

## The Views of the Elementary Programme Students Regarding School Teaching Programme

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**Abstract:** The main intention of this article is to determine the views of the university students attending on elementary education programme regarding the school teaching programme. A questionnaire garnered from literature knowledge and developed by researchers was applied to 361 senior class students who study in School Teaching Programme of Selçuk University. The data obtained from the questionnaire was evaluated and interpreted in SPSS Windows Programme. At the end of the research, it was determined that the students choose the department which they have knowledge about and their score meet, the facilities in the faculty lack, pedagogic formation lectures are not efficient enough, education aids should be increased during the lecture and the classes are heavily populated.

**Key words:** Elementary school programme • students opinion

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### INTRODUCTION

The efforts to make “being teacher” common began with Turkish Republic in 1923. Then, the total number of teachers was 10.102 including 1.081 female and 9.021 male teachers. The number of teachers who had pedagogic formation was 2.734 consisting of 378 female and 2.356 male teachers. Among the rest 7.368 teachers, 1.357 of them were the graduate of elementary education, 711 of them were the ones who finished medresseh, 152 of them were the ones who did not have any teaching experience [1]. The education period of 4 years (after elementary school) was increased to 5 years in 1924 and this period was extended to 6 years in 1932-33. To meet the needs of teachers of village elementary schools, schools of village teacher, village courses, education institutes were founded in addition to elementary schools. Village institutes, closed in 1953, were rearranged under the name of elementary education school of 6 yeras [2].

Until 1970-71 academic year, elementary school teachers had been trained in elementary schools which was at the level of high school. After 1970, the education period of these schools was extended to 7 years (after elementary school) and was extended to 4 years after secondary school. But, instead of elementary schools having lost their functions the education institutes containing 2 years of education were founded after 1974-75 academic year and these institutes were attached to the universities [1]. In 1983, the number of higher education schools was totally 17. This number was extended to 20 in 1984, to 21 in 1986, to 22 in 1987, to 23 in 1989 and to 24 in 1990[2]. With the condition of being at least a graduate of bachelor’s degree, the 2 year period of higher education schools was extended to 4 years after 1989-90 academic year and these schools were arranged as the department of elementary school teaching of education faculties [3].

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Because of the special condition of the mass the teacher addresses, the individuals who work in this field are expected to get necessary education and to have expected qualifications in today's information age, the basic goal of education is to be to get students to acquire the ways of self access rather than transferring the existing information to them [4]. Thus, the individual who learns by acquiring can solve problems about new situations faced and develop his/her scientific skills [5]. In application of new teaching programmes, rather than directly presenting knowledge in front of board, the teachers are expected to plan activities, prepare necessary environment for acquisition of courses, enable students to think and guide them [6].

Education is an important task that must be applied according to a programme, science societies' reaching to educational goals adopted as ideals is depended on maintaining these tasks in this field in a suitable way for specific programmes educators, for a qualified education, must always check education programmes and adapt them for conditions of society as the quality of education is highly depended on the quality of programme applied [7, 8].

To increase qualities in education has become one of the most important occupations of education institutions. Education programmes include which and how attitudes will be gained to individuals. For this reason, the quality of education is on a great scale depended on the programme applied as long as flaws and deficiencies of programmes are removed and programmes are rearranged according to changes in Science Field and in society that is as long as programmes are developed, the quality of education is expected to increase [9]. Recently, As criticisms about not training teachers as expected are considered, studies on reconstruction have begun to be applied in education faculties. Among them, the programme evaluation studies, a part of reconstruction, are included [10]. In this research, a questionnaire has been applied to 361 senior class students who study in School Teaching Programme of Selçuk University and the opinions of them about the programme have been interpreted.

## **MATERIALS AND METHODS**

In this research, the survey method has been used; the survey method is a research approach which aims at describing a situations ( either in past or present) with its present shapes [11].

**The Population and Sample of the Research:** The population of the reserach is students of Form Mastering Discipline Departmant of Selçuk University. 361 senior class students who study in Form Mastering Discipline Department of Selçuk University.(senior students total number is 390) include the sample of this research.

