



Problems and Solution Suggestions in Mobile Education

Hulya Aldemir Yalcin, Zeynep Carlioglu, Ozge Sevinc

28 Haziran Ortaokulu

1. INTRODUCTION

Life is constantly changing. Therefore, every country has to provide its citizens with the knowledge and skills they need to sustain their lives. To do this, it has to increase the quality of education and ensure that all citizens benefit from educational opportunities equally. In this context, every citizen has to attend basic education (primary education), and the state has to provide this. There are different steps and practices taken in this direction in our country. One of these is "transported education". Transported education is a system that is considered appropriate and implemented for those who cannot access education.

In this part of the research, the status of the problem, the purpose of the research, its importance, assumptions, limitations and definitions are included.

1.1. Problem Status

The daily transportation of students from schools located in sparsely populated and scattered settlements to a centrally located school is called "transported education". The most important goal of transported education is to spread education throughout the country and ensure equality of opportunity and possibilities (Tuzcu, 2021, 114).

Reasons for mobile training are as follows:

- The villages are very scattered.
- The decrease in the number of students in villages due to migration from villages to cities.
- The decrease in the number of students in villages due to the decrease in birth rates.
- The number of village schools with combined classes decreased.

In some settlements, transportation education can be provided until a solution is found due to natural disasters such as earthquakes, fires, floods, and avalanches. Transportation education is not applied to students in regions where transportation is not suitable and takes a long time due to reasons such as poor village roads and roads being closed due to snow in the winter, since boarding education is provided. It is essential that the number of primary school students is less than 10, there are not enough classrooms for general secondary school or imam-hatip secondary school students in the village and the total number of students in these classrooms is less than 60, and the distance of the village transportation center to the primary school where the students will be transported is at least 2 km according to the climate conditions and road safety (MEB, 2014).

As seen in Table 1.2, 1,279,015 students are being transported to 25,067 central schools in the 2020-2021 academic year. There is no data on the number of secondary and special education schools whose students are transported. 924,768 teachers work in schools located in transportation centers.

When Table 1.1 and Table 1.2 are compared, the number of schools and students moving has decreased in the five-year period. The number of schools that are transportation centers and the number of teachers working in these schools has increased. While the number of students moving has decreased, the increase in the number of teachers working in transportation center schools is thought-provoking.

After examining the situation of mobile education in Turkey, it is thought that it would be useful to examine the situation at the local level. In this context, mobile education was examined numerically in the 5-year period from 2015 to 2020 in Buldan district of Denizli province.

Table 1.3 . *Transportation Education in Buldan District of Denizli Province (2015-2016 Academic Year)*

Okul Türü ve Düzeyi	Taşınan	Taşınan	Merkez	Öğretmen
	Okul Sayısı	Öğrenci Sayısı	Okul Sayısı	Sayısı
İlkokul	26	234	6	72
Ortaokul	29	273	6	74
Lise	29	528	4	158
Özel Eğitim	-	-	-	-
Toplam	84	1.035	16	304

Source: Buldan District National Education Directorate.

Table 1.3 shows that 84 schools and 1035 students were transported to 16 transportation centers in the 2015-2016 academic year in Buldan district. While the number of students transported at primary and secondary school levels is similar, it is considerably higher at high school level. There is no transportation yet for special education (disabled) students.

Table 1.4. *Transportation Education in Buldan District of Denizli Province (2020-2021 Academic Year)*

Okul Türü ve Düzeyi	Taşınan	Taşınan	Merkez	Öğretmen
	Okul Sayısı	Öğrenci Sayısı	Okul Sayısı	Sayısı
İlkokul	29	215	6	69
Ortaokul	29	229	6	70
Lise	29	371	4	138
Özel Eğitim	13	17	4	17
Toplam	100	832	20	294

Source: Buldan District National Education Directorate.

In the 2020-2021 academic year in Buldan district, 832 students from 100 schools are transported to 20 centrally located schools. 294 teachers work in schools with transportation centers.

When Table 1.3 and Table 1.4 are compared, the number of schools that were moved increased but the number of students that were moved decreased in the five-year period. The reason for this may be migration from villages to cities, decrease in birth rates, preference of other schools for secondary education, etc. Due to these changes, the subject was chosen to reveal the problems experienced in transportation education and solution suggestions according to the opinions of school administrators, teachers and students in Buldan district.

2. THEORETICAL FRAMEWORK AND RELATED RESEARCH

In this section, information in the literature on transported education is compiled and the results of research conducted in previous years on transported education are given.

