

IMPLEMENTATION OF DIFFERENTIATED INSTRUCTION IN TEACHING GEOGRAPHY IN THE EIGHTH GRADE OF ELEMENTARY SCHOOL

Dragana Milošević¹, Vero Rossetti¹¹, Ivan Stojšić¹¹¹

Received: 10.09.2013. | Accepted: 05.11.2013.

ABSTRACT: *The main goal of this research is to determine how necessary is the use of a differentiated instruction in teaching geography in the example of eighth-grade students of the second cycle of education. Based on that, this paper shows the use of this form of teaching when introducing a new material in the classroom. The main task of the research is to determine how much the differentiated instruction is suitable for adoption of new geography curriculum and if there is a need for more detailed elaboration of this topic in order to improve teaching. Another task is related to the implementation of experiments in two classes, control one and experimental one, on the basis of which it has been determined which approach in teaching gives the best results in presenting geographic content in elementary school.*

Key words: *geography, forms of teaching, differentiated instruction*

INTRODUCTION

Students of the same age differ in physical, emotional and volitional characteristics, especially at the level of education, development of working habits and motivation for learning. Modern teaching must suit the individual, not just the age characteristics of students. In modern teaching, a teacher has to deal with the abilities of each student and has to distance the teaching from the requirements of “average student.”

The effort to adapt the teaching to the abilities of students with different achievement is called differentiated instruction. Differentiated instruction means that students are different and that these differences have to be accepted, and the expression individualized instruction specifies that it is a differentiation based on respect for individual differences.

¹ Elementary school „Svetozar Marković“, Lapovo; e-mail: drmilosevic@live.com

¹¹ Elementary school „Veljko Dugošević“, Beograd

¹¹¹ Association of Tourismologists of Zrenjanin, Žitni trg 4, 23000 Zrenjanin

One of possible ways to overcome the current problems in geography teaching is differentiation of regular classes. Greater student activity would be achieved through the respect for differences among students, each student could move at a pace that suits him best and which is in line with his aspirations, students with disabilities would be able to participate with other students equally in regular classes, talented students would not be neglected and would receive more information about geographic phenomena, structures and processes, not causing inferiority of other students in the class.

DEFINING DIFFERENTIATED INSTRUCTION

Traditional education does not recognize differences among students, because curricular content is identical for all students, the requirements are the same, the way of practice and repetition as well as evaluation. Such teaching is hard for the students who have low achievement and it influences their further inferiority in teaching (Becker, 2005). They continually achieve weaker results, which would be eliminated as a teaching threat which would be adapted to them. Teaching with the same requirements also has the impact on the pace of better students' progress. Traditional teaching also does not affect the inner motivation of better students, because they are impeded in their further progress since they are given average type tasks. They develop apathy and expressed un-conformity, because insufficient attention is paid to their achievement (Djukic , 1995) . Since the majority of the school population is average students, traditional teaching has a negative effect on their level of school achievement. Average students have different preferences and affinities in the teaching process, but the formulaic approach distances them from the expression of creativity and the formation of critical attitudes and opinions. Since each student is specific, it is necessary to search for forms of teaching which can accept the differences among students in the best possible way, and in relation to different levels of achievement and aspiration (Djuric, 1997) .

At the time of the ancient civilizations it was known that the teaching had to be adjusted to each student so the results of the work could be as efficient as possible. Common pedagogical errors are in poor conceptual determination of individual instruction. The main problem is its identification with individual work (Ivic, 2002) . Individual work means performing certain tasks independently by all students in the class during one lesson. Individualized instruction is based on different levels of achievement, while at the same time it respects almost all shades of students' individuality in a social group or a class.

Students of one class cannot be seen as a homogenous group from any point of view. If it was possible in our education system to form fairly uniform groups in terms of classes, there would be problems that would ruin the homogeneity criteria during the time. If psychological and pedagogical services even formed classes made up of individuals with approximately the same intellectual development, a problem would arise in the form of an inability for each student to recognize, solve the problem and implement it in a specific situation in a predicted time unit (Dotran, 1962).

