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Original scientific paper  
UDK: 81'242  
DOI: 10.17810/2015.96

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## LITERACY IN THE 21<sup>ST</sup> CENTURY FROM THE PERCEPTION OF PUPILS OF SECONDARY SCHOOLS

**Summary:** Paper is dedicated to the testing of the concept of *literacy*, based on the questionnaire, carried out in the school year of 2018/2019 among the students of two secondary vocational schools in Vrsac, Belgrade and Grammar School in Vrsac (200 respondents). The primary hypothesis of the research was that detection and detailed study of high school students' conceptosphere on literacy identify the fields to improve the teaching of Serbian as a mother tongue in secondary schools and the aim of work that, based on the collected and then processed data in analytical, cognitive and descriptive method, is to (a) isolate the dominant concepts of (non)literacy, (b) look at the tendencies of spreading and shaping the notion of *literacy* induced by the needs of modern life, and also that, in order to improve linguistic culture in all domains and all educational levels – (c) point to the possibility of improving the teaching of the Serbian language as a mother tongue. According to results of the survey secondary school students experience literacy in the 21<sup>st</sup> century as a complex concept; from the one who is literate expecting linguistic knowledge, what are the basic, traditionally accepted parameters, and recognize illiteracy as the lack of ability to apply knowledge in the field of language. They also demonstrated that it is necessary to improve the efficiency of teaching approaches designed to improve functional literacy in a variety of communicative situations; increase the number of hours and exercises in the field of spelling, or nurture and acquire more comprehensive and knowledge in use and skills of different forms of literacy needed for managing in 21<sup>st</sup> century; more attention should be paid to including relevant language handbooks in teaching; more explicit, on frequent and more familiar examples to students, point to the advantages of knowing and respecting the linguistic norm, paving the way for a better linguistic culture and enrichment of the mother tongue.

**Key words:** conceptual metaphor, literacy (in the 21<sup>st</sup> century), secondary school students, spelling, teaching of Serbian language.

### 1. Introduction

According to the census results and the Republic Statistical Office of the Republic of Serbia in 2011, Serbia had 127.463 illiterate persons aged 10 years and over (of which 22.831 illiterate men and 104.632 illiterate women) – the total literacy rate is 98%. In 50% of the population in Serbia (53% of women, 49% of men) is computer illiterate<sup>2</sup>. These data show that an additional effort needs to be invested in the cultivation of literacy, as one of the key indicators of the

<sup>1</sup> Electronic sources: *Statistical Office of the Republic of Serbia: Population according to literacy.*

<sup>2</sup> Electronic sources: *Statistical Office of the Republic of Serbia: Population according to computer literacy;* see also electronic source: *the Republic Institute of Statistics: Profile April 2019.*

level of development of the culture, and humility and the total potential of the individual and community on the whole.

In the 21<sup>st</sup> century, thanks to the development of technology, the power of the media and all the more complex demands of modern society and communication in it, in addition to elemental literacy, studied functional, media, digital and computer literacy, and it is also talked about cultural, social, visual, health, financial, even literacy of the third age. "With the timeless concept of literacy, it has become conceptually diffused and, to that extent, extended to diverse artifacts naturally derived from social, cultural and other needs, it is difficult to limit it to a unique term, which, as a rule, conveys the knowledge and respect of the linguistic norm" (Veljkovic Stankovic & Djordjev, 2018: 7-8). In a word, the content of the concept of literacy, "changes with the growth and development of society" (Kulic, 1997: 92), and that dynamic of modern life and the demands of modern society inevitably affect the habits and needs of young people and reflect on the content of curricula, as well as and creating a curriculum at all levels of education.

Having all previous of this in mind, we asked ourselves: 1. how do young people – whose system of values will be passed on to the next generation – today perceive (experience) literacy and its various forms; and 2. how the educational system, primarily the teaching of literacy, can respond more effectively/with more purpose to the higher expectations caused by the spread of the concept of literacy in the 21<sup>st</sup> century.

Paper is therefore focused on testing conceptualization and the scope of the concept *literacy* with secondary school students in the light of positive values and abilities, but also their lack (illiteracy); in addition, we wanted to get to know the student's views on different types of literacy, as well as the desirable forms of improving these knowledge and skills.