**Data gathering Method, Data collection and Data analysis:** In this research, as data gathering method, 27 poll questions gathered and developed from literature knowledge by researchers has been applied to 361 senior class students who study in Elementary School Teaching programme. When the poll was being developed, the Elementary School Teaching Programme of faculty of education was examined and literature about devolping and evaluating programme was scanned. the poll has been examined by members of the department of educational sciences and has been decided to be suitable for the goal of reserch and to contain the research topic, that's, it has been determined to have content validity. Before applying the poll to the group, it had been applied to a sub-group suitable for the sample and the reliability coefficient of the poll was found 0,84, making use of cronbach alpha formule. The poll, finally, has taken its last shape as containing 18 items.

The findings gathered at the end of the poll have been codde by statistical methods and evaluated in spss package programme. The frequency and percentiles (%) of replies to each questions students answered have been given and interpreted.

## **RESULTS**

The data gathered from the conclusion of the poll has been evaluated and interpreted. In the first sentence, students have been asked what they like most about their studying field. 30.5% of them have expressed that it is the interaction

Table 1: Which do you like most about your field?

Alternatives	Physical situation	The way of teaching courses	The quality of members of faculty	The interaction between members of faculty and students	Other
F	36	45	36	110	134
%	10.0	12.5	10.0	30.5	37.1

Table 2: Which factors affected you while choosing this programme?

Alternatives	I have knowledge about it.	Upon advice	Upon my parent's wish	At random without having any knowledge	The interaction between members of faculty and students	Other
F	87	30	51	59	111	23
%	24.1	8.3	14.1	16.3	30.7	6.4

Table 3: What do you think about social activities in faculty?

Alternatives	I find them too insufficient	Sufficient	I can't take part due to mye courses	I'm unaware of the activities	Other
F	152	42	43	69	55
%	42.1	11.6	11.9	19.1	15.2

Table 4: What do you think about pedagogic formation lectures?

Alternatives	Very boring	Necessary form e to be a good teacher but not productive	I learn many things	Other
F	27	231	55	48
%	7.5	64.0	15.2	13.3

between the of faculty and students 10.0% of them have expressed it's physical situation, 12.5% of them have expressed it's the way of teaching courses and 10.0% of them have said it's the quality of the members of faulty. Most of the students (37.1%) have "other". These opinions are; i do not like my field, i like child affection most, i like this job itself, due to the guarantee of job after graduation, my parents' living in this city (Table 1).

While choosing universities, 30.7% of students cared for which departments their scores were enough and they chose elementary school teaching due to the sufficiency of their scores. The rate of students who chose this field (with having pre- knowledge about the field) is 24.1% this rate shows that students benefitted from guidance services and chosen the departments consciously. In addition, the rate of those who chose this field upon advice is 8.3% while the rate of those choosing upon the parents' wish is 14.1%. the number of those who chose this field at random (without having any knowledge) is quite high (16.3) (Table 2).

Nearly half of students (42.1%) have expressed that they find the social activities in sufficient. While some (19.1%) are unaware of the activities, some (11.9) have expressed that can not participate in the activities due to their courses. Other opinions are; i do not find it necessary to participate, they are too expensive, the extent of activities must be enlarged, the activities must be educational, they are not announced sufficiently (Table 3).

Most of the students(64.0%) think that although pedagogic formation lectures are necessary to be good teacher they are not productive. The rate of those who think these lectures enable them to learn many things is 15.2%. Other opinions of students are; teachers make us tell the lectures, lectures are not effective because of teacher's not coming to lectures regularly, it is theoretical, there is no free thinking in lectures, they are necessary, basic of be a teacher but not satisfactory (Table 4).

Table 5: Do the subject of lectures generally attract your attention?

Alternatives	Same subjects are attracting	Despite the change in names, same lectures are stil boring due to the similarity of content	Nearly all subject are attracting	Other
F	169	114	46	32
%	46.8	31.6	12.7	8.9

Table 6: Do the topics lead you to make research to get new knowledge?

Alternatives	Yes	Same subjects	No	Other
f	34	126	165	36
%	9.4	34.9	45.7	10.0

Table 7: Can you reach to the sources about your lectures, research topics?