Experimental factors and models of research

Students of the experimental and control groups handle planned geography content using different forms of teaching. To make the obtained results complete, comparable and effective in educational terms, it was necessary to compare the results of both groups of students, and then analyze them and make final conclusions.

In the eighth grade:

- M1 consists of students of the control group K4 who handled planned teaching units by using frontal instruction with the application of monologue, dialogue, demonstration and illustrated method.
- M2 consists of students of the experimental group E4 who handled planned teaching units by using differentiated instruction with the application of reading comprehension and demonstration and illustrated method.

Table 1. Factors of a lesson, model, classes and number of students

Class	Factors		Model and number of students	Classes and number of students
	Type of a lesson and a teaching unit	Form of teaching and teaching methods		
VIII	Presentation: - Rivers and sea basins	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 26
	Presentation: - Rivers and sea basins	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Lakes and thermo-mineral waters	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - Lakes and thermo-mineral waters	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Land-basic types and importance	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - Land-basic types and importance	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Flora and fauna	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29

Class	Factors		Model and number of students	Classes and number of students
	Type of a lesson and a teaching unit	Form of teaching and teaching methods		
VIII	Presentation: - Flora and fauna	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Population, nations and ethnic communities of the Republic of Serbia	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - Population, nations and ethnic communities of the Republic of Serbia	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - The population structure	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - The population structure	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Migration of the population	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - Migration of the population	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28
VIII	Presentation: - Serbs outside our borders	- frontal instruction - monologue, dialogue, demonstration and illustration	M1 29	(K4)VIII ₁ 29
	Presentation: - Serbs outside our borders	- differentiated instruction - monologue, dialogue, demonstration and illustration, reading comprehension	M2 28	(E4)VIII ₃ 28

In order to determine which form of teaching gives better results when presenting new geography contents in the eighth grade, an experiment in the form of parallel group technique was conducted. After the selection of the control and experimental group, eight teaching units were presented. Geographic and socio-geographical teaching contents were presented so the results of the research could be as much trustworthy as possible.

The same teaching units were presented in both classes: *Rivers and sea basins, Lakes and thermo- mineral waters, Land- basic types and importance, Flora and fauna, Popula-*

tion, nations and ethnic communities of the Republic of Serbia, The population structure, Migration of the population and Serbs outside our borders.

Control group

In the control group K4 all the units were presented by using frontal instruction with the application of monologue, dialogue, demonstration and illustration. The instructional materials which were used were student atlases and physical-geographical map of the Republic of Serbia.

The teacher planned the structure of these lessons according to the classical model, through a clearly defined time articulation of introductory, main and final part of the lesson.

By using frontal instruction, a teacher distances himself from unpredictable circumstances, such as the distancing from the teaching content planned for presentation on the particular class. Addressing of a teacher, presenting the material to students, as well as asking questions is addressed to everyone regardless of the level of achievement and level of understanding of phenomena (Romelić, 2004).

In the introductory part of the class, method of monologue is dominant and scenario is carried out under strictly controlled conditions by a teacher. In the present case, the use of monologue is justified by the time aspect, as the introductory part of the lesson usually takes 5 to 7 minutes, so it is necessary to rationalize time.

By emphasizing the aim of the lesson, students are introduced to the main part of the lesson and they start to adopt the new teaching contents where methods of dialogue, illustration and demonstration are dominant. The teacher uses the method of monologue in explaining geographical phenomena, objects and terms which students haven't been introduced to previously.

The final part of the lesson involved testing of the acquired knowledge of each student. The questions contained characteristic terms, phenomena and objects which the students were introduced to during the presentation of the content of teaching units.

Experimental group

In the experimental group E4 all the units were presented by using differentiated instruction with the application of monologue, dialogue, demonstration, illustration and reading comprehension. The instructional materials which were used were student books, worksheets, workbooks, student atlases physical-geographical map and thematic maps of the Republic of Serbia, as well as other recommended literature.

Monologue method was used in the first lesson, in the introductory part so the students could understand what they are expected to do, how to fill out the worksheets, how to use additional sources of information, i.e. additional literature.

