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## RESEARCH ARTICLE

## Being a Teacher in BİLSEM: A Sample from Ankara

Sevda KIR , Sait AKBAŞLI

Hacettepe University, Department of Educational Administration, Ankara, Turkey

### Abstract

This study aimed to reveal the evaluations of teachers who work in Science and Art Centers (BİLSEM) about being a teacher there. This qualitative study is structured according to the phenomenology design. A total of 18 teachers working in BİLSEMs located in Ankara constituted the study group. Qualitative data were collected with a structured interview form. Content analysis method was used in the analysis of data. The teachers stated that they were pleased to work with gifted and talented students, and working in BİLSEM increased their motivation to improve themselves. However, they criticized the parents' expectations, the managers' attitudes, working hours, and insufficient technical equipment. However, despite the problems, most participants stated that they would recommend other teachers to come work in BİLSEM. Multiple suggestions were presented according to the problems raised in the study.

**Keywords:** Gifted and talented, science and art center, student, teacher

## Introduction

The concept of giftedness has been discussed by scientists for decades, and interest in those with exceptional abilities has continued even longer. Although various researchers and academics have tried to define the concept of giftedness, it is not easy to define what giftedness is. In gifted education literature, there is a lack of consensus on the definition of giftedness. Researchers and academics have made many definitions and explanations about giftedness. McAlpine (2004) stated that there are 213 definitions about the concept of giftedness. Starddat explains that intelligence is an individual's ability to perform mental behaviors that are difficult, complex, abstract, economical, appropriate for the purpose, have social value and have original qualities; under these conditions, it is the ability to concentrate his/her energy on behavior and resist excitement. William Stern considers it as the general ability of an individual to transfer his/her thinking consciously to new situations. For Wechsler, it is the ability of an individual to behave in accordance with the purpose, to think rationally and to communicate effectively with his / her environment. Alfred Binet thinks intelligence manifests itself through complex processes such as comprehension, judgment, and reasoning, not with simple mental elements such as memory space, sensory discrimination and reaction speed. As seen in the definitions given above, intelligence is generally defined as one-dimensional with different perspectives (Demirel et al., 2006).

**Corresponding Author:** Sevda KIR E-mail: sevdakcelik@gmail.com

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Binnet, one of the developers of the first intelligence test, explained that intelligence manifests itself in actions such as understanding, decision-making, and reasoning; whereas Gardner, the representative of the theory of multiple intelligences, stated that there were eight types of intelligence, namely verbal, mathematical, musical, visual, physical, social, personal, and naturalistic. He pointed out that individuals could be identified with each type of intelligence, and intelligence levels of people differed (Dolu & Ürek, 2017). Galton conducted a study in 1869 that questioned the relationship of human intelligence with heredity. According to the results of this study, Galton argued that intelligence did not change and remained the same from birth to death (Clark, 2008).

While Tannenbaum (1997) has considered the concepts of giftedness and ability synonymously, Gagne (1985) accepts the concepts of giftedness and talent separately. The contributions of giftedness and talent models to the understanding of artistic ability are mentioned. Feldhusen believes talent is an element of giftedness. He defines the creative-artistic ability in the classification of talents with its relations in curriculum areas (Feldhusen, 1992). Tannenbaum classifies gifted and talented people into four groups according to their contributions to society in moral, physical, emotional, social, intellectual or aesthetic aspects of life. They are categorized as scarcity talents enabling life easy, simple and healthy with their inventions; surplus talents who are artists and musicians; quota talents meeting social needs of people such as teachers, politicians, engineers; and anomalous talents entertaining people (Anghel, 2016). Gagne includes artistic talent in his diverse list of talents, explaining the factors involved in his development (Gagne, 1999). Ziggler and Heller (2000) make statements about talent development in the light of a new research in their field of expertise.

Joseph Renzulli tried to redefine intelligence in the 1970s. He analyzed the definitions of giftedness, reviewed the studies on the characteristics of gifted individuals, and presented a new definition of intelligence. Renzulli stated that IQ tests can always be questioned; He says that the characteristics of intelligence should be evaluated in the context of cultural and situational factors (Renzulli, 1978). As a matter of fact, some of the most recent studies have concluded that “the concept of intelligence cannot be clearly defined, not only because of the nature of the intelligence but also because of the nature of the concepts” (Renzulli, 1982). Different researchers and scientists have put forward different definitions and opinions about intelligence.

Experts identify those who are more successful than their peers in general and/or special ability areas. In 1991, these special individuals were defined as gifted by the decision of the Special Education Council (Baykoç, 2014). Later, the concept of special talented was used. In the BİLSEM published in 2015, the Ministry of National

Education (M.E.B) defines “a student who performs at a higher level than his peers in intelligence, creativity, art, leadership capacity, or special academic fields” as a special talented student (MEB, 2015). Gifted and talented people who have been identified need differentiated programs to develop these skills as they differ from their peers in many areas of development; therefore, their educational needs also differ. Hence, the education curriculum should be able to meet the needs of these children (Kaya, 2013).

A law was enacted in 1948–1956 to support students who are talented in the field of fine arts. Within the scope of this law, individuals who are considered to be talented in the field of fine arts are provided with educational opportunities in Turkey and abroad. With the 5245 law enacted in 1948, people deemed gifted were sent abroad, and their expenses were covered by the state. The scope of the law enacted in the following years was expanded (İdil Biret & Suna Kan Law, 1948). Studies were carried out over the years for homogeneous talent groups. Science high schools, Anatolian high schools, and Anatolian fine arts high schools were opened in order to provide training for gifted and talented children. Eventually Science and Art Centers were opened in 1996 for these children. Different institutions such as the Beyazıt Ford Otosan primary school, TEV İnanc Türkiye private high school, and Anatolian University also provide education in the field of education of gifted students (Kaplan Sayı, 2013). One of the important practices in Turkey is the gifted education program called “Üstün Yetenekliler Eğitim Programları” conducted by the Anatolian University. Program differentiation is based on the parallel curriculum model and the curriculum narrowing model (Sak, 2009). Gifted students take advantage of the scholarship opportunities provided by TEV İnanc Türkiye Foundation private high school and get education in this institution as a boarder. In addition, the institution implements the curriculum of Anatolian high schools (Dönmez, 2009).

