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Expectations of primary mathematics student teachers from their instructors and classmates

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Abstract

This study was conducted to determine freshman mathematics student teachers' expectations from their instructors and classmates in terms of contribute to their career development. In this study, case study method was used. A questionnaire with 2 open-ended questions was administered to total 152 freshman mathematics student teachers enrolled to Department of Elementary Mathematics Education, in Fatih Faculty of Education, in autumn semester of 2009-2010 academic year. As a result, it is revealed that freshman mathematics student teachers expect from their instructors about learning environment, exam question, assessment and evaluation and social relations between instructor and students.

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1. Introduction

Education is one of the most important factors in the development of individuals and societies. There are 3 basic element of the education system is in communication with each other. It is accepted that they are teacher, student and curriculum (Ceylan & Demirkaya, 2006). Though each of these items is important in itself, teachers are the head architects of the good developments in education (Sullivan & McDonough, 2002). In other words, teachers are directly effective on; the future of a society; students' formation and development of knowledge, skills, attitudes, values and behavior changes. It can be said that a mechanism can not be created to replace the teacher in education and in parallel with technological developments teacher always be needed (Ubuz & Sarı, 2009). Therefore, it is certain that the most important mission, training of manpower who serve the community, falls to teachers.

How important is the preparation and practice of programs that will contribute to the training of teachers; trainee teachers and academic staff's, implement these programs, behaviors in these process are so important (Köğce et al., 2010). Under the guidance of lecturer, mutual knowledge of the roles in an interactive environment where the learning takes place (Murat et al., 2006) clarifies expectations of participants from each other. The realization of expectations, or not happen affects individual's behavior in next process (Ülgen & Sümbül, 1999). If the expectations of teachers and students are different from each other, it may be harder or not available to communicate

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and to carry out their roles in solidarity in learning environment (Ülgen, 1994). Namely the awareness of students and instructors about their own responsibilities and the responsibilities of each other can improve learning efficiency. In addition, to ensure a qualified education, instructors should be model for students with their attitudes and behaviors, students should feel that they are precious in the eyes of the instructors and instructors should recognize their students (Keçeci & Taşocak, 2009).

There are many studies about problems and expectations of new students on orientation program which acquainted them to the new university environment (Ceyhan & Demirkaya, 1995; Dilekmen, 2003; Kutlu, 2004). In addition, it draws attention that there are researches to determine perceptions, expectations and needs of students (Wlazelek & Coulter 1999) on psychological counseling and guidance services. For example, in a study conducted by Saydan (2008) identified students' expectations from university instructors and the importance levels of these expectations. In another study Demirbolat (2005) has determined the master students expectations for the education program, practice and evaluation process lessons. However, there has not been any study related expectations of mathematics student teachers, first grade students at university, from their classmates and instructors.

Since expectations are beliefs about the learning process and the structure of knowledge (Mistades, 2007), determination of mathematics student teachers' expectations of instructors and classmates, consideration of these expectations in education process may play an important role to increase achievements of mathematics student teachers and to develop positive attitudes and behaviors towards their professions. Therefore, this study aims to identify the expectations of freshman mathematics student teachers from their classmates and instructors to contribute their professional development.

2. Method

Case study method was used in this study. Case study method is selected because it is particularly suitable for individually implemented studies and enables an in-depth inquiry of one aspect of the problem, and can be completed in a shorter time frame (Çepni, 2009).

2.1. Participants

The sample group consisted of freshman mathematics student teachers; 152 (48 male, 104 female); who studied at the Mathematics in Department of Primary Education in Fatih Faculty of Education, in the 2009-2010 academic year.

2.2. Data collection tools

The data was collected using a questionnaire containing 2 open-ended question. The questions are as follows:

As a mathematics student teacher to contribute to your professional development;

1. What are your expectations from your course teachers? Please explain.
2. What are your expectations from your classmates? Please explain.

