

University of Novi Sad | Faculty of Sciences
DEPARTMENT OF GEOGRAPHY, TOURISM AND HOTEL MANAGEMENT

THE 5TH SERBIAN CONGRESS
OF GEOGRAPHERS, 2021

**INNOVATIVE APPROACH
AND PERSPECTIVES
OF THE APPLIED GEOGRAPHY**

Collection of Papers



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ANALYSIS OF THE CURRICULUM OF ELEMENTARY SCHOOL IN THE REPUBLIC OF SERBIA

Aco Lukić^{A,C}, Dragana Blagojević^{A,B}, Đorđe Lukić^A

Abstract

The Law of school curriculum defines the curriculum for students from the first to the eighth grade of primary school. School curriculum is one of the most important school documents, which regulates the overview of the scope and structure of teaching for a longer period, according to the age of the students. The curriculum of each subject clearly defines the goals and tasks, hence the structured teaching contents and provides basic didactic-methodical instructions for its realization. This paper is focusing on the research where the target groups were the teachers of geography in primary schools. The aim was to determine the attitudes of the teachers about the school curriculum in Serbia, the possibilities of implementing innovations in the teaching, as well as activating students. Furthermore, one of the aims was to pay attention to the student workload, and the curriculum coherence by subjects.

Keywords: elementary education, elementary schools' curriculum, teacher, school, student

INTRODUCTION

The term curriculum is relatively new in many countries in Europe and the rest of the World. Most educational reforms done in the last decade of the 20th century, the term curriculum is used with the idea that it represents an influential condition for the success of the reforms, namely the innovations introduced by the reform. It is considered that the transition to the curriculum is the best path for the educational system to be opened and adjusted to the requirements of the modern time, whilst leaving an option of constant improvement and development of the educational system. The term curriculum is usually connected with the baroque pedagogy and represents the “course of education”. The significant difference between the educational plans and traditional programs of progress should be sought in the fact that the curriculums have the goals of teaching and learning that are specified and include the verified noticeable reactions of the students. The teaching content is deductively drawn from the opulent systematical experience of the civ-

ilization in certain scientific, humanistic and artistic disciplines. Teaching programs is one of the most used school documents which regulate the overview of the scope and structure of the teaching for a longer period, according to the age of the students. They include: lists of all the courses thought in the specific type of school according to the grades or years of study, the order of teaching of those courses according to the grades, the weekly number of classes of specific courses, overall weekly load of students of one grade, the number of predicted classes of each class for a year, the overall number of classes predicted for a year for each grade. In the teaching plan, each course has clearly defined basic goals and tasks, and therefore logically structured teaching content and basic didactic-methodical instructions for their realization (Simeunovic, Spasojevic, 2009).

Primary education in Serbia lasts for eight years and is done in two cycles. The cycles are divided in accordance with the developmental and age char-

^A University of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia; acolukic994@gmail.com, djordjelukic997@gmail.com

^B BioSense Institute – Research Institute for Information Technologies in Biosystems, University of Novi Sad, Dr Zorana Dindića 1, 21000 Novi Sad, Serbia; dragana.blagojevic@biosense.rs

^C Institute for Language and Preparatory Studies, Charles University, José Martího 407/2, 162 00 Praha 6, Czech Republic

acteristics of the students. Each cycle lasts for four years. *First cycle*: classroom teaching- from 1st until 4th grade. In this cycle, one teacher is responsible for the teaching of all courses except for the language courses and some optional courses. *Second cycle*:

subject teaching- from 5th until 8th grade. During this cycle, each course is thought by a different teacher, specialized in a specific area, whilst one teacher, the headteacher, is responsible for leading the class (Komlenovic, 2004).

RESEARCH METHODOLOGY

A field research method was used for this paper. A three-part survey comprising 21 statements/questions were used to obtain data. The research was conducted through the Internet, and each respondent was given a questionnaire. The first part (3 questions) collected demographic data. The second part (12 questions) contained statements/questions about the courses the respondents teach, then the questions related to their role of a head-teacher and whether their school uses an electronic class register. The second part of the survey used a Likert scale- a scale of attitudes that consists of five statements. It was given to respondents with the aim to express the level of their agreement or disagreement with each statement, using the five-level scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) (Likert, 1932).

