



Original article

Examining the Opinions of School Principals on Being a Principal in Science and Art Centre (BILSEM)

Güliz Kaymakçı ^{a, *}, Yakup Gür ^b, Serdal Bakan ^c & Engin Üstündağ ^d

^a Department of Special Education, Faculty of Education, Tokat Gaziosmanpaşa University, Tokat, Türkiye

^b School Principal, Ministry of National Education, Tokat, Türkiye

^c Ministry of National Education, Tokat, Türkiye

^d Ministry of National Education, Tokat, Türkiye

Abstract

The current study aimed to determine the willingness of school principals to serve as school principal in BILSEMs, their perspective of serving as a principal in these institutions, and the difficulties they think they may encounter based on the opinions of school principals who work in different institutions and have not worked in BILSEMs before. In the study, the case study design, one of the qualitative research methods, was employed to examine social and human phenomena in their natural environments in detail. The study group comprises 12 school principals who work as principals in state institutions other than BILSEMs located in the provinces of Bingöl, Tokat, and Istanbul and who have not previously worked as principals in BILSEMs. The research data were collected using the semi-structured interview technique and voice recording over the phone. In the study, it was concluded that the participants agree that BILSEM principals should be appointed with a written exam within the framework of specific criteria, that priority should be given to those who received graduate education in appointments, that school principals should be innovative, open to change, able to use technology, willing to prepare projects and have leadership characteristics. In light of the findings of the study, the following suggestions can be made: Principals should be appointed to BILSEMs after serving as an assistant principal in a BILSEM for a certain period, they should be trained by undergoing a one-year in-service training and appointments should be made by adhering to a performance-oriented process beside the written exam.

Keywords: School principal, Science and art centre (BILSEM), Appointment criteria.

Received: 22 March 2024 * **Accepted:** 22 June 2024 * **DOI:** <https://doi.org/10.29329/jeps.2024.1052.2>

* Corresponding author:

Güliz Kaymakçı, Department of Special Education, Faculty of Education, Tokat Gaziosmanpaşa University, Tokat, Türkiye.
Email: guliz.kaymakci@gop.edu.tr

INTRODUCTION

School is the most critical part of the education system, serving as the primary environment where students acquire knowledge, skills, and behaviours according to specific purposes and principles (Balıcı, 2022). Beyond being the pillars of education, schools act as catalysts for change and innovation within society (Tunç & Beşaltı, 2015). The significant role of schools in societal development underscores the necessity for meticulous management of their resources, including financial, human, and other assets (Taymaz, 1985).

The school principal, along with other staff, manages the school. The principal holds responsibility for all operations within the school, spanning from educational activities to health and safety, and from cleanliness to renovation projects (MEB, 2021). Principals are appointed for a four-year term based on the Regulation on Selecting and Assigning Administrators to Educational Institutions under the Ministry of National Education. Specifically, for Science and Art Centres (BILSEM), which cater to gifted students, only those who meet specific criteria can be appointed principals. These criteria include being a tenured teacher at these institutions, holding an educational management certificate, and passing the exams conducted by the Ministry of National Education.

The effectiveness of a school principal's leadership is critical in establishing the school culture, defining the vision, mission, and educational policies, evaluating the performance of school personnel, and ensuring the efficient use of financial resources (Aktay & Ekşi, 2009). From another perspective, a leader is seen as the planner and initiator of significant undertakings (Demirel, 2018). Schools and their administrators bear the responsibility of creating a conducive school culture and instilling value judgments in students (Halstead & Taylor, 2000). While educational approaches for gifted students and their peers are frequently discussed within our education system, the education provided to gifted students and the management of their education differ from the services offered to typically developing students (Özer, 2020).

Gifted individuals stand out from their peers due to traits such as early reading ability, spontaneous learning, exceptional intelligence, vivid imagination, and creativity (Fryand & Hale, 1996). Societies face challenges in adequately addressing the educational needs of these individuals using conventional methods in regular educational institutions (Şahin & Levent, 2015). Consequently, specialized educational strategies and management practices are required to meet the unique needs of gifted students effectively.

Educating gifted individuals with significant human potential is indispensable for constructing a developed society. Thus, BILSEMs have been opened in our country to provide education for gifted individuals. Science and Art Centers (BILSEM), which have been operating since 1995 to provide

education to exceptionally talented students, are essential in supporting students socially and emotionally and keeping them together with their peers who are also incredibly talented (Kaya, 2013).

According to Gagne (1999), talent is the regular manifestation of an innate potential or particular skill in any field. Individuals possessing these potentials present significant opportunities not only for their own countries but also for the entire world. Failing to capitalize on these opportunities is a loss on a global scale (Kazu & Şenol, 2012). Therefore, it is crucial that teachers and school administrators working with gifted individuals are competent in the academic, cognitive, and affective domains.

McNeely, Nonnemaker, and Blum (2002) found that adolescent students develop a sense of belonging to their school when they feel cared for by other stakeholders within the school. This sense of belonging helps them avoid substance abuse, truancy, and unnecessary violence at an early age. The success of a school principal hinges not only on professional experience but also on their belief in their own success, awareness of their competencies, and self-confidence (Baltacı, 2020).

According to Çelikten (2004), school principals fulfill numerous roles essential for the effectiveness of the education provided at school. These roles include acting as a mother, father, trader, counselor, mediator, judge, teacher, educator, solution producer, and initiator of communication. Such multifaceted responsibilities underscore the complexity of the principal's position and the broad spectrum of skills and attributes required to foster an effective and supportive educational environment.

Creative and successful individuals play crucial roles in shaping a society's direction, often emerging from those with exceptional talents and leadership potential. Their contributions are multifaceted and impactful, influencing various aspects of societal development and progress. According to Ergün (1992), the practical guidance provided to these individuals can accelerate the pace of social change, leading to desired transformations within society. This highlights the importance of nurturing such talents through proper education and mentorship. In this context, the contribution of school principals to the education and success of gifted students is undeniable. School principals are pivotal in creating an environment that fosters the growth and development of gifted individuals. Their leadership ensures that educational programs are tailored to meet the unique needs of these students, providing opportunities for them to explore and enhance their talents. Principals also play a critical role in recruiting and supporting competent teachers who can effectively nurture the academic, cognitive, and affective domains of gifted students. Moreover, school principals help establish a culture of excellence and high expectations, motivating gifted students to strive for their best. They facilitate the provision of resources and extracurricular opportunities that stimulate creativity and innovation, further contributing to the development of these individuals. By recognizing and nurturing the potential of gifted students, school principals not only contribute to the personal success of these individuals but also to the broader advancement of society, as these students are more likely to become the creative and successful individuals who drive social change.