In the next phase of the lessons students filled out worksheets. Worksheets are differentiated according to the level of students' achievement with four levels of difficulty. The first level of differentiation for the grade- sufficient (2) contains the basic information about the contents of the unit, and additional tasks relate to the simpler ways of using maps, for example, determining the position of the respective object. The second level of differentiation cor-

responds to the achievement of students with the grade-good (3). At this level it is expected that the student with the teacher's assistance and advice respond to more complex tasks, such as the interpretation of the graph, the age pyramid. The third level of differentiation corresponds to the achievement- very good (4). At this stage a high level of a student's autonomy and a greater ability of productive work are expected, and worksheets are done with the teacher's minor suggestions. The fourth level of differentiation corresponds to the achievement- excellent (5). At the highest level, the students are expected to have the highest level of independence in their work, successful execution of all assigned tasks, finding information from other sources, permanent map and didactic apparatus reading...

Reading comprehension in the present study has two forms: textual work and filling out the worksheets. Textual work represents the use of recommended literature: geography textbook for the eighth grade of elementary school, workbook and other recommended and prepared data sources.

The use of illustration and demonstration is present in all phases of the lesson. Depending on the severity of the worksheets and achievement levels, students are given tasks that are related to the interpretation of the geographic content with the help of different means of expression: photos, graphs, thematic maps...

THE RESULTS OF THE EXPERIMENT

In order to determine which form of teaching gives the best results when adopting new geography contents, an experiment was conducted which was in the form of parallel groups (control and experimental groups), where the same teaching units were presented using a different form of teaching and almost the same teaching methods (Lalovic, 2009).

Testing in the eighth grade

In order to determine which form of teaching gives better results when presenting geography content, eight teaching units were presented in the eighth grade: *Rivers and sea basins, Lakes and thermo- mineral waters, Land- basic types and importance, Flora and fauna, Population, nations and ethnic communities of the Republic of Serbia, The population structure, Migration of the population and Serbs outside our borders.*

In the control group all the units were presented by using frontal instruction with the application of monologue, dialogue, demonstration and illustration. In the experimental group all the units were presented by using differentiated instruction with the application of monologue, dialogue, demonstration, illustration and reading comprehension.

Control group K4

The teaching unit - *Rivers and sea basins.* 306 points were scored out of the maximum possible number of 522 points which is 59.00% of the maximum. The mean value of the group is 11. Calculated value of standard deviation is 3.59. The minimum value of the deviation is 0 and the maximum -7.

Table 2: Distribution of students from the group K4 according to the interval of points and grades

The name of the unit	Number of students according to the interval of points/ grades				
	≤6 1	7-9 2	10-12 3	13-15 4	16-18 5
Rivers and sea basins	3	7	10	5	4
Lakes and thermo- mineral waters	3	8	9	5	4
Land- basic types and importance	3	7	10	4	4
Flora and fauna	3	8	9	4	4
Population, nations and ethnic communities of the Republic of Serbia	3	8	8	3	4
The population structure	2	8	9	5	3
Migration of the population	2	8	8	6	4
Serbs outside our borders	2	8	8	7	4

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Rivers and sea basins averagely. This is confirmed by the data presented as a percentage: good- 34.48%, very good- 26.92%, sufficient - 24.14%, excellent 13.79%, and the lowest percentage is of those with the grade insufficient- 10.34%. An average grade of the group K4 in presenting the mentioned unit is good 3.24.

The teaching unit - *Lakes and thermo- mineral waters*. 305 points were scored out of the maximum possible number of 522 points which is 58.00% of the maximum. The mean value of the group is 11. Calculated value of standard deviation is 3.62. The minimum value of the deviation is 0 and the maximum -7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Lakes and thermo- mineral waters averagely. This is confirmed by the data presented as a percentage: good- 31.03%, sufficient- 27.59%, very good – 17.24%, excellent 13.79%, and the lowest percentage is of those with the grade insufficient- 10.34%. An average grade of the group K4 in presenting the mentioned unit is good 2.96.