The third part (5 questions) included the questions of the organization of the teaching plan and program and their effect on the teaching process. The content of the survey was developed for this research and is not modeled by any existing survey on the topic of *Analysis of the curriculum of the elementary school in the Republic of Serbia*. After the completion of the field survey, there was a total number of 116 properly filled-in surveys. It was as summed that teachers of different gender, places of employment (elementary and high school), and places of work (urban/rural areas) have different experiences in managing the school administration, and thus have different attitudes toward the issue. The respondents' participation was a volunteer.

The aim of the research was to include as many geography teachers, from urban and rural areas, in order to determine the attitudes and experiences of teachers related to the teaching plan and program currently used. It is assumed that the teachers of different gender and area of employment, have different experiences related to the teaching plan and program, and therefore different opinions about it. The hypothesis used for the research assumes that there are statistically relevant differences in the opinions regarding the usage of the teaching plans and programs, of the respondents of different gender and area of employment. It is also assumed that teachers from differ-

ent areas of employment and working experience use different methods of teaching. The teachers with more work experience are assumed to have more knowledge of the organization of the teaching plans and programs. One of the assumptions is that the teaching plans and programs are allowing the inclusion of the special needs' students in the teaching process. Due to this, one of the hypotheses assumes that there are statistically important differences in the opinions of the teachers with the different working experiences regarding the usage of different methods of teaching the certain parts of the curriculum.

The obtained data were analyzed in the statistical program SPSS, which was used in similar researches (Alghazo & Gaad, 2004; Altinkök, 2017; Sharma, Moore, & Sonawane, 2009; Višnić, Ivanović Bibić, Đukičin Vučković, Ivkov-Džigurski, & Konečnik Kotnik, 2017). The most common statistical analyses used in this research are initial descriptive statistical analysis, t-test analysis for independent samples and one-way analysis of variance (ANOVA). To determine if there is a statistically significant difference between individual groups, post-hoc Scheffe test was used as one of the strictest and most used tests. T-test of independent samples was applied in order to compare the arithmetic mean of two respondent groups: male and female, teachers working in elementary and high school, teachers working in urban and rural areas. One-way analysis of variance (ANOVA) was used to determine whether there is a statistically significant difference between dependent variables (statements related to respondents' attitudes) and independent variables (respondents' social characteristics).

Among the responders, the largest group included those with the working experience between 6 and 15 years (43.1%), then those from 16 to 25 years (25.0%). There was a slightly smaller number of responders with up to 5 years of working experience (21.6%). The smallest group represents those with over 26 years (10.3%). All the responders are employed in primary schools. Based on the area of employment, the results are totally 57.8% or 67 of the responders out of 116 are employed in the urban area, whilst the 42.2% or 49 responders are employed in the rural areas.

RESULTS AND DISCUSSION

As it can be seen on the Figure 1, most of the respondents had between 6 and 15 years of work experience (43.1%), followed by those with 16 to 25 years of experience (25.0%). There were a few respondents with less than 5 years of work experience (21.6%) and the smallest number of respondents was in the group with over 25 years of work experience (10.3%). Depending on the place of work, the result was the following: a total of 57.8% of respondents work in schools in urban areas while only 42.2% work in rural areas. According

teaching and the strategy of teaching. This term can also be linked to the meaning of the term “methodology”. The correlation is interpreted as linking the content of one course with the content of the other with the goal of activation of students and innovations in teaching (Mrkalj, Z.V. 2010). The opinions of teachers regarding the correlation of courses based on the existent curriculum in primary schools are rather negative (Figure 2). Even 65% of respondents think that the content is not harmonized with the courses, and with-

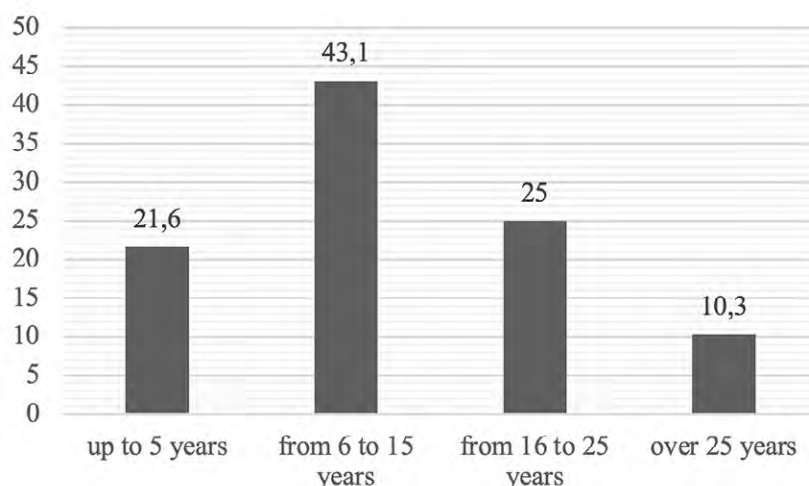


Figure 1. Structure of respondents according to their work experience (%)

to the gender structure, the vast majority are female teachers, 59.5%, as it was expected since more women are involved in this profession. Male respondents are present in 40.5%.

The term “correlation” in the educational methodology has several interpretations. Besides the usual, the correlation is set between the orientation goals of

out that harmonization, we cannot speak of correlation, as one of the innovations.

As it can be seen on the Figure 3, 74.14% of respondents think that the students are overwhelmed by the school duties. Those duties are directly connected to the curriculum. Therefore, the teachers have expressed their dissatisfaction with the current curriculum because of the load the students have and the impossibility of students’ activity.

During the survey, the teachers have listed the most used methods. Out of the total number of respondents, 80.17% uses the frontal method, while 14.65% uses the group method. The rest of the methods as the individual work with the help of a teacher and the individual work without the help of the teacher is used by only 5.18% of respondents. The active school/teaching is basically the school that is mostly centered, directed towards the child that is treated like a complete personality not just the student. The main characteristics of this “new” school are: the existence of the whole prefixed curriculum is not necessary, there should be oriental curriculum, or one obligatory and one flexible part, the starting point is the interests of children and the learning process is

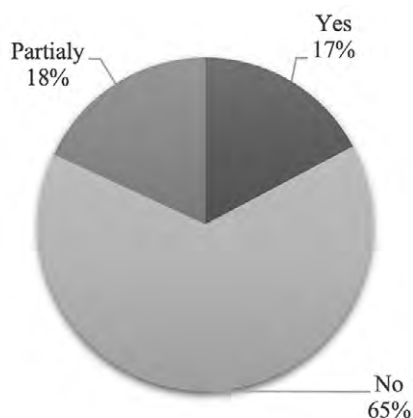


Figure 2. The opinions of teachers regarding the correlation of courses based on the existent curriculum in primary schools (%)

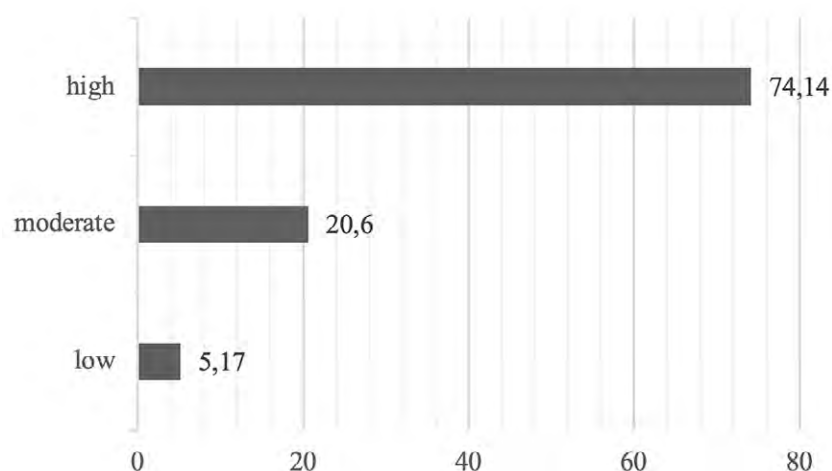


Figure 3. Teachers' answers about the topic if the students are overwhelmed by the school duties (%)

connected to those interests, every teaching is connected with the previous knowledge and the personal experience of the child, the motivation for learning is personal (inner), the predominant methods of active teaching are practical, working, manual activities, expressive activities, laboratory activities, field-

work etc. The goal of this type of school is the growth of the personality and individuality of a child, not only the adoption of the curriculum. What should be graded is the kids' satisfaction with the activities, motivation and will to participate, and the personal growth (Ivic et al., 2001).