2.1. *Equality of Opportunity and Possibility in Education*

People are born with some basic rights and freedoms. These are rights granted to people simply because they are "human"; they are defined as rights that all humanity can benefit from without any discrimination. People have the right to live their freedoms without violating the freedoms of others. Among these rights and freedoms that people use in the social sphere is the right to education. Certain studies are carried out by legislators so that people can benefit from their rights to education, which are restricted due to the different conditions they are in. In order to ensure the sustainability of people's rights to education and to ensure equality of opportunity and opportunity in education, people should be able to access educational resources. Providing this accessibility equally through the state is called equality of opportunity and opportunity. If a person cannot access these opportunities equally due to environmental factors such as social, economic and cultural factors, it is not possible to talk about equality of opportunity in education. The right to education protected in the Constitution includes equality of opportunity and opportunity. Therefore, people who do not have equality of opportunity in education should have the right to request this right from the state (Taşdemir, 2010, p.47). The rights that people have from birth are protected by both national laws and international agreements.

Article 42 of the "Social Rights and Duties" section of the 3rd Section of the Constitution of the Republic of Turkey, under the title of "Right and Duty to Education and Learning", states that no individual can be deprived of the right to education regardless of their gender, religious belief, color, language,

or race, that primary education is compulsory for girls and boys and that it will be provided free of charge through the state. With this article in the Constitution, the right to education of every child in Turkey, regardless of gender, at the primary school age, is secured by the highest law and has an important place in terms of ensuring equality of opportunity and means.

This right, which is guaranteed by the Constitution, is also guaranteed in the National Education Fundamental Law. The National Education Fundamental Law No. 1739, dated 1973, mentions the measures to be taken to ensure that individuals have equal opportunities and possibilities in education and that they can continue their education up to the highest level. It also mentions the special measures to be taken for the education of students with special needs.

In the Primary Education and Education Law No. 222 dated 1961, the statement that primary education is compulsory for girls and boys of the age group and will be provided free of charge by the state is included in Article 2. In addition, in cases where the conditions of the students are unfavorable or the population is low, the provision that education should be provided without interruption through transportation or regional boarding schools or mobile schools is stated in Article 9 (MEB, 2018b). The content of the UN Convention on the Rights of the Child, to which many nations are parties, is based on the fact that the states that are parties to the convention make primary education free and compulsory for all girls and boys (Article 28), (UNICEF, 2018a). Again, the Convention emphasizes that every individual has the right to education and that primary education should be provided free of charge and that this level of education should be compulsory (Article 26), (UNICEF, 2018b).

Turkey implements certain practices for students who do not have equal opportunities and possibilities, both within the framework of the provisions set forth in the Constitution and the international agreements to which it is a party. One of these practices, transportation education, has been implemented since 1989.

2.2. Transported Education

Transportation of education is the transportation of primary and secondary school students to a centrally located school every day with appropriate transportation vehicles in order to continue their education and training due to various reasons (MEB, 2014). Transportation education is carried out by transporting students in regions where education and training cannot be continued due to scattered or small campus population, insufficient school buildings or personnel, to schools designated as transportation centers in order to continue their right to education. In addition, in cases where education cannot be provided by transportation due to environmental conditions of the region, climate conditions, road conditions, economic reasons, education and training are provided in Regional Boarding Schools (YBO) or Primary Education Schools with Boarding Houses (PIO) that are deemed appropriate to be opened by the provincial and district national education directorates (Yalçın, 2006, p.54).

When Turkey's geographical location is taken into consideration, it is seen that the settlements are scattered and have a small population. It becomes difficult to provide services to students living in these regions, there are problems in providing school buildings, equipment, and educational personnel, and schools that are opened are closed due to insufficient students. For this reason, transportation education has become indispensable for Turkey in order to increase the quality of education, to ensure equal opportunities and possibilities in education, and to reduce the cost of education.

In the "Out of School Children" Report published by UNICEF in 2012, the main factors for the children being out of education in Turkey were shown as school-related limitations and administrative obstacles. These obstacles included administrative obstacles such as registration, monitoring of school attendance, and age limits for education. It was shown that one of the biggest obstacles for students to continue school was the long distance between school and home, and that students living in rural areas had limited options for transportation or boarding education. In addition, exposure to negative situations such as physical and emotional violence and peer bullying in schools was also presented as a factor in children being out of school. Other issues such as the number of students per classroom, which varies according to provinces and regions, dual education (morning-afternoon) and the physical structures of schools that are inadequate to meet the needs of students with special needs constitute obstacles to ensuring sustainability in education (Karakütük, 1998, p.16).

