

Basic sciences agonize in Turkey!

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Basic sciences agonize in Turkey!

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Abstract. In this study, changes from past to present in the departments of physics, chemistry, biology and mathematics, which are considered as the basic sciences in Turkey, are shown. The importance of basic science for the country emphasized and the status of our country was discussed with a critical perspective. The number of academic staff, the number of students, opened quotas according to years for these four departments at universities were calculated and analysis of the resulting changes were made. In examined graphics changes to these four departments were similar. Especially a significant change was observed in the physics department.

Lack of jobs employing young people who have graduated from basic science is also an issue that must be discussed. There are also qualitative results of this study that we have discussed as quantitative. Psychological problems caused by unemployment have become a disease among young people. This study was focused on more quantitative results. We have tried to explain the causes of obtained results and propose solutions.

1. Introduction

In recent years, basic sciences have been seriously shaken in Turkey. In universities the situation of Physics, Chemistry, Biology and Mathematics departments is vexatious. In the study, we show that there are quotas for these four basic sciences in 2010-2015 and account for the amount of entered students and the changes according to years. Also, we accounted for the number of academic staff in these faculties and graphed according to years. This results are argued and solution suggested.

Basic sciences are basic of country. If there is no basic science in a country, the country is destroyed. There is need to take precautions to protect these basic sciences which are destroyed day by day. In the last years, most of the Faculty of Sciences, which is obligatory to open university by YÖK (Higher Education Institution), were closed because students do not choose these departments. The students do not find jobs when they are graduate. Those who are graduate these departments, face lack of jobs.

2. Quantitative datas

In 2010-2015 years, opened quota amounts and entered the amount of students are accounted and shown as graphically in Physics, Chemistry, Biology and Mathematics departments (Figure 1 and Figure 2).



When the Figure 1 is researched, seen that Physics is least but Mathematics is most. The amounts of opened quota to Chemistry and Biology departments are shown parallelism. It is seen that all departments are felt from 2010 to 2015, also in 2013 sudden falling is seen.

When the Figure 2 is researched, seen that the amount of entered students is least in Physics, but seen to the most in Mathematics. The amount of entered student in all departments are falling continuous unto 2015.

When the both graphic datas are researched, it is seen that none of opened quotas is full.

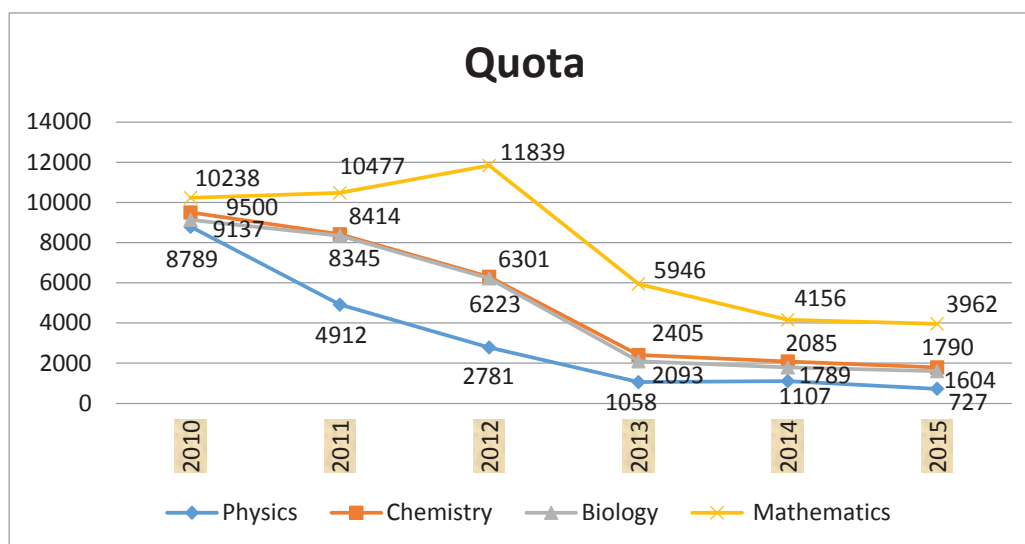


Figure 1. The number of quotas opened to year in departments of Physics, Chemistry, Biology and Mathematics [1, 2, 3].