In the relevant literature, numerous studies explore school principals' perceptions and challenges associated with their roles, particularly in specialized educational settings like BILSEMs (Science and Art Centres for gifted students). Eren (2022) examined the opinions of school principals working in BILSEMs and found that 75% of the administrators lacked information about the intelligence tests used to diagnose students and the modern methodologies for identifying exceptionally talented students. This gap in knowledge underscores the need for targeted professional development and training for BILSEM principals to ensure they are well-equipped to support the unique needs of gifted students. According to Demirtaş and Özer (2014), school principals should be pioneers in their schools, demonstrating success, possessing advanced degrees, being appointed based on specific criteria, and having substantial experience. These qualifications are particularly pertinent for BILSEM principals, who must navigate the complexities of managing institutions that cater to gifted students. Their leadership is crucial in creating an environment that fosters the intellectual and creative growth of these students. Gencer (2021) conducted a study to understand students' perceptions of school and school principals, revealing that students view principals as leaders who guide them. This perception is vital in BILSEMs, where principals play a significant role in motivating and inspiring gifted students to reach their full potential. The leadership and vision of BILSEM principals are instrumental in shaping the educational experiences of these students, who often require more personalized and challenging learning environments. Pemik and Levent (2019) highlighted the inadequacy of in-service training provided to school principals and teachers, emphasizing the need for comprehensive professional development programs. Their study, which examined the opinions of school administrators and teachers regarding the education of exceptionally talented students in support rooms, points to a critical area for improvement. Effective training programs would equip BILSEM principals with the necessary skills and knowledge to manage specialized educational programs and address the unique challenges of educating gifted students. Çoban (2018) reflected on the difficulties experienced by BILSEM administrators and the solutions they proposed. Despite being knowledgeable about planning, these administrators often lack sufficient experience and expertise in managing human resources. This finding suggests that BILSEM principals would benefit from enhanced training and support in administrative skills, particularly in human resource management, to effectively lead their schools. In conclusion, the studies collectively highlight the critical role of BILSEM school principals in the education and development of gifted students. Ensuring that these principals receive adequate training and support is essential for them to effectively lead their schools, manage resources, and create an environment conducive to the growth and success of exceptionally talented students.

In addition to these studies, it is thought that a study that includes the opinions of principals about becoming a principal will help to identify the problems encountered in this profession and to produce solutions to these problems. In this connection, no study has been found in the literature on BILSEM principals working closely with gifted students who are believed to be the pioneers of society in the

future. Thus, the current study investigates the perceptions of principals working in other educational institutions about being a principal in BILSEMs.

When the literature is examined, it is seen that there are different studies aiming to determine the perceptions of teachers, students, and parents about school principals. However, no study has been found to determine the perceptions of school principals who work as administrators in different schools about becoming principals in BILSEMs where gifted students are educated. Therefore, the current study is considered essential and unique. In this context, by determining the product that you will contribute to the field to be developed by the director at BILSEM, the existing prejudices will be determined so that individuals considering applying will benefit from understanding these prejudices at the beginning. In the case of applying, the thoughts that have formed in the participants with this study may change the negative thoughts in the society, perhaps by determining the prejudices of individuals who have characteristics suitable for institutions such as BILSEM, which have the opportunity to work one-on-one with exceptionally talented children, and that people who are qualified and suitable as principals should be employed in those institutions guidance can be provided.

The current study aims to determine the willingness of school principals to serve as school principals in BILSEMs, their perspective of serving as a principal in these institutions, and the difficulties they think they may encounter based on the opinions of school principals who work in different institutions and have not worked in BILSEMs before. To this end, the main problem of the study is worded as follows; “What are the opinions of school principals working in different institutions about being a principal in BILSEMs?” In this context, the sub-problems of the study are as follows;

1. What are the perceptions of school principals working in different institutions about being a principal in BILSEMs?
2. What are the opinions of school principals working in different institutions about the difficulties faced by BILSEM principals?
3. What are the opinions of school principals working in different institutions regarding the benefits of being a principal in BILSEMs for the principal?
4. What are the opinions of school principals working in different institutions on the criteria for appointment as a principal to BILSEMs?

Limitations

1. It is limited to 12 school principals who serve as principals in a state institution other than BILSEM schools and have not previously held any position as a BILSEM principal.
2. It is limited to the 2022-2023 academic year.
3. It is limited to the semi-structured interview technique, a data collection tool.

METHOD

This section explains the research model, study group, data collection technique, and data analysis.

Research Model

In the study, the primary qualitative research design, which is one of the qualitative research methods, was discussed that the researcher is interested in understanding how participants make meaning of a situation or phenomenon and seek to discover and understand a phenomenon, a process, the perspectives and worldwide of the people involved (Merriam, 2002). The case study design is used to find distinctive answers to scientific questions. The case study design allows for a detailed and holistic examination of the data obtained from the interviews (Glesne, 2013).

Study Group

The current study's population is all the school principals who work as principals in a state institution other than BILSEMs and have not previously worked as principals in BILSEMs. The study group consists of 12 school principals currently serving as principals in instate educational institutions located in three different cities whose development levels were categorized as low, medium, and high according to the data issued by the Socio-Economic Development Ranking Studies (Ministry of Industry and Technology, 2017). Thanks to the data collected from socio-economically different provinces, the principals' opinions reveal whether the changing educational needs resulting from the changing economic level affect their desire to become a manager while also increasing the reliability of the study. These principals have not previously held any position as BILSEM principals before. The criterion sampling method, one of the purposive sampling methods, was used to select the participants, and the criteria used in the selection were not having previously worked in a BILSEM and currently working as a principal in a public school. In studies using the criterion sampling methods, individuals with specific characteristics can be selected as observation units, and people with these characteristics can be included in the sample (Büyüköztürk et al., 2014).

Table 1. Demographic features of the participants

Participants	Gender	Title	Type of School Work	Education Level	Professional Experience	Managerial Experience
X1	Male	Chartered Teacher	High school	Bachelor's degree	16	8
X2	Male	Chartered Teacher	Middle school	Master's degree	16	2
X2	Male	Chartered Teacher	Middle school	Master's degree	15	5
X4	Female	Chartered Teacher	Primary school	Master's degree	22	7
X5	Male	Chartered Teacher	Special education school	Master's degree	30	7
X6	Male	Chartered Teacher	Middle school	Bachelor's degree	19	8
X7	Male	Chartered Teacher	High school	Bachelor's degree	20	8
X8	Male	Chartered Teacher	Middle school	Master's degree	21	4
X9	Female	Chartered Teacher	Primary school	Master's degree	25	10
X10	Female	Chartered Teacher	High school	Master's degree	20	4
X11	Female	Chartered Teacher	Primary school	Master's degree	16	8
X12	Male	Chartered Teacher	Primary school	Master's degree	22	18

As seen in Table 1, eight participants are male, and four are female. All of the participants are chartered teachers. Three participants have a bachelor's degree, while nine have a master's degree. One of the participants has 8-1 years of professional experience, nine of them have 16-24 years of professional experience, and two have 25 or more years of professional experience. Finally, six participants have 0-7 years of managerial experience, five have 8-15 years of managerial experience, and one has 25 or more years of managerial experience.

Data Collection Tools

The interview method is essential in terms of obtaining detailed information about experiences, feelings, and perceptions (Yıldırım & Şimşek, 2005). Therefore, this study collected data using the semi-structured "School Principals Interview Protocol" developed by the researchers based on expert opinions. The School Principal Interview Protocol consists of two parts. In the first part, there are questions to elicit information about the gender, title, branch, education level, professional experience, and managerial experience of the participants. In the second part, there are five questions to elicit the opinions of the participating principals on the selection and appointment of BILSEM principals, the

qualifications of BILSEM principals, advantages and disadvantages of being a BILSEM principal, problems encountered by BILSEM principals and solutions to these problems:

The questions in the second part of the School Principals Interview Protocol are as follows:

- What do you think about the selection and appointment of BILSEM principals?
- What do you think about the qualifications to be possessed by BILSEM principals?
- What do you think about the advantages and disadvantages of being a BILSEM principal?
- What do you think about the problems encountered by BILSEM principals?
- What do you think about the solutions to the problems encountered by BILSEM principals?

