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STUDENTS GROUPING CAN INCREASE STUDENTS' PERFORMANCE

Annotation. *Educational facilities are under increasing pressure to improve the quality of education and adhere the curriculum that reflect the needs of practice. In order to be able to meet this goals, schools and universities apply different methods of organizing learning process. This paper presents an evaluation of the system of grouping students into study groups. The paper is devoted to the analysis of comparison of study results compared with their results from entrance exams two measurements carried out on students of three-year bachelor study with economic focus. The purpose of this study is to choose the system of grouping students to increase performance of students.*

Keywords: *ability grouping, homogeneous grouping, sociology in education, streaming in educational system.*

JEL klasifikace: A23.

1. Introduction

Studies about students grouping are an important topic for education researchers and have been the subject of research for many years. These studies usually examine the alternative conceptions and the reasons for the formation of these conceptions.

There are various studies about ability grouping (full-time, part-time, within-class, between-class), which are associated with different outcomes. Student ability grouping divides students using different methods to apply the educational achievement diversity in the groups. Academic results depend on the academic environment and attitude to special needs of individual student. Some authors criticize assessments of homogeneous ability grouping (Chorzempa, Graham 2006), others authors say that there is necessity of ability grouping because they can progress faster (Kulik, Kulik 1997, Swiatek, 2001).

Some authors admitted that students have to be grouped and instruction differentiated according their needs because it is ineffective to deliver the same instruction to everyone. (Finn, Achilles, 1999, Bourke, 1986). Gifted students need adequate academic challenge and equal intellectual ability (Robinson, 2002). Tomlinson (1999) suggested to provide targeted instructions, focus the attention on individual differences and be responsive to varied students learning needs in the same group. Grouping motivates students to work hard and perform at a higher level particularly when there are harder tests. High ability groups tend to be taught by the more experienced and better qualified teachers (Boaler, Wiliam, Brown, 1998).

The aim of our research is to fill the gap by investigating students' group differences and their development over time. This research analyzes the issue of ability grouping and its effect on overall

achievement of students. There has been no research in Slovakia with a specific focus on ability grouping.

2. Methodology and Sources

We analyzed the influence of classmates ability on student achievement in exogenously formed university student groups. For the purpose of this study we analyzed the results of the students for the reference period from the academic year 2015/2017. The study uses administrative data on undergraduate students. Two groups of students were studied during three academic years - during a bachelor study at the University of Economics in Bratislava. The first group was attended by 76 students of the Accounting program, and in the second group 79 students were studied in the same study program. The first group of students was grouped according alphabet without taking into account the results of the entrance exams. The criteria for splitting the second group of students into the groups were the results of the entrance exams - the students with the best results from the entrance exams were included in one group, the students with the average results from the entrance exams were included in other groups and the students with the worst results were ranked in the last group. The criterion for student assessment after the Bachelor's degree was the study average for the entire study period. A score of 36 subjects throughout the bachelor study, including assessment for state exams and final work, was included in the average. It is important to note that most courses during first three years of study (bachelor study) are compulsory and the students are administratively appointed to particular group that is the same for each course of their curriculum because the course selection could lead to self-selection of the particular group. Subsequently, students were asked to express their subjective attitude towards both study group approaches. Finally, we have seen a correlation between the results of the entrance exams and the study average achieved in the bachelor study.

Entrance exams results provided us meaningful information on the effectiveness of a student selection process (with respect to the likelihood of poor examination performance). Measures of academic achievements made significant contributions to the comparison of the ability groups.

The analysis was done in longitudinal perspectives – we looked at the long-term impact of within-class grouping on students overall academic outcomes. We analyzed student examination performance by grouping students into categories based on measures of prior achievement.

The analysis was carried out on several years at a single institution. The study group comprised only those who had successfully completed the course and only those who were direct school-leavers. But we can say that results reflect the study which represents the vast majority of Slovak university students. This paper illustrates a method of student grouping that has the potential to introduce the selection process that identify the profiles of students who are most likely need higher goals or vice versa who need more learning support.

3. Results

In the table below, we can see the results of the two monitored groups over a three-year period 2015-2017.

Table 1

Bachelor students study results 2015-2017		
	Students grouped by alphabet	Students grouped by the average of grades
Average rating	1,968	1,742

Source: own processing

On the basis of the findings, we can say that the differences are small, insignificant. A slightly better average was that students were grouped by the average. The first group achieved a better than average score of 31 students, in the second group it was 38 students.

The results of this comparison do not suggest that one or the other method of student grouping would bring better or worse measurable results in the form of the study average. However, according to a questionnaire survey, students prefer grouping to study groups by average because they are gaining enriched teaching, and grouped students in groups have developed more positive attitudes towards subjects they studied than students in mixed groups.

The last step of our analysis was to track the correlation between the results from the entrance exams and the resulting study average for the bachelor study. The results are shown in the following table:

Table 2

Correlation between the results of the entrance exams and the study average 2015-2017		
	Students grouped by alphabet	Students grouped by the average of grades
Correlation	-0,406	0,513

Source: own processing

The resulting correlation in second case is positive. Attending special classes for the gifted is positively related to the development of social self-concept of acceptance and to the development of school-related interest and student – teacher relationships. Accordingly, an intellectually challenging environment and interaction with equally able schoolmates seem to be main factors for a positive class atmosphere.

4. Conclusion

Differentiating students by skill is a long-term topic of interest in education systems around the world. Group abilities within a group are seen as a means of increasing the achievement that avoids the social and emotional disadvantages of grouping. It is very difficult to answer the question of correctly placing students in groups with their intellectually equal classmates not only because it is also difficult to determine who their intellectually equal classmates are. Proponents placing students in groups with their intellectually equal schoolmates put forward the following arguments – a highly intelligent student who learns with others who are not at his intellectual level can never face a real academic challenge. When all (or almost all) groups are easy (or relatively easy adapted to less able students), never higher ability students will ever learn to face challenges and recover from failure. Students should be included in groups where they have to work hard for the existence of real competition. In a less demanding group, more clever students may get better results, but they can move faster in the elite ability groups and learn a lot more.

The purpose of this paper is to illustrate how the effectiveness of ability grouping may be mediated by composition of groups according their entry exams performance. This research examines the effects of classroom achievement grouping practices on the bachelor students at University of Economics in Bratislava. In order for our research we used a university database AIS. The longitudinal analyze focused on the effects of ability grouping on student overall performance. We based our research on the hypothesis that ability groups exhibit different trajectories in the achievement development. Gifted groups can accelerate faster and more in depth than in the regular classes. The students included in our research are placed in the groups on the basis of entrance exams results and remain in that groups all the time. The most important findings of this study may be summarized as follows.

Non-linear specifications give strong proof that students at the top of the ability level derive benefits from high-ability classmates. Strong entrance level results were positively related to the likelihood of successful academic results. The primary goal of our research was to provide a basis for university policy development on ability grouping by presenting data on the long-term academic effects of ability grouping for university students. This study concludes that grouping students into groups by skill brings also objective and subjective satisfaction of students with such a division.

This study points to the need for more future studies but this paper can be base for future research. Further research is needed to replicate and clarify this findings. Future research will show whether or not he results of the present study can be generalize. We found out that attending a gifted group had positive effects on students' overall results, moreover students in gifted groups exhibited more interest in study and better relationship between student and teachers.

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