In regions where transportation education is deemed appropriate, there are certain studies that need to be done before implementation and that need to be followed up during the implementation process. The studies that need to be done before starting transportation education are as follows: Conducting a study on the population information, economic and social structure, transportation conditions, feasibility studies in terms of education, determining certain standards and rules regarding education, determining the campus and routes where transportation center schools will provide service (Karakütük, 1998, p.16).

2.3. Reasons for Transported Education

The reasons for transportation education can be listed as follows: It can be expressed as ensuring the sustainability of the education of students living in regions with unfavorable conditions in line with the principle of equality of opportunity and possibility without interruption. In the regulation published in the Journal of Announcements (2000), it is explained as ensuring that the quality of education is increased by transporting the children in the region where there is no primary school due to regional conditions or whose closure is deemed appropriate or where there is a combined class education practice to the determined central schools on a daily basis. Karakütük (1998, p.17) states in his study that the necessity of transportation education in Turkey has emerged due to reasons such as the geographical and economic structure of the country, labor force availability, excessive internal migration, and the scattered or small populations of the settlements. He states that it is due to the aim of increasing the quality of education by taking into consideration the equality of opportunity and possibility in education in accordance with the Constitution and other international agreements to which it is a party.

CHAPTER FOUR: FINDINGS AND COMMENTS

This section includes findings and comments regarding the analysis of the opinions obtained through the interview form.

4.1. Findings Regarding Sub-Problems

The opinions of school administrators regarding school-family associations were analyzed in seven sub-problems and are given below, respectively.

4.1.1. Findings Regarding the First Sub-Problem

The first sub-problem of the research is: "What are the opinions on why there is a need for transported education?" The data in response to this sub-problem are shown in Table 4.1.

Table 4.1. *Opinions on the Need for Transported Education*

Tema	f	%
	19 (H1, H2, H4, H6, Ö1, Ö2, Ö3, Ö4, Ö5,	79,17
Taşınmalı eğitim gereklidir	Ö6, Ö7, Ö9, Ö10, Ö11, Ö12, Y1, Y2, Y4, Y6)	
	2 (H5, Y5)	8,33
Birleştirilmiş sınıf yerine bağımsız sınıfta eğitime fırsat vermektedir.		
	3 (H3, Ö8, Y3)	12,50
Taşıma eğitim olmamalıdır		

As seen in Table 4.1, the themes are classified as "Transported education is necessary", "It provides an opportunity for education in an independent class instead of a combined class" and "Transported education should not be".

Those who stated that "transported education is necessary" regarding the need for transported education said the following.

I have been a teacher for 22 years, I have taught in both combined and independent classes. The benefits of these are definitely not directly discussed, the children who receive combined and normal education do not have equal rights. Because there is absolutely no justice in having four classes, three classes, five classes together and in an independent class. I think transported education should definitely continue and it is beneficial. (Interviewer: H1).

Transported education provides equal opportunities. It can increase the quality of education by helping children reach schools. It can cause education to become widespread. These are my thoughts (Interviewer: H2).

Students who will participate in transported education receive more effective education under better conditions in educational institutions that are more central and have more facilities. Therefore, I think it is very necessary for the development of students. (Interviewer: H4).

In these conditions, transportation education is mandatory for all children to benefit from education (Interviewer: H6).

Transportation-based education is necessary. Because if it were not for that, we would walk to school and be late for school. (Interviewer: T1).

The fact that educational services do not charge a fee is good for people with low economic means (Interviewer: T2).

There should be transportation education. (Interviewer: T3).

It is necessary. (Interviewer: T4).

I think transported education is very good. (Interviewer: T5).

Transported education is necessary. (Interviewer: T6).

There are not enough teachers in the villages, so mobile education is necessary. (Interviewer: T7).

Transported education is necessary. (Interviewer: T9).

Transportation is required. (Interviewer: S10).

I think mobile education is necessary. (Interviewer: T11).

Transported education is necessary. (Interviewer: T12).

Transported education is a necessary education. I do not believe that combined classes will be sufficient. I support transported education in a single common point for villages with small populations. (Interviewer: Y1).

Regarding transportation education, I think our students here are very tired during the commute. It became necessary with the abolition of village schools, but if the primary schools there continued more actively, it seems like the students would be less tired. (Interviewer: Y2).

I think that students should be moved to small settlements where the number of students is insufficient. (Interviewer: Y4).