The questions aimed to reveal the preliminary knowledge of the participants who have not worked as managers in BILSEM institutions, to identify the negative and incorrect ones, and thus to generate data that will lead to studies on individuals more suitable to work in those institutions.

Data Collection

The data were collected by using the semi-structured interview technique. Appointments were made with the participants, and they stated that the participation would be on a volunteer basis, that personal information would be kept confidential, that the answers given would only be used for scientific purposes, and that the interviews would be auto-recorded. Face-to-face interviews were conducted individually, and the interviews were conducted face-to-face ($f=4$) or via telephone ($f=8$) on the specified days and hours. The interviews lasted approximately 10-15 minutes and were tape-recorded and transferred to digital media. The participants' demographic information was kept confidential using code names such as X1, X2, After the interviews were completed, they were transcribed, and the analysis stage was initiated.

Data Analysis

The audio recordings obtained from the participants were transcribed in the computer environment, and coding was carried out for each interview form. The answers to the interview questions were analyzed by creating themes and codes. The obtained information was interpreted by using the content analysis methods. The content analysis method is a detailed examination and arrangement of qualitative and quantitative works on a subject (Ültay et al., 2021).

Validity and Reliability

The reliability and validity of the results of measurements made in studies should be tested. This is accepted as the most important means of increasing the credibility of the findings obtained in a qualitative study. At the stage of collecting the data, the participants were able to express their thoughts

freely. They were not given any direction. Also, the analysis of the obtained data was explained in detail, which positively affected the validity (Creswell & Poth, 2016).

The questions determined in the interview protocol to reveal the opinions of the school principals were collected in a question pool. Some questions were removed from the pool in line with the opinions of four different field experts. In order to give the final form of the protocol, a pilot study was carried out with two school principals working in state schools. After the pilot study, the questions were revised, and thus, the validity and reliability of the data collection tool were increased. The raw data obtained from the interviews were analyzed using the content analysis technique, and direct quotations from the participants' opinions were used to increase the study's reliability and validity. From the opinions expressed by the participants, 17 themes and 127 codes were created. Then, two experts were asked to check the themes and codes. As a result of the comparison of their checks, the number of agreements and disagreements was determined by using the formula of Miles and Huberman (1994): “(Reliability = (agreement/agreement + disagreement) x 100)”. In qualitative research, the agreement between the evaluations of the researcher and the expert should be 90% and above, indicating that reliability is achieved (Saban, 2008). For the reliability of the study, the two experts whose opinions were consulted concluded that the themes and the codes were compatible. As a result of the reliability analysis performed using the formula above, the code agreement rate for the codes determined in the study was 91%. This result shows that the study is reliable in terms of the consistency of the findings. According to Creswell (2012), a researcher aims to think about aspects. In addition, the opinions obtained from the form were analyzed separately by two coders. It was examined and themes and codes were created. Two encoders Cohen Kappa fit values were calculated to ensure reliability (Viera & Garrett, 2005), It was found that the fit ranges from .81 to .82 and is good/very good. Modelling was done by grouping the relevant codes under common themes.

Research Ethics

At all the stages of this study, great care was taken not to violate ethical rules like freedom, educational responsibility, social responsibility, mutual respect, productivity, respect for the people... In addition, Legality was ensured by the decision of the ethics committee. The ethics committee approval for the study was given by the Ethics Committee of Tokat Gaziosmanpaşa University with the decision numbered 01-54 in the session numbered 08 and dated 16.05.2023.

FINDINGS

In this section, the answers given by the participants to the questions in the interview form of the school principals were analyzed in line with the sub-problems of the study, and the findings obtained from the analysis are presented.

Findings for the question “What do you think about the selection and appointment of BILSEM principals?”

The study first tried to determine the opinions of the school principals about the selection and appointment of BILSEM principals. For this purpose, the school principals were asked, “What do you think about the selection and appointment of BILSEM principals?” The themes, codes, frequencies, and percentages of the codes obtained from the content analysis of the data in line with the expert opinions are shown in Table 2.

Table 2. Opinions about the selection and appointment of BILSEM principals

Categories	Codes	f
Education	Graduate Education	3
	Experience	1
	Appointment based on the score taken from the centralized exam	7
	Appointment based on the scores taken from both the centralized exam and oral exam	1
Characteristics of the system	Appointment by the Ministry based on performance	3
	Appointment through aptitude tests	1
	Appointments from numerical branches	3

When Table 2 is examined, it is seen that there are two themes, seven codes, and 19 code frequencies. Under the education theme are the graduate education codes (f=3) and experience (f=1). Under the theme of the characteristics of the system, there are the codes of appointment based on the score taken from the centralized exam (f=7), appointment based on the scores taken from both the centralized exam and oral exam (f=1), appointment by the ministry based on performance (f= 3), appointment through aptitude tests (f=1) and appointment from numerical branches (f=3). They mentioned that principals must be appointed through an examination to become a principal in BILSEMs, where talent exams are conducted to recruit incredibly talented students. When the opinions expressed by the participants about this question are examined, it is seen that the participants X1, X2, X3, X4, X7, X9, X10 are of the opinion that principals should be appointed to BILSEMs on the basis of the score taken from the centralized exam, the participant (X8) is of the opinion that principals should be appointed to BILSEMs on the basis of the scores taken from both the centralized exam and oral exam, the participants X1, X3, X5 are of the opinion that principals having graduate education should be appointed, the participant X3 is of the opinion that principals having enough experience should be appointed, the participants X5, X6, X8 are of the opinion that principals from numerical branches (mathematics, physics, chemistry, etc.) should be appointed, the participants X5, X6, X12 are of the opinion that principals should be appointed on the basis of performance by the Ministry of National

Education and the participant X11 is of the opinion that principals should be appointed through aptitude tests. Some of the participating principals expressed the following opinions on this issue:

“Since there are gifted students in BILSEMs, I believe that school principals should be selected from among counseling teachers who are experts in this field. In addition, those who have master’s or doctorate degrees should be given priority.” (X1)

“As far as I know, BILSEM principals are selected from among the teachers who have worked or are currently working in a BILSEM.” (X2)

“The administration of a BILSEM, both as a principal or as an assistant principal, is tough and demanding. Therefore, I think principals should be subjected to a separate test or different conditions should be sought in their appointment, such as having a master’s degree and having experience in conducting projects.” (X3)

“I think unjust appointments can only be prevented by exams. I think that people with the competencies required in their field and who can prove that they have these competencies through a written exam should be appointed.”(X4)

“I believe they should be chosen among graduate-level mathematics, physics, and chemistry teachers. Teachers who have numerical or manual skills and can contribute to the emotional and physical development of the child should be appointed there. Their appointment by the Ministry would be good.”(X5)