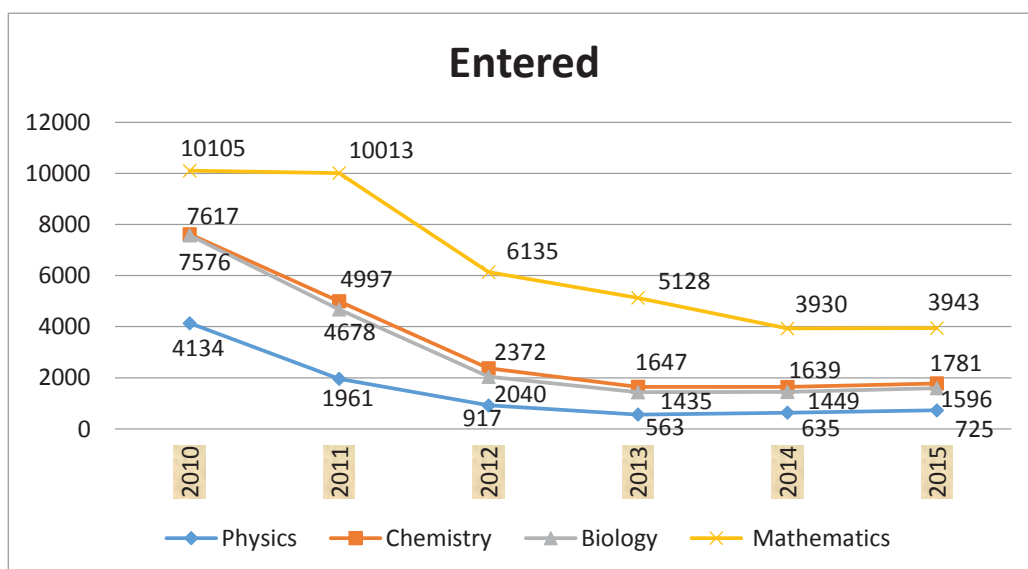


Figure 2. The number of entered students to year in departments of Physics, Chemistry, Biology and Mathematics [1, 2, 3].

Below, it is given that the departments of Physics, Chemistry, Biology and Mathematics are opened quotas by years and the amounts of entered students.

When the graphic is researched, the difference is big between the opened quotas in 2012 in these four departments and the amounts of entered students. Also, in 2015 the opened quotas to departments and the amounts of entered students are the least. It is seen to seriously falling from 2010 to 2015 years in each four departments. When the amounts of quota is looked in, Mathematics has the least falling in 5 years, Physics has the most falling. It is observed to same falling amount in Chemistry and Biology departments.