I think that transported education is necessary so that all children can benefit from education under equal conditions. (Interviewer: Y6).

Those who expressed their views on the need for transported education by saying, "It provides an opportunity for education in an independent classroom instead of a combined classroom." said the following.

Transported education is necessary to avoid combined classes. (Interviewer: H5).

In my opinion, transportation education is necessary so that students in small settlements can study in better schools and students studying in combined classes can receive more qualified education in independent classes. (Interviewer: Y5).

on the need for transported education by saying, "There should be no transported education," said the following.

There should be no transportation for education; every child should receive education in their own village. (Interviewer: H3).

Transported education should not be necessary for young children. There should be schools in villages. (Interviewer: T8).

I find education with transportation unnecessary. Every child should receive education in their own environment. Students spend at least an hour coming and going every day and have to get up early to catch the vehicle. (Interviewer: Y3).

4.1.2. Findings Regarding the Second Sub-Problem

The second sub-problem of the research is: "What are their views on the problems experienced in transportation?" The data in response to this sub-problem are shown in Table 4.2 in the form of themes.

Table 4.2. Opinions on Problems in Transportation Services in Transported Education

Tema	f	%
	8 (H1, H4, Ö3, Ö4, Ö8, Ö9, Ö11, Ö12)	32,00
Araçlar eski	7 (H1,H2, H3, H5, Ö7, Y3, Y5)	28,00
Sürücüler bilinçsiz	5 (H6, Ö6, Y1,Y4, Y6)	20,00
Hizmetler yeterli değil, geliştirilmeli	5 (Ö1, Ö2, Ö5, Ö1,0 Y2)	20,00
Sorun yok		

The problems in transportation services in transported education are classified under themes and the opinions of managers, teachers and students are given in Table 4.2. As seen in this table, the problems are given under the themes of "The vehicles are old", "The drivers are unconscious", "The services are not sufficient and should be improved" and "There is no problem".

Regarding the problems in transportation services in transported education, those who stated that "The vehicles are old" said the following:

Likewise, I have been working in transportation schools for 20 years. During this period, there were times when I worked as a teacher and administrator. The biggest problem in transportation education is that the vehicles are old (Interviewer: H1).

In transportation education, it would be more appropriate for each student to be transported with students at their own level. Transportation services should be provided with safe vehicles and in accordance with the rules to transport students in a healthy manner. (Interviewer: H4).

The vehicle constantly breaks down. (Interviewer: T3).

There are few seats and I usually have to stand. (Interviewer: T4).

The vehicles are very old and worn out. (Interviewer: S8).

Transported education is necessary, but the vehicles are old. (Interviewer: S9).

In transported education, some seats do not have seat belts in transportation services, and students do not wear the seat belts that do. (Interviewer: T11).

The car is old, there is no seat back. (Interviewer: S12).

“drivers are unconscious” regarding the problems in transportation services in transportation education said the following:

I think that unconscious drivers do transportation, I mean, I definitely think that drivers (I will answer the next question in the future) should definitely undergo training. (Interviewer: H1).

Children may have some problems in transportation. Since they are the same age, yes, we said equal opportunities in education, but sometimes it can also bring negative examples. They can be negatively affected by each other, we need to mention this, because swearing and fighting are things we observe. Drivers can be insensitive to these (Interviewer: H2).

People who do transportation work are not educated in this regard. They can sometimes be offensive, especially to children, with the way they behave and talk to them. They do not approach children like a teacher. (Interviewer: H3).

Drivers should be trained. (Interviewer: H5).

Drivers should be inspected in transported education. Suitable drivers should be found. (Interviewer: T7).

Although transportation is tried to be done within the possibilities, the vehicle owners who provide transportation are not satisfied. They say that they cannot earn enough income and therefore they do not care about transportation. (Interviewer: Y3).

I believe that the main reasons for this education system are the lack of control over whether the drivers are suitable for the job, the inadequacy of the vehicles, and the indiscipline among the students in the vehicles. (Interviewer: Y5).

Regarding the problems in transportation services in transported education, those who stated that “The services are not sufficient and need to be improved” said the following:

Current transportation services are not sufficient and should be improved. (Interviewer: H6).

It would be better if the means of transportation comes close to the house. (Interviewer: S6).

I believe that in transportation education, students should be transported easily and comfortably. Because their success in their lessons and being ready for the lesson are related to this. (Interviewer: Y1).

In some regions, children can be transported to more distant regions instead of the nearest transportation center. I think this should be prevented. It needs to be improved. (Interviewer: Y4).

I do not find the current transportation services sufficient. I think they need to be improved. (Interviewer: Y6).

Regarding the problems in transportation services in transported education, those who stated that *there was no problem* said the following:

Transportation services are important in transportation-based education. Because without these vehicles, our work would be very difficult. (Interviewer: T1).

I think it is safe and children go to school more safely thanks to these vehicles. (Interviewer: T2).

I am very pleased with the services in mobile education. (Interviewer: T5).

5. DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this section, the data collected and the analyses made are discussed and the suggestions developed in parallel with the discussions are included.

5.1. Discussion and Conclusion

This section includes the discussion of the data collected and the analyses made, as well as the suggestions developed in parallel with the discussions.

The most emphasized issue by administrators, teachers and students regarding whether or not transported education is necessary is that transported education is necessary. It has been stated that transported education provides the opportunity to receive education in independent classes, and there are also administrators, teachers and students, albeit very few, who think that transported education should not exist. The study conducted by Taşdemir (2010) also concluded that transported education is necessary and that it is an important step towards providing equality of opportunity and possibility. In other words, the results of this research and the results of Taşdemir's research are similar.

The main problems experienced in transported education transportation services are the old vehicles and the unconsciousness of the drivers. There are also those who do not see any problems. The fact that the vehicles are old and the drivers are unconscious is similar to the results of the studies conducted by Ülker (2009) and Şimşek and Büyükkıdık (2017). The fact that the problems still continue shows that these situations should be taken into consideration in the auction (tender) process.

In the solution suggestions regarding the problems experienced in the transportation process in transportation education, the most frequently mentioned solution suggestion is “vehicles should be suitable and well-maintained”. In addition, suggestions such as increasing inspections, abandoning transportation education and training drivers have also been put forward. The suggestion that “transportation education should be abandoned” from the

research findings was also expressed in the study conducted by Yalçın (2006, p. 59). It is consistent with the finding that it is necessary to reveal the extent to which opportunity and quality are provided in education and that the situation should be evaluated accordingly. In addition, it is seen that similar findings and suggestions regarding the training of drivers are also emphasized in the study of Çelik (2019). In other words, the results of the studies conducted at different times and in different provinces are similar.

The main problem experienced in lunches in transported education is that "the food is not liked by the children, it is insufficient and of poor quality". It can be seen that there are also problems with the cafeteria and presentation. However, the study conducted by Taşdemir (2010) revealed that the food and cafeteria services are sufficient. In other words, the results of this study and the study conducted by Taşdemir are different from each other.

The main suggestion for solving the problems experienced with lunches in transported education was "taking students' opinions on the meal menus", followed by suggestions for improving the quality of food and presentation and ensuring control and order.

In transportation education, the main problems originating from transportation center schools are the physical, equipment, equipment and tool inadequacies, followed by the early and late arrival and departure of the vehicles. As stated in the study of Uslu (2017), the research findings that are similar to the finding that transportation center schools have inadequate physical and equipment are also similar to the findings of the study of Şimşek and Büyükkıdık (2017). This situation also causes negativities in the perspectives of the transportation students and their parents towards transportation education.

The most important solution suggestion for the problems originating from transportation center schools in transportation education is the suggestion that transportation center schools should be strengthened physically, in terms of equipment and personnel. This is followed by the suggestions that transportation center students should be provided with more comfortable transportation opportunities, separate funds should be sent to transportation center schools, cooperation between stakeholders should be increased and transportation students should be taken to adaptation training.

5.2. Recommendations

The following studies can be carried out to ensure that transported education is functional and provides equality of opportunity and possibilities:

- Schools with adequate physical environment and educational equipment should be selected as transportation center schools.
- Schools that are in the middle of villages close to each other, in other words, schools that are easily accessible, should be selected as transportation hub schools.
- Vehicles transporting students must be new and have trained drivers. Transportation should not be done with old vehicles and unconscious drivers.
- The problems of vehicles being old and drivers being unconscious have been revealed both in this study and in studies conducted by others. In other words, similar problems have been revealed in studies conducted in different provinces and different years. Different studies should be conducted to determine why this is the case. There are occasional discussions in the education world about the inability to find entrepreneurs to provide transportation, especially in villages that are very scattered and very far from each other. Not everything may be as it is written on paper. If real data regarding the realities of the country is to be obtained, it is necessary to go to the field and collect data from the field.
- Meal menus should be determined with the participation of students, and hot and quality meals should be served.
- Schools that are transportation centers should be supported in terms of money, equipment and materials.