2.3. Data analysis

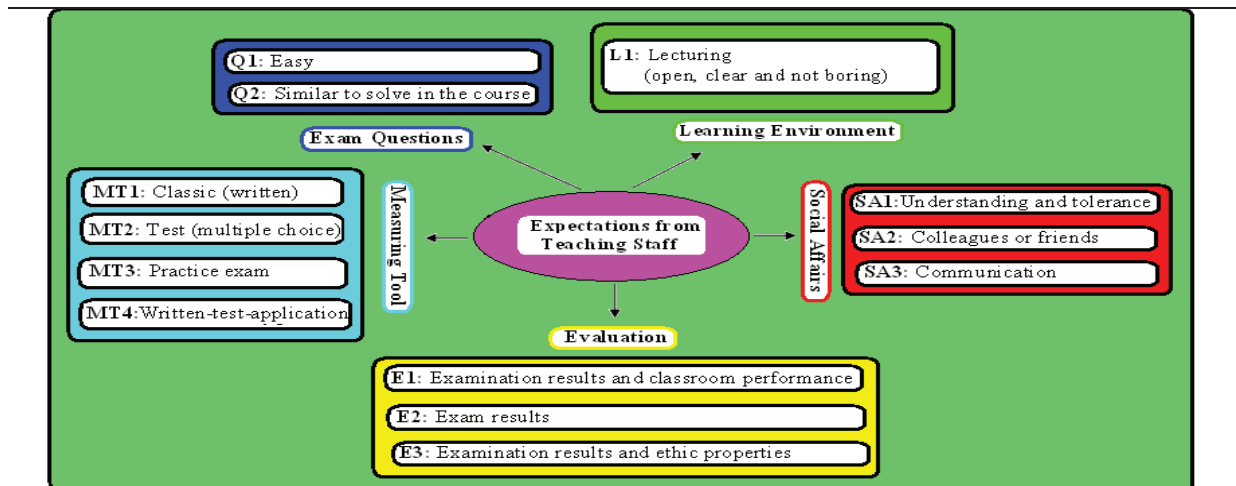
In the stage of data analysis, questionnaire questions, the answers given by mathematics student teachers were analyzed independently and categorized by domain experts and researchers from 3 different fields according to their similarities and differences. Then, the categories created by domain experts and researchers reviewed and similar categories clarified, dissimilar categories were discussed and as a consensus some common codes and themes were created (Yin, 1994)

3. Results

In this section, findings related to expectations from their instructors and classmates of mathematics student teachers' are presented.

Mathematics student teachers' views on the expectations about instructors is given in Table 1.

Table 1. Mathematics student teachers' expectations of instructors



Codes	Examples from Mathematics Student Teachers' Responses	N	%
L1	I want them to give a tutorial, entertaining and not boring lesson and to provide a good education environment.	66	43
Q1	Instructor should not ask too much difficult questions. Number of difficult questions should be reduced.	78	51
Q2	The questions should be parallel with subjects and questions that is solved in lesson. Especially, I would be glad if they ask us what they tell in the lessons.	20	13
MT1	I would like them to make written exams, not multiple choice. Because I think that there is less chance to make mistakes in written exams.	16	11
MT2	It should be in the form of multiple choice, because we have solved multiple choice question for many years. I believe I'll be more successful when the examination is multiple choice, because we are accustomed to this style. In addition, the scoring would be more equitable.	35	23
MT3	It is beter to make practice exams than memorization and information based exams. Classroom management and our lesson presentations should be scored.	6	4
MT4	I would like teachers to make examinations which measures us totally. When necessary they should score us by written exam, multiple choice or classroom performance.	3	2
E1	I want my success to evaluate both exam marks and my classroom performance.	35	23
E2	Our success should be evaluated according to our answers in exams.	70	46
E3	Success should not be evaluated just exam results. I would like that personality should be participated in the evaluation. As a result, we will be teachers. Teachers shoud be role model for students.	58	38
SA1	We had a very tiring and busy period in school because of lessons and exams. Therefore, we want teachers to act tolerant and understanding to us.	26	17
SA2	I want my teachers not to build walls among us and I would like them to act like a friend or colleague. There isn't any problem now, because all of them are well people.	26	17
SA3	I want them to be more relevant. They had beter not to go out when the lesson finishes. Otherwise, there isn't any efficiency because of disjointed relationship between students and teachers.	5	3

*: Since mathematics student teachers' responses can be labeled under more than one code, the percentage may exceed 100.

