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# Sociodemographic Factors and Students' Attitudes towards Integrated Instruction

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**Abstract:** The primary objective of the study was to ascertain the attitudes of final-year students in undergraduate academic and master's academic studies at the University of Nis Faculty of Sport and Physical Education and the University of Pristina - Kosovska Mitrovica Teacher Education Faculty in Prizren - Leposavic toward the possibilities of integrating the learning contents of the subjects Serbian Language and Physical Education. The study aims to investigate views about integrated instruction and the incorporation of Serbian Language and Physical Education in the integrative curriculum based on several demographic criteria such as gender, age, faculty major, overall grade point average, and socioeconomic status. The research was conducted on a sample of 179 students. Descriptive techniques were used to determine the level of expression of basic variables, while a Linear Regression Model was employed for statistical inference testing of established hypothesis. The results obtained indicate a statistically significant correlation between attitudes towards integrated instruction and the incorporation of the Serbian Language in the integrative curriculum in relation to sociodemographic characteristics (Hypothesis 1 and 2). However, no statistically significant associations were found for attitudes towards the incorporation of Physical Education in the integrative curriculum concerning sociodemographic variables (Hypothesis 3).

***Keywords:*** *integrated instruction, Serbian language, physical education, sociodemographic characteristics, students' attitudes*

## Introduction

Since the modern societal development demands progress in all its aspects, the necessity for innovating the education process has become an inevitability of the 21 st century. The programmatic concepts and contents of primary school subjects, especially in the younger grades of primary school, are encompassed by new regulations dedicated, year after year, to raising awareness and refreshing educational activities. Technological advancement implies acquiring interdisciplinary knowledge and skills with opportunities for further development in the conditions of rapid progress in information technologies. As Cekic-Jovanovic and Milanovic (2020) cite, recent research and scientific analyses show that the "quality of knowledge acquired by students in schools is insufficient, and that students do not have sufficiently developed competencies necessary for further education and everyday life" (Cekic-Jovanovic and Milanovic, 2020: 84, according to: Strategy for the Development of Education in Serbia by 2020, 2012; Maghnouj et al. 2020). Traditional models of teaching and learning often do not provide opportunities for the development of interdisciplinary competencies and, as such, are frequently formalized and authoritarian, impacting the practical application of knowledge and the connection of theory with real-life situations (Mandić, 2003). Recognizing the need to strengthen these competencies, modern instruction concepts have embraced various models of developmental instruction, including integrative approach to learning.

According to Lukić Radojičić (2011), integrated instruction is one of the innovative models that involves linking educational content from multiple subjects. In the Glossary of EducationalTerms, integrated instruction is defined as a "a teaching model in which the content of various topic areas is linked into meaningful units arranged around a central theme, with the goal of enabling students to acquire com-

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prehensive knowledge of occurrences and events in their everyday lives, regardless of subject divides" (Glossary of Educational Terms, 2014: 252). Buljubašić Kuzmanović emphasizes that the integrative approach to learning "emphasizes intellectual, social, emotional, and aesthetic development, supporting the holistic development of students" and that it is "centered around an individualized program directed towards the student, rather than a program focused on the subject and guided by the teacher" (Buljubašić Kuzmanović, 2007: 148).

Similar views and reflections are observed in the research by foreign authors (Cone et al. 2009), who define interdisciplinary education, on which integrative learning is based, as a process in which two or more thematic areas are integrated to promote enhanced learning in each area. The implementation of interdisciplinary knowledge provides all participants in the learning process with opportunities to discover new ways of organizing and implementing program content. The concept of interdisciplinary education recognizes the integrity and uniqueness of each subject while acknowledging the interrelationships among subjects, which points to the closer determinants of the mentioned teaching model, according to the authors.

As we have already highlighted, the development of society and technology in the modern age indicates challenges in acquiring interdisciplinary competencies among students. Additionally, the technological era has led to a reduction in physical activity among people (Lee et al., 2017). According to Sekeljić and Stamatović (2018), existing research shows that students' activity during class is very low, necessitating improvements in instruction to achieve its effectiveness and quality. Hence, integrated instruction, which does not limit knowledge acquisition and skill development with disciplinary boundaries but enables problem-solving, critical thinking, and teamwork through an interdisciplinary approach, provides numerous opportunities for the holistic development of students, especially in the context of instruction in the younger grades of primary school.