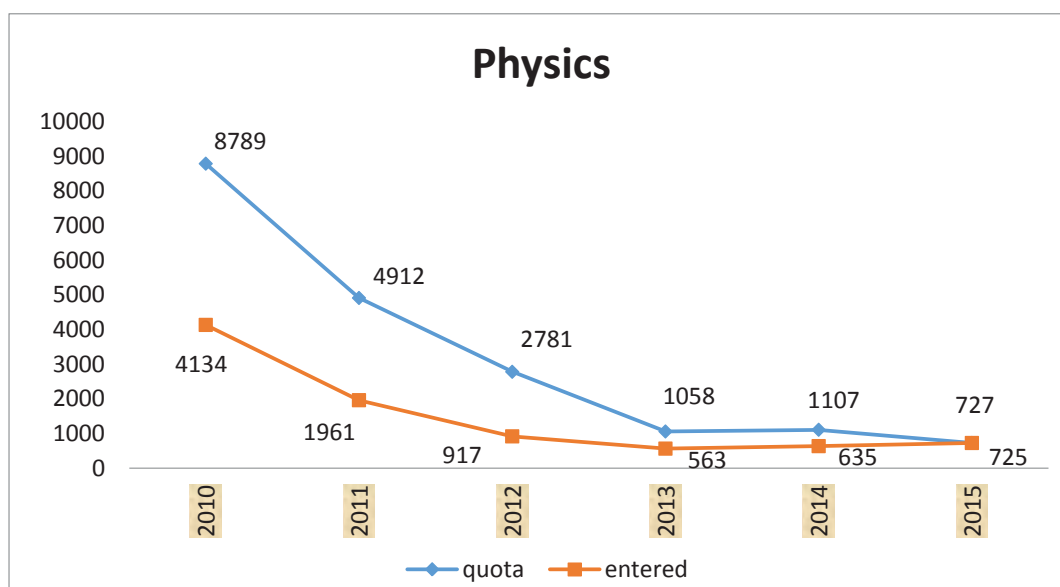


Figure 3. The opened quotas and the number of entered students to years in Physics Department [1, 2, 3].

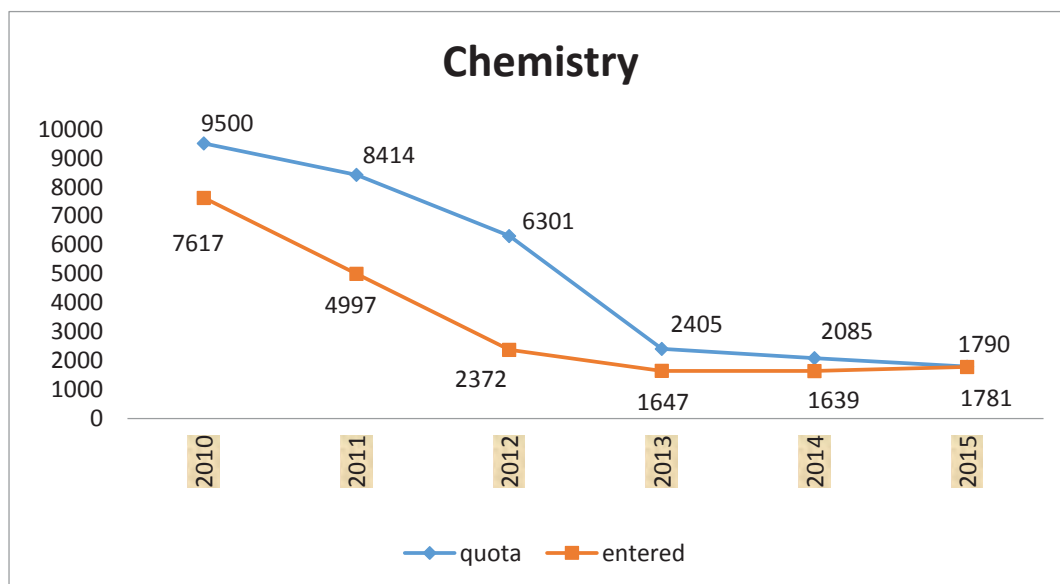


Figure 4. The opened quotas and the number of entered students to years in Chemistry Department [1, 2, 3].

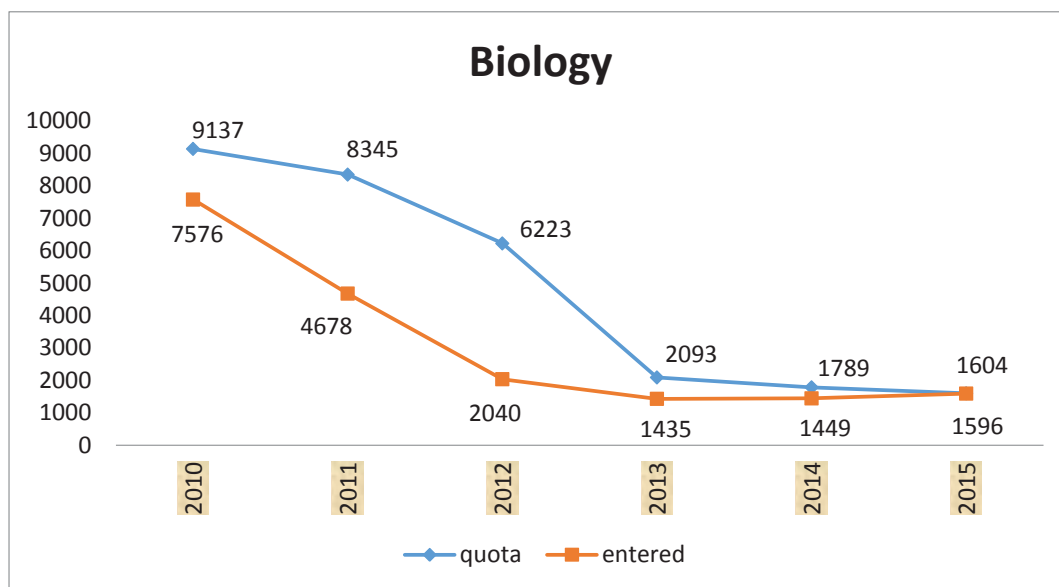


Figure 5. The opened quotas and the number of entered students to years in Biology Department [1, 2, 3].

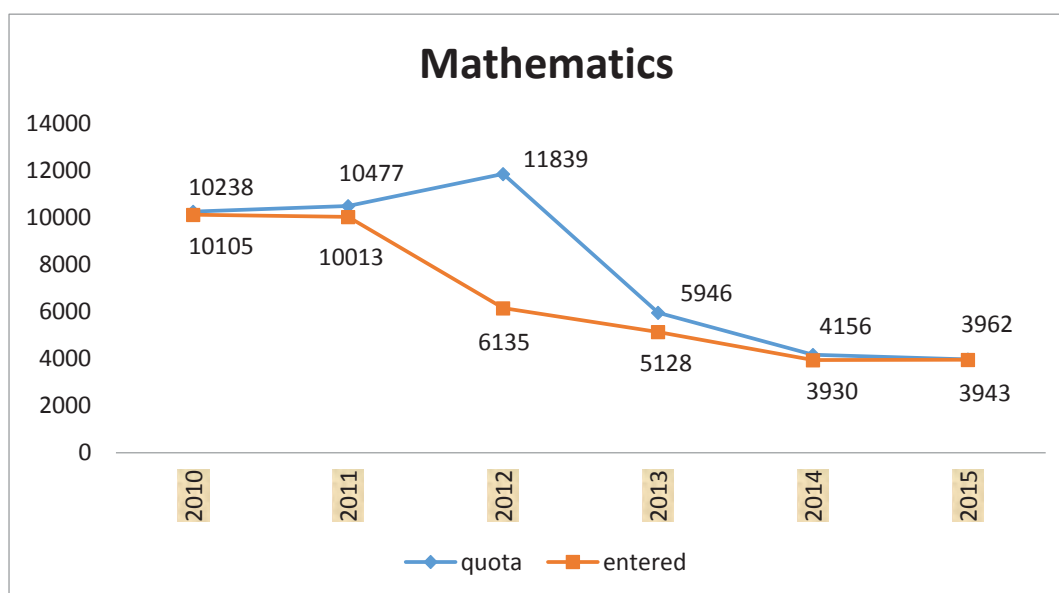


Figure 6. The opened quotas and the number of entered students to years in Mathematics Department [1, 2, 3].

Below, in Figure 7 it is given to the amounts of academic staff in Physics, Chemistry, Biology and Mathematics departments. When the graphic is researched, it is seen to Biology has the least academic staff, Mathematics has the most ones. It is seen to the amounts of academic staff are falling apart from Mathematics departments.