Turkey has searched for the most suitable model that will identify gifted and talented students and provide them educational opportunities, and practices of gifted education in other countries have been examined. “An additional course practice school” called the Science and Art Center Project has been initiated to identify the most appropriate and practical model for Turkey’s unique conditions (Dönmez, 2004). The general directorate of special education guidance and counseling services of the Ministry of National Education launched the “Developing Special Abilities of Primary School Students” project in 1996. BİLSEMs are special educational institutions affiliated to the Ministry of National Education, general directorate of special education and guidance services. Science and Art Centers have an important role in the education of gifted and talented students (Sıcak, 2014).

According to the calendar published by the Ministry of National Education and the BİLSEM, classroom teachers nominate students in the fields of general mental abili-

ty, visual arts, and music, taking their grade levels into accounts. Students first attend the group screening (MEB, 2015b). Students who are successful in group screening are included in the individual identification phase in three fields. In the field of general ability, students with an intelligence level of 130 and above and those who are successful in the fields of art and music in the second phase are identified as gifted and talented. According to the results of BİLSEM identification conducted throughout the country in the academic year 2018–2019, the number of students entitled to receive education at BİLSEM was 20,263, and the number of students that BİLSEMs provided educational services increased from 42,832 to 63,095 (Anadolu Ajansı, 2019).

BİLSEMs differ from other schools affiliated to the Ministry of National Education in many respects. Students come to BİLSEMs in pull-out programs, at times convenient for them, mostly in the evening or at weekends. Education in BİLSEM starts in the second grade of primary school and continues until the end of the 12<sup>th</sup> grade. In the BİLSEM education process, there are five programs: orientation, supportive training, recognition of individual abilities, development of special skills, and projects (BİLSEM, 2016). The courses students should take at each stage are determined. Every student profile requires a different program. There are framework programs for each branch to be implemented in BİLSEM. Teachers create the course contents on the basis of the program the students attend and the framework program according to the student's knowledge level and needs in the course.

Teachers are appointed to the Science and Art Centers on the basis of certain criteria, including being a teacher for at least 3 years, completing the compulsory service, or being exempted from compulsory service. The candidate teachers are asked to certify their experiences and qualifications in the fields specified in the Annex-2 form, and a ranking is made according to the score they have obtained in the Annex-2 form among the teachers who apply in their own branch in the province where they work. Three teachers per vacancy on the basis of branches, are invited for an interview. The total score, the basis for the assignment, includes 60% of the score obtained from the Annex-2 form and 40% of the interview score. The teachers are chosen according to the vacant quotas in their branches in the province they are located in and are appointed according to their score superiority (M.E.B., 2019). Teachers assigned to BİLSEM can work in the morning, afternoon, evening, and on Saturdays and Sundays, according to their own schedule (Çetin & Doğan, 2018).

A highly competent and skilled teacher will make a positive contribution to the success of the student. Teachers are the focus of the school as teachers will do the activities in schools (Hopkins & Stern, 1996). Therefore, if teacher qualifications increase, the quality of education in a school also increases (Tang & Choi, 2009). The success of BİLSEMs depends on their ability to achieve their establishment goals,

their teachers' qualifications, and their self-improvement (Altun & Vural, 2012). Teachers who teach gifted students are expected to be better than other teachers in terms of teacher competencies such as professional knowledge, professional skills, and attitudes and personal characteristics (Chan, 2001; Renzulli, 1985).

Teachers working in the Science and Art Centers stated that their undergraduate courses did not include information and training regarding the characteristics and education of gifted students (Gökdere & Çepni, 2005). In addition, there are studies that show that teachers working in BİLSEM need training/support in areas, such as project-based teaching, special education, and evaluation of gifted students (Gökdere & Küçük, 2003). These studies reveal that teachers who work in the field of gifted education are not given the necessary training in this area, and their professional development needs are not met.

Important steps have been taken in recent years in the field of gifted education in Turkey; however, multiple problems still exist. If BİLSEMs are sufficiently equipped, they will be more competent in raising future leaders and scientists (Keskin et al., 2013). Kılıç (2015) pointed out that Science and Art Centers provide an important service in this field but are inadequate in certain aspects, whereas another study suggested that the problems in these institutions may stem from students, teachers, administrators, and parents, as well as the infrastructure, physical conditions, equipment, and location of the BİLSEMs (Çetin & Doğan, 2018). Şeker (2012) examined BİLSEMs in terms of training, counseling, physical conditions, and cooperation between the BİLSEM and environment through interviews with the teachers. In a quantitative study conducted with BİLSEM teachers through a questionnaire, teachers mentioned their views regarding the functions of BİLSEM, the difficulties they had. The teachers also brought some suggestions to improve BİLSEMs (Semerci & Kaya, 2007).

This study reveals some points similar to the results or findings of other studies about BİLSEMs. However, it differs from other studies in some aspects. The main difference being the concept of "being a teacher in BİLSEM." Other studies have mostly focused on BİLSEM as an educational institution for the gifted. This study evaluates the expectation of parents, administrators, and environment from the teachers and the advantages and disadvantages of working in BİLSEM. It examined the problems and challenges that teachers encountered in BİLSEM. In addition, it assessed the job satisfaction of BİLSEM teachers. We also asked if BİLSEM teachers would recommend other teachers working in regular schools to teach in BİLSEM. The teachers voiced their criticism against BİLSEMs and offered suggestions on how to improve different aspects. Therefore, this study covered a wider area of research than other studies.

Gauging the opinions of teachers working in the BİLSEMs about these institutions

is important to ensure improvement. This can help future teachers who want to work with gifted and talented students form an opinion about BİLSEMs. In addition, it can benefit education policy makers, education administrators, program development specialists, and other relevant stakeholders involved with gifted and talented education for eliminating disruptions in BİLSEM, meeting the needs of teachers, and increasing the quality of gifted and talented education. We also hope that our study will contribute to future studies and endeavors in gifted and talented education.

This study aimed to determine the feelings and thoughts of teachers working in BİLSEMs through the following questions, which were answered by the participants who were BİLSEM teachers:

1. When did you learn about BİLSEM?
2. How did you learn about BİLSEM?
3. What kind of information did you have about BİLSEM before you started working there?
4. What are the expectations of the family from BİLSEM teachers?
5. What are the expectations of administrators from BİLSEM teachers?
6. What are the expectations of the environment from BİLSEM teachers?
7. What are the advantages and disadvantages of working in BİLSEM compared with other formal education institutions?
8. What are the difficulties or problems you encounter in BİLSEM?
9. Are you satisfied with working in BİLSEM?
10. Would you recommend teachers who are considering working in BİLSEM to work here?
11. What are your criticisms and suggestions regarding the administrative functioning and programs of BİLSEM?