It's seen that there are 5 different groups about mathematics student teachers' expectations of instructors, "process of course, exam questions, measurement tools, assessment, and social relations". By looking at the expectations on **learning environment**, mathematics student teachers want from instructors to create a clear, understandable, enjoyable learning environment. According to expectations of **exam questions**, half of the mathematics student teachers want easier questions in exams. In terms of expectations about **measuring tool**,

mathematics student teachers want multiple choice tests and classical written exams. By looking at the expectations on **evaluation**, mathematics student teachers want that evaluation should cover “test scores and classroom performance”, “exam results, and moral characteristics” and “test scores”. Expectations about **social relations** occur that mathematics student teachers wait the “tolerance”, “acted them as a colleague or friend” and “the establishment of good communication with them”.

Views on the expectations of mathematics student teachers, mathematics teachers in primary school from their classmates are given in Table 2.

Table 2. Expectations from classmates

Codes	Examples from Mathematics Student Teachers' Responses	N	%
SE1	There are too many groups in our classroom. A month has passed but still we can not act together. I want closer relationships.	79	52
SE2	I would like to have more time for social activities such as trips, tea parties, picnics etc.	65	43
SE3	I want all of my classmates (both girls and boys) to trust each other, to be respectful and tolerant.	39	26
EfC1	Some students in classroom treat us as a rival. They are unwilling to share lessons notes with us; which we can't join. I don't want such events again.	65	43
EfC2	I am waiting them to be silent and serious in the lessons and discussions should be related to lesson subject.	36	24

It's seen that mathematics student teachers' views about expectations from their classmates collected in 2 different theme as a socialization and lessons. It's observed that mathematics student teachers have **social** expectations about "friendship with classmates", "participation in activities together" and "respect, tolerance and trust to each other". In terms of expectations about **course**, mathematics student teachers' expectations from their classmates determined as “sharing lecture notes and resources”, “to be quiet in lessons and sharing ideas related about lesson subjects.”

4. Conclusion, discussion and recommendation

When findings about mathematics student teachers' expectations are analyzed it is occurred that nearly half of the students want instructors to provide a clear, comprehensible, enjoyable, and good learning environment. This result coincides with Saydan (2008)'s findings in study of students studying in the faculty of economics and administrative sciences. In this study Saydan determines that some statements like “lesson should be presented actively”, “sample questions should be solved to reinforce the learning”, “an understandable voice and reasonable speed should be used” are among the quality expectations which take place on top of expectation list. When focus on this results, it is recommended that instructors should take care of students' desires to provide an effective learning environment.

When looked at findings related to the mathematics student teachers expectations of exam questions, half of the mathematics student teachers want easy exam questions and some of them want questions which are similar to questions solved in lessons.

Looking at the findings related to the measurement tool, most of the mathematics student teachers want multiple-choice test type. Such a wish may be a result of the traditional education concept, because looking of success as result-oriented rather than process. This idea may be a result of not understanding of requirements of professing as a teacher. Therefore, it is recommended that students should be faced by instructors with questions which forces them to make analysis and synthesis, improve their problem solving and thinking skills.

Looking at the findings related to assessment, mathematics student teacher often wants to evaluate according to exam results. In contrast to this situation, it is advised that the instructors should use alternative methods of assessment (performance tasks, project assignments, etc.) as well as result-oriented examinations in evaluation process.