The teaching unit – *Land- basic types and importance*. 299 points were scored out of the maximum possible number of 522 points which is 57.00% of the maximum. The mean value of the group is 10. Calculated value of standard deviation is 3.82. The minimum value of the deviation is 0 and the maximum 7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Land-basic types and importance averagely. This is confirmed by the data presented as a percentage: good- 23.07%, sufficient- 24.14%, very good – 13.79%, excellent 13.79%, and the lowest percentage is of those with the grade insufficient- 13.79%. An average grade of the group K4 in presenting the mentioned unit is good 2.96.

The teaching unit – *Flora and fauna*. 289 points were scored out of the maximum possible number of 504 points (one student was absent) which is 57.00% of the maximum. The mean value of the group is 10. Calculated value of standard deviation is 3.82. The minimum value of the deviation is 0 and the maximum 7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Flora and fauna averagely. This is confirmed by the data presented as a percentage: good-32.14%, sufficient- 28.57%, very good – 14.29%, excellent 14.29%, and the lowest percentage is of those with the grade insufficient- 10.71%. An average grade of the group K4 in presenting the mentioned unit is good 2.92.

The teaching unit – *Population, nations and ethnic communities of the Republic of Serbia*. 273 points were scored out of the maximum possible number of 486 points (two students were absent) which is 56.00% of the maximum. The mean value of the group is 10. Calculated value of standard deviation is 3.76. The minimum value of the deviation is 0 and the maximum 7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Population, nations and ethnic communities of the Republic of Serbia averagely. This is confirmed by the data presented as a percentage: good- 29.63%, sufficient- 29.63%, excellent 14.81%, and the lowest percentage is of those with the grade very good – 11.11% and insufficient- 11.11%. An average grade of the group K4 in presenting the mentioned unit is good 2.77.

The teaching unit – *The population structure*. 286 points were scored out of the maximum possible number of 486 points (two students were absent) which is 59.00% of the maximum. The mean value of the group is 11. Calculated value of standard deviation is 3.33. The minimum value of the deviation is 0 and the maximum -6 and +6.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit The population structure averagely. This is confirmed by the data presented as a percentage: good- 33.33%, sufficient- 29.63%, very good – 18.52%, excellent 11.11%, and the lowest percentage is of those with the grade insufficient- 7.41%. An average grade of the group K4 in presenting the mentioned unit is good 2.86.

The teaching unit – *Migration of the population*. 304 points were scored out of the maximum possible number of 504 points (one student was absent) which is 60.00% of

the maximum. The mean value of the group is 11. Calculated value of standard deviation is 3.45. The minimum value of the deviation is 0 and the maximum -7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Migration of population averagely. This is confirmed by the data presented as a percentage: good- 28.59%, sufficient- 28.59%, very good – 21.43%, excellent 14.29%, and the lowest percentage is of those with the grade insufficient- 7.14%. An average grade of the group K4 in presenting the mentioned unit is good 3.07.

The teaching unit – *Serbs outside our borders*. 317 points were scored out of the maximum possible number of 522 points which is 61.00% of the maximum. The mean value of the group is 11. Calculated value of standard deviation is 3.53. The minimum value of the deviation is 0 and the maximum -7.

Based on the existing values, the distribution of the students from the group K4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit *Serbs outside our borders* averagely. This is confirmed by the data presented as a percentage: good- 27.59%, sufficient- 27.59%, very good – 24.14%, excellent 13.79%, and the lowest percentage is of those with the grade insufficient- 6.89%. An average grade of the group K4 in presenting the mentioned unit is good 3.10.

Experimental group E4

The teaching unit - *Rivers and sea basins*. 338 points were scored out of the maximum possible number of 504 points which is 67.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 2.95. The minimum value of the deviation is -1 and +1 and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit *Rivers and sea basins* averagely. This is confirmed by the data presented as a percentage: good- 35.71%, very good- 28.57%, sufficient – 17.88%, and excellent 17.85%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is good 3.46.