Seçenekler	Yes	No	I reach generally	I can't reach generally
F	56	36	196	73
%	15.5	10.0	54.3	20.2

Table 8: Is the faculty library sufficient about sources in your department?

Alternatives	Yes, I can find what I want.	I don't benefit from the library	No, too insufficient	Other
F	130	46	123	62
%	36.0	12.7	34.1	17.2

To the question “do the subject of lectures generally attract your attention?” nearly half of students have expressed that some subject are attracting, 31.6% of them have expressed that in spite of changing the names of some subjects, the content of lessons is the same. For this reason, they think the lectures are not attracting for them. The rate of those who find all subject attracting is 12.7%. the rate of students choosing “others” is 8.9% (Table 5).

Nerally half of the students (45.7%) have given a negative answer to this question. The rate of those given a positive answer is 9.4% while 34.9% of students think some topics lead them to make research, to get new knowledge. 10% of them have chosen the alternative “other” (Table 6).

54.3% of students have told that they can reach to sources about their lectures, research topics. That’s, students do not have much difficulty in reaching to necessary sources, materials. The rate of those who have expressed that they can not reach to sources is 10.0% (Table 7).

36.0% of students have expressed that they can find the sources they want some of the students (12.7%) have expressed tnaü they do not benefit from the library while 34.1% have found the library insufficient. Same of those who have chose other alternatives have expressed opinions like its sifficiency is average, partly sufficient, not sifficient at oll, the ources could be increased, the number at boks is anadequate, or the library could be enriched with wore boks (Table 8).

In this question; some of the students (21.1%) have exprbe applied every year. The rate of those who think that it must be applied in the last 2 classes is 24.4%, the rate of those who think the present situation must maintain is 27.4% other opinions are; especially in the first year, it must also be in the first class, it must be optional, every year in one term (Table 9).

About this question 39.1% of students have expressed that assignments do not gain anything to them, while the rate of students expressing that assignments given better prepare them for lesson. Students choosing “the other” have told that, some assignments are useful, logical assignments are not given, few assignments must be given in senior class, 1 am in against of assignments, assignments do not conduct us to research, some assignments gain many things (Table 10).

Table 9: In which terms do you think the practice teaching must be applied?

Alternatives	Evey year	In the last 2 year	In last year, in both terms	The existing situation mustmaintain	Other
F	76	88	55	99	43
%	21.1	24.4	15.2	27.4	11.9

Table 10: What do you think about assignments given?

Alternatives	Too many assigments are given	No assignment is given	Assignments given prepare us for lessons beter	Assignments don't gain any thing	Other
F	32	36	98	141	54
%	8.9	10.0	27.1	39.1	15.0

Table 11: Do you find the members of faculty productive enough?

Alternatives	Yes	No	Partly	Other
F	38	83	207	33
%	10.5	23.0	57.3	9.1

Table 12: What do you think about promation the system of passing class?

Alternatives	The present situation is good	The obligation fo passing the branch lessons expect form may be removed	Student's can graduate being more qualified by making it more difficult	Other
F	139	78	89	55
%	38.5	21.6	24.7	15.2

Table 13: Which factor do you think is the most efficient in getting a qualified elementary school teacher?

Alternatives	The faculty graduated	Train oneseelf	Education in basic	Economical conditions	Other
F	32	204	58	23	44
%	8.9	56.5	16.1	6.4	12.2

57.3% of students think that the members of faculty are partly productive, The rate of those who think that they are productive enough is 10.5%, those thinking that they are not productive is 23.0% (Table 11).

The acgievement grade of a lesson in the faculty (the time when this poll has been applied) is the total of 40% of mid-term examination, 60% of Final or make-up examination. The exams are evaluated on totally 100 grade, marks are transformed into the system of quarter note. While great majority of students think that about the system of passing class, lessons, the present situation is good, 21.6% of them have expressed that the obligation of passing others expect for branch lessons must be removed. 24.7% of students think that if lessons are made difficult, the number of more qualified graduates increases. Other opinions are; it is so so, it is not sufficient, more sufficient measurement, evaluation can be applied, the systmen of bell-shaped curve must be applied, the iregular attendance must be removed, more opportunities to make practice must be given (Table 12).,

The majority of students (56.5%) have expressed that it's necessary to train oneseelf in ordes to be a good elementary school teacher. They think that basic education is effective to the rate of 16.1% that the faculty graduated (8.9%), economical conditions (6.4%) do not have much effect. Other opinions are; lessons taken at basic, training oneseelf, loving his/her duty, personifications, being voluntering, having a good pedagogic formation, the education taken in the faculty (Table 13).

