

### The Views of Teachers of Science and Art Centres about the Institution

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#### Abstract

The aim of this study is to define the views of the teachers, who for Science and Art Centres (BİLSEM). With this aim survey method was employed in this study. The study is carried out among 88 teachers employed in six Science and Art Centres. The exemplification is done through 61 teachers chosen among these teachers. The data is collected via a questionnaire which contained information related to the teacher and school, and was developed by researchers. Data was analysed in percentage and chi-square test. The results of the study indicate that the teachers have no negative thoughts about BİLSEM and no difficult job context but they want to communicate with universities and other BİLSEMs. In addition, they emphasized the importance of in-service training and pointed out the necessity of making it continual. Considering this data, it can be suggested that communication between the universities and BİLSEMs be provided and in-service training made continual.

**Key-words:** Highly-gifted, science and art centre, teacher.

#### Bilim ve Sanat Merkezlerinde (BİLSEM) Görev Yapan Öğretmenlerin BİLSEM'e Yönelik Görüşleri

#### Özet

Bu çalışmanın amacı, Bilim ve Sanat Merkezlerinde (BİLSEM) görev yapan öğretmenlerin BİLSEM'e yönelik görüşlerini belirlemektir. Bu amaçla, arařtırmada tarama modeli kullanılmıştır. Arařtırmanın evreni altı Bilim ve Sanat Merkezinde görev yapan 88 öğretmendir. Örnekleme ise bu öğretmenler içerisinde seçilen 61 öğretmen olmuştur. Veriler; arařtırmacılar tarafından geliştirilen öğretmene ve okula ait bilgileri içeren anket formuyla toplanmıştır. Veriler frekans yüzde ve ki-kare ile analiz edilmiştir. Arařtırmanın sonunda öğretmenlerin BİLSEM'e yönelik olumsuz görüşlerinin bulunmadığı, çalışırken zorlanmadıkları, ancak diğer BİLSEM'ler ve üniversitelerle iletişim kurmak istedikleri belirlenmiştir. Bunun yanında hizmetiçi eğitimin önemini vurgulayarak sürekli hale getirilmesinin gerekliliğinden bahsetmişlerdir. Buna dayanarak, BİLSEM'lerin bulunduğu illerdeki üniversitelerle işbirliğinin sağlanması, hizmetiçi eğitimin sürekli hale getirilmesi gibi öneriler verilebilir.

**Anahtar kelimeler:** Üstün yetenekli, bilim ve sanat merkezi, öğretmen

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### **Introduction**

The concept of “highly gifted” is generally explained as performing at the highest level. Superior intelligence and superior ability can be described as showing the best performance and motivation compared to peers in areas such as creativity, art, leadership or a special academic area (Özsoy, Özyürek ve Eripek, 1998; MEB, 1991). Also, superior ability is defined to be the resultant of ability over the average, creative thinking and duty responsibility and these three aspects are emphasized to be present in the highly-gifted (Renzulli & Reis, 1985).

The children with superior intelligence are those who continually scores 130 or over in the intelligence test and who are superior to 98 % of a set roughly chosen among their peers (Özsoy, 1984, 31). Children with special gift are, however, those who, beside scoring 120 or over in the intelligence test, differ from their peers remarkably with their abilities in areas such as fine arts, maths, science and technology. The highly gifted and the super-intelligent show great success in one or more or a combination of these the aforementioned areas and they have secret powers (Ersoy ve Avcı, 2001).

Children with superior ability are the individuals who have the potential of developing themselves. It is for this reason that they need the large-scale education facilities which could not be provided with ordinary programmes (Renzulli & Reis, 1985). Now the scientific circles also accept that this is not a privilege for the gifted but a necessity and these children are included in special education classes. In the historical process it can be seen that the education of the gifted during the Ottoman reign is carried out in special schools called Enderun. Enderun Schools, which was accepted by the historians to be unprecedent in countries at times, is the first of the education institutions founded to educate the high brain power specially (ENÇ, 2005: 288).

In Turkey, the necessity of special education institutions with suitable conditions to the abilities of super-intelligent children and the importance of the supporting the enterprises of the private sector in this area first stated in the 4<sup>th</sup> Five-Year Development Programme (Akt. Akarsu, 2001). As a result of this development, a school called “Özel Ufuk Koleji” is opened for super-intelligents in Ulus in 1980s (Demirci S., 2003). Businessman Sezai Türkeř and his wife İnanç Türkeř founded an association to build a school where the children with special or superior ability could be educated and in 1993 a school

called “Türk Eđitim Vakfı İnanç Túrkeř Özel Lisesi (TEVİTÖL)” was opened as a result of the efforts of this association. It was aimed to grow up the business and policy leaders of the future so only children with IQ of 130 and over were accepted to TEVİTÖL (Milliyet, 2006).

In Turkey, Istanbul University, Hasan Ali Yücel Education Faculty, Department of Special Education founded the first Department of Education of the Super-intelligent. In October 2002, this department stated the Undergraduate Programme for Teaching the Super-Intelligent, secondary department of Primaryschool Teaching and from 2003 onwards students started to be accepted to master’s programme. In the education of the candidate teachers as much importance was given to practice as theory and on 30 July 2002, Bayezit Primary School was assigned to be the practice school according to protocol signed between Istanbul University and The Ministry of National Education. In this model, the basic curriculum of The Ministry but differs in relation to the needs of the students (Davaslıgil, 2004). In this project, students with superior ability are exposed to a programme which does not totally isolate them from their peers with normal-level of intelligence and which, at the same time, meets their social, mental and perceptual needs. As well as the needs of the students with superior ability and their parents, this project is aimed to meet in-service training needs of the teachers at school (Radikal, 2007).

Also, the education of the highly-gifted have been tried to be met through the support of some foundations and associations. One of these is the Foundation for Turkish Children with Superior Ability (TUYÇEV) founded in 1993. This foundation organizes different activities to meet the children in a social environment and, at the same time, helps the families who are aware of the difference of their children but don’t know what to do (TUYÇEV, 2007). Foundation for The Support of All Talented Children (TUYECDER) was founded by the families of the children who attend the on-going programme at Bayezit Primary School. The aim of the foundation is to support these children with their education in accordance with their potential and gift, decarcerate them to the society as happy individuals, and illuminate the concerned aouthority and the public about the education of the talented individuals by keeping their talents alive and helping them to fulfil their ambitions (TUYECDER, 2005). There are similar foundations and associations and these are supported by the academicians. These institutions play an important role in

creating awareness in families and the public about this subject and they go on their studies.

As a result of the project, related to the education of the talented, started by the Ministry of National Education in 1993, education centres were opened to supply the talented with the necessary facilities suitable with an education programme containing grouping method, which enabled them to get education on several days of the week, to develop their abilities. At these education centres, talented children get education both in science and art. It is for this reason that the names of these places were accepted as Science and Art (Tebliğler Dergisi, 2001).

BILSEMs are the centres opened by the Ministry of National Education, Directorate-General for Service of Special Education-Counselling and Information. These are the independent centres opened enable students with special or superior abilities at pre-schools, primary and secondary education institutions to discover and develop their individual talents without disrupting their formal training. At these centres, the educating-teaching activities are planned and carried out in a way that is compatible with their formal training institutions and co-operation between the programmes followed in formal training institutions and the centres is well provided. The talented enrolled in BILSEMs are taken into programmes necessary for the development of their special gifts without isolating them from their peers and intervening into their formal training (MEB, 2007). According to the report by the Ministry of National Education (MNE) in 2007, 5,175 children were educated at 35 BILSEMs last year. At these centres, there are 351 teachers and 60 administrators. Today the number of these centres is 43 (Üstündağ, 2007).

Like in all other education programmes, the success of BILSEMs depends on the programmes' practicers' knowledge, skill, attitude and values assumed by the programme (Gömleksiz ve diğlerleri 2005). So the efficiency of the teachers should be increased in areas such as preparing activity and projects and teaching methods and skills, and they must conceive the necessity, philosophy, and quality of the programme. Teachers who participate in the education of the talented are expected to be more skilful, efficient and knowledgeable than other teachers (Renzulli, 1985). Teachers are accepted to these centres in consideration to certain rules but they need the expansion of

their authority on subjects like the education of the talented and the programmes to be applied..