In our country, there are 193 universities with private university. If we look at the amount of universities, we can see to how the amounts of academic staff fallen in basic sciences.

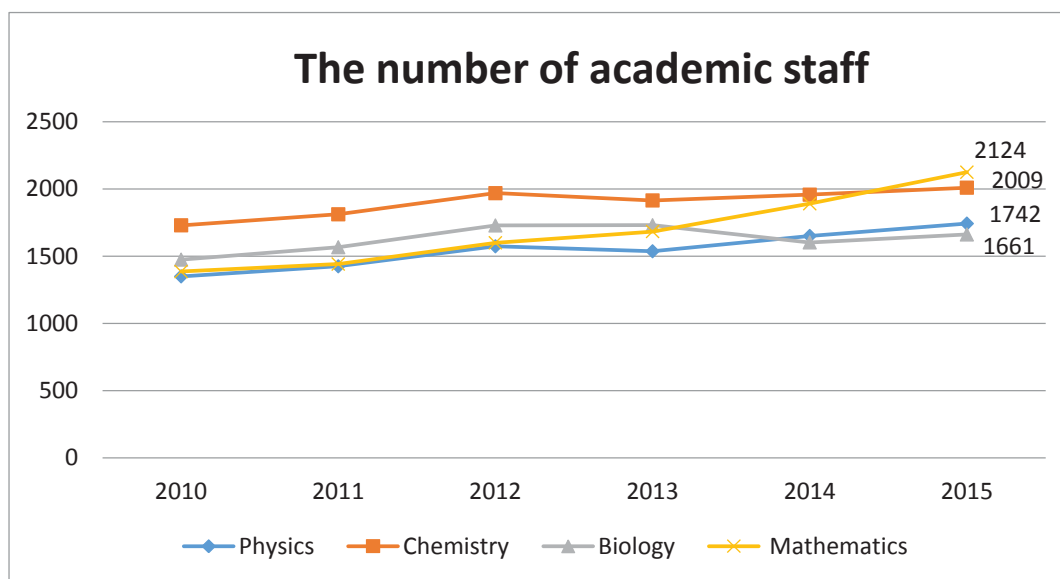


Figure 7. The number of academic staff according to years [4].

3. Conclusion and recommendation

We tried to make an analysis of our quantitative research which is calculated of opened quotas and number of entered students and also the numbers of academic staff in these departments between the 2010-2015 years in Physics, Chemistry, Biology and Mathematics departments of the state and private universities in Turkey. When the graphics are looked in, Mathematics Department is able to survive although it was difficult and destroyed department is Physics Department in these four departments. Especially after the year 2012, it is observed to a serious decline in the data values.

The result we obtained in this study, the basic sciences in Turkey is doomed to extinction. The sophistication of a country is directly proportional to the basic sciences. Without basic science is not scientific production. Without scientific production the country plays a role as a consumer, not producer and it becomes dependent on the outside. The problem is specific and clear. The life water should be given as soon as possible to the basic sciences. Therefore, the education system should be updated. Students should be encouraged to these departments when they are in secondary education. Above all, the youngs should not live in unemployment concern when they graduate from these departments. Particularly, job employment should be created for these departments. We hope, when is taken these precautions the basic sciences will find life and scientific production will begin to flourish.

References

- [1] Student Selection and Placement Center (ÖSYM) 2010-2015 Academic Year Higher Education Statistics Book
- [2] Student Selection and Placement Center (ÖSYM) From 2010 until 2015 quantitative datas for the results of ÖSYS (Student Selection and Placement Examination)
- [3] Student Selection and Placement Center (ÖSYM) From 2010 until 2015 ÖSYS (Student Selection and Placement Examination) higher education programs the smallest and the largest scores list
- [4] Academic staff information on web page of universities.