While the curricula in faculties educating future pedagogy professionals have been modernized in recent years, it is assumed that students have knowledge about planning, organizing, and conducting integrated instruction. According to research in the field of integrating subjects in younger grades (Popeska and Jovanova-Mitkovska, 2016; Zdravković, 2017; Ratković, 2018; Novković-Cvetković, 2017; Miloradović, 2019), it is evident that the most suitable subjects for integration are Music Education and Physical Education. This research is intended to study students' attitudes about integrative teaching in the domain of the Serbian language and physical education in the teaching programs implemented in the Republic of Serbia. Language teaching can be harmonized, integrated and jointly improved with other subjects (music, mathematics etc.), as shown by similar studies conducted in other countries (Greci, 1997; Buchanan et al., 2002; De Francesco, 2004; Hatch and Smith, 2004; Solomon, 2008; Coral and Lleixa, 2016). However, there is imited research on integrating Serbian Language and Physical Education content, and there is a lack of information on the attitudes of students, future teachers, and physical education teachers towards such integration.

## Methodological framework of the paper

### *Subject of Research*

The main subject of the research is to examine the correlation between the attitudes of final-year undergraduate and master's students and their sociodemographic characteristics regarding the integration of content between the Serbian Language and Physical Education subjects. Additionally, the study aims to explore the mutual influence of the investigated variables.

### *Research Objectives*

To determine whether there is a correlation between the sociodemographic characteristics of the participants and their attitudes toward traditional/integrated instruction.

To investigate if there is a correlation between the sociodemographic characteristics of the participants and the attitudes of students towards incorporating the Serbian language into integrative planning.

To examine whether there is a correlation between the sociodemographic characteristics of the participants and the attitudes of students towards incorporating physical education into integrative planning.

### *Research Hypotheses*

General Research Hypothesis

The attitudes of final-year students of undergraduate studies and master's studies at the University of Niš, Faculty of Sports and Physical Education, and the University of Priština - Kosovska Mitrovica, Teacher Education Faculty in Priština-Leposavić, regarding the possibilities of integrating content from Serbian language and Physical Education subjects, are connected with a set of sociodemographic characteristics of students.

Specific Research Hypotheses

H1: Students' attitudes toward traditional/integrated instruction are linked to a set of sociodemographic characteristics of students;

H2: Students' attitudes toward the incorporation of Serbian language subject in the integrated instruction plan are associated with a set of sociodemographic characteristics of students;

H3: Students' attitudes toward the incorporation of Physical education subject in the integrated instruction plan are associated with a set of sociodemographic characteristics of students.

### *Research Sample*

The research sample consisted of a total of 179 participants from the final years of undergraduate and master's studies at the University of Niš Faculty of Sport and Physical Education (72 participants) and the University of Priština-Kosovska Mitrovica Teacher Education Faculty in Prizren-Leposavic (107 participants). The sample was made up of students of the aforementioned faculties, chosen according to the nature of the study, that is, the study program for the education of physical education teachers and classroom teaching. The survey was conducted anonymously as part of a scientific paper. The data collected from the survey will be used only for scientific research purposes in accordance with the Law on personal data protection of the Republic of Serbia (https://www.paragraf.rs/propisi/zakon_o_zastiti_podataka_o_licnosti.html) and Declaration of Helsinki ethical principles (https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/). There were no difficulties in carrying out the survey of the respondents' attitudes, and the same was carried out with the author's own material efforts.The gender distribution comprised 43 male participants and 136 female participants, indicating an uneven gender representation in the sample. The gender disproportionate sample is also determined by the nature of the studies, because in the Republic of Serbia for generations, female respondents have a pronounced preference for studies for teaching professions of various profiles. Regarding age distribution, the majority of participants were between 23 and 25 years old (50.8%), followed by participants under 22 years old (30.7%). Additionally, 14% of participants were between 26 and 35 years old, while the smallest proportion of participants fell into the age range of 36 to 45 years old (4.5%). When considering the educational level, 98 participants were enrolled in undergraduate academic studies, and 81 were pursuing master's academic studies. The majority of participants had an average grade between 7 and 8 (61.5%), followed by those with an average grade between 8 and 9 (21.8%), and the least number of participants had an average grade between 6 and 7 (5%). Regarding the socioeconomic status, the largest group of students had parents earning between 25,000 and 40,000 (35.8%), followed by an equal distribution below 25,000 (22.3%) and above 65,000 (22.3%). The smallest group of students had parents earning between 40,000 and 65,000 (19.6%).

**Table 1.** *Representation of Sample Structure*

| Control/independent variables | | Number of participants | % |
|---|---|---|---|
| Gender | Male | 43 | 24.0% |
| | Female | 136 | 76.0% |
| Age | up to 22 years of age | 55 | 30.7% |
| | between 23 and 25 years old | 91 | 50.8% |
| | between 26 and 35 years old | 25 | 14.0% |
| | between 36 and 45 years old | 8 | 4.5% |
| Faculty Majors | University of Niš Faculty of Sport and Physical Education | 72 | 40.2% |
| | University of Priština-Kosovska Mitrovica Teacher Education Faculty in Prizren-Leposavic | 107 | 59.8% |
| Level of Studies | Undergraduate studies | 98 | 54.7% |
| | Master's studies | 81 | 45.3% |
| Average grade | 6-7 | 9 | 5.0% |
| | 7-8 | 110 | 61.5% |
| | 8-9 | 39 | 21.8% |
| | 9-10 | 21 | 11.7% |
| Socioeconomic status | Under 25.000 | 40 | 22.3% |
| | 25.000 - 45.000 | 64 | 35.8% |
| | 40.000 – 65.000 | 35 | 19.6% |
| | Over 65.000 | 40 | 22.3% |

Dependent variable: scores on the questionnaire measures of general atitude, traditional/integreted instructions, atutide towards the integrated educational plan of the Serbian language and physical education.

### *Research instrument*

The instrument utilized in this research was specifically designed for the purposes of this study, and its psychometric characteristics were evaluated through the work of Snežana Perišić (Perišić, 2022). The questionnaire consists of 30 items. Students expressed their level of agreement on a five-point Likert scale with statements (completely agree, mostly agree, uncertain, mostly disagree, completely disagree), examining their attitudes towards the integrated instruction of the Serbian language and physical education. Responses to all questions are summed, and higher scores on the scale indicate a more negative attitude towards the use of integrative approach in everyday schooling and vice versa. Based on the mentioned work, the results suggest satisfactory but relatively low reliability (Cronbach's Alpha > 0.7).

The items are organized into three scales:

- General attitude towards traditional/integrated instruction;
- Attitude towards the incorporation of the Serbian language in the integrated education plan;
- Attitude towards the incorporation of physical education in the integrated education plan.

### *Data collection*

The data used in this research were collected using the Google Forms tool and directly distributed into an Excel spreadsheet. Data analysis was conducted using the statistical analysis program SPSS 23. For the purpose of data analysis, statistical parameters such as frequency, percentage, measures of central tendency (mean and standard deviation), and linear regression analysis were used. Linear regression analysis was employed to calculate the predictive power of the model, considering that the distribution of

respondents' answers to the used scales did not statistically differ from a normal distribution ($p > 0.05$). As for sociodemographic indicators, they were also collected with the questionnaire and used as predictive variables.

## Results

The results of the frequency statistical test are presented in Table 2 to determine the descriptive indicators of each item separately (mean, standard deviation) in the scale of general attitude towards traditional/integrated instruction. As mentioned in the previous chapter, higher mean scores indicate a more negative attitude and vice versa. As shown in the table, the item with the highest mean score, and consequently the most negative attitude of participants (Mean = 3.78; SD = 1.08), is "The application of the traditional instruction method in younger grades of primary school enables better focus of children on learning subjects and objectives." On the other hand, the lowest mean score and a positive attitude of participants (Mean = 1.64; SD = 0.71) is for the item "Integrated instruction in younger grades of primary school encourages integrity in development." Considering other items and their mean scores, it seems that participants have a more positive attitude towards the implementation of integrated instruction compared to traditional instruction.

**Table 2.** *Descriptive indicators for a scale item - The general attitude towards traditional/integrated instruction*

| General attitude towards traditional/integrated instruction | Min | Max | M | SD |
|---|---|---|---|---|
| The application of the traditional instruction method in younger grades of primary school enables better focus of children on learning subjects and goals. | 1 | 5 | 3,78 | 1,08 |
| Integrated instruction in younger grades of primary school encourages integrity in development. | 1 | 5 | 1,64 | 0,71 |
| I believe that integrated instruction in younger grades of primary school contributes to acquiring comprehensive knowledge. | 1 | 4 | 1,70 | 0,76 |
| I believe that integrated instruction is more effective than traditional instruction. | 1 | 5 | 2,04 | 0,89 |
| Instruction should not be burdened with constantly linking content. | 1 | 5 | 3,34 | 1,19 |
| I enjoy listening to lectures delivered in a traditional way. | 1 | 5 | 3,59 | 1,19 |
| I am willing to apply content integration in the school where I will work. | 1 | 5 | 1,73 | 0,75 |
| I believe that integrated instruction should be part of the mandatory curriculum for younger grades of primary school. | 1 | 4 | 1,94 | 0,84 |
| I believe that every school should have a team for planning and implementing integrated instruction. | 1 | 5 | 1,73 | 0,89 |
| I only acknowledge the application of traditional instruction. | 1 | 5 | 2,90 | 1,36 |

M- mean; SD - standard deviation

By analyzing the results presented in Table 3, which show the items of the scale "Attitude towards the incorporation of Serbian language in the integrated instruction plan", we can see that the item with the lowest score, indicating the most positive attitude of the participants, is "The instruction process I plan to apply in working with younger primary school children will involve integrating the learning content of Serbian language" (M=1.74, SD=0.76). On the other hand, participants have the most negative attitude towards the item "I enjoy preparing integrated content in Serbian language for younger primary school children" (M=3.39, SD=1.18). These two items are contradictory, but considering all the items representing the attitude towards the incorporation of the Serbian language in the integrated instruction plan, there are more positive attitudes towards the incorporation of Serbian language in the integrated instruction plan. Therefore, we can conclude that the participants are more inclined towards the application of integrated instruction compared to traditional instruction methods.

**Table 3.** *Descriptive indicators for a scale item - The incorporation of Serbian language in the integrated instruction plan*

| The attitude towards the incorporation of Serbian language in the integrated instruction plan | Min | Max | M | SD |
|---|---|---|---|---|
| 1. I am not willing to plan the incorporation of Serbian language content in younger grades of primary school. | 1 | 5 | 2,27 | 0,92 |
| 2. Implementing integrated instruction that includes the implementation of Serbian language content in younger grades of primary school is familiar to me. | 1 | 5 | 1,92 | 0,90 |
| 3. The teaching process I plan to apply in working with younger primary school children will involve integrating the learning content of the Serbian language. | 1 | 4 | 1,74 | 0,76 |
| 4. Integrating Serbian language content in younger grades of primary school allows children to create a comprehensive picture. | 1 | 4 | 1,80 | 0,84 |
| 5. Connecting the learning content of the Serbian language subject with other learning content should be a feature of the methodical approach to children in younger grades of primary school. | 1 | 5 | 2,89 | 1,27 |
| 6. The Serbian language learning content for children in younger grades of primary school can only be presented in a traditional way. | 1 | 5 | 3,17 | 1,26 |
| 7. Traditional instruction of Serbian language is the only valid method for children in younger grades of primary school. | 1 | 5 | 1,85 | 0,75 |
| 8. It is desirable to apply the integration of Serbian language learning content in your work. | 1 | 5 | 2,19 | 1,00 |
| 9. I enjoy preparing integrated content in Serbian language for younger primary school children. | 1 | 5 | 3,39 | 1,18 |
| 10. I will organize my methodical work in such a way that I present the Serbian language learning content through traditional approaches to children in younger grades of primary school. | 1 | 5 | 2,27 | 0,92 |

M - Mean; SD - standard deviation

As for the participants' answers on the scale regarding the attitude toward the incorporation of physical education in the integrated education plan, as shown in Table 4, we can see that participants had the most negative attitudes toward the statement: "Integrating the physical education learning content can shift the focus from the main learning objectives of the subject" (M=3.42; SD=1.15). On the other hand, participants had the most positive attitudes toward the statement: "Integration of physical education content in younger grades of primary school is stimulating for children's development" (M=1.40; M=0.74). Once again, as in the previous two tables showing two different sets of attitudes for this scale, we observe a positive attitude toward the application of integrative methods compared to traditional instruction.

**Table 4.** *Descriptive indicators for a scale item – The attitude towards the incorporation of Physical education in the integrated instruction plan*

| The attitude towards the incorporation of Physical education in the integrated instruction plan | Min | Max | M | SD |
|---|---|---|---|---|
| 1. Integrating the physical education learning content in younger grades of primary school is stimulating for children's development. | 1 | 5 | 1,40 | 0,74 |
| 2. I am willing to conduct/implement integrated physical education lessons in the younger grades of primary school. | 1 | 5 | 1,68 | 0,82 |
| 3. I am interested in implementing integrated physical education lessons for children in the younger grades of primary school. | 1 | 5 | 1,65 | 0,85 |
| 4. Integrating the physical education learning content can shift the focus from the main learning objectives of the subject. | 1 | 5 | 3,42 | 1,15 |
| 5. It is more appropriate to convey the physical education learning content using traditional instruction methods. | 1 | 5 | 3,39 | 1,07 |
| 6. I can identify learning content suitable for integration through the subject of Physical Education in the younger grades of primary school. | 1 | 4 | 1,95 | 0,79 |

| The attitude towards the incorporation of Physical education in the integrated instruction plan | Min | Max | M | SD |
|---|---|---|---|---|
| 7. Integrating the physical education learning content into the instruction process for children in the younger grades has its positive aspects for the teaching staff. | 1 | 4 | 1,78 | 0,76 |
| 8. The content of the physical education subject cannot be presented to children in the younger grades of primary school through integrated instruction methods. | 1 | 5 | 3,11 | 1,19 |
| 9. Physical education for children in the younger grades of primary school should be presented in an integrated way through another content. | 1 | 5 | 2,16 | 0,90 |
| 10. It is challenging for me to present the physical education learning content in an integrated way to children in the younger grades of primary school. | 1 | 5 | 3,16 | 1,14 |

M - Mean; SD - standard deviation

In order to highlight and verify which of the attitude scales has the most positive attitude among participants, we summed up the scores of individual items and applied recoding analysis to ensure uniform response direction. A higher score on the scale indicates a more positive attitude towards the integrated approach and vice versa. As shown in Table 5, the most positive attitude towards the integrated instruction approach is observed on the scale regarding the incorporation of physical education in the integrative learning plan (M=2.63; SD=0.58), while the results for the other two scales are not significantly different, and the scores are quite similar. This suggests that participants have more positive attitudes towards the integrative approach, and the attitudes are homogeneous, as indicated by the low standard deviation scores.

**Table 5.** *The descriptive indicators of scores on the test examining attitudes towards integrated instruction*

| | Min | Max | M | SD |
|---|---|---|---|---|
| General attitude towards traditional/integrated instruction | 1 | 3,70 | 2,56 | 0,50 |
| Attitude towards the incorporation of Serbian language in the integrated instruction plan | 1 | 3,70 | 2,58 | 0,47 |
| Attitude towards the incorporation of Physical education in the integrated instruction plan | 1 | 3,10 | 2,63 | 0,58 |

M - Mean; SD - standard deviation

**H1: Students' attitudes toward traditional/integrated instruction are linked to a set of sociodemographic characteristics of students- testing**

Linear regression analysis was applied to examine the impact of sociodemographic variables on the formation of attitudes toward integrated instruction. Sociodemographic variables were used as predictors, and the criterion was the attitude toward traditional/integrated instruction, attitude toward the incorporation of Serbian language in the integrated instruction plan, and attitude toward the incorporation of physical education content in the integrated instruction plan. The data in Table 6 show that the general attitude toward traditional/ integrated instruction can be predicted based on the sociodemographic characteristics of the participants (gender, age, faculty, level of study, average grade in studies, financial status). This is indicated by the statistical significance of the regression coefficient correlation, which is lower than the critical value of 0.05 (0.00; $p < 0.05$). A special contribution is made by the predictor of age, which negatively, lowly, and statistically significantly correlates with the criterion (-0.21; p=0.01), the faculty major, which also negatively correlates with the criterion (-0.22; p=0.01), and the average grade, which also negatively correlates with the criterion (-0.28; p=0.00). These data tell us that younger participants, those in undergraduate studies with lower average grades, have a positive attitude toward traditional/integrated instruction.

The obtained data indicates that the set of sociodemographic variables correlates significantly with the criterion and that they influence the formation of attitudes towards traditional and integrated instruction.

**Table 6.** *The regression model, the criterion - the general attitude towards traditional/ integrated instruction*

| $R = 0,35$<br>$R^2 = 0,12$<br>$p = 0,00$ | The standardized beta coefficient | P |
|---|---|---|
| Gender | -0,05 | 0,52 |
| Age | -0,21 | 0,01 |
| Faculty major | -0,22 | 0,01 |
| Level of studies | 0,11 | 0,21 |
| Average grade | -0,28 | 0,00 |
| Socioeconomic status | -0,02 | 0,84 |

p- statistical significance; R- regression coefficient of correlation; $R^2$- coefficient of determination

**H2: Students' attitudes toward the incorporation of Serbian language subject in the integrated instruction plan are associated with a set of sociodemographic characteristics of students-testing**

Just as in the previous table, in Table 7, based on the presented results, we see that the attitude towards the incorporation of Serbian language in the integrated education plan can be statistically significantly predicted based on the sociodemographic characteristics of the participants (gender, age, faculty, study level, average grade, and financial status). This is indicated by the regression correlation coefficient, which is 0.00 (0.52; $p < 0.05$). We conclude that sociodemographic variables have an impact on the formation of attitudes towards the incorporation of Serbian language in the integrated education plan, as the set of sociodemographic variables correlates significantly with the criterion. A special contribution is made by the predictor of gender, which negatively correlates with the criterion (-0.21; $p = 0.01$), age, which negatively, moderately, and statistically significantly correlates with the criterion (-0.18; $p = 0.02$), and the faculty major, which also negatively and statistically significantly correlates with the criterion (-0.24; $p = 0.00$). These data indicate that males, younger individuals, and those from the University of Niš - Faculty of Sport and Physical Education have a more positive attitude towards the incorporation of Serbian language in the integrated education plan.

**Table 7.** *The regression model, the criterion - Attitude towards the incorporation of Serbian language in the integrated education plan.*

| $R = 0,52$<br>$R^2 = 0,28$<br>$p = 0,00$ | The standardized beta coefficient | P |
|---|---|---|
| Gender | -0,21 | 0,01 |
| Age | -0,18 | 0,02 |
| Faculty major | -0,24 | 0,00 |
| Level of studies | -0,04 | 0,63 |
| Average grade | -0,06 | 0,40 |
| Socioeconomic status | -0,01 | 0,92 |

p- statistical significance; R- regression coefficient of correlation; $R^2$- coefficient of determination

**H3: Students' attitudes toward the incorporation of Physical education subject in the integrated instruction plan are associated with a set of sociodemographic characteristics of students-testing**

Unlike the previous two results presented in Tables 6 and 7, the attitudes towards the incorporation of physical education in the integrated education plan are somewhat different in Table 8. The attitude cannot be statistically significantly predicted based on sociodemographic characteristics of the participants (gender, age, faculty major, level of study, average grade, financial status) because the statistical significance of the regression correlation coefficient is higher than the critical value of 0.05 (0.26; p=0.06). These data indicate that there is no influence of sociodemographic variables on the attitude towards the incorporation of physical education in the integrated education plan.

**Table 8.** *The regression model, the criterion - Attitude towards the incorporation of Physical education in the integrated education plan*

| $R = 0,26$<br>$R^2 = 0,07$<br>$p = 0,06$ | The standardized beta coefficient | P |
|---|---|---|
| Gender | 0,04 | 0,68 |
| Age | -0,05 | 0,59 |
| Faculty major | -0,09 | 0,31 |
| Level of studies | -0,16 | 0,09 |
| Average grade | -0,08 | 0,33 |
| Socioeconomic status | -0,11 | 0,16 |

p- statistical significance; R- regression coefficient of correlation; $R^2$- coefficient of determination

## Discussions

Educational institutions, or schools, are seen as crucial entities in shaping students' knowledge and habits. They also shape their views about numerous everyday topics and urge them to make their own judgments. The integration process is an important aspect that permits students to develop cognitive abilities that are required for integrating different views encountered in the educational system.

Interactive learning is regarded as a modern model that connects learning contents from different subjects with the goal of acquiring full understanding about concepts and events in students' daily lives. Previous research has validated the incorporation of Serbian language material in the teaching of disciplines such as Social Studies, Music, Visual Arts, and Mathematics (Đorđević, 2007). In terms of sociodemographic variables, they can be very useful for forming opinions and drawing conclusions about the influence of non-operationally dependent and uncontrollable factors on the formation of attitudes toward the integration of Serbian language content and physical education into the integrated instruction plan, as well as on integrative teaching in general. This is precisely the subject of our research.

The study's primary objective was to investigate the correlation between students' views and sociodemographic variables about the integration of Serbian language and physical education material in the final years of undergraduate academic and master's studies. A survey of 179 students, heterogeneous in terms of gender, age, faculty major, study level, average grade, and financial status, was done using a scale of attitudes toward educational materials integration. We discovered that students have a positive view toward integrated education by using statistical tests such as descriptive statistics and a linear regression model. Regarding the impact of sociodemographic variables, where attitudes towards integrated instruction, attitudes towards incorporating Serbian language in the integrated education plan, and attitudes towards incorporating physical education in the integrative approach were taken as criteria, and sociodemographic indicators (gender, age, faculty major, study level, average grade, financial status) as predictors, we have concluded that the general attitude towards integrated instruction and the attitude towards incorporating Serbian language in the integrated instruction plan can be predicted based on the sociodemographic variables of the participants (Hypothesis 1 and 2). On the other hand, the attitude towards including physical education in the integrated instruction plan cannot be predicted based on sociodemographic characteristics, as confirmed by the regression coefficient and the level of significance (Hypothesis 3).

Based on the abovementioned, and considering the hypotheses set, the general hypothesis, as well as the specific hypotheses H1 and H2, can be confirmed, as a statistically significant correlation was found at the significance level of 0.00. This leads us to the conclusion that sociodemographic variables play a role in forming 25% of the attitude towards the integration plan and the incorporation of Serbian language in the integrated instruction plan. It is also important to note that younger students, from undergraduate studies, with lower grades, have more positive attitudes towards integrated instruction.

Given the lack of previous research on the subject, the acquired results are very significant indicators and starting points for additional studies. Future studies should include teachers working in educational institutions to examine actual implementation and real attitudes toward integrated instruction. It

would also be suitable to increase the number of participants, standardize them based on sociodemographic variables, and broaden the scope of attitudes toward integrated instruction.

### Author Contributions

Conceptualization, S.P. and V.M; methodology, S.P.; software, S.P.; formal analysis, S.P. and V.M.; writing—original draft preparation, S.P. and V.M.; writing—review and editing, S.P. All authors have read and agreed to the published version of the manuscript.

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## ANNEX

### Questionnaire

In front of you is a questionnaire that examines students' attitudes towards integrative teaching in Early Primary Education. Please read the manual carefully before answering questions, and circle the answer that best expresses your degree of agreement with the statement. Round up the answers according to the following principle:

1. If you completely agree with the statement, circle *x* in column ***I totally agree***.
2. If you agree with the statement, circle *x* in column ***I mostly agree***.
3. If you are not sure whether you agree or disagree with a statement, circle the sign *x* in a column ***I'm not sure***.
4. If you don't agree with the statement, circle *x* in column ***For the most part, it doesn't I agree***.
5. If you don't agree with the statement at all, circle *x* in column ***I don't agree at all***.

Thank you for your cooperation!

### CLAIMS

1. The application of the method of classical teaching, in the younger grades of primary school, allows better focus on the subjects and objectives. 1 2 3 4 5
2. I am not ready to plan the integration of Serbian language content in younger grades of primary school. 1 2 3 4 5
3. Integration of the content of physical education, in the younger grades of primary school, it's good for children's development. 1 2 3 4 5
4. Integrative teaching, in the younger grades of primary school, encourages integrity in the development. 1 2 3 4 5
5. I'm ready to take / implement integrative physical education classes upbringing in the junior grades of elementary school. 1 2 3 4 5
6. I am interested in conducting integrative physical education classes for children in the younger grades of elementary school. 1 2 3 4 5
7. Conducting integrative teaching that includes the implementation of teaching content the Serbian language in the younger grades of elementary school is close to me. 1 2 3 4 5
8. I believe that integrative teaching, in the younger grades of primary school, contributes to the a full range of knowledge. 1 2 3 4 5
9. The teaching process that I plan to apply in my work with children in the younger grades of primary school schools will include the integration of the teaching content of the Serbian language. 1 2 3 4 5
10. Integrating the teaching content of physical education can shift the focus from the main objectives of the course. 1 2 3 4 5
11. I believe that integrative teaching is more effective than traditional teaching. 1 2 3 4 5
12. It is more appropriate to convey the teaching content of the subject Physical Education traditional methods of teaching. 1 2 3 4 5
13. Integration of the content of the Serbian language in the younger grades of primary school enables

kids want to create a complete picture. 1 2 3 4 5

14. I can recognize the teaching content suitable for integration through the subject of Physical Education upbringing in the younger grades of elementary school. 1 2 3 4 5
15. Linking the Curriculum of Serbian Language with Other Teaching Content it should be a feature of a methodical approach to children in the younger grades of elementary school. 12 3 4 5
16. The teaching content of the Serbian language, for children in the younger grades of primary school, can be it's only done in the traditional way. 1 2 3 4 5
17. There is no need to burden oneself with constant linking of content in class.1 2 3 4 5
18. Integration of the Physical Education Curriculum into the Teaching Process of Children inyounger grades also have its positive sides for the teaching staff. 1 2 3 4 5
19. I enjoy listening to a lecture given by someone in the traditional way. 1 2 3 4 5
20. Traditional teaching of Serbian language in children in the younger grades of primary school, it's the only valid one. 1 2 3 4 5
21. It is desirable to apply in one's work the integration of the teaching content of the Serbian language. 1 2 3 4 5
22. I am ready to implement content integration in the school where I will be working. 12 3 4 5
23. The content of the subject of physical education cannot be served to children in younger grades of primary school with integrative methods of work. 1 2 3 4 5
24. I enjoy the preparation of integrated content of the Serbian language intended for younger children grades of primary school. 1 2 3 4 5
25. I believe that integrative teaching should be part of the compulsory curriculum and programs for the younger grades of elementary school. 1 2 3 4 5
26. Physical education should be presented to children in the younger grades of primary school integrated into other content. 1 2 3 4 5
27. I will organize my methodological work in such a way that I present the teaching content of the Serbian language through traditional approaches to children in the lower grades of elementary school. 1 2 3 4 5
28. I believe that every school should have a team to plan and carry out an integrative continue. 1 2 3 4 5
29. It is a problem for me to present the teaching content of physical education in an integrated way children from the lower grades of elementary school. 1 2 3 4 5
30. Only the application of traditional teaching I recognize. 1 2 3 4 5

The key to the test:
Inverse items are marked with an asterisk

GENERAL ATTITUDE TOWARDS TRADITIONAL/INTEGRATIVE TEACHING: 1*, 4, 8, 11 , 17*, 19*, 22, 25, 28, 30*;

ATTITUDE TOWARDS THE INCLUSION OF THE SERBIAN LANGUAGE IN THE INTEGRATIVE PLAN: 2*, 7, 9 , 13, 15, 16*, 20*, 21, 24, 27*;

ATTITUDE TOWARDS THE INCLUSION OF PHYSICAL EDUCATION IN THE INTEGRATIVE PLAN: 3, 5, 6, 10*, 12*, 14, 18, 23*, 26, 29*.