Nearly half of students (47.6%) are hopeful in that this occupation will satisfy them in all aspects in future. While 19.7% of them, for this reason, they chose this job, 23.3% of them are not hopeful in getting satisfaction from

Table 14: Do you think this job will satisfy you in all aspects in future?

Alternatives	Yes, I chose this job for this reason	I hope	I don't think	Other
F	71	172	84	34
%	19.7	47.6	23.3	9.4

Table 15: Can sufficient educational materials, technologies be used during courses?

Alternatives	Yes, they are used	They are used very little, if the use is increased, the productivity of lesson will also increase	No, they aren't use	Other
F	43	174	107	37
%	11.9	48.2	29.6	10.2

Table 16: Are the physical conditions of school and classrooms sufficient?

Alternatives	Yes, sufficient	Can be better	Insufficient	Other
F	27	186	122	26
%	7.5	51.5	33.8	7.2

Table 17: What do you think about the population of classes?

Alternatives	Ideal	If decreased a little, productivity will increase	Heavily, populated, courses are not productive	Other
F	98	165	70	28
%	27.1	45.7	19.4	7.8

Table 18: Do you think you will be efficient when you graduate in view of pedagogic formation, knowledge of branch?

Alternatives	Yes	No	Partly	Other
F	66	92	150	53
%	18.3	25.5	41.6	14.7

this job in future. Some students have revealed that being a teacher will satisfy them spiritually, that they want to get promotion in the occupation, they can face economical problems, they will get satisfaction if they can train students in the desired way (Table 14).

To the questions, nearly half of the students have expressed that sufficient materials, technologies are used seldom but they have added that if the use of materials increase, the productivity will also increase. The rate of those thinking that materials are used sufficiently is 11.9%, the rate those thinking the materials are not used at all is 29.6%. The rate of students who have expressed other opinions is 10.2%. Some of these opinions are; very few materials were used in 3<sup>rd</sup> class, the favourites of teachers is the lecture method (Table 15).

The rate of students telling that they liked physical conditions of their department most was 10.0%. Since 7.5% of students have answered the question about the physical conditions of classrooms, the school, a parallelism is seen between answers. In addition, more than half of the students (51.5%) have explained that the physical conditions of the school, classrooms could be better. On the opposite, 33.8% of students think that physical conditions are not sufficient. In addition to this, students have expressed that; there must be a theatre saloon at school, the physical conditions are too bad, classrooms are too cold, there are classrooms at basement, the presence of technological equipments in specific classes must be equipped with technology (Table 16).

Nearly half of the students (45.7%) have explained that classes are heavily populated, the productivity will increase if the number of students in classes are decreased. The rate of students expressing that the population is ideal is 27.1% while the rate of those thinking that classes are crowded, so courses are not productive at all is 19.4% in additions, some

students have explained that increasing the number of students will prevent the difficulty of appointment, the large number of students coming from other universities makes classes crowded (Table 17).

Almost half of the students (41.6) have said “partly” to the question mentioned above. The rate of those saying “yes” is 18.3%, saying “no” is 25.5%. the rate of those expressing other opinions is 14.7%. Some of these opinions are; I will be efficient maybe with my own effort, I do not think I will be efficient, I will try to be efficient, we need to develop ourselves more, the only thinking I lack will be experience (Table 18).

## **DISCUSSION**

This research has been applied to evaluate of the opinions of the students who study in the elementary school programme of Education Faculty of Selcuk University. The variables measured are mostly the interests, expectations of students, their opinions about the programme, their satisfaction about it.

The feature students like most about the department is the interaction between students and teachers. In additions, students chose this programme since their scores were enough for this department, they chose it having knowledge about the department. For this reason, it can be mentioned that the guidance services of private courses are efficient: however this activity can be increased. During the period of choosing programmes, getting help from guidance services is very important in view of meeting the expectations of students, guardians [12]. The teachers who do not loved by students, this situation can affect the success of students negatively [13]. For the alternatives of university programmes, the quality, efficiencies of guidance services must be increased. The student must not choose a faculty or department just because their scores are enough for the faculty or department.