Looking at the findings about social relationships, it is determined that mathematics student teachers want instructors to be understanding and tolerant, to act like a colleague or friend, to create relationship rather than teaching them and to go where they want. In a study done by Demirbolat (2005) identified that mathematics student teachers had expectations from instructors about democracy and respect in classroom environment. But in another study of Ceylan and Demirkaya (2006) said that elementary school teachers state that they can't create a democratic atmosphere in classrooms. Therefore, it is advised that instructors should be a role model and create a democratic atmosphere in classroom to ensure a quality education (Ekinçi & Burgaz, 2007; Keçeci & Taşocak, 2009).

Mathematics student teachers have expectations from classmates both socially and related to courses. Since the relationship between students is important, faculty management and mathematics student teachers have a great role to keep the balance. In this regard, students should be encouraged to come together and participate in various social activities.

References

- Ceylan, S., & Demirkaya, H. (2006). An investigation of prospective primary school teachers' satisfaction level on primary teacher education programme and the services provided. *Mehmet Akif Ersoy University Journal of Education Faculty*, 12, 146-160.
- Çepni, S. (2009). *Introduction to research and project studies*. (Extended 3rd ed.), Trabzon: Celepler Press.
- Demirbolat, A. O. (2005). Expectations of graduate students from lecturers and the curriculum. *Journal of Turkish Educational Sciences*, 1, 47-65.
- Dilekmen, M. (2003, July). *The effect of students' adaptation status to university life of orientation services*. Paper presented at the VII. National Psychological Counselling and Guidance Congress, İnönü University, Malatya.
- Ekinçi, C. E., & Burgaz, B. (2007). The expectation and satisfaction levels of the students at Hacettepe university with respect to academic services. *Hacettepe University Journal of Education*, 33, 120-134.
- Keçeci, A., & Taşocak, G. (2009). Communication skills of faculty's: An example of a college of nursing. *Dokuz Eylül University School of Nursing Electronic Journal*, 2(4), 131-136.
- Köğçe, D., Yıldız, C., & Aydın, M. (2010, April). *Teaching profession: Elementary mathematics student teachers' viewpoint*. Paper presented at the II. International Congress of Educational Research, Antalya.
- Kutlu, M. (2004, July). *University students' problems and expectations related to getting accustomed to live at university and orientation services*. Paper presented at the XIII. National Educational Sciences Congress, İnönü University, Malatya.
- Mistades, V. M. (2007). Exploring business students' and liberal arts students' beliefs about physics and physics learning. *Asia Pacific Education Review*, 8(1), 100-106.
- Murat, M., Aslantaş, H. İ., & Özgan, H. (2006). Assessment of instructors with regard to instructional activities in classrooms. *Journal of Gazi Educational University*, 26(3), 263-278.
- Saydan, R. (2008). Quality expectation of the university students from university teachers: Case of Yüzüncü Yıl university faculty of economics and administrative sciences. *Gazi University Journal of the Faculty of Economics and Administrative Sciences*, 10(1), 63-79.
- Sullivan, P., & McDonough, A. (2002, July). *Teachers differ in their effectiveness*. Proceedings of the 26th Annual Conference on Psychology of Mathematics Education, University of East Anglia, Norwich, UK.
- Ubuz, B., & Sarı, S. (2009). Primary teachers candidates' views on good teacher. *Ondokuz Mayıs University Journal of Education*, 28, 53-61.
- Ülgen, G., & Sünbül, A. M. (1999). Levels of academic achievement of students and the perceptions of instructors and students related to their own and each other responsibilities, in learning situation. *Hacettepe University Journal of Education*, 15, 1-10.
- Ülgen, G. (1994). Achievement expectancy and the level of achievement on the educational psychology course (EBB 321) in undergraduate education. *Hacettepe University Journal of Education*, 10, 55-63.
- Wlazelek, B.G., & Coulter, L. P. (1999). The role of counseling services for students in academic jeopardy: A preliminary study. *Journal of College Counseling*, 2(1), 33-41.
- Yin, R. K. (1994). *Case study research design and methods*. (2nd ed.). San Francisco: Sage.