“I think that it would be appropriate for those who graduated from numerical branches to be appointed by the Ministry of National Education.”(X6)

“Persons who can provide the necessary guidance for students should be selected as principals. Those who have curiosity and skills should be appointed through a written exam, not with an oral exam.” (X7)

“It can be done based on a written exam, followed by an oral exam. They should be selected from among the branch teachers such as mathematics and physics.” (X8)

“To become a principal, it is necessary to be a teacher at that school, which I think is good. This is very good because I think a teacher from within the system with an exam will contribute more to the institution regarding administration.” (X9)

“They have to be appointed by exam because their students and teachers also take exams to be here.” (X10)

“Since students are admitted to BILSEM with aptitude tests, principals should also be subjected to an aptitude test.” (X11)

“BILSEMs should be included in the scope of project schools, and the principals should be appointed by the Ministry, just as in the project schools.” (X12)

In this context, school principals who have not worked in BILSEMs stated that appointment by examination is an appointment criterion in foreign BILSEMs, the appointment of graduates from the psychological therapies and guidance department or digital branch as branches, and appointment of those who have completed their master's degree and have project experience are more appropriate. These opinions can be thought that the appointment of teachers in BILSEMs may be kept in one of the exceptional guidance and guidance areas for those who have a master's degree or have worked in the field of special education or for people with unique talents, as it consists of a particular education room.

Findings obtained for the question “What do you think about the qualifications to be possessed by BILSEM principals?”

Concerning the second sub-problem of the study, the question “What do you think about the qualifications to be possessed by BILSEM principals?” was asked of the participating principals. The themes, code frequencies, and percentages of the codes obtained from the content analysis of the data in line with the expert opinions are shown in Table 3.

Table 3. Qualifications to be possessed by BILSEM principals

Categories	Codes	f
Personality characteristics	Being competent	7
	Having proper diction	1
	Being innovative	2
	Being devoted	1
	Having numerical intelligence	1
	Having communication skills	2
	Being sociable	1
Education	Having technological competence	2
	Having experience in project preparation	4
	Having graduate education	4
	Having pedagogical knowledge	3
	Having content knowledge	4
	Being inquisitive	2

When Table 3 is examined, it is seen that there are two themes, 13 codes and 34 code frequencies. These two themes are personality characteristics and education. They shed light on BILSEM principals' ability to understand the needs of specially talented students, produce solutions, and find practical solutions to current problems. Under the theme of personality characteristics, there are the codes of being competent (f=7), having proper diction (f=1), being innovative (f=2), being devoted (f=1), having numerical intelligence (f=1), having communication skills (f=2), being sociable (f=1). Under the theme of education, there are the codes of having technological competence (f=2), having experience in project

preparation (f=4), having graduate education (f=4), having pedagogical knowledge (f=3), having content knowledge (f=4), being inquisitive(f=2).

When the opinions expressed by the participants about this question are examined, it is seen that the participants X1,X2,X3,X4,X9,X10,X12 are of the opinion that principals should be competent in their field and administration, the participants X9, X12 are of the opinion that principals should be inquisitive, the participant X1 is of the opinion that principals should have proper diction, the participant X2 is of the opinion that principals should have social skills, the participants X1,X2,X3,X8 are of the opinion that principals should have communication skills, the participants X5, X8, X10, X11 are of the opinion that principals should have content knowledge, the participants X5,X9, X10 are of the opinion that principals should have pedagogical knowledge, the participants X3, X4 are of the opinion that principals should be innovative, the participant X4 is of the opinion that principals should be devoted, the participant X6 is of the opinion that principals should have numerical intelligence, the participants X3, X7 are of the opinion that principals should have technological competence, the participants X3,X4,X6, X9 are of the opinion that principals should have experience in project preparation and the participants X4, X5, X9, X12 are of the opinion that principals should have graduate education. Some of the participating principals expressed the following opinions on this issue:

“BILSEM principals should possess certain qualities, such as being knowledgeable, having good speaking skills, being persuasive and establishing effective communication with everyone.” (X1)

“BILSEM principals must have excellent communication skills, be socially adept, and establish good communication with parents and teachers. This is because gifted students are enrolled in BILSEMs, and determining the teachers who will guide them and bringing together parents and teachers require communication skills and expertise.”(X2)

“Managing this group of students and teachers is likely not easy. Therefore, BILSEM principals should be well-equipped in educational technologies, possess strong communication skills, know current learning and teaching techniques, and be competent in project management.”(X3)

“BILSEM principals should be selected from individuals who have developed themselves in the field, achieved successes, are innovative, dedicated, open to projects, ambitious, and have completed their master’s or doctoral degrees.”(X4)

“It is important for our principals and colleagues working there to have completed graduate education in their field or the field of education.”(X5)

“They need to possess numerical intelligence. They should prove themselves through projects they undertake every 2-3 years, including TÜBİTAK (The Scientific and Technological Research Council of Turkey) and international projects.”(X6)

“They should have technological competence and be knowledgeable about every subject in which education is provided to students. They should genuinely love this job, have a curiosity and passion for it, possess the necessary abilities and talents, and be able to guide students.”(X7)

“They need content knowledge because the incoming students are special, and the principal should be able to see the world and life from their perspective. They should have good communication skills.” (X8)

“They must have an inquisitive personality and an academic orientation. They need to participate in research and be involved in a relevant project.”(X9)

“They should develop themselves and should not only excel in their field but also develop themselves pedagogically outside of their discipline.”(X10)

“Since they work with gifted students, they should attend in-service training in their fields and course contents.”(X11)

“They must be prone to research and development. They must have a doctoral degree. (X12)

It has been stated that the principals who will work in BILSEMs must be well-equipped, have proper diction, have high communication skills, have improved themselves in the field, be determined, have postgraduate education, and have numerical intelligence. This situation can be interpreted as there are opinions about the qualifications of being a principal in BILSEMs, which aim to meet the high expectations of society in general in institutions that seek to train gifted students for the future.

Findings for the question “What do you think about the advantages and disadvantages of being a BILSEM principal?”

When the answers were given to the question, “What do you think about the advantages and disadvantages of being a BILSEM principal?” the participating principles were analysed, and three main themes and eight codes were obtained for the advantages. The themes, frequencies, and percentages of the codes received from the content analysis of the data in line with the expert opinions are shown in Table 4.