The teaching unit - *Lakes and thermo- mineral waters*. 323 points were scored out of the maximum possible number of 486 points (one student was absent) which is 66.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 2.92. The minimum value of the deviation is -1 and +1 and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Table 3: Distribution of students from the group E4 according to the interval of points and grades

The name of the unit	Number of students according to the interval of points/ grades				
	≤6 1	7-9 2	10-12 3	13-15 4	16-18 5
Rivers and sea basins	0	5	10	8	5
Lakes and thermo- mineral waters	0	5	9	9	5
Land- basic types and importance	0	4	9	8	6
Flora and fauna	0	5	9	8	4
Population, nations and ethnic communities of the Republic of Serbia	0	5	9	9	5
The population structure	0	4	10	9	5
Migration of the population	0	4	9	10	5
Serbs outside our borders	0	3	9	10	5

Based on the given distribution, most of the students have mastered the unit Lakes and thermo- mineral waters averagely. This is confirmed by the data presented as a percentage: good- 33.33%, sufficient- 18.52%, very good – 33.33%, and excellent 18.52%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is good 3.44.

The teaching unit – *Land- basic types and importance*. 334 points were scored out of the maximum possible number of 486 points (one student was absent) which is 69.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 3.02. The minimum value of the deviation is -1 and +1 and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Land- basic types and importance averagely. This is confirmed by the data presented as a percentage: good- 33.33%, sufficient- 14.81%, very good – 29.63% and excellent 21.43%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is very good 3.59.

The teaching unit – *Flora and fauna*. 309 points were scored out of the maximum possible number of 468 points (two students were absent) which is 66.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 2.99. The minimum value of the deviation is -1 and +1, and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Flora and fauna averagely. This is confirmed by the data presented as a percentage: good-

34.62%, very good – 30.77%, sufficient- 19.23%, and excellent 15.38%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is good 3.42.

The teaching unit – *Population, nations and ethnic communities of the Republic of Serbia*. 340 points were scored out of the maximum possible number of 504 points which is 67.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 3.75. The minimum value of the deviation is -1 and +1, and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit *Population, nations and ethnic communities of the Republic of Serbia* averagely. This is confirmed by the data presented as a percentage: good- 33.33%, very good- 33.33%, sufficient- 18.52%, and excellent 18.52%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is very good 3.50.

The teaching unit – *The population structure*. 343 points were scored out of the maximum possible number of 504 points which is 68.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 3.68. The minimum value of the deviation is -1 and +1, and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit *The population structure* averagely. This is confirmed by the data presented as a percentage: good- 35.71%, very good – 32.14%, excellent 17.86%, and sufficient- 14.29. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is very good 3.54.

The teaching unit – *Migration of the population*. 347 points were scored out of the maximum possible number of 504 points which is 69.00% of the maximum. The mean value of the group is 12. Calculated value of standard deviation is 3.71. The minimum value of the deviation is -1 and +1, and the maximum -5 and +5.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit *Migration of population* averagely. This is confirmed by the data presented as a percentage: very good- 32.14%, good- 35.71, excellent- 17.86 and sufficient- 14.29%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is very good 3.57.

The teaching unit – *Serbs outside our borders*. 339 points were scored out of the maximum possible number of 486 points (one student was absent) which is 70.00% of the maximum. The mean value of the group is 13. Calculated value of standard deviation is 2.79. The minimum value of the deviation is 0 and the maximum -6.

Based on the existing values, the distribution of the students from the group E4 was done according to the interval of points and grades and the average grade of the group was calculated.

Based on the given distribution, most of the students have mastered the unit Serbs outside our borders averagely. This is confirmed by the data presented as a percentage: very good- 37.04%, good- 33.33%, excellent- 18.52% and sufficient- 11.11%. There are no students with the grade- insufficient. An average grade of the group E4 in presenting the mentioned unit is very good 3.63.

Correlation between the control group K4 and experimental group E4

By comparing the results of the control group K4 and experimental group E4, we can see that the group E4 achieved a greater number of points, i.e. had a higher percentage of success. In the experimental group, the teaching units were presented by using differentiated instruction, while in the control group K4 the same units were presented by using frontal instruction.

Correlation of points and average grades according to the teaching units is given in table 4.

The students of the eighth grade have shown better results when presenting the demographic contents compared to natural geographic ones. The reason may be subjective in nature, because students usually resist a little during the introduction of innovation, i.e. new forms of teaching and teaching methods.