It is not possible to think that a quality of education programme is limited with courses for this reason, social activities inside, outside the faculty. Among the concept of “social activity” seminars, conferences, sports tournaments, theatre, folk dancing, folklore, tours (for a day or more) spring festivals, graduation ceremonies can be considered. Most of the students find social activities in the faculty insufficient, some of them can not participate in such activities due to their lessons while other of them are unaware of the activities. For this, more activities must be planned [8]. In this view, social activities are to be increased, their contents is to be enriched, students are to be enabled to participate in these activities.

Students think that pedagogic formation courses are necessary to be a good teacher but they these courses are not efficient. Removing defects about these courses is extremely significant in view of teaching occupation [8]. To be a qualified teacher pedagogic courses are very significant, contribute much to students [14]. The defects of these courses in their service for goals must be removed.

The topics of courses mostly do not lead students to make researches, gain new knowledge. In addition, most of the students have expressed that they can reach the sources about research topics and the courses. They have added that they can mostly find the sources they look for at the faculty library. The adequacy of a library in aspect of sources is an important component for an education institution. However, developing libraries, making them contain current sources, subscription to educational reviews, following innovations are extremely significant in view of educational activities. Most of the students have expressed that practice teaching could be applied in the last year as in a research previously carried out [8].

Majority of students have explained that assignment do not gain anything, while some have explained that they are useful to get prepared for courses. By assignments, students can repeat, review the things learned, can get themselves prepared for next courses, topics. They can also learn to use sources, the library, referential materials, encyclopedias, in this way, they can maintain their learning outside class [15].

Students like courses from the point of enabling them to get know the world, thus loving it from the point of being efficient outside the school, from the point of gaining them a different extent to their views of world. They think that members of faculty are partly efficient in terms of these situations. Teachers must help students to develop suitable behaviour such as co-operation, democratic thinking, problem solving, decision making for the goals of education [16].

On one hand, It is important to especially train oneself to be a qualified elementary school teacher, on the other hand, the faculty graduated from, having basic knowledge have also significance. In addition, students are hopeful that elementary school teaching will satisfy them in all aspects in future. The qualifications of a good teacher can be divided into 2 groups as personal, occupational qualifications. Personal qualifications are teacher's being tolerant, flexible, frank, affectionate, understanding witty, having expectations of high succes, encouraging, supportive. Occupational qualifications are such feature as general cultural knowledge, vocational skills, efficiencys, subject matter knowledge [17]. Memmbers of faculties must do their duty for students to be trained better. They must also remove students' deficiencies, must be a good guide for them.

Students think that adequate technologies, materials are rarely used during courses, but if the use of them increases, the efficiency will also increase. The materials, equipments used in teaching give students the opportunity of efficient learning, the use of educational technology, audio visual materials is effective on students' learning, increasing permanence level of learning [18]. From this view, in courses, technologies, educational materials must be utilized adequately, the shortage in materials must be removed, enough time must be allocated for practices.

The physical enviroentment is defined as the features of the place allocated for educational activities. Such factors as materials (like chair, table, cupboard) empty spaces, the place's order of heat, light, color constitute the pyhsical variables of the environment. The relations between teacher and students are greatly affected by these pyhsical variables. For this reson, in educational activities, the significance of the order of environment is very high. While class objects gain value when united with individual, they will be functional as long as they make contribution to education [19]. While some of the students of elementary school programme find the pyhsical conditions of classrooms, the school insufficient, majority of them think that they could be better. To make courses efficient, productive, the number of students in classes could be decreased, the pyhsical conditions of classrooms, the schoolcould be reexamined.

Students think that if the number of students in classes decreases, the efficiency in courses will be high, at the same time, they will not have much difficulty in being appointed. The number of students for a teacher can not be higher than 40 including the multigrade classes [20]. The number expressed in laws, regulations is undoubtedly valid for university classes. The population of classes in mastering discipline department of elementary school teaching of Selçuk University contains averagely 50 students.