Table 4. Advantages and disadvantages of being a BILSEM principal

Categories	Codes	f
Time	The suitability of working hours	2
Opportunities	Participation in projects	4
	Having workshops	1
	Working with selected students	3
	Good student and parent profile	2
	Contributions to the professional and personal development	3
Financial Gains	Extra payments	3
	Economic gains	3
Time	Having different working hours	4
Concerns	Children being capricious and arrogant	2
	High expectations	3
Financial Problems	Lack of resources and materials	2
	Inadequate physical conditions	1

Table 4 When Table 4 is examined, it is seen that there are six themes, thirteen codes, and 33 code frequencies. These themes are time, opportunities, and financial gains as advantages, time, concerns, and economic problems as disadvantages. Under the theme of time, there is the code of suitability of working hours (f=2). Under the theme of opportunities, there are the codes of participation in projects (f=4), having workshops (f=1), working with selected students (f=3), good student and parent profile (f=2), contributions to professional and personal development (f=3) and under the theme of financial opportunities, there are the codes of extra payments (f=3), economic gains (f=3). The first theme derived from the opinions expressed about disadvantages is the theme of time, and under this theme, there is the code of having different working hours (f=4). The second theme is the theme of concerns. Under this theme, there are the codes of children being capricious and arrogant (f=2), high expectations (f=3), and the last theme is the theme of financial problems. Under this theme are the codes of lack of resources and materials (f=2) and inadequate physical conditions (f=1). When the opinions expressed by the participants about this question are examined, it is seen that the participants X1, X5 are of the opinion that suitability of working hours is an advantage, the participant X2 is of the opinion that having workshops is an advantage, the participants X3, X4, X6 are of the opinion that contributions to professional and personal development are an advantage, the participants X5, X9, X11 are of the opinion that having economic gains is an advantage, the participants X8, X11, X12 are of the opinion that having extra payments is an advantage, the participants X2, X10, X12 are of the opinion that students' being selected with an exam is an advantage, the participants X10, X12 are of the opinion that student and parent profile is an advantage and the participants X1,X2,X3, X6 are of the opinion that participation in projects is advantage. On the other hand, the participants X2, X3, X7, X11 are of the opinion that different working hours is a disadvantage, the participants X1, X12 are of the opinion that

children being capricious and arrogant is a disadvantage, the participants X4,X5, X12 are of the opinion that high expectations is a disadvantage, the participants X3,X5 are of the opinion that lack of resources and materials is a disadvantage and the participant X5 is of the opinion that inadequate physical conditions is a disadvantage. Some of the participating principals expressed the following opinions on this issue:

“As far as I know, BILSEM has a slightly different working schedule. Besides, gifted children may exhibit a small amount of capriciousness and arrogance. Students might have a condescending attitude, which can pose a challenge. If the projects they undertake are successful, it creates a valuable outcome, which is a positive thing.”(X1)

“As far as I know, BILSEM principals have different working hours, meaning they work outside the regular school hours, usually between 5 and 10 PM. This aspect poses a disadvantage. It can be challenging to determine which teachers will work during these hours and bring students to school at that time. However, the presence of gifted students and the availability of projects and workshops are advantages of BILSEM schools.”(X2)

“Children can also produce excellent work in projects. All of these require significant costs, which might be a disadvantage. Finding funding to cover these costs can be challenging. There is no concept of regular working hours; the work begins in the morning and extends until late evening, including weekends. Advantages include the constant need for principals to improve themselves and the requirement for teachers and administrators to enhance their skills continuously. They must elevate their communication abilities to a high level and can specialize in project preparation, which contributes to their professional development.”(X3)

“Like any other administrator, BILSEM principals have their advantages and disadvantages. Of course, being responsible for a unit that aims to advance students who have already proven themselves in different talents brings high expectations from various stakeholders, including parents, the Ministry of Education, and the local education authority. It requires constantly researching, nurturing, and working with an open-minded team. The principal should prepare all possible opportunities and conditions to foster students’ abilities to the highest level and ensure effective coordination of educators and the team who will guide them.”(X4)

“In our schools affiliated with the Directorate of Special Education and Guidance Services, the principals receive an additional 25% payment for their extra hours. Being a BILSEM principal may provide more comfortable working opportunities for the principal to allow students to use BILSEM during non-academic hours. On the other hand, you are dealing with gifted children, and the expectations are very high. Many BILSEMs operate either within a school’s premises or in buildings that do not belong to them, which puts them at a disadvantage in terms of both the physical conditions of the school and preparing educational environments for students.”(X5)

“I believe it is an advantage that students provide leadership to teachers in constantly engaging in project-based activities, and this allows principals to renew themselves.”(X6)

“Having the work schedule after mainstream classes have finished can be considered a disadvantage.” (X7)

“I believe BILSEM has a positive aspect. I assume they have some financial flexibility regarding budget allocations, which allows them to avoid financial difficulties.” (X8)

“Because institutions affiliated to the Directorate of Special Education take twenty-five per cent more payment.” (X9)

“Being a BILSEM principal has the advantage that the children who come to you have already passed a certain stage, an exam, and are high-level students. Therefore, I think the job is easier. Furthermore, on the other side, a child wants to receive the education you provide. I do not think there is a disadvantage. I consider it a rather elite school administration compared to other school administrations.” (X10)

“They do not have any economic difficulties. They receive a significant budget from the ministry. The teachers and the director also receive an extra 25% in extra hours. These can be considered as advantages.” (X11)

“Selective admission of students and teachers is a major advantage. I am aware that they do not have any financial difficulties. They receive the necessary funding from the Directorate of Special Education Services. Additionally, I consider the profile of parents and students to be highly qualified. They go through a specific selection exam, which is an advantage. The biggest disadvantage could be that some parents may think, “My child was specially selected and is different from their peers.” It may create pressure if they do not find what they expected.” (X12)

Regarding the advantages of being a principal in BILSEMs, issues such as seeing the parent and student profile as positive in general, selective recruitment of students in particular, opportunities for professional development of principals, and higher financial returns compared to other educational institution directorates were stated. It can be said that this situation reveals the importance of student selection and parent profile in terms of management in education, as the principals of other institutions present it as an advantage compared to their institutions in terms of student and parent profiles.

Findings for the question “What do you think about the problems encountered by BILSEM principals?”

The participating school principals were asked, “What do you think about the problems encountered by BILSEM principals?” The themes, codes, frequencies, and percentages of the codes obtained from the content analysis of the data in line with the expert opinions are shown in Table 5.

Table 5. Problems encountered by BILSEM principals

Categories	Codes	f
Financial Difficulties	Lack of physical settings	1
	Lack of resources and materials	5
	Transportation of students to the school	1
Operational Difficulties	The absence of attendance requirements for students	3
	Lack of information on BILSEM among parents	1
	Different working hours	1
	BILSEM requires intense effort	2
Parental Difficulties	Intensity of projects	1
	High expectations	5
	Parental pressure	3
	Lack of communication with parents	2

When Table 5 is examined, it is seen that there are three themes, eleven codes, and 25 code frequencies. They reflected the problems faced by BILSEM principals as the lack of the materials required for students to develop their creativity and use their full potential in BILSEMs and the high expectations of student's parents regarding their incredibly talented children.