The teachers should help the children in providing information, recognizing the problems and the evaluating the studies. They can transform the classroom into a more interesting medium where the children can satisfy their curiosity and develop their problem solving skills (Davaslđgil, 2003). Studying with the talented is an exciting, attractive and interesting job , however, the teachers to study with these children should be well equipped in terms of their vocational formation and carry certain personal aspects. The talented children are of course children but their typical characteristics that differentiate them from ordinary children. The development and learning aspects, interests, problems, emotional situations etc. of these children must be known by the teachers (Metin, 1999). Alson, teachers' thoughts about the institution are reflected in all the activities and will be influential in the success. Thus, teachers' views about BILSEMs are found to be important and a study was decided to be fulfilled in this subject.

#### **Aim**

In this study, defining the views of the teachers working for BILSEMs is aimed. Accordingly, the teachers are asked about their general views about BILSEMs, problems, difficulties at work.

#### **Method**

Survey model was employed as it is aimed to take opinions of the teachers.

#### **The population and the sample of the study**

The population of the study includes 88 teachers working for Elazđđ Bilim ve Sanat Merkezi, Kırkkale Bilim ve Sanat Merkezi, Kırřehir Bilim ve Sanat Merkezi, Malatya Bilim ve Sanat Merkezi, Sakarya Bilim ve Sanat Merkezi ve Yozgat Fatma Temel Turhan Bilim ve Sanat Merkezi. 61 of these teachers make the sample. Questionnaire was sent to other BILSEMs but no answer returned. So the study was carried out on the BILSEMs aforementioned. Information related to exemplification is given in Tablo 1.

**Table 1. Personal Detailes of the Teachers Participated in the study.**

	f	%
Sex		
female	13	21.3
male	48	78.7
Length of Service		
0-5 year	8	13.1
6-10 year	30	49.2
11-15 year	12	19.7
16 year and more	11	18.0
Education		
undergraduate	35	57.4
Master	20	32.8
Ph.d	6	9.8
In-service training		
Yes	58	95.1
No	3	4.9
Toplam	61	100.0

As it can be seen in the Table 1 the majority of the participaters are male. That the teachers with 6-10 year length of service (%49.2) are majority shows that most of the teachers are young but not less experienced. Almost all the participating teachers took the in-service training, which is very pleasing.when looked at the in-service training subjects, it could be said: Most of the participaters (%47.5) took the in-service training on talented children and their aspects, 21.3% took their in-service training on BİLSEM's general structure and aspects, and these in-service training covers talented children and their aspects, learning-teaching methods and skills

#### **Collecting the Data and Analyses**

The data is collected through a questionnaire prepared by the researchers.First; the design form was prepared and then presented to three lecturer members of the Department of Education Scienses and 10 teachers working for BİLSEMs. After the evaluations, for personal information six entries, for views about BİLSEM one entry, for difficulties at BİLSEM nineteen entries, for problem-solving attitude one entry and for their view of future there is an open-ended entry.

### Findings and Comments

The findings gained are shown in the Tables. Data was not compared due to the imbalance number in sex and in-service training. Accordingly Teachers's views about BILSEM are given Table 2.

**Table 2. Teacher Views About BILSEM**

Entries	f	%
I think BILSEM is an unnecessary institution	0	0.00
Fills an important gap for the education of the talented	51	29.0
Does not provide enough support for the development of highly-gifted	7	4.0
It is waste of time in exam-based education system	0	0.0
Helps the socialization and self-expression of the students	54	30.7
Due to individual education student becomes aware of his own talents	45	25.6
I believe that enough attention is not paid to painting, music, sports etc. during the acceptance of the students	19	10.8
TOTAL	176	100.0

An evaluation of the teacher views show that their views are concentrated in "Helps the socialization and self-expression of the students" (30.7%) and "Fills an important gap for the education of the talented" (29.0 %)" Also the view that "Due to individual education student becomes aware of his own talents" (25.6%) is one of the most supported views. In general it can be said that negative views are hardly supported, however, 10.8 stated that "enough attention is not paid to painting, music, sports etc. during the acceptance of the students". Apart from these, the other views of the teachers are as follow:

Three of the teachers emphasized the insufficiency of the time for the targeted education and stated that this school last all day; three teachers said that the teachers working at BILSEMs are not well equipped and their sufficiency and being specialists be the top most; two teachers stated that it should be paid attention to painting, music and sports while choosing the students. While a teacher believes that opening BILSEMs in every city will be useful, another teacher emphasizes that there should be criteria for the selection of the administrators too and the personal status of the teachers and the conditions of BILSEMs should be improved. The same teacher says that BILSEM is important because the education for the gifted is not provided in formal training

institutions, however, BILSEMs are not adequately equipped both physically and technologically and the teachers who work here should be trained about the gifted.

**Table 3. Difficulties for teachers at BILSEM**

Maddeler	5		4		3		2		1	
	f	%	f	%	f	%	f	%	f	%
Understanding and use of BILSEM's directive	3	4.9	4	6.6	20	32.8	24	39.3	10	16.4
Preparing and developing activities	2	3.3	4	6.6	19	31.1	26	42.6	10	16.4
Practice of the prepared activities and projects	2	3.3	1	1.6	13	21.3	30	49.2	15	24.6
Communication with students	2	3.3	1	1.6	9	14.8	22	36.1	27	44.3
Using teaching technologies correctly	0	0.0	4	6.6	7	11.5	22	36.1	28	45.9
Knowing and understanding the students	1	1.6	2	3.3	8	13.1	32	52.5	18	29.5
Efficient use of the time	1	1.6	2	3.3	7	11.5	23	37.7	28	45.9
Attracting the attention of the students	2	3.3	0	0.0	9	14.8	21	34.4	29	47.5
Self-development and finding suitable material for this	1	1.6	4	6.6	15	24.6	28	45.9	13	21.3
Getting the support of the families	2	3.3	3	4.9	9	14.8	36	59.0	11	18.0
Communicating with other BILSEMs	3	4.9	14	23.0	11	18.0	13	21.3	20	32.8
Mutual work with other teachers in other areas	3	4.9	3	4.9	14	23.0	21	34.4	20	32.8
Having access to the necessary written material and books	3	4.9	0	0.0	16	26.2	31	50.8	11	18.0
motivating the students to the aim	2	3.3	2	3.3	11	18.0	35	57.4	11	18.0
Stimulating the students	2	3.3	2	3.3	10	16.4	36	59.0	11	18.0
Assessing the studies of the students	2	3.3	1	1.6	10	16.4	34	55.7	14	23.0
Creating suitable teaching medium	4	6.6	3	4.9	9	14.8	27	44.3	18	29.5
Preparinf suitable teaching material	1	1.6	4	6.6	16	26.2	29	47.5	11	18.0
Communicating with the university in the town	2	3.3	13	21.3	18	29.5	17	27.9	11	18.0



Table 3 shows the difficulties met by the teachers at BİLSEMs. According to this data the teachers don't have difficulties in general. But they have problems in communicating with other BİLSEMs (%23.0), and with the universities in the same town (%29.5). the proportion of teachers who don't have difficulty in understanding and using BİLSEM's directory is high (39.3%) and the same can be said for those who have partial difficulty (32.85). a general look at the findings show that teachers who mark the "have real difficulty" are not many but there is consantraion on the choices of "don't have difficulty" and "partial difficulty". The proportion of teacher having difficulty was assessed in terms of their length of service but no statiscially meaningful difference was found. The reason for this might be the insufficiency of the exemplification group.

**Table 4. Solution Offers of the BİLSEM Teachers.**

Entries	f	%
BİLSEMs should be closed	0	0.0
Directories should clearly be stated and easily pracicable	36	9.1
Communication with Other BİLSEMs in different towns should be provided	36	9.1
BİLSEM should co-operate with the universities in their towns	56	14.2
In-service training should become continual and branches should be cared	61	15.5
BİLSEM buildings designed suitable for students' multi-dimentional(cognitive,perceptional,psychomotor) developments	53	13.5
BİLSEMs' lack of labs, libraries, sport saloons etc. should be dealt with.	54	13.7
Seminars should be oragnized to gain the support of the family	45	11.4
At every BİLSEM there must be a specialist trained in special education and highly-fifted.	41	13.5
TOTAL	394	100.0

An examination of Table 4 shows that none of the teachers think that BİLSEMs should be closed (0.0%).conserning the other entries the proportion of other suggestions are very close to each other. The in-service training view is the most participated view 15.5 %. Teachers are especially concentratyed on the idea that in-service training should be made continual with regard to branches. Moreover, most of the teachers think that co-opeartion with the universities should be provided (14.2%), and the in adequacy of these centres such as labs, libraries, sports complex should be met (13.7%).