### **Method**

The study design, study group, data collection tools, data collection, and analysis are included in this section of the study. As social reality cannot be independent of human perception and comprehension processes, the researcher cannot remain neutral in the study process in qualitative research. One of the main features of qualitative research is that it uses the inductive method.

Hewson et al. (2015) have categorized studies conducted by collecting data from the Internet as primary and secondary studies. Online studies open to public use and based on accumulated data are called “secondary studies,” and specially designed studies are called “primary studies.” As this study was designed to investigate a spe-

cific situation and phenomenon, it was a primary study.

### Study Design

The study design used here is phenomenology, which deals with the facts that we are aware of but do not have sufficient information about (Yıldırım & Şimşek, 2016). The phenomenological approach focuses on personal experiences and how individuals interpret events according to their own point of view. In this approach, the researcher tries to understand the events as they are experienced by the individual (Çekmez et al., 2012). Croopley (2002), in a phenomenology study conducted with gifted children, concluded that these children could not live their childhood owing to the high expectations and being directed to accomplish difficult things. In this study, the teachers' opinions regarding working in BİLSEM were evaluated.

### Study Group

Sample selection is one of the important stages in qualitative studies, which uses “purposeful sampling” (Özdemir, 2010). Eighteen teachers working in Science and Art Centers in Ankara in the fall semester of 2019–2020 (October–November 2019) from different branches who voluntarily agreed to be interviewed constituted the study group of the research. The main inclusion criterion for the study was to be still working at BİLSEM.

The personal characteristics of the participants, such as, sex, professional seniority, the type of school they worked before BİLSEM, and the duration of work in BİLSEM are given in Table 1 below.

Table 1

*Personal Characteristics of the Working Group*

Code	Sex	Professional Seniority	Previous School Type	Working Time in BİLSEM
T1	Female	16–20	Secondary school	6 years
T2	Female	11–15	Anatolian high school	3 years
T3	Female	21–25	Vocational high school	3 years
T4	Female	16–20	Anatolian high school	14 years
T5	Female	6–10	Anatolian high school	3 years
T6	Female	21–25	Secondary school	10 years
T7	Female	16–20	Vocational high school	3 years
T8	Female	16–20	Secondary school	3 years
T9	Male	11–15	Secondary school	1.5 years
T10	Female	11–15	Primary school	3 years
T11	Female	11–15	Anatolian high school	1.5 years
T12	Male	16–20	Vocational high school	4 years
T13	Male	21–25	Secondary school	3 years
T14	Male	16–20	Secondary school	13 years
T15	Male	16–20	Secondary school	5 years
T16	Male	11–15	Secondary school	3 years
T17	Male	16–20	Primary school	2 years
T18	Male	16–20	Primary school	5 years

Table 1 shows that the majority of the participants were women; except one of



the teachers in the study group, their professional seniority was over 10 years. Considering the type of school where the participants worked before, it is seen that the teachers worked in all types of schools, except science high schools. The duration of the teachers' employment at BİLSEM varied between 1.5 years and 14 years.

Table 2 displays the teachers' responses to questions about when and how they learned of BİLSEM.

Code	When?	How?
T1	10 years ago	Guidance and Research Center
T2	10 years ago	Official announcement
T3	7 years ago	A BİLSEM teacher
T4	When I was informed about an act for being a teacher at BİLSEM	Official announcement
T5	10 years ago	My mom was a BİLSEM teacher
T6	14 years ago	My school informed me
T7	4 years ago	Friends
T8	7 years ago	While working at the Guidance and Research Center
T9	12 years ago	Official announcement
T10	11 years ago	During the identification process
T11	4 years ago	Official announcement
T12	10 years ago	From a BİLSEM teacher
T13	3 years ago	Official announcement
T14	13 years ago	Friends
T15	When his daughter was identified as gifted	Guidance and Research Center
T16	During the training provided to candidate teachers when I started teaching	Search on the Internet
T17	2 years ago	Friends
T18	5 years ago	Being told to be a good teacher for BİLSEM

Participants T4, T15, and T16 did not provide a date in response to when they learned about BİLSEM; instead, they mentioned an event that informed them. T4 learned of it when the Ministry of National Education announced they will employ teachers to work in BİLSEM. T15 stated that he received information about BİLSEM when his daughter was identified as gifted and started attending classes in BİLSEM. T16 learned of it during pre-service training in his first year of teaching. The other teachers stated exactly when they were informed. Estimating the date teachers got to know of BİLSEM, it can be concluded that there was a wide range of time periods of teachers' knowledge. There are also differences between the working times of the participants in BİLSEM and the time of being informed.

The participants expressed that they were informed through different modes such as through the counseling research center, the teachers working in BİLSEM, official announcements, family members working in BİLSEM, the institution where they work, and announcements about the recruitment of teachers for BİLSEM.



## **Data Collection Tools and Data Collection**

One of the most important elements of research is qualitative data. In this study, the phenomenological interview method was used to collect qualitative data. This type of interview aims to determine the participants' perceptions and thoughts about events (Greasley & Ashworth, 2007). The researcher aimed to determine how the participants made sense of external reality.

The researcher developed an interview form with two parts as a data collection tool. The first part included questions about the personal characteristics of the teachers, and the second part had eight open-ended questions to determine the teachers' opinions about BİLSEM. Before the interview questions were determined, the aspects of working in a school for the gifted were studied. The researchers took the order and number of questions, what they will cover, and how much detail they will include into consideration while arranging them. They paid particular attention to writing questions that were open-ended, easy to understand, had a specific focus, did not have multiple dimensions, and were not guiding. In addition, the questions made sense to the participants in that they were regarding the teachers' present experiences and activities. The researchers created a pool of questions and chose the most appropriate ones that realized the study's aim.

The interview form was reviewed by an expert to evaluate it in terms of the research purpose and its suitability to qualitative study. The expert was an academician working in gifted education, experienced in qualitative studies and research methods and techniques. The expert evaluated the interview form using evaluation criteria. Based on the expert evaluation, amendments were made, and the number of questions was increased to 11 to collect more reliable data. To increase the reliability of the study and to check whether the questions served their purpose, it was tested by interviewing a teacher working in BİLSEM, who was not included in the sample because it was a pilot study.

Maximum diversity and criterion sampling methods were used among purposeful sampling methods for participant selection. The condition of the participants having to work as a permanent teacher in BİLSEM was checked, and teachers from different branches were selected. The Internet was used as a research area in this study. E-mail is one of the most widely used methods and tools in qualitative research on the Internet. In this study, the participant teachers were informed by telephone and e-mail regarding the purpose of the study. The written interview form was sent to the teachers who voluntarily agreed to participate via e-mail, and the teachers were asked to fill the form. The data file of the study was created from the interview forms sent by the participants via e-mail.

There are some advantages to collecting data via e-mail. E-mail is less costly, practical in terms of delivering questions to a large number of people at the same time, and efficient because researchers and participants can maintain simultaneous and asynchronous communication. It was assumed that the participants would be more

comfortable and sincere in their answers as they would have less anxiety about being exposed in the studies conducted via the Internet. It also gives the participants the opportunity to correct or provide additional opinion to the researcher after checking their writing. In addition, the Internet provides flexibility to the researcher in terms of time and space. Generally, audio or video recording of face-to-face interviews is often made, and the researcher has to decipher the records and transfer them to digital media. Some of the problems experienced at this stage are incomprehensible words and local parlance and misunderstood diction. As the data collection was carried out via e-mail, these problems automatically disappeared. Conscious approval was more easily obtained from the participants via e-mail (Yıldırım & Şimşek, 2016).

Apart from its positive aspects, studies using the Internet are criticized for not conforming to the principles of “contingency, content, in-place and there,” which are considered important in qualitative research. When doing Internet research, as the researcher is not physically present in the study environment, it is not possible to glean clues from the atmosphere, facial expressions, and body language of the participants. Furthermore, the participants may lose interest and stop providing data, which may result in unsuccessful results (Yıldırım & Şimşek, 2016).

Some of the most criticized aspects of qualitative research are their high subjectivity and low validity and reliability (Arastaman et al. 2018). Creswell and Miller (2000) stated that the researcher has an important role in determining the validity and reliability criteria in qualitative research. Internal validity is related to the extent to which the findings obtained in the research are realistic. External validity is related to the generalizability of the research. The objectivity and impartiality of the researcher to the situation to be investigated can be expressed as reliability (Guba & Lincoln, 1994).

Validity and reliability are also emphasized in research conducted via the Internet. Although reliability is very important in quantitative research, it cannot have the same importance in qualitative research. The fact that qualitative research is situational and in-depth makes it weak in terms of reproducibility and generalization. Validity is the most important factor that makes a qualitative study scientific. The subjects that are valid in traditional qualitative research are also valid in Internet research (Yıldırım & Şimşek, 2016). Techniques such as diversification, peer review, and audit trail criteria are used in qualitative research to increase validity and reliability (Creswell & Miller, 2000). To increase the validity of the research, it has to be confirmed that the teachers who participate in the study are real people. As they can also be reached by phone, it has been ensured that they are real people. In addition, explaining the process in detail increases the validity of qualitative data.

Attention was paid to the storage and security of the data obtained during the research to protect the data providers. Unauthorized persons, groups, or institutions were denied access to data, and data integrity was preserved. The actual presence of the

participants was confirmed. The collected data were stored and shared only with authorized persons and institutions upon request. Identity information and opinions of the participants were protected, and particular attention was paid to legal and ethical issues.

### **Statistical Analysis**

Phenomenological analysis deals with events and phenomena from a subjective perspective. In phenomenological analysis, how participants evaluate events in their environment is discussed (Wade & Tavis, 1990). This study aimed to comprehend and evaluate the opinions of the participants according to their own view points (Smith & Eatough, 2007). Phenomenological analysis consists of stages, including determining the research problem, selecting the sample, and collecting and analyzing data. As the sample size was small, the researcher had the opportunity to make a more detailed analysis. The data were categorized first, and then the themes under each category were determined. The compatibility of the themes with the data was verified. If deemed necessary, correction or change was made in the themes. At the end of the analysis, the researcher interpreted and reported the opinions of the participants on the subject (Smith & Eatough, 2007).

Miles and Huberman (1984) have stated that data analysis should be done in three stages in a study. These stages can be summarized as (1) eliminating unnecessary data, (2) using visuals to make the data more comprehensible, and (3) concluding and confirming the data. Dey (1993) divided the data analysis process into three sections, including description, classification, and association. Strauss and Corbin (1990) have tried to explain this process with a single coding concept. Yıldırım and Şimşek (2016) have explained the analysis process in four stages: (1) encoding data, (2) finding themes, (3) organizing codes and data, and (4) defining and interpreting the findings.

This study used the content analysis method to analyze qualitative data. In content analysis, data expressing the same or similar meaning are collected under certain themes. Thus, the reader can understand and interpret the data easily because the data are more organized and systematic. Participants were given codes T1, T2... T18. The answers given by the participants for each question are reflected in the tables. Each table has been analyzed separately. If the participants explained the same thing with different expressions in their answers, a common theme was used. Similarities and differences in answers were evaluated. In the findings section, citations were made from the answers of the participants.

In testing the validity of the information obtained in the study, the results of other studies in the literature and the findings that differ in the data set were used. Interview data in the study were obtained in writing via e-mail. Therefore, the credibility (internal validity) was ensured as the participant's approval was obtained. To ensure the validity of the obtained data, intra-subject validity and inter-subject validity methods were used. In the inter-subject validity method, data were evaluated by an indepen-

dent phenomenologist (Hall & Lindzey, 1985). In this study, the inter-subject validity method was used to increase the internal validity by obtaining expert opinion. To provide transferability (external validity), the participants were selected from among the teachers working in BİLSEMs according to the goal of the study. In addition, the research data were analyzed in detail, and quotations were included. It was determined that the coding was consistent, which indicated that there was consistency (internal reliability) in the study. Expert support was sought and received in the preparation of the data collection tool and in the analysis of the data to evaluate the study objectively. The interview forms of the study were submitted for confirmation review, which ensured conformability (external reliability).

## Results

In this section, the findings of the research have been explained. The responses of the teachers to the third question, “What kind of information did you have about BİLSEM before you started working at BİLSEM?” included the following: in general, (T2) apart from the student profile being educated, they have a logic about like a university and they do projects; (T3) I knew they had a flexible schedule; T4 said that she had no prior knowledge; (T5) I knew that it was a little known school; (T8) I knew that gifted children received education in pull-out programs; (T9) I knew that BİLSEMs were providing pull-out learning environments for gifted children; In the first years, I heard that there were BİLSEMs doing studies like the ones conducted in study centers, but in recent years, I heard that they conduct practice-based studies in accordance with their mission. T12 explained that he knew BİLSEMs provided education for gifted and talented students and also the philosophy of education in BİLSEM, the types of programs, project-based education, literature about gifted students, and the strategies of differentiation and enrichment in education. T16 said that he did not have enough information. What he knew was that there were a few BİLSEMs in some locations, and it was difficult to be a teacher here. T17 told he had not heard about BİLSEMs at all, whereas T18 had only hearsay. The other participants stated that BİLSEMs were institutions that provided education to gifted and talented children. Therefore, it was understood that they did not have much information about BİLSEM before they started working there.

On the basis of answers given by teachers to the fourth question, “What are the expectations of the family from BİLSEM teachers?” themes were created. Within the scope of this question, five themes were created: attitudes and behaviors toward the students, contribution to the academic success of the student, contribution to the social development of the student, revealing and developing the student’s abilities, and giving feedback to the parents about the student. In addition, the teachers mentioned the realistic and unrealistic expectations of the parents. Some of these expectations

were (T1) everything except the child's talent and interest. First of all, I think the family expectations are very high. (T3) The child should always succeed in the field that the parents find "appropriate;" based on the knowledge that his child is already "superior," he always expects him to be the most successful student. (T4) After passing the exam, they expect their child is a scientist and do extraordinary things, and the teacher is constantly expected to do things that the child cannot actually do, but deemed obligatory (T5).

The most emphasized theme by the participants was the attitude and behavior toward the student. The answers given by the teachers on this theme were as follows: They ignore the child's other problems and even expect us to ignore them. We are trying to move forward with a versatile mentoring. When we take care of their psychological/social problems and alleviate these problems, the family is first surprised and then satisfied (T4). They expect them to behave by making their children feel very special, to tolerate all of their behaviors, and to include their children first in every activity organized by the institution (T7). Some of them have very high expectations. For example, there are those who expect their children to behave like geniuses (T8). They want their children to be treated like more than they are, and to be constantly emphasized that they are the very special, most special, most talented, only gifted child. They see it as if they had the only child who attended the institution (T10). Parents expect us to understand students and guide them (T18). T15 had a gifted child and answered this question in great detail showing empathy toward parents. He pointed out on the basis of his experiences that parents did not clearly understand what BİLSEMs did.

In the theme of revealing and developing the student's abilities, (T2) we are expected to develop their child in line with his/her ability; (T6 and T16) they expect the teachers to reveal their children's skills. (T17) They anticipate teachers to conduct original studies for their kids (T14). They expect us to broaden their horizons. The points that the teachers made on the theme of academic success were as follows: They expect something that will crown their children's success. Being winners, awards etc. (T3). They want something that will give their children an advantage (additional points, extra points in central exams, etc.). In today's educational conditions, the family expects us to make a visible change in the student (as a grade or any competition success) (T4). Some families expect teachers to produce projects that get results directly by increasing the performance of students at the highest level very quickly, gaining degrees in competitions, etc. (T12).

T2, T12, and T13 talked about expectations for contributing to the social development of the student and mentioned that the parents expect the student to be socialized. Only one participant (T8) gave an opinion on the feedback theme. He stated that

some parents expect the teachers to observe and get to know their children and to give feedback to the parents regarding the child.

Similar answers, in general, were given to the fifth question, “What are the expectations of the administrators from BİLSEM teachers?” The participants stated that administrators expected the teachers to make projects, receive degrees and awards in TÜBİTAK and other competitions, provide parent-student satisfaction, create a jewel from every student, attend the class on time, keep a track of timelines, and do things that will make the institution well-known. They expressed their opinion that the administrators expected the institution to be advertised through various activities, trips, events, cooperation with other institutions, and the tasks they carried out to increase the visibility of the institution.

The answers given to the sixth question, “What are the expectations of the environment from BİLSEM teachers?” were quite different. T3 stated that she did not have a comment on this issue, and T8 stated that she did not experience any expectations from the environment. T1 and T11 believed that the environment expected special attention at the time of identification of BİLSEM. The responses of the other teachers were (T2) disseminating the work done in BİLSEM; (T4) benefiting from the infrastructure of the institution of the local people and from the workshops provided by the teachers, provided that it is free of charge; (T5) sharing activities not seen in normal schools with the environment; (T6) taking part in all projects and events; (T7) ensuring that teachers, even though their ages are very young, bring them to the stage of a scientist and make inventions and discoveries; (T9) training young people who will develop the country; (T10) support and assistance in preparation for the BİLSEM exams. T12 stated, “If the district or provincial directorates of national education or different stakeholders cooperating with BİLSEM meant by environment, I think their primary expectation is students’ achievement in successful projects. In other words, result-oriented expectations prevail in all segments. This is an expectation that overshadows the value of process-oriented and long-term studies.” T13 stated that the people do not know how BİLSEMs function; and thus, anticipated BİLSEM students to invent things, file patents, make robots, and so on. T14 perceived environment as parents and mentioned they wanted to learn whether their children were gifted or not. In addition, they needed to overcome the problems they have with their children. T15 gave a very detailed response, including types of environments, stakeholders in the environment, increasing awareness toward BİLSEMs, their functions as gifted and talented schools, the activities held there, and their differences from other educational organizations. T16 pointed out especially teachers from other schools wanted to get teaching materials and tools used in BİLSEMs. T17 claimed that the environment overestimated the teachers, and T18 said they were expected to create all the difference.

Table 3 shows the answers given by the participants to the seventh question, “What are the advantages and disadvantages of working in BİLSEM compared with other formal education institutions?” Although the expressions are different, sentences with the same meaning are reflected in the table as a single sentence.

Table 3

*Advantages and Disadvantages of Working at BİLSEM*

<b>Advantages</b>	Providing one-on-one training (T1)
	Low number of students, working with small groups (T2, T3, T5, T7)
	Students are gifted and talented and have high potential (T2, T3, T7, T12, T15)
	Parents are conscious (T2)
	Absence of exam anxiety (T3, T12)
	Being able to provide a skill-based education (T3, T12)
	The teaching environment is open to development (T3, T7, T14)
	Being able to adapt and apply individualized education program using the curriculum within ethical limits (T4, T15)
	Developing creativity and empathy skills of the teacher as it is a special educational institution (T4, T13, T14)
	Always forcing the teacher to learn and improve himself (T4, T7, T12)
	Longer lesson times (T5)
	Working with children on various subjects (T5)
	Experience a sense of professional satisfaction (T6, T7, T17)
	Having the opportunity to teach gifted and talented children who are interested in the subject until the last year of high school (T9)
	Flexibility of the course schedule and having free days (T10, T11)
	Conducting activity/project-based studies (T10, T17, T12, T13)
	Preparing content to make use of information (T10)
	A qualified teaching staff (T16)
<b>Disadvantages</b>	Students tire and feel bored quickly because they come after school (T1, T3, T7)
	Each student has different abilities and interests (T2)
	Seeing students for 2 hours only 1 day a week (T2, T10)
	Not getting the material needed. (T2)
	Working hours (T3, T5, T6, T7, T8, T11, T12, T13, T14, T17)
	Lack of time for excursions or extracurricular studies as there are evening and weekend classes (T3)
	Psychological pressure on teacher by principals, parents, and environment for success (T3, T17)
	Students seeing BİLSEM as a course and not embracing it as a school (T3)
	Having to deal with the project, award, and competition part (T4)
	Not all students selected have the same proficiency and grade level deterioration (T5)
	Not having any advantage except 25% more payment for additional courses (T7, T9, T17)
	Students not attending full time makes it difficult for them to study and a good performance (T8)
	Continuous new topics and appealing to different interests of different students (T9)
	Parents' high expectation levels (T10, T15, T16)
	Working hard (T18)
	Having too many tasks, responsibilities, and contributions but being not rewarded materially and spiritually (T12)
	Too much paperwork (T16)

According to the teachers' opinions, one of the most important advantages of working in BİLSEM was working with a small number of students in the classrooms and small groups. T7 mentioned that working with small groups had a positive effect on doing more productive work and provided an opportunity to spend more time with



each student. The fact that the students are gifted and talented was seen as one of the most advantageous aspects of working in BILSEM. This situation had a significant effect on the teachers’ professional satisfaction. Qualified teachers were seen as a driving force for self-improvement for the new teachers in BILSEM.

The main issue that the teachers saw as a disadvantage was the working hours. As BILSEM provided pull-out programs, some students came on weekdays and some on weekends according to the leaving time of their schools. This meant that the teachers had to work accordingly and was seen as a major disadvantage. T3 stated that she worked in the evenings and at weekends and thus had difficulty making time for her own family and could not spend time with her own children and they had problems socializing. In addition, she said that they were working when their friends were free, and, therefore, they could not make any weekend plans.

An important issue that was seen as a disadvantage was that students came to BILSEM after a tiring school day. This situation made it difficult for both the student and the teacher. The low motivation of the tired student also negatively affected the efficiency of the lesson. It was thought that there was no financial advantage to be a teacher in BILSEM, except for the 25% extra tuition fee given to teachers working in special educational institutions or having special education classes. In this regard, T9 stated that working at BILSEM was financially disadvantageous because she could not take part in support and training courses on weekends.

Table 4 includes the themes on the basis of the answers given to the eighth question, “What are the difficulties or problems you encounter in BILSEM?” and the distribution of the responses to these themes.

Table 4 <i>Difficulties or Problems Encountered in BILSEM</i>	
Themes	Participants
Working hours and conditions	T1, T3, T5, T7, T8, T13, T14
Parents’ expectations	T1, T3, T6, T7, T8, T15
Student-related situations	T2, T4, T5, T10, T12
Physical conditions and technical equipment of the institution	T3, T7, T9, T10, T11, T12, T18
Education/Programs	T3, T8, T9, T16, T17
Administration	T3, T4, T8
Organizational climate	T4

Participants with the codes T1, T3, T5, T7, T8, T13, and T14 evaluated their working hours as one of the difficulties of BILSEM. T7 stated that working hours could cause problems in private life. Teachers also saw parents’ expectations as part of the difficulties or problems. T3 found the parents very demanding, and T1 claimed that some parents expected the teachers to teach some basic skills, which the children need to gain in the family. T13 pointed out that writing and responding messages in

WhatsApp groups took too much time. T14 mentioned he had difficulties in adapting to working conditions and requirements in BİLSEM.

Teachers also mentioned some situations with the students under difficulties. T2 stated that students who arrived late were hungry and tired and thinking of the next day's exam and homework. They felt that the students sometimes saw BİLSEM as a course. T10 emphasized that excessive self-confidence and disrespectful attitude of the child because of being identified as gifted caused a problem. T12 said, "The most important challenge I have faced since I started working is the increasing number of students in groups and BİLSEM. Consequently, the time allocated to the students for the programs has drastically reduced. This is a problem that pushes BİLSEM's understanding of individualized education toward schooling. Apart from that, the need for planning new, different and enriched activities for students turns into a time problem to a teacher."

Inadequate technical equipment (T3, T7, and T11), lack of space and the increasing crowd of groups (T9), and difficulties in obtaining materials to be used in applications were the other problems expressed by teachers.

Inadequacies stemming from the program (T3), the fact that the functioning of BİLSEM is not parallel to the school, that is, the programs such as support program and recognizing individual talent program in BİLSEM do not have any equivalent in schools (T8), the field of the branch is very wide, and having difficulty in accessing information that can answer the different curiosity of students (T9) were the difficulties stated under education training/programs. T16 stated that he had classes with primary school students in BİLSEM although he taught secondary school before as his subject was taught at the secondary school level. He added he did not know what to do if he had to teach eighth grade classes in normal schools. T17 emphasized the need for high level communication and teaching skills.

The opinions expressed in the administration theme were the attitudes of the administrators that constantly led to competition but did not support teachers, the conduct of student affairs through continuous advisory teachers (T3), parent communication, administrative pressures on compulsory competition/project applications (T4), the fact that they were far from the functioning of these institutions, and policies were established on a daily basis and without preparation (T8). Only T4 gave an opinion on the organizational climate and stated that cooperation between teachers was poor owing to competition.

Answering the ninth question, "Are you satisfied with working at BİLSEM?" T2, T3, T4, T6, T7, T8, T12, T13, T14, T15, T17, T18; those who say I am indecisive are T5, and T9; and those who say I am not satisfied are T1, T10, T11, T16. Therefore, 12

of the 18 teachers were satisfied, four were unsatisfied, and two were indecisive. Although T2 said that she was generally satisfied, but felt she was very tired. T3 loved working at BİLSEM despite all the problems; and T4 expressed her satisfaction with the following statements:

After over 14 years, what I feel now is: My life has been BİLSEM, I have created my lifestyle accordingly. Is it tiring? Yes. But considering the large number of students in our schools, the exam and grade evaluation system, I am satisfied with BİLSEM.

T15 mentioned his satisfaction,

I can definitely say yes to this question. The biggest reason is the BİLSEM which I work in, it has an effect on my satisfaction. All kinds of opportunities are provided for creativity; working with people who think differently, as teachers and students, gives a different pleasure. The fact that I am still learning during the time I work motivates me at the point of personal and professional development.

T10, one of the teachers who was not satisfied with working at BİLSEM, said, "I was satisfied until the last identification processes. I am no longer satisfied since it stopped being a gifted and talented school due to the mistakes in the identification process and due to the constant pressure of the ministry" T11 said, "I cannot say that I am satisfied. I am very pleased with the student profile, but financial difficulties are hampering everything. We constantly have to spend from our own pocket"

One of the indecisive teachers, T9 said, "It is pleasing to develop with the students, but the expectation of a continuous competition creates pressure and causes stress. In other words, there is no direct answer, there are situations that I am satisfied or not." The other indecisive teacher, T5, said, "I am not happy because of the chore that is expected to be done rather than teacher competence. But the pleasure of working with students who are truly gifted and talented is invaluable. I am both very pleased and not satisfied at all."

Answering the tenth question, "Would you recommend teachers who are considering working at BİLSEM to work here?" three of the participants (T1, T8 and T10) stated that they would not recommend, whereas other participants stated that they would recommend. However, it appears that teachers base their recommendations on conditions. T2 stated, "I definitely recommend it. BİLSEM is a suitable place for those who want to do something but cannot do as long as they want to work." T3 said, "If s/he is confident in his creativity, likes to do research, has a skill-based education approach, has the potential to take initiative and create a program, and working hours are suitable for his life I would recommend." T4 stated,

If they will always be open to learning, they will not say “I have a master’s degree, I have PhD”, they like to work closely and privately with the student, they like to produce, they can adapt to the working days and hours, I strongly recommend them.

T5 “I would recommend it to the teachers knowing the lesson time and everything to be done, but it is not a school for every teacher.” T7 said, “It depends on the lifestyle of the people and the hours they want to work, but I recommend it to teachers who generally aim to improve themselves and like to work without waiting for a return.” T9 said, “If s/he can afford these disadvantages, feels a lack of professional satisfaction, is looking for a driving force to improve himself/herself, I encourage him/her.” T11 said, “If her/his subject isn’t science, yes I would recommend.” T12 said,

First of all, I recommend them to think well with all their pros and cons and decide accordingly. If they really haven’t lost their enthusiasm for learning, if they don’t think they are at the point of satisfaction in terms of research and professional development, of course I recommend that they work here.

In most of the answers, the desire to improve oneself and the passion of working came to the fore as a condition of advice.

Answers to the last question of the research, “What are your criticisms and suggestions regarding the administrative functioning and programs of BİLSEM?” were grouped under certain themes. The distribution of the answers given by the participants according to the identification, training time/working hours, class size, physical conditions, and technical equipment of the institution, education training/programs, and administration themes are reflected in Table 5.

Table 5  
*Criticism for BİLSEM*

Themes	Participants
Identification	T4, T5, T6, T7
Training time/working hours	T2, T7, T4
Class size	T2, T13
Physical conditions and technical equipment of the institution	T4, T6
Educational training/programs	T1, T3, T9, T10, T11, T12, T13, T14, T15
Administration	T3, T4, T5, T7, T9, T12, T17, T18

T16 mentioned he did not want to answer this question. Participants (T4, T5, T6, and T7) criticized the identification process and emphasized that more sensitivity should be paid to this process. Although T4 argued that BİLSEMs should only serve children at the level of genius, T5 stated that the identification was not distinctive and that the students were prepared and took the exam. T2 stated that the lesson time was insufficient in discovering the children’s abilities, and T7 pointed out that the students were tired because they came to BİLSEM after school. T2 criticized that the number of groups was increasing by the day. T4 stated that she did not find it logical

to open so many BİLSEMs without establishing the infrastructure (building, teacher, material, etc.). T6 stated that adequate infrastructure, physical environment, tools, and equipment should be provided.

One of the themes most criticized by teachers was the programs. Criticisms were made that the programs were not regular and systematic, that there was no integrity between BİLSEMs in terms of programs, it was not clear where the programs take the student from, and the deficiencies of the programs should be identified and revised. T15 expressed that,

The biggest problem in BİLSEM is the lack of objective criteria for transitions between programs, for example when passing from support group to the program of recognizing individual talents. The observation forms processed by the teachers are taken into consideration for the student to move to the next program. I think that students should prepare a graduation project at the end of each program and present it to the jury. In addition, I think that besides face-to-face education, students should be able to take courses from upper programs with distance learning methods (portal, course, etc.). The credit system, which was applied in our country for a period, can also be done.

T12 stated some criticisms and suggestions,

First of all, I believe that the logic of the program in BİLSEM should be changed, especially for gifted students, to reveal their gifted field as soon as possible and deepen in those areas for a longer time and do research projects. For this, the duration of the programs may change.

In addition, T9 stated that instead of developing cooperation, patience, and long-term struggle characteristics; the students' character structure was encouraged, which led to jobs that achieved rapid results and gave a tangible output rather than quality. She stated that she was worried that this approach would develop a character for children to turn to small daily businesses rather than devoting long years to science like an Aziz Sancar.

In one of the criticisms gathered under the administration theme, T4 said the following,

I advocate not standardization in BİLSEM, but a unique way of working and production of each BİLSEM with all its stakeholders. I think that each BİLSEM's mission and vision specific to its environment and infrastructure should be unique. This is not taken seriously at present, and strategic planning should be more detailed and carefully made, and the necessary monitoring and evaluation should be done.

T3, however, criticized the attitudes of the administrators that constantly led to competition but did not support it. T9 stated that the teachers were not provided enough support to improve themselves and the teachers worked independently. T4 stated that people who had never worked in BİLSEM before were appointed as administrators and that held the progress at BİLSEM back, whereas T7 stated that merit should not be ignored in the executive elections for BİLSEM. T1 said that working at BİLSEM should be a privilege. T12 advised that administrators with a limited vision who manage BİLSEMs like other schools should be changed.

Suggestions were made that cooperation with scientists and artists was important, the principles of transparency and being scientific should be adopted, and the content of the programs should be enriched. T17 felt that teachers should not be pressured into making projects, and T18 said that BİLSEMS should be affiliated directly to the Ministry of Education instead of the local directorate of education, and policies should be developed beyond daily expectations.

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

Ten female and eight male teachers participated in the study. The results show that the professional seniority of the participants is more than 10 years except for one, and they worked in different school types before BİLSEM. They state that they had very general and superficial knowledge about BİLSEM before they started to work in BİLSEM. Observations related to parents expressing expectations show that unrealistic expectations are a pressure factor on the teachers. It has been revealed that administrators' expectations that trigger continuous competition and focus on competition and rewards make teachers unhappy and reduce their motivation. Working with gifted and talented students and smaller groups has been the most prominent among the advantages of working in BİLSEM. The most disadvantageous aspect of BİLSEM is the negative impact of working hours on the teachers' private lives and on students coming to BİLSEM tired after school. The difficulties faced related to BİLSEM show a normal distribution. Working hours, expectations of parents, and physical and equipment deficiencies of the institution are the difficult aspects of working in BİLSEM. Participants express their criticism in areas such as the identification process, working hours, class size, physical conditions and technical equipment of the institution, educational training/programs, and administration. There are speculations about the diagnostic process, space problems of BİLSEMs, lack of equipment, programs-related differences between BİLSEMs, insufficiency of programs to respond to needs, administration's expectations, and policies for short-term outputs; all these are the criticisms highlighted by the teachers.

Sezginsoy (2007) conducted a study in which the teachers evaluated Science and Art Centers. In the study including teachers' opinions, the teachers stated that they

did not find the physical equipment in BİLSEMs to be sufficient. In another study in which BİLSEMs were evaluated, parents, students, and teachers expressed their opinions about these institutions under headings such as achieving their goals, equipment, cooperation with the environment, teacher and student selection, and teachers' in-service training. The equipment was found to be insufficient in this study too (Yıldız, 2010). The most emphasized issue in the study, which deals with the applied training programs–related problems faced by teachers working in BİLSEM, is the insufficiency of physical conditions (Şenol, 2011). Çetin and Doğan (2018) stated that there are deficiencies in the equipment of BİLSEM. In these studies, the results related to the lack of sufficient equipment are similar. Although Yıldız (2010) found student choices at a medium level in his study, negative criticism was made about the identification processes in this study, and it differs in this respect from other studies. In his study, Şenol (2011) expressed a positive opinion on the programs in BİLSEM but criticized the training programs.

In another study about BİLSEM, most of the teachers and administrators found the professional development opportunities offered to teachers insufficient (Altun & Vural, 2012). In this study, T9 stated that the teachers are not provided sufficient support to improve themselves. In this context, the results of the two studies are similar. In a study examining the expectations of classroom teachers working in primary schools, school administrators, parents, and students expressed their expectations from classroom teachers (Çelik & Hotaman, 2018). Some expectations from classroom teachers and BİLSEM teachers are similar. There are expectations, such as academic success, showing love and interest to the student, being in contact with parents, discovering talents, and appreciating and honoring the student, from both teacher groups.

Some of the findings of the study, which deals with the problems faced by mathematics teachers in BİLSEM, are related to students, with students being reluctant, physically and mentally tired, and engaging in inappropriate behavior. In addition, it was stated that there are problems in working hours along with social, personal, and financial issues (Çetin & Doğan, 2018). In the research by Sarıtaş et al. (2019), parents made criticisms about the programs, insufficient equipment, and infrastructure of BİLSEM. The findings of the two studies mentioned earlier and the findings of this study are similar.

In another study, the effectiveness of BİLSEMs was investigated. The opinions of the teachers, administrators, and parents were sought, and the effectiveness of BİLSEMs was examined in terms of purpose, process, climate, and organization. It has been concluded that the least effective dimension of the BİLSEM is the climate dimension. The findings of Özkan's (2009) study and the view that the cooperation between teachers is weak owing to competition in the context of organizational cli-



mate are similar to this study. According to Kaya (2013), some of the striking findings in the studies are the inadequacies in the education program, physical conditions, teacher training, and project studies in BİLSEM. The results obtained by Kaya (2013) in his study are similar to the results of this study.

The quality of education is much more important than the quantity. When the quality of BİLSEMs is increased in every aspect by eliminating the existing problems, the quality of education for gifted and talented children will be better (Kaya, 2013). The quality of the education offered is much more important than quantitative data in the training of gifted students. In this respect, it is important to eliminate the problems experienced in BİLSEMs by increasing the quality of education. Following suggestions have been made on the basis of the findings of the research:

1. Courses for gifted education may be added to the education faculties of universities. Every prospective teacher who graduates may have knowledge about the characteristics of gifted students, their identification, teaching strategies, and the education of the students. In addition, every teacher assigned to BİLSEM can be given an in-service training about gifted and talented education and the working system in BİLSEM. Therefore, teachers can be prepared to work with these children, both in terms of motivation and competence, as much as possible, before starting their duties.
2. Parents may be informed about gifted students, feedback can be given to parents about their children's development, and their expectations can be taken into account. However, working in BİLSEM should not be shaped according to the expectations of the parents. A policy that does not allow parents to put pressure on teachers and school management can be adopted.
3. Before a new BİLSEM is opened, the institution's need for teachers, infrastructure, technical equipment, and all kinds of tools may be met. The laboratories and classrooms-related needs of BİLSEM can be met for the education of these gifted and talented students, who are seen as the future of this country; otherwise, it will be a dream to train scientists in institutions that do not have enough materials to experiment.
4. Although there is flexibility in the application and working of BİLSEMs, there can be a common program and application unity. The content of the programs may be enriched. The content of the training may be given importance and not the short-term successes. Of course, Although it is important to be successful in scientific competitions and carry out projects, the main mission of BİLSEM can be to raise individuals who have critical thinking skills, question, and research, are aware of their own abilities, and will do useful work for their country and the world. Only reward and tangible success-oriented policies may not be implemented.

Suggestions can be made for working hours, which are challenging for both students and teachers. To enable students to benefit from the education provided, a model can be developed for deciding whether the children should leave the school or not. Teachers' participation in activities to improve themselves may be supported and encouraged. When selecting managers for BİLSEM, the condition of having worked in BİLSEM for a certain period and having at least a master's degree may be the qualifications needed. Transparency and merit may be considered in appointments.

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