Under the theme of financial difficulties, there are the codes of lack of physical settings (f=1), lack of resources and materials (f=5), and transportation of students to the school (f=1). Under the theme of operational difficulties, there are the codes of the absence of attendance requirement for students (f=3), lack of information about BILSEM among parents (f=1), different working hours (f=1), BILSEM requiring intense effort (f=2), intensity of projects (f=1). Under the theme of parental difficulties, there are the codes of high expectations (f=5), parental pressure (f=3), and lack of communication with parents (f=2). When the opinions expressed by the participants about this question are examined, it is seen that the participants X1, X3,X4,X5,X7 are of the opinion that there is a lack of resources and materials, the participant X4 is of the opinion that there is a lack of physical settings, the participant X5 is of the opinion that the transportation of students to the school is a problem,the participants X2,X3,X11 are of the opinion that the absence of attendance requirement for students is a problem, the participant X7 is of the opinion that lack of information about BILSEM among parents is a problem, the participant X11 is of the opinion that different working hours is a problem, the participants X5, X8, X9, X10, X12 are of the opinion that high expectations is a problem, the participants X9, X10, X12 are of the opinion that parental pressure is a problem, the participant X12 is of the opinion that the intensity of projects is a problem, the participants X1, X15 are of the opinion that BILSEM requiring intense effort is a problem and the participants X2, X5 are of the opinion that lack of communication with parents is a problem. Some of the participating principals expressed the following opinions on this issue:

“It may be necessary to put in extra effort to educate them and to seek additional resources. In such cases, there is inevitably an extra workload involved.” (X1)

“The difficulties here may include establishing good communication with parents. Since it operates outside regular school hours, it is necessary to ensure that students attend the program...” (X2)

“Finding resources for projects can be challenging, and establishing workshops may also pose difficulties. It might be challenging to initially set up the workshops and subsequently ensure consistent student participation. Over time, the lack of mandatory attendance may lead to increased student absenteeism, potentially resulting in the workshops' closure.” (X3)

“There may be some physical limitations such as spatial and material deficiencies.” (X4)

“On the other hand, BILSEM faces certain challenges. Due to high expectations, parents often place significant importance on BILSEM institutions. This can sometimes lead to conflicts between parents, administration, and teachers. Since BILSEM education is generally provided during non-school hours, parents are responsible for taking their children to BILSEM without government support. Children already have a set schedule once they arrive home but must also attend BILSEM. The child encounters another educational setting without having the opportunity to relax during the school day. BILSEM must have social spaces that can provide relaxation and comfort for these students. These are the challenges that the principal faces.” (X5)

“One possible difficulty is the lack of necessary materials and equipment, which may result in the school not functioning at the desired level. The school principal may face challenges in this regard. Additionally, lacking sufficient knowledge about BILSEM among the community and teachers can make the school principal's job more challenging.” (X7)

“Since these students are special, parents may not completely understand their children or exaggerate their abilities. Sometimes, parents' high expectations due to considering their child as a special student can make administration more challenging.” (X8)

“The staff working in BILSEM can be influenced by a profile of parents with high expectations for their children. In this sense, they may experience parental pressure or be subjected to numerous questions.” (X9)

“I believe that BILSEM principals may experience more difficulties with parents rather than students. I do not think they would have problems with the students themselves. For example, parents might not be overly concerned about their child's success in music or other fields. However, they tend to place more importance on their performance in math and science subjects, leading to higher expectations and potential challenges. Therefore, they may experience difficulties in dealing with parents.” (X10)

“Since everyone has different working hours, it might pose a challenge. I am not sure if attendance is being tracked. If there is no requirement for attendance, they may not be able to achieve what they desire or expect.” (X11)

“One of the biggest challenges they may encounter is likely related to project development. As education services are now project-based and Provincial Directorates of National Education constantly encourage us to generate projects, finding teachers willing to collaborate in project works could be difficult. As mentioned earlier, satisfying parents’ expectations might also pose some challenges.”(X12)

Regarding the advantages of being a principal in BILSEMs, issues such as seeing the parent and student profile as positive in general, selective recruitment of students, providing opportunities for professional development of principals, and higher financial returns compared to other educational institution directorates were stated. It can be said that this situation reveals the importance of student selection and parent profile in terms of management in education, as the principals of other institutions present it as an advantage compared to their institutions in terms of student and parent profiles. The general view put forward as disadvantages is that working hours are different, gifted students are more arrogant than their peers, and parents have high expectations. This situation can be interpreted as causing principals who want to work in BILSEM institutions to question whether they are equipped to meet this high expectation. It can also be interpreted that there is not enough information about the psychological characteristics of gifted students and that principals who have gifted students in their schools may have limited knowledge about these children.

Findings obtained for the question “What do you think about the solutions to the problems encountered by BILSEM principals?”

The participating principals were asked, "What do you think about the solutions to the problems encountered by BILSEM principals?" The themes, codes, frequencies, and percentages of the codes obtained from the content analysis of the data in line with the expert opinions are shown in Table 6.

Table 6. Solutions to the problems encountered by BILSEM principals

Categories	Codes	f
Communication	Establishing effective communication	4
Education	They should have professional experience	1
	Continuity in education should be ensured	1
	They should pursue an academic career	1
	They should train themselves well in their field	2
	Social activities should be increased	1
Regulations	The appointment of principals should be tied to a certain standard.	1
	Schools should be on a campus	1
	Principals should be able to select the teachers	1
Financial Problems	Equipment and resource deficiencies should be addressed.	2
	Employment opportunities should be increased.	1

When Table 6 is examined, it is seen that there are four themes, eleven codes, and 16 code frequencies. They mentioned that BILSEM managers should be able to establish healthy communication with every unit within the institution in order to address the problems they face in all aspects. Under the theme of communication, there is the code of establishing good communication (f=4). Under the theme of education, there are the codes of having professional experience (f=1), ensuring continuity in education (f=1), pursuing an academic career (f=1), training themselves in their field (f=2), and increasing social activities (f=2). Under the theme of regulations, there are the codes of tying the appointment of principals to a certain standard (f=1), locating schools on a campus (f=1), and selection of teachers by principals (f=1). Under the theme of financial difficulties, the codes address equipment and resource deficiencies (f=2) and increasing employment opportunities (f=1). When the opinions expressed by the participants about this question are examined, it is seen that the participants X1, X8, X10, X12 are of the opinion that effective communication should be established, the participant X8 is of the opinion that principals should have experience, the participant X7 is of the opinion that continuity in education should be ensured, the participant X12 is of the opinion that principals pursue an academic career, the participants X8, X12 are of the opinion that principals should train themselves well in their field, the participant X3 is of the opinion that the appointment of principals should be tied to a certain standard, the participants X4, X7 are of the opinion that equipment and resource deficiencies should be addressed, the participant X5 is of the opinion that schools should be in a campus, the participant X4 is of the opinion that social activities should be increased, the participant X5 is of the opinion that principal should be able to select the teachers and the participant X7 is of the opinion that employment opportunities should be increased. Some of the participating principals expressed the following opinions on this issue:

“He/she should effectively guide and manage their team, maintain good communication with students, stay in constant contact with the counselor they work with, listen to teachers regularly, and take control of the flow of events from the beginning to the end.”(X1)

“In this context, working with students in a more workshop-style and game-like approach, as well as working with gifted students, can be seen as a positive aspect for teachers and school administration. We work in a rural area, and our resources are not at the desired level. However, working with these gifted students can bring joy to individuals, and it would be rewarding for teachers to see the results of their work.”(X2)

“The regulations regarding the appointment of administrators can be standardized, and if the uncertainty in the selection process is eliminated, it can provide a sense of relief for principals.”(X3)

“Creating an environment, preparing materials to maximize students' talents, and providing necessary support is crucial. Additionally, students should be taken on educational trips to schools in different cities to create awareness among students and educators, including school principals.”(X4)

“I want the schools affiliated with the Directorate General of Special Education and Guidance Services to be located within the same campus. I believe that more effective work can be done together on one campus. To empower principals, I would delegate teacher appointments to the principal's discretion, just like in project-based schools, allowing them to choose their teachers based on their success. We should also hold the principal responsible for the success of the teachers they choose.”(X5)

“Continuity is fundamental to both education and BILSEM. This education should start in the pre-school period and continue through the upper levels. There should be fields where children can work and create. We cannot motivate the child if any of these steps is missing. As a parent, if my child cannot find a job after university, I may choose not to send them there. Therefore, this process needs continuity, comprehensive resources, and competent teachers in the field.”(X7)

“They should be able to establish good communication. They should have good content knowledge. They should have previous experience in managing a BILSEM.” (X10)

“Parental information sessions regarding the BILSEM process can be conducted effectively, and communication with parents can be improved.”(X12)

“Dealing with people can be challenging, both with students and parents. It is important to support the staff in this institution with guidance and counseling training and provide courses and seminars on leadership and guidance for individual teachers. Collaboration with the Higher Education Council (YÖK) can be pursued to ensure qualified principals are selected for quality schools. Individuals with an academic career should be appointed principals in these institutions.”(X9)

In this section, the solution suggestions that the principals have created for the problems they think they may encounter after becoming BILSEM principals are to increase their communication skills, to be professionally experienced, to give more space to social activities, to position the schools independently in a particular area, to prevent problems that may arise with the teachers. It is seen that they offer suggestions such as being active in the appointment of managers and eliminating hardware and infrastructure deficiencies. However, it can be said that the solutions offered by the principals to the problems they foresee regarding BILSEM are generally valid in all schools. In this case, managers may suggest these solutions predictably, benefiting from their experiences.

Discussion, Conclusions and Suggestions

Today's rapidly changing and evolving technological and scientific conditions necessitate school principals to enhance their leadership skills and effectively manage their institutions. School principals must prepare themselves professionally and psychologically for the role of administration in order to enhance students' academic achievement and increase effectiveness within their institutions (Wildy et al., 2007). Therefore, school administration requires special education or preparation due to its unique demands and responsibilities (Karstanje & Webber, 2008).

The school administrator is critical in increasing school effectiveness (Balıcı, 1993). With their acquired knowledge, skills, and experience, school principals play a decisive role in shaping the school's vision, planning activities, motivating and managing staff, and initiating and sustaining efforts for change within the institution (Garies & Tschannen-Moran, 2005). A study by Önen and Eryılmaz-Ballı (2020) found that students perceive school principals as transformative leaders and guides. The leadership, experience, and perspective of school principals are crucial in achieving the desired success by schools in academic, social, cultural, and sports domains (Aktay & Ekşi, 2009). There is a great responsibility on the school and school administrators to create a positive school climate, instill core values in students, and foster a sense of belonging within the institution (Halstead & Taylor, 2000). This situation becomes even more significant in BILSEMs.

When the participants' opinions about the selection and appointment process of BILSEM principals were examined in the current study, it was found that most participants think that BILSEM principals should be selected through a written exam. At the same time, some suggest that the Ministry of National Education should appoint them based on specific criteria. On the other hand, some participants think BILSEM principals should be selected from those who have received graduate education. At this point, it is necessary to review the process of selecting and appointing BILSEM principals because while students and teachers are selected through a written exam and an oral exam conducted by the Ministry of National Education based on specific criteria, the selection of BILSEM principals solely through a written exam does not fully align with the function of BILSEMs. In addition to a written exam, BILSEM principals should be selected through a method that assesses their professional and personal development and is based on performance.

The analyses conducted in the current study revealed that the participating school principals unanimously agreed on the importance of being innovative, open to change, technologically competent, and providing leadership to teachers in project preparation for appointing someone as a principal to a BILSEM. The current study's findings concur with the findings reported by Demirtaş and Özer (2014), which examined school principals' perceptions of school principals. They found that according to the participants, the principal should be a leader for the school, attract attention with their accomplishments, have a graduate degree, be appointed based on a career system, and gain experience by working alongside experienced colleagues before being appointed. Jolly (2009) emphasizes that special programs should be prepared for gifted students. Therefore, school administrators who work in institutions where gifted individuals receive education should be competent in academic, cognitive, and affective domains and have a good command of educational technologies. He/she should follow current developments, know the project preparation processes, and guide and inspire teachers and students. High communication skills and establishing a dialogue with all segments of society will contribute to developing social relations in the institution.

The school principals participating in the study expressed problems such as lack of resources and materials, inadequacy of physical settings, and difficulties that BILSEM principals will encounter. On the other hand, equipment, resource, and material deficiencies and physical space inadequacies are obstacles to the effective leadership of BILSEM principals. The results obtained from these studies show that BILSEM principals devote some of their time to improving the physical conditions of the institution, providing the required equipment and materials, and increasing the technological opportunities, so they cannot spare enough time to lead the educational and instructional activities. These results are similar to some research results in the literature (Çelikten, 2004; Turan et al., 2012). Meeting the equipment, resource, and material needs in BILSEMs and the development of physical spaces will allow BILSEM principals to devote their time to developing and renewing themselves professionally regarding social relations and following technological developments.

The process that a person carries out for many years is subject to deterioration, positively or negatively, not only for himself but also for his family, environment, and negativities. In this sense, before hiring managers, it is crucial to introduce the work programs section to the candidates and inform them about the work to be done and their responsibilities in the institutions where the managers are appointed. In this respect, it ensures the organization of commercial activities to promote the BILSEM institution and student profile for BILSEM principal candidates. Growth exams can be created to help managers understand whether they have the appropriate equipment, depending on the institution or not, to grow in the level of perspective, knowledge, and perception. It was also learned that the principals should meet their colleagues who have previously worked in BILSEMs, learn about their jobs, and find suitable conditions or people. In this regard, the details of being employed in institutions under a trial period are bright. In this way, school principals who had not worked in BILSEMs participated. The scope of the results obtained from the tangible study of the principals who worked in BILSEMs can be investigated in future studies.

REFERENCES

- Aktay, A., & Ekşi, H. (2009). Yönetici ve öğretmenlerin değer tercihleri ile örgütsel vatandaşlık davranışları arasındaki ilişki. *İş Ahlakı Dergisi*, 2(3), 19-65. <http://isahlakidergisi.com/sayilar/2-cilt-1-sayi/m0014>
- Balcı, A. (1993). *Etkili okul kuram, uygulama ve araştırma*. Yavuz dağıtım.
- Balcı, A. (2022). *Açıklamalı eğitim yönetimi terimleri sözlüğü*. Pegem Akademi. ISBN: 978-605-364-074-5
- Baltacı, A. (2020). Okul müdürü öz yeterlik algısı ölçeğinin Türkçe'ye uyarlanması. *Journal of Humanities and Tourism Research*, 10(1), 27-40. <http://johut.karabuk.edu.tr/DergiTamDetay.aspx?ID=731>
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2014). *Bilimsel araştırma yöntemleri*. Pegem Akademi Yayıncılık.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.

- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- Çelikten, M. (2004). Bir okul müdürünün günlüğü. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 14(1), 123-135. <https://search.trdizin.gov.tr/yayin/detay/3624/bir-okul-mudurlugunun-gunlugu>
- Çoban, G. S. (2018). Bilim ve Sanat Merkezleri yöneticilerinin yaşadıkları zorluklar ve çözüm yollarına ilişkin görüşleri: İstanbul örneği. [Yüksek Lisans Tezi, İstanbul Kültür Üniversitesi].
- Demirel, İ. N. (2018). Eğitim liderinin etkileme gücü. *EKEV Akademi Dergisi*, 0(73), 293-302. <https://dergipark.org.tr/pub/sosekev/issue/71391/1147983>
- Demirtaş H., & Özer N. (2014). Okul müdürlerinin bakış açısıyla okul müdürlüğü. *Kastamonu Eğitim Dergisi*, 22(1), 1-24. <https://dergipark.org.tr/pub/kefdergi/issue/22603/241527>
- Eren, H. (2022). Denizli ili kale ilçesinde görev yapan okul müdürlerinin Bilim ve Sanat Merkezi (BILSEM) işleyişine ilişkin görüşleri. *Pamukkale Üniversitesi Eğitim Bilimleri Enstitüsü*. <https://hdl.handle.net/11499/38981>
- Ergün, M. (1992). *Eğitim ve toplum*. Ocak Yayınları.
- Fryand, F., & Hale, S. (1996). Processing speed, working memory, and fluid intelligence: Evidence for a developmental cascade. *The American Psychologist Society*, 7(4), 237-241. <https://www.jstor.org/stable/40062952>.
- Gagne, F. (1999). Is there any light at the end of the tunnel?. *Journal for the Education of the Gifted*, 22(2), 191-229. doi:10.1501/Ozlegt_0000000174.
- Gareis, C. R., & Tschannen-Moran, M. (2005). *Cultivating principals' sense of efficacy: Supports that matter*. Paper to be presented at the annual meeting of the University Council for Educational Administration, Nashville, TN. <http://coe.ksu.edu/ucea/2005/TschannenUCEA2005.pdf>
- Gencer, M. (2021). Öğrencilerin okul ve okul müdürü kavramlarına ilişkin metaforik algıları. *Kalem Eğitim ve İnsan Bilimleri Dergisi*, 11(2), 729-754. <https://doi.org/10.23863/kalem.2021.222>.
- Glesne, C. (2013). *Nitel araştırmaya giriş* (A. Ersoy & P. Yalçınoğlu). Anı Yayıncılık. ISBN: 9786054434992
- Halstead, J. M., & Taylor, J. M. (2000). Learning and teaching about values: a review of recent research. *Cambridge Journal of Education*, 30(2), 169-202. <https://doi.org/10.1080/713657146>
- Jolly, J. L. (2009). Historical perspectives: The national defense education act, current STEM initiative, and the gifted. *Gifted Child Today*, 32(2), 50-53. doi:10.17522/balikesirnef.529898
- Karstanje, P., & Webber, C. F. (2008). Programs for schools principal preparation in East Europe. *Journal of Educational Administration*, 46(6), 739-751. doi:10.1108/09578230810908325
- Kaya, N. G. (2013). Üstün yetenekli öğrencilerin eğitimi ve BILSEM'ler. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 15(1), 115-122. <https://dergipark.org.tr/pub/erziefd/issue/6010/79706>
- Kazu, İ. Y., & Şenol, C. (2012). Üstün yetenekliler eğitim programlarına ilişkin öğretmen görüşleri (BILSEM Örneği). *e-Uluslararası Eğitim Araştırmaları Dergisi*, 3(2), 13-35. <https://www.acarindex.com/e-uluslararasi-egitim-arastirmalari-dergisi/ustun-yetenekliler-egitim-programlarina-iliskin-ogretmen-gorusleri-BILSEM-ornegi-1218334>

- McNeely, A. C., Nonnemaker, J., M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health*, 72(4), 138–146. doi: 10.1111/j.1746-1561.2002.tb06533.x
- MEB, (2021). Milli eğitim bakanlığına bağlı eğitim kurumlarına yönetici seçme ve görevlendirme yönetmeliği. Resmi Gazete, Sayı 31386. <https://www.resmigazete.gov.tr/eskiler/2021/02/20210205-1.htm>
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass Publishers.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. London, United States of America: SAGE.
- Önen, Ö. & Eryılmaz-Ballı, F. (2020). Z kuşağı ortaokul öğrencilerinin okul müdürlerine dair algılarının incelenmesi, *EKEV Akademi Dergisi*, 0(84), 529-550. <https://dergipark.org.tr/tr/pub/sosekev/issue/71841/1155727>
- Özer, M. (2020). Türkiye’de özel yeteneklilere yetenek geliştirme desteğinde Bilim ve Sanat Merkezleri: Mevcut durum ve iyileştirme alanları. *Uluslararası Toplum Araştırmaları Dergisi* 17(33), 729-749. <https://doi.org/10.26466/opus.810856>
- Pemik, K. ve Levent, F. (2019). Üstün yetenekli öğrencilere destek odasında verilen eğitime ilişkin okul yöneticilerinin ve öğretmenlerin görüşleri. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 20(2), 313-338. <https://doi.org/10.21565/ozelegitimdergisi.446598>
- Saban, A. (2008). Okula ilişkin metaforlar. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 14(3), 459-496. <https://dergipark.org.tr/tr/pub/kuey/issue/10342/126702>
- Ministry of Industry and Technology (2017). İllerin ve bölgelerin sosyo-ekonomik gelişmişlik sıralaması araştırması [the Socio-Economic Development Ranking Studies] ((SEGE-2017), Kalkınma Ajansları Genel Müdürlüğü, Ankara.
- Şahin, F., & Levent, F. (2015). Examining the methods and strategies that classroom teachers use in the education of gifted students. *The Online Journal of New Horizons in Education*, 3(5), 73-82.
- Taymaz, H. (1985). *Okul Yönetimi*. Pegem Yayınevi.
- Tunç, E., & Beşaltı, M. (2015). Okul yaşam kalitesinin bazı değişkenlere göre incelenmesi. *Turkish Journal of Education*, 3(4), 28-39. doi:10.19128/turje.181090.
- Turan, S., Yıldırım, N., & Aydoğdu, E. (2012). Okul müdürlerinin kendi görevlerine ilişkin bakış açıları. *Pegem Eğitim ve Öğretim Dergisi*, 2(3), 63-76. <https://dergipark.org.tr/tr/pub/pegegog/issue/22588/241264>.
- Ültay, E., Akyurt, H., & Ültay, N. (2021). Sosyal bilimlerde betimsel içerik analizi. *IBAD Sosyal Bilimler Dergisi*, (10), 188-201. <https://doi.org/10.21733/ibad.871703>
- Viera, A. J. ve Garrett, J. M. (2005). Understanding interobserver agreement: The kappa statistic. *Family Medicine*, 37(5), 360-363.
- Wildy, H., Clarke, S. R. P., & Slater, C. (2007). International perspectives of principal preparation: How does Australia fare? *Leading & Managing Special Edition*, 13(2), 1–14.
- Yıldırım, A., & Şimşek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin Yayıncılık. ISBN 9750200071. <http://eku.comu.edu.tr/index/2/2/etopkaya.pdf>.