T-TEST RESULTS

A t-test is a statistical analysis that is used to determine whether there is a significant difference between the means of two groups. The following tables show the results of the T-test for the statements with statistically significant differences in the respondents' answers.

The results of the t-test have shown that there is a statistically significant difference between the answers of the respondents based on their gender (the level of significance $p < 0.05$). Statistically, a significant difference is also noticeable with four out of twelve statements. At the answers of the respondents for the statement: *The curriculum is unadjusted with the requirements of further education*, we can notice the statistically important difference. The female responders

have graded this statement higher than the male ones. The other 3 statements were graded higher by the male responders than the female ones, which means that female teachers are less in agreement with the statements regarding the curriculum. The statement that showed statistically significant differences is *The curriculum offers the possibility of involving the students with special needs in regular education*. The contemporary education implies the involvement of children with special needs, the primary education is obligatory for every child that is able to attend the school. Their education is dependable on the curriculum. Therefore, female responders think that the curriculum does not follow the requirements of inclusive education. The curriculum for special needs students that are de-

Table 1. T-test results for the respondents of different gender

Statement	Gender	F	P
The curriculum offers the possibility of involving the students with special needs in regular education	male	10,760	0,001
	female		
The curriculum is unadjusted with the requirements of further education	male	11,464	0,001
	female		
The curriculum is appropriate for the age, individual needs of students and their previous education	male	15,486	0,000
	female		
The curriculum is constantly improved and modernized	male	7,258	0,008
	female		

veloped as the individual educational plan is adopted by the school team (parents, teachers, psychologist and/or pedagogue of the school). According to that plan, the curriculum can be adapted to the needs of students, as a whole or partially (e.g. one course or the group of similar courses that are troubling for the student). If needed, the standards of accomplishment and goals of education can also be changed based on the capacity of the student.

RESULTS OF THE ANALYSIS OF VARIANCE (ANOVA)

One-way analysis of variance (ANOVA) was used for determining whether there is a statistically significant difference between dependent variables (statements related to the respondents' attitudes) and independent variables (the respondents' social characteristics). The analysis of variance ANOVA shows that statistically, a significant difference is not present among the respondents of different work experiences.

Twelve statements were tested, and no statistically significant difference was established for any. Therefore, this hypothesis has not been confirmed.

Statistically, a significant difference is also spotted at the statement that reads: *The curriculum is appropriate for the age, individual needs of students and their previous education and the curriculum is constantly improved and modernized.* The answers for all other statements are the same for both female and male teachers. These results show that the hypothesis that implies statistically significant differences in opinions of the teacher based on their gender is correct (Table1).

The analysis of variance ANOVA shows that the statistically significant difference between the respondents based on the lengths of their experience does not exist. Twelve statements have been tested and not one has shown a statistically significant difference. Due to that, this hypothesis has not been confirmed. The high level of agreement with the statements shows that the teachers with different lengths of working have more or less similar opinions about the curriculum and agree that it is not well represented, formed and does not follow the improvement of students, nor incentives the activation of students or inclusive education.

CONCLUSION

The curriculum is mostly one of the basic school documents, which is used to regulate the volume and structure of teaching for a longer period of time, based on the age of the students. The curriculum is significant documents that include the didactical concretization of general and methodical elements of the teaching plan. The curriculum includes clearly defined general goals and tasks, logically structured teaching content and basic didactical-methodical guidance for its use for each course. Based on the survey done among the teachers of geography in primary schools, with different places of employment and years of experience, it is deemed that the reform of curriculum is needed, as well as its adaptation to the students with special needs. The teachers surveyed also believe that the activation of students should be more important. As shown in the results, with the existent curriculum, teachers most-

ly use the frontal teaching method, which represents the traditional method that puts the children in the second position. The modern understanding of the World's methodologists is that the children should be in the first place and that the school should be a place where they have most of their studying done. The survey also shows that the existent curriculum is not in accordance with the courses and the students are overwhelmed with the number of materials. With the unadjusted curriculum, the special needs students are disconnected from the obligatory education or in the worst case, disregarded. The load of the students by the curriculum leads to a lack of interest for certain courses and therefore leads to the lower overall grades. Involving the teachers in the process of creating the curriculum will lead to better outcomes of education. They are the ones directly passing the curriculum over to the students.

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