To the question of what else do you suggest for solution of problems at BİLSEMs two teachers emphasized the need to educate the teacher for every programme before beginning the education; and a teacher said that there should be unity of the programmes applied at BİLSEMs. Another teacher pointed out that project-targeted directory compels the success of BİLSEM to the project and the aim should not be the projects but rather projects should be development of practice. A teacher wanted the activities to be broadcasted and shared and the other pointed out the necessity of improving the physical conditions of BİLSEMs..

The teachers were asked about their views of the future of BİLSEMs and the findings are as follow: Five teachers wrote that BİLSEMs should give formal training and one of these wrote that they should be boarder schools. While three teachers wrote that BİLSEM have no efficient and clear directory and it has to have its own curriculum, the other three emphasized that the deficiencies related to the directory, precept and bases should be met immediately. Another teacher said that the directory is not sufficient while preparing an activity, defining a target is left to the teacher, and if the teacher is not well equipped in this, his proportion of failure increases. Two teachers want the ministry to pay more attention to this institution.thye express their feelings that if paid attention, the institution will serve the aim better. While a teacher wants the BİLSEM to be effectual as Enderun, another one states that teacher-student diagnosis, teacher selection, formation of BİLSEM building, student satisfaction, personal rights of teachers and supervision should be perfected. A teacher is of the opinion that the preparation of activities by directorate general, organization of semester and end-of-year I-service trainings, education on the use of technology, founding invention shops, and employing teachers in branches such as electrics, machine, automotive will be helpful. While another teacher emphasizes the importanse of the continuity of social activities for the talented at BİLSEM, the other says that BİLSEM with its physical conditions, technology, innovative approach, and its expert stuff well equipped with knowledge should reach the level that will satisfy the talented students. The other states that these institutions musn't have deficiencies. Beside these, the teachers say that “ university is enough active in my town”, “art should be paid atention”, “tudents should be selected in painting and music”, “BİLSEM

teachers should be privileged”, “their authority and facilities should be expanded”.

### **Conclusion And Discussion**

A Teacher, with its position and function, is one of the most important factors that affect the success in an education institution. Teachers' views related to the student and the school, all his decisions and practices will show its effects. Thus in this study, the teachers are asked about their opinions about BILSEMs. The finding can be explained as follows.

Teachers think that BILSEMs are very important for the education of talented and gifted. The gifted and the talented need a different education programme to make a contribution to the society because of their special abilities and learning pace (Clark, 1997). Also, these schools help the gifted to express themselves and socialize. These children can be only one or very few in their classes. This situation can make them uneasy but when with other gifted in suitable environment, they become happy by mental, social, and emotional share (Dönmez, 2004). It is important that the teachers have no negative thoughts against BILSEM. Their positive attitude will reflect to their performance and it is promising that some problems will be solved in time.

Most of the teachers emphasized the importance of in-service training which is organized with regard to the branches and they want it to be continual. This result can at the same time show the inadequacy of the gained education as well as the importance of this for teachers. The teachers state that they have no difficulties while working. However it is obvious that they really have difficulty in communicating with other BILSEMs and universities. This shows that teachers sometimes need sample studies, changing opinions, discussing the problems, getting academical support. So universities should be co-operated. the gifted students should also get the support of the academia and this support should make the facilities better for the gifted. Co-operation with the universities will also help the development of the teachers. Communication with other BILSEMs should be very strong and information changes should be provided.

BILSEM teachers state that if the deficiencies of these institutions are closed a huge gap at the education of the gifted will be compensated. They think that due to lack of time spent at these centres, the expected performance could not be gained at the moment but if the school could be changed into a full-day

education, the performance of the students will reach its highest level. Also the teachers point out that the ministry and private institutions should give more support to these centres or else the present stae will never be edquate. So the qualities of BILSEMs must be increased. These institutions should meet the all the fifted need by completing its technological or structural investments. It is also stated that selection of the students should cover the art or else the gifted in these areas are lost. So not only the super-intelligent but also the talented in music, sports, painting should be accepted to these centres.

The limited exemplification of this study affects the results to be generalized. Also reflect the limitedness of quantitative research. Through a strong exemplification group, interview, and observation with the support of qualitative studies, new studies will bring more effectual results in this subject.

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