## REFERENCES

1. Akyüz, Y., 1994. Türk Eğitim Tarihi (Başlangıçtan 1993'e). İstanbul: Kültür Koleji Yay.
2. YOK. 1998. "Cumhuriyet Döneminde Öğretmen Yetiştirme Tarihi Gelişimi". Eğitim Fakülteleri Öğretmen Yetiştirme Programlarının Yeniden Düzenlenmesi İle İlgili Rapor. Ankara.
3. Dursunoğlu, H., 2003. Cumhuriyet Döneminde İlköğretime Öğretmen Yetiştirme Tarihi Gelişimi. Milli Eğitim Dergisi. Sayı 160. Güz 2003.
4. Başkan, A., 2001. Öğretmenlik mesleği ve öğretmen yetistirmede yeniden yapılanma. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi. Sayı: 20: 16-25.
5. Kaptan, F., 1999. Fen Bilgisi öğretimi. İstanbul: Öğretmen Kitapları Dizisi. Milli Eğitim Basımevi.
6. MEB. 2000. İlköğretim Okulu Fen Bilgisi Dersi Öğretim Programı. Ankara: Milli Eğitim Basımevi.
7. Büyükkaragöz, S.S., 1997. Program Geliştirme "Kaynak Metinler". Konya: Öz Eğitim Yayınları.
8. Cansaran, A., 2004. Biyoloji Öğretmenliği Öğrencilerinin Biyoloji Öğretmenliği Programı Hakkında Düşünceleri. GÜ Gazi Eğitim Fakültesi Dergisi. Cilt: 24. Sayı: 1: 1-21.
9. Erden, M., 1992. Eğitimde Program Değerlendirme. Ankara: Pegem Yayıncılık.
10. Karadeniz, C.B., 2001. Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Coğrafya Öğretmenliği Programının Öğrenciler Tarafından Değerlendirilmesi. X. Ulusal Eğitim Bilimleri Kongresi. AIBU, Bolu.
11. Karasar, N., 2000. Bilimsel Araştırma Yöntemi. Ankara: Nobel Yayın Dağıtım.



12. Güleç, M.M., 2006. Doğrudan ve Dolaylı İşlevleri Yönüyle Türkiye’de Üniversiteye Hazırlık Dersaneleri. Uludağ Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi. Bursa
13. Akyıldız, H. and Ö. ve Atabeyoğlu, 2001. Fen Bilgisi Öğretmenliği I. ve IV. Sınıf Öğrencilerinin İdeal-Pratik Düzeyde Öğretmen Özelliklerini Değerlendirmeleri. Yeni Binyılın Başında Fen Bilimleri Eğitimi Sempozyumu, Maltepe Üniversitesi, 7-8 Eylül, İstanbul, Bildiri Kitabı, pp: 317-325.
14. Adıgüzel, A., 1999. Öğretmen Yetiştirmede Mesleki (Pedagojik) Formasyonun Önemi. Köprü Dergisi. Sayı: 68. güz. Ankara
15. Paulu, N. and K. ve Perkinson, 1995. *Helping Your Child with Homework*. Washington, D.C.: U.S. Department of Education.
16. Deveci, H., 2005. Sosyal Bilgiler Dersinde Gazete Kullanımı. The Turkish Online Journal of Educational Technology. Volume 4, Issue 3, Article 21.
17. Şeker, H. ve diğ. 2004. Öğretmen Yeterlikleri Ölçeği. Milli Eğitim Dergisi. Sayı: 164. Güz
18. Emir, S., 2005. Sosyal Bilgiler Öğretiminde Görsel Materyallerin Erişmeye, Tutuma ve Yaratıcı Düşünmeye Etkisi. XIV. Ulusal Eğitim Bilimleri Kongresi Pamukkale Üniversitesi Eğitim Fakültesi 28–30 Eylül 2005 DENİZLİ
19. Uludağ, Z. and H. ve Odacı, 2002. Eğitim Öğretim Faaliyetlerinde Fiziksel Mekan. Milli Eğitim Dergisi. Sayı: 153-154. Kış-Bahar 2002.
20. 2222 Sayılı İlköğretim ve Eğitim Kanunu