Table 4: Correlation of points and average grades in control group K4 and experimental group E4

Group-class	The name of the unit	% of achieved points	Average grade
K4-VIII1	Rivers and sea basins	59,00%	3,24
E4-VIII3		67,00%	3,46
K4-VIII1	Lakes and thermo- mineral waters	58,00%	2,96
E4-VIII3		66,00%	3,44
K4-VIII1	Land- basic types and importance	57,00%	2,96
E4-VIII3		69,00%	3,59
K4-VIII1	Flora and fauna	57,00%	2,92
E4-VIII3		66,00%	3,42
K4-VIII1	Population, nations and ethnic communities of the Republic of Serbia	56,00%	2,77
E4-VIII3		67,00%	3,50
K4-VIII1	The population structure	59,00%	2,86
E4-VIII3		68,00%	3,54
K4-VIII1	Migration of the population	60,00%	3,07
E4-VIII3		69,00%	3,57
K4-VIII1	Serbs outside our borders	61,00%	3,10
E4-VIII3		70,00%	3,63

CONCLUSION

One of the main tasks of geography teaching is to make students adopt the acquired knowledge permanently, apply them to new teaching and life situations, but also to minimize the process of forgetting.

By using traditional forms of teaching, we neglect the differences among students which leads to decreased productivity and motivation to work and learn. By using differentiated instruction, we cannot eliminate all deficiencies in geography teaching, it provides the possibility to overcome the weaknesses of traditional forms and methods of teaching. Consideration of abilities and preferences of each individual student is at the heart of differentiated instruction. By applying differentiated instruction, we eliminate the weaknesses in teaching, which were mainly reflected in the position of a student in the learning process. By using differentiated instruction, a student ceases to be the “object” in the classroom.

In the new situation where a student receives instruction in accordance with his abilities and is aware of the fact that he can progress, he completes his tasks on his own and uses different sources of knowledge. By applying differentiated instruction, we eliminate the subjectivity of a teacher, which increases students' motivation. The advantage of differentiated instruction is reflected in the enormous possibilities of its application in geography teaching. Students achieve better results in the classroom regardless of whether they are introduced to mathematical geography, physical geography, socio-economic or regional geography contents.

We achieve students' greater motivation and satisfaction by using differentiated instruction. In every segment of presenting a teaching unit, student knows what he is expected to do, he gets a concise feedback, questions and tasks are adjusted to his age, intellectual and individual characteristics.

Based on the results (Table 4), we can see the difference in the level of students' achievement which is expressed in percentage of points achieved and average grades between the control and experimental group. Since the groups were almost uniform according to their school achievement in the previous school year, we can notice that better results are achieved by applying differentiated instruction than the frontal one.

Retest at the end of the school year confirmed that the students of the experimental group remember more teaching material, apply acquired knowledge better and cope with additional sources of information easier compared to the control group students.

REFERENCES

- Bakovljević M. (1998): *Didaktika*, Naučna knjiga, Beograd
- Beker M. (2005): *Motivacija za učenje*, Pedagoško društvo Srbije, Beograd
- Davidović R. (2000): *Regionalna geografija (Evropa, afrički Mediteran i turističke metropole)*, univerzitet u Novom Sadu, Prirodno- matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad
- Dotran R. (1962): *Individualizovana nastava*, Veselin Masleša, Sarajevo

- Dorđević J. (1981): Savremena nastava, Naučna knjiga, Beograd
- Đukić M. (1995): Didaktički činioci individualizovane nastave, Filozofski fakultet, Novi Sad
- Đurić Đ. (1997): Psihologija i obrazovanje, Univerzitet u Novom Sadu, Učiteljski fakultet u Somboru, Sombor
- Ivić I. (2002): Aktivno učenje, Institut za psihologiju, Beograd.
- Lalović Z. (2009): Metode učenja i nastave u školi, zavod za školstvo, Podgorica
- Majl A. (1968): Kreativnost u nastavi, Svjetlost, Sarajevo
- Milošević D.: Diferencirani oblik rada u nastavi geografije u osnovnoj školi, magistarska teza, rukopis, Departman za geografiju, turizam i hotelijerstvo, Prirodno-matematički fakultet, Univerzitet u Novom Sadu (2010)
- Romelić J. (2004): Metodika nastave geografije, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad