

## Investigation of School Principals' Views on Financial Sustainability of Primary Schools Using Delphi Technique

Demirbilek, Mesut<sup>1</sup>  <https://orcid.org/0000-0002-7570-7807>

### ABSTRACT

#### Received

29.01.2022

#### Accepted

15.04.2022

#### Key Words

*School finance,  
Sustainability,  
School budget,  
School principals,  
Financial  
management of  
schools*

The need for a sustainable financing system for schools in Turkey is increasing day by day due to the increase in costs. This study, which was carried out with a phenomenological design, aims to reveal the opinions of principals working in public primary schools on the financial sustainability of schools by using the Delphi technique. In this context, the research was carried out on the sample of fifteen school principals working in public primary schools. In the research process, to ensure that schools can be managed financially better, first of all, the suggestions and opinions of the school principals were taken, and then the second application was made and the collected suggestions were presented to the participating school principals for approval. Then, the statistical values of the answers obtained were examined and the items on which they were compromised were determined. In this direction, according to the results obtained in the research, the participating school principals suggested realizing the employment of school assistants and servants at the ministry level, transitioning to a school-based budget system with the financial support to be provided to schools by taking into account various conditions (such as the number of students, socio-economic status, number of branches, physical equipment). In addition, school principals suggested that local governments should be more effective in financing education and allocating budgets, tax exemptions for school-related expenditures, or tax and insurance reductions in personnel employment. At the same time, the school principals suggested that the ministry employ personnel for the technical, maintenance and repair works of the schools, charge the parents of the students during registration for the schools to generate financial income, and send the central allocation within this framework by analyzing the needs of the schools.

---

<sup>1</sup>Mesut Demirbilek, Ministry Of National Education, demirbilekmesut@gmail.com

## INTRODUCTION

Financial sustainability, in terms of an organization, is the ability to ensure the continuity of the organization in the long term by combining investment and financial resources and to create value for the organization, and it includes the combination of various financial variables in the relationship that connects the value of the business with organizational continuity (Zabolotnyy & Wasilewski, 2019). According to Leon (2001), the basic principles that affect the financial sustainability of an organization are; (1) gross earnings, including donations, aids, grants, and loans, (2) direct costs covering all direct expenditures related to the project or area of expenditure, (3) overhead costs to perform basic administrative functions, identified as operating expenses, and (4) the balance including the corporate profit and loss account and financial results. Lysiak et al. (2020) consider financial sustainability as the continuous fulfillment of the responsibilities of the administrations to serve and the achievement of the financial situation to a satisfactory level in the short-long term. Barbera et al. (2017), on the other hand, evaluate financial sustainability in two dimensions (active and passive sustainability) and conceptualize passive sustainability as the ability to respond to crises and return to the original state, and active sustainability as the ability to anticipate and cope with organizational threats and the creation of socio-economic development and new opportunities.

As in the financial processes in businesses, schools also have to maintain their financial sustainability under their purpose of existence. Thus, according to Hoşgörür and Arslan (2014), sufficient financial resources are not allocated especially to state-owned educational organizations in Turkey, causing negativities in achieving educational goals, and to solve these problems, schools and school administrations strive to create their own financial resources through activities such as renting school gardens and facilities, receiving donations, and traveling or bazaar organizations, etc. Local authorities play an important role in financing compulsory education in many European Union countries and this situation occurs at different local authority levels in each country. For example, in northern countries and the United Kingdom, local authorities determine the financing of schools, the budget, and the amount of funds to be used, while using the taxes they have collected to finance primary and secondary education. Local authorities in Germany, France, Italy, Spain, and Austria are responsible for the construction of schools and various operational tasks but are not responsible for teachers' salaries (Werner & Shah, 2006). However, in most European countries excluding Iceland, teachers' salaries are mostly paid at the central government level, while in countries such as the Czech Republic, France, Greece, and Austria, teachers' salaries and resource transfer are realized, albeit partially, at both central and regional authority levels. For non-teaching staff, on the other hand, salary responsibility is left to local, administrative, and regional authorities in most European countries (except Hungary), as in Belgium, Ireland, Spain, Croatia, Italy, Malta, the Netherlands, Portugal, Slovenia, and Liechtenstein (Eurydice, 2014).

Additionally, in countries such as Switzerland and Belgium, different local authorities may apply different types of school funding, for example in the Swiss canton of Schwyz the parents of students studying in secondary schools are charged tuition fees, while in the canton of Zurich such a fee is not charged. Again, in the canton of Schwyz, high salaries are offered to increase the quality of teachers at the basic education level and to recruit qualified teachers, while there is no such practice in the canton of Zurich (Werner & Shah, 2006). However, the purchase and execution of a variety of operational goods and services (such as stationery, books, teaching materials, repairs, electricity, and small-scale maintenance) take place in

more than two-thirds of European countries through cooperation at both central and local authority levels. This situation occurs in the Czech Republic, France, and Romania at three different levels of authority (central, regional, and provincial), while in Belgium, Ireland, Spain, Malta, the Netherlands, and Liechtenstein, the transfer of funds to schools for operational implementation is mostly from the central budget. In Austria, Croatia, and Iceland, the transfer of funds in basic education is left entirely to local authorities. Again, in countries such as Lithuania, various demands such as the repair of schools and the financing of teaching materials in countries such as Romania can be met with local taxes (Eurydice, 2014).

In the USA, the federal government, state, and local governments have a say in the financing of education, while the federal government covers eight percent of the school financing and the remaining financing needs are met by the states and local governments (NCES, 2021; U.S. Department of Education, 2021). In particular, states allocate some of their revenues from sales and taxes to the financing of schools (National Conference of State Legislatures [NCSL], 2021). However, local governments also allocate a determined percentage of their income from property taxes or donations to the financing of education (Public Broadcasting Service [PBS], 2008).

In the European, various tax and other revenues obtained by local and regional authorities in 27 European countries are used to obtain the entire financing of schools, while in 17 European countries, these revenues are used for limited school financing. For example, in the Scandinavian countries, Bulgaria, Estonia, and the United Kingdom, this type of income is used for whole school financing, while in Lithuania and Romania schools' operational and goods and services purchases, in Poland, teachers' salaries, transport, and purchases of goods and services, while in Croatia and the Netherlands, only financial support for goods and services procurement is provided by the revenues obtained by local authorities (Eurydice, 2014).

In Turkey, on the other hand, a complex and uncertain financing system, involving both central and local stakeholders, is implemented for the financing of education. Thus, according to the parent-teacher association regulation numbered 28199, the financial income of schools is realized through parent-teacher associations, and schools' financial income is generated by "in kind, in cash, conditional/unconditional donations and aids, operation of canteens and similar places within the schools, social, cultural, sports, courses, projects, exams, meetings, campaigns, and similar income-generating activities that public institutions and organizations, private law legal entities, and real persons will carry out within formal and non-formal education institutions outside the hours of education and training" (The Ministry of National Education of Turkey, Parent-Teacher Association Regulation, 2012). Apart from these elements specified in the regulation, funds are sent for cleaning and stationery materials, repairs, etc. needs from the central ministry budget or service personnel needs are partially met through the The Turkish Employment Organization [IŞKUR] Community Service Program (TYP) from time to time. Thus, in the research conducted by Suna, Altun, Emin, and Gür (2021), the budget allocated to education between 2000-2019 increased from TRY 3 billion to TRY 113 billion, and the financial budget rate per student increased from TRY 256 to TRY 6,000. Despite these rates, the reflection of this financial transfer to schools was not sufficient and equal.

For example, in the studies carried out by researchers such as Altuntaş (2005), Kavak et al. (1997), Özdemir (2011), Yolcu and Kurul (2009), suggested that schools have to use various applications such as collecting registration, photocopy, diploma, and travel fees to generate income. Again, according to Zoraloğlu et al. (2005), schools earn the most income from

canteen rental, donations, and kindergarten monthly fees. According to Yolcu (2007), there is an inequality of opportunity between schools in terms of income, and schools with good socioeconomic status receive more donations, while schools with a lower socioeconomic environment are more disadvantaged in terms of income. However, from time to time, teachers are used to obtaining donations from parents, school administrators have to deal with financial matters rather than educational processes, which are their main duties, and this situation causes conflicts between parents, school management, and teachers, and harms the educator identities of both teachers and school administrators (Köse & Şaşmaz, 2014), as well as teachers and administrators, are exposed to various investigations. For example, in the press release numbered 2019-47 made by the Governorship of Istanbul, an investigation was launched against 55 school administrators who requested donations from parents and various penalties were imposed on school administrators (Istanbul Governorship, 2019).

These financial supports, which are provided by the efforts of school principals, teachers, and parents and by parent-teacher associations, ministries, and local institutions, do not have a sustainable dimension and quality and produce temporary solutions. Especially with the effect of the pandemic period, schools' canteen rentals, donations, etc. incomes have decreased, cleaning and health expenses have increased, and thus their financial problems have gradually escalated (Özdogru, 2021). For this reason, the need for financial sustainability of educational institutions, especially primary schools, which are the basic elements of the education system, has gained more importance. In this context, this research aims to examine the views of school principals on the financial sustainability of schools by using the Delphi technique. To this end, answers to the following research questions were sought;

- What are the suggestions of school principals working in public primary schools regarding the financial sustainability of schools?
- What are the views of school principals working in public primary schools regarding the financial sustainability of schools?

## METHODOLOGY

Research methodology lends legitimacy to the research being conducted and provides researchers with a detailed plan, ensuring that research is effective and manageable (Indeed, 2021). In this direction, information about the design, method, participants, data collection tools, data collection process and analysis, validity and reliability of the research conducted in this section.

### Research Design

The phenomenology design, which is one of the qualitative research designs, was used in the formation of the basic methodological structure of the research. The basic paradigm forming this pattern rather focuses on the question “what do we know as individuals?” (Reiners, 2012). According to Vagle (2014), the phenomenological design is a reflective and inductive method, enabling individuals to gain insight through their past and life experiences, and at the same time to give meaning to their daily experiences. For this purpose, the phenomenological design was used to reveal the experiential awareness, meanings, and views of school principals on the financial sustainability of schools.

## Participants

The convenience sampling method was used to determine the study group in the research. According to Gravetter and Forzano (2012), in this sampling method, participants who are easily accessible to the researcher and suitable for research qualifications are included in the sample. In this context, convenience sampling method was preferred in the research in order to overcome time and cost limitations.

According to Şahin (2001), the number of participants in the Delphi technique should consist of at least seven people, and 10-20 participants are ideal. In this framework, 15 school principals selected by the researcher under the characteristic of the research were included in the study group. Demographic information of the study group is presented below (Table 1).

**Table 1.**

*Demographic Information of Participants*

Participant Code	Gender	Educational Status	School Type	Experience in School Management
P1	M	Undergraduate	Islamic Divinity Students Secondary School	4
P2	M	Graduate	Islamic Divinity Students Secondary School	6
P3	F	Graduate	Secondary School	15
P4	F	Undergraduate	Primary School	8
P5	M	Undergraduate	Primary School	12
P6	M	Undergraduate	Primary School	4
P7	M	Graduate	Secondary School	10
P8	M	PhD	Secondary School	7
P9	M	Graduate	Primary School	14
P10	F	Graduate	Secondary School	10
P11	F	Graduate	Primary School	29
P12	M	Undergraduate	Secondary School	11
P13	M	Graduate	Secondary School	8
P14	M	Graduate	Primary School	10
P15	F	Graduate	Secondary School	5

As seen in Table 1, ten of the participating school principals are male and five are female. However, five of them are undergraduate, nine of them are graduates, and one of them is PhD. Six of the school principals work in primary school, seven in secondary school, and two in Islamic divinity students secondary school. At the same time, the managerial experience of school principals varies between four years and twenty-nine years.

## Data Collection Tools

In the research, the Delphi technique was used to reveal the opinions and suggestions of the school principals working in public primary schools about the financial sustainability of the schools. The purpose of the Delphi technique is to reveal group judgements and bring group ideas together on a common point (Dalkey, Brown, & Cochran, 1969). This method aims to reach the consensus of expert opinions or different opinions when decisions about various situations, events, and problems need to be taken, and thus to benefit from the dynamics of group communication consisting of unaware of each other (Grime & Wright, 2016).

Rowe and Wright (2001) point out that the following principles should be followed to get opinions from experts and participants in Delphi applications; (1) selecting experts or

participants who have a good command of the subject, (2) creating a heterogeneous study group, (3) selecting between 5-20 participants, (4) presenting and justifying the statistical results of the data obtained after the Delphi panel, (5) continuing to apply until the answers show stability, (6) revealing final joint results.

Within the framework of the principles set forth by Rowe and Wright (2001), the form created by the researcher was used to collect data during the Delphi application process. The section of the form is presented below;

The research aims to get your opinions as the school principals, on what kind of measures, regulations, or models should be developed by the education decision-makers to provide better financial management of schools or sustainable financial management of schools. In this framework, please indicate your suggestion and opinion on the suggestion in items in the field below. The suggestions and opinions you have expressed will then be combined with the suggestions and opinions of the other participants and the second stage Delphi technique will be applied.

Suggestion 1: .....

Your views about Suggestion 1: .....

Suggestion 2: .....

Your views about Suggestion 2: .....

### **Data Collection and Analysis**

Delphi panels can consist of several applications (usually 2 or 3) depending on the nature of the research. According to Şahin (2001), in these panels, generally (1) a questionnaire about the problem situation is first sent to the participants and their opinions are taken, (2) an anonymous form is sent by the participant and these answers and opinions are listed as items, (3) these items and opinions are graded on a Likert-type item structure (from 1 to 7) and sent to the participants, (4) the answers sent by the participants by writing their names this time are statistically (first quartile, third quartile, median, and range values) evaluated, and (5) the results are sent back to the participants together with the participant responses, ensuring consensus.

The open-ended questionnaire form was sent to the participants and the participants were asked to write their suggestions about the problem situation and also their opinions about it. The opinions and suggestions obtained in the first Delphi panel application were then listed in a single form as items and the participants were sent e-mails and asked to indicate their level of agreement with these items from 1 (Strongly Disagree) to 7 (Strongly Agree) and to express their opinions if any. The first quartile, third quartile, median, mode, and mean values of the answers obtained after the second Delphi panel were calculated statistically (using the SPSS program), and the items that include the opinions on which the majority of the group agreed with the interquartile range less than 1.2, as stated by Zelfiff and Heldenbrand (1993) and the items that include the opinions on which the group did not agree with the interquartile range more than 1.2 were presented in the research (Şahin, 2001). In the study, twenty-three items and opinions were expressed by the participants after the first Delphi panel, and then within the framework of the results obtained statistically after the application of the second Delphi panel, 9 items with the interquartile range of more than 1.2 and weak other statistical values (such as mean, median, mode) were not accepted by the majority of the group.

## Validity and Reliability

Reliability in qualitative research is more about the researcher being careful and honest while doing research (Robson, 2002). Validity, on the other hand, is more concerned with researcher bias, respondent bias and reactivity (Lincoln & Guba, 1985). In this direction; (1) Researcher bias is the researcher's knowledge and assumptions negatively affecting the research in the processes such as design, data collection, analysis, and sampling, (2) respondent bias refers to respondents' perception of the research subject as a threat to themselves or their ability to give answers that satisfy the researcher, and (3) reactivity refers to the effect of the researcher on the studied situation or participants (Lincoln & Guba, 1985).

In this context, research processes were inspected by an academician who is an expert in the field of Educational Administration to increase the validity and reliability of the research, ensure the transparency of the processes carried out by the researcher, and prevent researcher bias. At the same time, detailed information was given about the research process and analysis processes, and the data were supported by the opinions of school principals. Moreover, the information of the participants was kept confidential to prevent respondent bias and reactivity, and their opinions were taken in an online environment (via mail) where the participants could express themselves easily. In addition, the participants' expressing their opinions without getting to know each other and without mutual interaction with the Delphi method was a factor that prevented participant bias and reactivity.

## FINDINGS

After the first Delphi technique application, the opinions obtained from the school principals were listed as items, presented to the school principals' opinions with the second Delphi application, and the items or opinions on which group consensus was achieved or not achieved are presented in Table 2 below.

**Table 2.**

*The Descriptive Values of the Responses of the Participating School Principals to the Suggested Items After the Second Delphi Technique Application*

Suggested Opinion or Item	N	Mean	Median	Mode	First Quartile 25%	Third Quartile 75%	Interquartile width
I1) Increasing the budget allocated to education from the central government budget	15	7	7	7	7	7	0
I2)Covering the employment and salaries of personnel such as security and service personnel from the central budget, not with the parent-teacher association	15	6.87	7	7	7	7	0
I3) Providing financial appropriations to schools in parallel with the number of branches, classrooms, and students and spending by the commissions to be formed at the schools	15	6.73	7	7	7	7	0
I4)Financing schools by local governments, budgeting local governments for education or involving local governments in the process	15	5.67	7	7	6	7	1
I5) Ensuring tax exemption in meeting school needs	15	7	7	7	7	7	0
I6)Transfer of financial responsibility to the school principal and school commission by abolishing the parent-teacher association regulation	15	4.60	6	7	1	7	6

**Table 2 (Cont.)**

*The Descriptive Values of the Responses of the Participating School Principals to the Suggested Items After the Second Delphi Technique Application*

Suggested Opinion or Item	N	Mean	Median	Mode	First Quartile 25%	Third Quartile 75%	Interquartile width
I7) Providing financial support and appropriation from the ministry budget, taking into account the physical structure of the school, its region, socio-economic status and environment	15	7	7	7	7	7	0
I8) Meeting the financial and material needs of schools by the national education directorates	15	4.07	3	7	1	7	<b>6</b>
I9) To make repairs, reparation, and maintenance in schools, the technical personnel are employed by the ministry and these needs of the schools are met by the technical personnel working in provinces and districts	15	6.80	7	7	7	7	0
I10) Bringing a school contribution for the education-related expenses of the parents (school clothes, stationery, etc.)	15	3.67	4	1	1	7	<b>6</b>
I11) Taking into account the number of students, the number of branches, and other characteristics of the schools, service personnel are assigned by the ministry and their salaries are met	15	6.53	7	7	7	7	0
I12) Enabling the making of financial assistance and cooperation protocols between schools	15	5.67	7	7	5	7	<b>2</b>
I13) Allocating various taxes such as property and environment taxes in the districts to the financing of the schools in that district	15	5.80	7	7	4	7	<b>3</b>
I14) Ensuring tax and SSI Premium exemption or reduction in the salaries of cleaning personnel employed by schools through service procurement	15	6.93	7	7	7	7	0
I15) As in secondary education, transferring allowances for expenses such as stationery, cleaning, maintenance, repair, etc. to elementary schools	15	6.93	7	7	7	7	0
I16) The Ministry allocating a certain annual budget to each school and informing the school administration of this budget amount at the beginning of the year, and the transition to a school-based appropriation system	15	6.67	7	7	7	7	0
I17) Providing financial support at the ministry level by conducting a needs analysis of schools	15	6.47	7	7	7	7	0
I18) Allowing schools to engage in income-generating business activities	15	4.07	4	7	1	7	<b>6</b>
I19) Payment of copyrights or patent rights to schools for printing corporate designs (such as logos) and various products (such as clothes) belonging to schools	15	5.60	7	7	5	7	<b>2</b>
I20) Leaving the sale of products such as school uniforms, tracksuits, etc. to parent-teacher associations	15	4.67	7	7	2	7	<b>5</b>



**Table 2 (Cont.)**

*The Descriptive Values of the Responses of the Participating School Principals to the Suggested Items After the Second Delphi Technique Application*

Suggested Opinion or Item	N	Mean	Median	Mode	First Quartile 25%	Third Quartile 75%	Interquartile width
I21) Giving the right to open an artistic, sportive, academic, and cultural private education course, art course, and sports club to parent-teacher associations or to the school	15	5.73	7	7	4	7	3
I22) Meeting all of the school's auxiliary or service personnel needs all year and full-time by İŞKUR (Turkish Employment Agency)	15	6.53	7	7	7	7	0
I23) Receiving registration fee from students' parents	15	6.40	7	7	6	7	1

As Table 2 shows, an examination of the results obtained in line with the analysis of the opinions of the participant school principals on the provision of sustainable school finance reveals that the interquartile range values of the opinions and suggestions in the items 6-8-10-12-13-18-19-20 and 21 are higher than 1.2 and are not accepted by the participants.

Participant views on the items on which school principals' views are concentrated and shared, especially on ensuring the financial sustainability of elementary schools and their better financial management, are presented in Table 3 below.

**Table 3.**

*Participant Opinions Regarding the Items on which Group Consensus is Achieved*

The Item on which Consensus is Achieved	Participant View
I1) Increasing the budget allocated to education from the central government budget	<i>"Increasing the budget allocated to education from the central government budget will ensure equal opportunities in education and increase the quality." (P2/Islamic Divinity Students Secondary School)</i>
I2) Covering the employment and salaries of personnel such as security and service personnel from the central budget, not with the parent-teacher association	<i>"It is expected that the expenses of the personnel working in the schools affiliated to the Ministry of National Education will be met through the Parent-Teacher Associations. This situation creates problems in most schools because of the inequalities between regions. It is said that education is free of charge, but some schools charge parents in this regard due to their conditions. The Ministry of National Education should meet the needs of school cleaners and security guards with the right planning. The practice of financing the salaries of the employees of public benefit programs by the state, which has been implemented in recent years, is appropriate and correct practice. This helps to eliminate inequality between schools." (P8/ Secondary School)</i>
I3) Providing financial appropriations to schools in parallel with the number of branches, classrooms, and students and spending by the commissions to be formed at the schools	<i>"Schools at all levels should be paid by the Ministry, and expenditures should be made by commissions to be formed at schools. It should be ensured that the appropriations are given in May every year and the commissions to be formed at the school should be planned and the school should be ready for education by meeting all the needs in July and August." (P15/ Secondary School)</i>

**Table 3 (Cont.).***Participant Opinions Regarding the Items on which Group Consensus is Achieved*

The Item on which Consensus is Achieved	Participant View
I4) Financing schools by local governments, budgeting local governments for education, or involving local governments in the process	<i>“If the local administrations meet the personnel needs of the schools in their region, do the standard maintenance and repair works themselves, and allocate a standard budget each year according to the size of the school, the expenses of the school will be met in this way and the concern of the school administrations whether they can employ staff will be eliminated. In that case, the school administration and the parent-teacher association do not worry about creating funds for repair and renovation works and they focus on the main educational work” (P7/ Secondary School)</i>
I5) Ensuring tax exemption in meeting school needs	<i>“Meeting the various needs of the school and providing tax exemption for school-related expenses will make significant contributions to reducing school expenses” (P3/ Secondary School)</i>
I7) Providing financial support and appropriation from the ministry budget, taking into account the physical structure of the school, its region, socio-economic status, and environment	<i>“Considering the physical capacities and socio-economic conditions of the schools, an annual allowance can be transferred to schools, as in high schools” (P4/Primary School)</i>
I9) To make repairs, reparation, and maintenance in schools, the technical personnel are employed by the ministry and these needs of the schools are met by the technical personnel working in provinces and districts	<i>“It will be more beneficial to install, repair, maintain and, if necessary, renew the equipment and goods in schools such as elevators, doors, toilets, computers, etc. by the technical personnel to be employed in national education directorates” (P9/Primary School)</i>
I11) Taking into account the number of students, the number of branches, and other characteristics of the schools, service personnel are assigned by the ministry and their salaries are met	<i>“According to the physical structures of the schools and the number of students, the need for service personnel can be met, and thus the ministry directly deals with issues such as severance pay and penalties” (P5/Primary School)</i>
I14) Ensuring tax and SSI Premium exemption or reduction in the salaries of cleaning personnel employed by schools through service procurement	<i>“The cost of a staff, which is currently around TRY 5200, can be reduced to approximately TRY 1500 with these suggestions and savings can be achieved” (P5/Primary School)</i>
I15) As in secondary education, transferring allowances for expenses such as stationery, cleaning, maintenance, repair, etc. to elementary schools	<i>“The control of appropriations in basic education schools should be left to schools as in secondary education. The expenditure of the appropriations coming to the schools should be made by the school, not by the national education directorates.” (P6/Primary School)</i>
I16) The Ministry allocating a certain annual budget to each school and informing the school administration of this budget amount at the beginning of the year, and the transition to a school-based appropriation system	<i>“When the Ministry allocates a certain amount of annual budget to each school and informs the school administration at the beginning of the year, permanent solutions are produced instead of temporary solutions such as TYP (Public Benefits Program)” (P12/ Secondary School)</i>
I17) Providing financial support at the ministry level by conducting a needs analysis of schools	<i>“The same financial resources should not be allocated by the ministry to the school in need and the school that does not need it, financial support should be provided accordingly by determining the needs on the spot and analyzing them” (P1/Islamic Divinity Students Secondary School)</i>

**Table 3 (Cont.).***Participant Opinions Regarding the Items on which Group Consensus is Achieved*

The Item on which Consensus is Achieved	Participant View
I22)Meeting all of the school's auxiliary or service personnel needs all year and full-time by İŞKUR (Turkish Employment Agency)	<i>"All of the school's auxiliary staff needs should be met by İŞKUR on a full-time basis. If necessary, the laws regarding İŞKUR should be amended and it should be ensured that auxiliary personnel are constantly employed in schools throughout the year" (P11/Primary School)</i>
I23)Receiving registration fees from students' parents	<i>"Although I make suggestions, I think it may be difficult to implement, but I think it would be good if school expenses were calculated during the school start process and paid by the parents during registration" (P13/Secondary School)</i>

As seen in Table 3, the participating school principals expressed their opinions and suggestions to ensure that schools have sustainable financial management and better financial management, and they agreed on these views and suggestions statistically. According to the opinions of school principals, increasing the budget allocated to education leads to quality and equality of opportunity. At the same time, school personnel should be employed at the ministry level and a school-based budget should be spent by the school commission, with the financial support to be provided to schools by taking into account various conditions (such as the number of students, socio-economic status, number of branches, physical equipment). However, school principals also stated that local administrations should be made more effective in financing education and local governments should allocate a budget for situations especially the employment of maintenance and repair personnel, etc. At the same time, they stated that tax exemptions should be provided for school-related expenditures or that conveniences such as tax and SSI reduction in personnel employment should be provided. Again, the school principals suggested that the ministry should employ personnel for the technical, maintenance, and repair works of the schools and that the parents should be charged during the registration for the schools to generate financial income.

### DISCUSSION AND CONCLUSION

It is important to create a sustainable structure or model for the financing of schools in Turkey. Thus, as the findings suggest, it does not seem possible to sustain the financial management of schools, which have many dimensions and expenditure costs due to various factors such as donations, temporary service purchases, etc. For this reason, the participating school principals made suggestions and expressed their views such as increasing the budget allocated to education, employing personnel at the ministry level, switching to school-based budgeting, making local governments effective in school financing, provide tax and insurance exemption, or reduction in school expenditures and personnel employment, employing technical personnel for technical maintenance and repair works of schools, charging fees from parents during registration by calculating the expenses of the school, increasing the employment of personnel through the İŞKUR (Turkish Employment Agency) Public Benefits Program and providing full-time staff all year, and providing central financing support by analyzing the needs of schools.

As Hoşgörür and Arslan (2014) stated, schools in Turkey have difficulties in finding sufficient financial resources, and this requires increasing the budget provided for the financing of education and allocating a budget suitable for the conditions of each school, as stated by the school principals in their opinions. However, another implication of the findings

is that to increase the influence of local authorities in education, as a matter of fact, in many European countries, local authorities allocate some of the taxes they receive to the financing of education, and even many other school costs (construction, maintenance, repair, employment of service personnel, transportation, etc.) apart from teachers' salaries are covered by local authorities (Eurydice, 2014; NCES, 2021; NCSL, 2021; PBS, 2008; Werner & Shah, 2006). Local authorities in Turkey can also play a role in the financing of education in line with European standards, so that the financial needs of education at the local level can be planned more efficiently and the financial requirements of schools can be met.

In the research of Suna, Altun, Emin, and Gür (2021), it is seen that the ratio of the budget allocated to education and the budget per student has increased in Turkey. However, in practice, as reflected in the findings of researchers such as Altuntaş (2005), Kavak et al. (1997), Özdemir (2011), Yolcu and Kurul (2009), Zoraloğlu et al. (2005), this is allocated from central budget and not reflected in schools or it is not enough and efforts are made by school principals and teachers to create new resources. Thus, the 2021 budget report of the Ministry of National Education reveals that the ratio of the education budget to the Gross Domestic Product is 3.76 percent and the ratio has not changed much over the years (The Turkish Ministry of National Education, 2021). At the same time, as Yolcu (2007) stated, there is a financial inequality between schools. For this reason, as reflected in the opinions of school principals as a result of this research, it is considered important that the financing is school-specific or school-based, shaped within the framework of school planning, yielding more appropriate results and providing equality of opportunity.

The issue of sustainability in the financing of schools occupies the agenda of many countries from time to time. The general economic situation in the countries is also reflected in the financing costs in schools and has a significant impact. For example, as Leigh (2021) stated, financial pressure and uncertainty on the school budget in the UK affect schools significantly, and factors such as increasing costs at schools, high inflation rates and personnel insurance premiums negatively affect the sustainable finance of schools. In Turkey, the salary costs of security and service staff, who are mostly employed by parent-teacher associations in schools, are increasing year by year and create the greatest financial pressure on schools. Thus, the data of the Turkish Ministry of Family, Labor, and Social Services [AÇSHB] (2021) reveal that the cost of the minimum wage to the employer was TRY 1,935.23 in 2015, while this increased to TRY 5,879.70 in 2022 (AÇSHB, 2022). To alleviate this pressure, as reflected in the opinions of school principals, it is crucial to provide tax reduction and exemption in school expenditures and school personnel employment, and it is vital for the financial sustainability of schools.

According to school principals, one of the main financial expenses of schools is maintenance and repair works that include technical works and technical works. For example, in the UK, personnel in many different fields (teaching assistants, special needs support personnel, administrative affairs secretary, office personnel, accountant, technical personnel, health personnel, child care personnel, etc.) are employed in schools to carry out such technical work (Whitehorn, 2010). Especially with the implementation of the Fatih Project in Turkey, the needs in other technical fields (maintenance and repair of electronic devices, secretarial works, medical support, heat, light and ventilation systems, repair and restoration works, support personnel) are generally met through service procurement by schools. This can cause significant costs for public schools. Thus, in the research conducted by Altunay (2017), the most significant expense areas of schools consist especially of service procurement expenses and also building maintenance, cleaning materials, equipment maintenance, procurement of fixtures, and stationery products. In this context, as reflected in the opinions of school principals as a result of the research, the ministry's employment of technical personnel in the

execution of processes such as technical operation, maintenance, and repair in schools will both alleviate the heavy financial burden for schools and provide savings in terms of these processes.

Another situation that is reflected in the opinions of school principals is that students' parents are charged with school financing. In this financing method, which is known as the indirect financing method in the literature, the basic financial income source of the schools is the tuition fees or other fees during the registration or extended over the academic year (Güngör & Göksu, 2013; Tonbul, 2016). This charge (or fees) taken at the higher education level in Turkey is restricted by the Constitution in basic education. Thus, article 42 of the Constitution prohibits the collection of tuition fees in public schools (Constitution of the Republic of Turkey, 1982), thus necessitating a constitutional amendment. However, according to the Organisation for Economic Co-operation and Development [OECD] (2020) Turkey report, despite the central education financing in Turkey, the schools' demand for voluntary donations from families for expenses such as education, maintenance, and repairs has gradually increased. The increase in these demands shows that the budget for the financing of education and schools is not used adequately and efficiently. This situation causes school administrations to receive donations from parents indirectly or to take initiatives for this. Thus, school administrations try to manage the financial processes of their schools by putting themselves at risk.

As a result, there are problems in the financial management of education and schools in Turkey and it is possible to observe that it does not have a sustainable structure, and in this context, it is known that school administrations have difficulties especially with the increase in costs. In this context;

- Increasing the budget allocated to education, switching to school-based budgeting and transferring the spending authority to the school administration,
- Recruitment of necessary personnel by the central or local authorities, taking into account the needs and qualifications of the schools,
- Since the needs of schools such as maintenance and repair are life-threatening, legal arrangements should be made in a systemic integrity to meet these needs,
- Providing tax reductions and exemptions in order to reduce the expenditure costs of schools and to ease school principals and school-parent unions economically will be beneficial for a sustainable financing in education.

Through these arrangements, school principals' anxiety about finding financial resources will be eliminated and the energy and efforts of school principals will be directed to educational processes.

### **Support and Acknowledgment**

As the authors, we do not have any support or acknowledgment of the process of conducting the research.

### **Conflict Statement**

As the authors of the study, we declare that we do not have any declaration of interest/conflict.

### **Publication Ethics Statement**

All the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed in the whole process from the planning of this research to its implementation, from data collection to data analysis. None of the actions specified under the title of "Actions Contrary to Scientific Research and Publication Ethics", which is the second

part of the directive, have been taken. Scientific ethics and citation rules were followed during the writing process of the study, no falsification was made on the collected data, and this study was not sent to any other academic publication medium for evaluation.

## REFERENCES

- Aile, Çalışma ve Sosyal Hizmetler Bakanlığı [Ministry of Family, Labor and Social Services] (2021, 10 Aralık). Yıllar itibarıyla net ve brüt asgari ücret[Net and gross minimum wage by years] (01/08/1996-31/12/2020). <https://www.aile.gov.tr/media/35787/yillar-itibariyle-net-brut-asgari-ucretler.pdf>
- Aile, Çalışma ve Sosyal Hizmetler Bakanlığı [Ministry of Family, Labor and Social Services] (2022, 1 Ocak). Asgari ücretin net hesabı ve işverene maliyeti [Net account of the minimum wage and its cost to the employer]. Çalışma Genel Müdürlüğü/Sendika Üyeliği ve İstatistik Daire Başkanlığı. <https://www.csgeb.gov.tr/asgari-ucret/asgari-ucret-2022/>
- Altunay, E. (2017). Okul yöneticilerinin görüşleri doğrultusunda eğitim finansmanı politikaları: Sorunlar, nedenler ve çözümler[Education finance policies in line with the opinions of school administrators: Problems, causes and solutions]. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 6(2), 689-714. <https://doi.org/10.14686/buefad.304498>
- Altuntaş, S. Y. (2005). *İlköğretim okullarının finansman ihtiyaçlarını karşılama düzeyleri [Levels of financing needs of primary schools]* (Yayınlanmamış Yüksek Lisans Tezi). Van Yüzüncü Yıl Üniversitesi.
- Barbera, C., Jones, M., Korac, S., Saliterer, I., & Steccolini, I. (2017). Governmental financial resilience under austerity in Austria, England and Italy: How do local governments cope with financial shocks? *Public Administration*, (95), 670-697. <https://doi.org/10.1111/padm.12350>
- Dalkey, N. C., Brown, B. B., & Cochran, S. (1969) *The Delphi method: An experimental study of group opinion*, RAND Corporation.
- European Commission/EACEA/Eurydice (2014). *Financing schools in Europe: Mechanisms, methods and criteria in public funding* (Eurydice Report). Publications Office of the European Union.
- Gravetter, J. F., & Forzano, L. B. (2012). *Research methods for the behavioral sciences*. Linda Schreiber-Ganster.
- Grime, M. M., & Wright, G. (2016). Delphi method. *Wiley StatsRef: Statistics Reference Online*, 1-16. <https://doi.org/10.1002/9781118445112.stat07879>
- Güngör, G., & Göksu, A. (2013). Türkiye’de eğitimin finansmanı ve ülkelerarası bir karşılaştırma [Financing of education in Turkey and a cross-country comparison]. *Celal Bayar Üniversitesi İ.İ.B.F. Yönetim ve Ekonomi Dergisi*, 20 (1), 59-72. <https://dergipark.org.tr/tr/download/article-file/146114>
- Hoşgörür, V., & Arslan, İ. (2014). Okul örgütünün finansal kaynaklarının yönetimi sorunu [The problem of management of financial resources of the school organization] (Yatağan ilçesi örneği). *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 4(1), 91-102. <https://dergipark.org.tr/tr/pub/trkefd/issue/21473/230155>
- Indeed (2021, December 9). What is research methodology and why is it important? <https://www.indeed.com/career-advice/career-development/research-methodology>
- İstanbul Valiliği [Istanbul Governorship] (2019). Basın duyurusu [Press release] (2019-47). <http://istanbul.gov.tr/okullarda-bagis-adi-altinda-kayit-parasi-toplanmasi-ile-ilgili-basin-aciklamasi>.
- Kavak, Y., Ekinci, E., & Gökçe, F. (1997). İlköğretimde kaynak arayışları [Searching for resources in primary education]. *Kuram ve Uygulamada Eğitim Yönetimi*, 3(3), 309-320. <https://dergipark.org.tr/tr/pub/kuey/issue/10384/127055>
- Köse, A., & Şaşmaz, A. (2014). *İlköğretim kurumlarının mali yönetimi [Financial management of primary education institutions]*. Eğitim Reformu Girişimi, Birleşmiş Milletler Çocuklara Yardım Fonu ve MEB Ortaklığı Araştırma Raporu. [https://www.egitimreformugirisimi.org/wp-content/uploads/2017/03/ERG\\_MaliYonetimArastirmaRaporu.pdf](https://www.egitimreformugirisimi.org/wp-content/uploads/2017/03/ERG_MaliYonetimArastirmaRaporu.pdf)
- Leigh, P. (2021, 6 Aralık). Managing school finance in times of budgetary pressures and uncertainty. <https://www.focus-education.co.uk/blog/managing-school-finance-under-pressure/>
- Leon, P. (2001). *Four pillars of financial sustainability*. The Nature Conservancy.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Lysiak, L., Kachula, S., Hrabchuk, O., Filipova, M., & Kushnir, A. (2020). Assessment of financial sustainability of the local budgets: Case of Ukraine. *Public and Municipal Finance*, 9(1), 48-59. [http://dx.doi.org/10.21511/pmf.09\(1\).2020.05](http://dx.doi.org/10.21511/pmf.09(1).2020.05)
- Milli Eğitim Bakanlığı Okul Aile Birliği Yönetmeliği [Ministry of National Education, School Parent Association Regulation] (2012, 9 Şubat). *Resmi Gazete[Official newspaper]* (Sayı:28199). <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=15878&MevzuatTur=7&MevzuatTertip=5>

- Milli Eğitim Bakanlığı [Ministry of National Education -MEB] (2021). *2021 yılı bütçe raporu[Budget report for 2021]*. MEB Strateji Geliştirme Başkanlığı. [http://sgb.meb.gov.tr/meb\\_iys\\_dosyalar/2020\\_12/30125920\\_2021\\_BUTCE\\_SUNUYU.pdf](http://sgb.meb.gov.tr/meb_iys_dosyalar/2020_12/30125920_2021_BUTCE_SUNUYU.pdf)
- National Center for Education Statistics (2021). *Public school revenue sources*. <https://nces.ed.gov/programs/coe/indicator/cma>
- National Conference of State Legislatures (2021). *The State role in education finance*. <https://www.ncsl.org/research/education/state-role-in-education-finance.aspx>
- Organisation for Economic Co-operation and Development (2020). *Education policy outlook Turkey*. <https://www.oecd.org/education/policy-outlook/country-profile-Turkey-2020.pdf>
- Özdemir, N. (2011). *İlköğretim finansmanında bir araç: Okul-aile birliği bütçe analizi[A tool in primary education finance: School-parent union budget analysis] (Ankara ili örneği)* (Yayınlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi.
- Özdoğan, M. (2021). Covid-19 salgınında okul müdürlerinin okul yönetiminde karşılaştıkları sorunlar ve bu sorunlarla başa çıkma stratejileri [The problems faced by school principals in school management in the Covid-19 epidemic and strategies to cope with these problems]. *Medeniyet Eğitim Araştırmaları Dergisi*, 5(1), 1-14. <https://dergipark.org.tr/tr/pub/mead/issue/63456/903476>
- Public Broadcasting Service (2008, 5 September). *How do we fund our schools?* <https://www.pbs.org/wnet/wherewestand/blog/finance-how-do-we-fund-our-schools/197/>
- Reiners, G. M. (2012). Understanding the differences between Husserl's (descriptive) and Heidegger's (interpretive) phenomenological research. *Journal of Nursing & Care*, (1), 1-6. <http://10.4172/2167-1168.1000119>
- Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers*. Blackwell Publishers.
- Rowe, G., & Wright, G. (2001) Expert opinions in forecasting: Role of the delphi technique. In *Principles of forecasting: A Handbook for researchers and practitioners* (Eds. J.S. Armstrong). Kluwer Academic Publishers.
- Suna, H. E., Altun, Ü., Emin, M. N., & Gür, B. S. (2021). *Türkiye'de eğitimin 20 yılı[20 years of education in Turkey] (2000-2019)*. T.C. Millî Eğitim Bakanlığı.
- Şahin, A. E. (2001). Eğitim araştırmalarında delphi tekniği ve kullanımı [Delphi technique and its use in educational research]. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, (20), 215-220. <https://dergipark.org.tr/tr/download/article-file/87971>
- Tonbul, Y. (2016). Eğitimin ekonomisi [Economics of education]. *Eğitibilim: Pedandragoji* içinde. (Editör: Erdal Toprakçı). Ütopya Yayınevi.
- Türkiye Cumhuriyeti Anayasası [Constitution of the Republic of Turkey] (1982, 9 Kasım). *Resmi Gazete* (17863-Mükerrer). <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.2709.pdf>
- U.S. Department of Education (2021, 25 October). *The Federal role in education*. <https://www2.ed.gov/about/overview/fed/role.html>
- Vagle, M. D. (2014). *Crafting phenomenological research*. Left Coast Press.
- Werner, J., & Shah, A. (2006). *Financing of education: Some experiences from ten European countries*. Institute of Local Public Finance Working Paper September 2006. [https://www.researchgate.net/publication/5164382\\_Financing\\_of\\_Education\\_Some\\_Experiences\\_from\\_tenn\\_European\\_Countries/link/00b7d538f65f2a0366000000/download](https://www.researchgate.net/publication/5164382_Financing_of_Education_Some_Experiences_from_tenn_European_Countries/link/00b7d538f65f2a0366000000/download)
- Whitehorn, T. (2010). *School support staff topic paper*. Department for Education Publications.
- Yolcu, H. (2007). *Türkiye'de ilköğretim finansmanının değerlendirilmesi[Evaluation of primary education financing in Turkey]* (Yayınlanmamış Doktora Tezi). Ankara Üniversitesi.
- Yolcu, H., & Kurul, N. (2009). Evaluating the finance of primary education in Turkey within the context of neo-liberal policies. *International Journal of Educational Policies*, 3(2), 24-45.
- Zabolotnyy, S., & Wasilewski, M. (2019). The concept of financial sustainability measurement: A case of food companies from Northern Europe. *Sustainability*, (11), 1-16. <https://doi.org/10.3390/su11185139>
- Zeliff, N. D., & Heldenbrand, S. S. (1993). What has been done in the international business curriculum? *Business Education Forum*, 48 (1), 23-25. <https://eric.ed.gov/?id=EJ470016>
- Zoraloğlu, Y. R., Şahin, İ., & Fırat, N. Ş. (2005). İlköğretim okullarında kaynak sorunu [Resource problem in primary schools]. *Eğitim Bilim Toplum*, 3(12), 86-101.