent classes organized by the Ministry of National Education, which shows that the curriculum used in multigrade classes has clearly separated content and outcomes for each grade level. Therefore, it is crucial to organize new curricula that are specifically prepared for multigrade classes where students from different grade levels have the opportunity to learn together and from each other in a single classroom to help them benefit from the advantages of the mixed-age education.

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