## 2. Methodological framework of research

*The subject of research* is the concept of secondary school students about the complex notion of literacy. *The basic research problem* can be formulated as the following questions: *Can the discovery and detailed study concept of secondary school students on literacy map the fields in which to improve teaching literacy in secondary schools in the 21<sup>st</sup> century?*

*The objectives of the research* are:

- (a) Isolate the dominant concepts of (none) literacy,
- (b) Consider the tendencies of spreading and shaping the notion of literacy induced by the needs of contemporary life,
- (c) Point out the possibilities of improving the teaching of the Serbian language as a mother tongue in secondary schools.

*Primary hypotheses* which are the starting point in the analysis after determining the goals of this paper is: *The discovery and detailed study concept of secondary school students on literacy identify fields in which to improve teaching the Serbian language as a mother tongue in secondary schools.*

*Secondary hypotheses* are numerous:

- H1: High school students literacy in the 21<sup>st</sup> century is perceived as a complex notion.*

- H2: Students of high school evaluate a literate person on the basic traditionally accepted parameters in understanding literacy (knowledge and respect of language standards).
- H3: High school students most often recognize illiteracy as the lack of ability to apply knowledge in the field of language.
- H4: High school students value their own literacy.
- H5: When they have spelling doubts and/or want to improve their own spelling knowledge, high school students first look up answers/help on the Internet.
- H6: In the 21<sup>st</sup> century, in the opinion of high school students, knowledge of basic language rules and the spelling of the mother tongue is not important.
- H7: Secondary school students believe that the teaching of spelling, as one of the most visible aspects of literacy, could first be improved with the use of information and communication technologies.
- H8: Students have a conciliatory (egalitarian) attitude about general illiteracy.
- H9: Students do not know when International Literacy Day is celebrated.
- H10: High school students believe that today electronic literacy is the most important, that it is neglected and / or underestimated, and that the spelling is given too much attention.<sup>3</sup>

The nature and purpose of the work caused an orientation of each of a *deliberate pattern* – the study included a total of 200 students (Table 1) from the classes of high school general type – High school "Borislav Petrov Braca" peaks (hereinafter referred to as HSV), and professional schools different educational profiles: for the education of technicians and economists from the School Center "Nikola Tesla", Vrsac (SCV), and pharmacists, physiotherapists from the Pharmaceutical Physiotherapeutic School, Belgrade (PPB). When choosing schools, we took care of their territorial affiliation and education profile, i.e. the field of work and the direction of the school that the students attending. For high school education, we have defined ourselves for several reasons: (a) deepening and expanding literacy classes in secondary school which is adopted in elementary school; (b) high school students, having regard to their age, had their own linguistic expression; (c) the completion of high school is for some students and the end of formal education and organized work on developing literacy; (d) those continuing education students should be able to accept higher education requirements.

Table 1. Sample research

	HSV	SCV	PPB	In total
Number of respondents	50	50	100	200
Gender	20 m; 30 f	24 m; 26 f	12 m; 88 f	56 m; 144 f (100 %)

<sup>3</sup> The imposition of secondary hypotheses (H5–7 and H10) significantly influenced the fact that the 21<sup>st</sup> century is the fastest change in the world of human technology, as new trends are almost daily created on the market of information and communication technologies. Today in high school (and earlier), teachers have digital natives in front of them, as the author of electronic learning, Marc Prensky (Prensky, 2005), describes students of the 21<sup>st</sup> century. Electronic sources: Prensky, M. (2005), *Digital natives, digital novices*.

Average age	16-18: 16 (10), 17 (30), 18 (10)	14-17: 14 (10), 15 (17), 16 (10), 17 (13)	14-18: 14 (18), 15 (32), 16 (17), 17 (31), 18 (2)	14 (28); 15 (49); 16 (37); 17 (74); 18 (12); average age =15.97.
Date of interview	4. 9. 2018. (50)	6. 9. 2018. (27) 12. 9. 2018. (23)	September 26, 2018(50) September 27, 2018(17) 30. 1. 2019. (33)	4. 9. 2018 - 30. 1. 2019.

Legend: HSV – High School "Barislav Petrov Braca", Vrsac; SCV – School Center "Nikola Tesla", Vrsac; PPB – Pharmacy and Physiotherapy School, Belgrade; m – male gender; f – female gender.

In the period from September 2018 to the end of January 2019, a total of 200 high school students (56 – male gender, 144 – female gender), average age a 15.97 years ago, an *anonymous questionnaire* was filled in, composed of 10 questions of mixed (open and closed) type. The same, minimally modified instrument was also used in earlier research but on the population of (college) students, future educators and teachers (Veljkovic Stankovic & Djordjev, 2018: 7–22)<sup>4</sup>; therefore, in the discussion (see p.3), due to the same or similar requests (items) in the survey questions, there are, as expected, certain matches. This questionnaire is designed to reveal: (a) the original domains through which students understand literacy and its various forms, (b) the supremacy of certain types of literacy, (c) the assessment of one's own degree literacy, literacy of others, as well as the competences that these knowledge and skills imply, (d) the attitude of students towards the knowledge of language rules and the spelling of the mother tongue.

*Preparation and research.* – The research was preceded by a serious and extensive preparation. Several informal talks were held with the teachers of the schools involved in the research. It was decided to specially designed questionnaires are collected at the beginning and at the end of the first semester of the school year 2018/19 in order not to disturb the teaching process. Before the questionnaire, students were explained the goals of the research, and also explained the difference between conceptual and poetic metaphors.

Collected data they were processed by the *analytical, descriptive and cognitive methods*, and they were viewed summarily and followed by brief discussions, given the issues raised by certain issues. Each of the 10 survey questions it is stated (in its original form) in the header of special tables (see the table below 2–11; compare: Veljkovic Stankovic & Djordjev, 2018: 7–22).

### 3. Results of research and discussion

3. 1. Typology of almost half of all responses (40.5%) to the first question by which students were asked to construct conceptual metaphors with target domain *literacy* (see Table 2). It covers the notion of literacy and shows that it is today oscillating. The concepts of minimum mind / and optimum / literacy vary– the scope and operability of knowledge varies from elementary knowledge of the language through the emphasis on the communicative

<sup>4</sup> The results of the research about literacy of new age from the standpoint of future educators and teachers (see: Veljkovic Stankovic & Djordjev, 2018: 7–22), are presented at the *Sixth International Congress of Applied Linguistics Today – Language, Literature and Interdisciplinary Today*, Belgrade, 12<sup>th</sup> and 13<sup>th</sup> October 2018.

role of literacy to the inclusion of other skills and knowledge. So, literacy is perceived as the ABILITY TO READ, WRITE AND CALCULATE, KNOWLEDGE AND RESPECT OF LANGUAGE RULES, as part of GENERAL CULTURE, THE BASIS OF COMMUNICATION, but also as ABILITY TO USE A COMPUTER. This shows that literacy and requirements regarding it are day by day, and it is increasingly difficult to determine precisely<sup>5</sup>.

A total of 40% of respondents' responses provide a diagnostic of degree of literacy (Table 2) 18% of it was positive (literacy in the 21<sup>st</sup> century is seen as VALUABLE / IMPORTANT / SIGNIFICANT / IN DEVELOPMENT), in 22% of the negatively oriented (LITERACY IS WASTED, TAINTED, SAD, IS NOT AS IMPORTANT AS ONCE, IGNORED, BORING etc.). These answers support the claim that language depends on the speaker's views (who often do not look after, disrespect, neglect, etc.), and these attitudes can also be built in the teaching process.<sup>6</sup>

In addition, 8.5% of all responses reveal that literacy, on the one hand, is seen as a MIRROR OF AN INDIVIDUAL'S EDUCATION, PRIMARY LIFE, ART, and CULTURE ITSELF. These answers are not in high correlation with the comfort with which we refer to the spelling, and not even to other forms of literacy. At a conscious level, as we can see, it knows the value of orthography, but it "is taken for granted", it is partially respected, often with superficial approach etc. (Veljkovic Stankovic & Djordjev, 2018: 17). The students' answers revealed that literacy is perceived as PRIVILEGE, and as a privilege of "a few" (GOLD).

The answers received were confirmed H1: *High school students are perceived literacy in the 21<sup>st</sup> century as a complex notion.* As we see, the conceptualization of literacy from the learner's perspective includes: the scope of the concept of literacy that oscillates, brings (predominantly negative) the diagnostics of the degree of literacy development and runs on diverse paths – from PRIMARY LIFE to the PRIVILEGE OF A FEW.

Table 2. *Conceptualization of literacy*

1. Describe how you	In total (%)	
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<sup>5</sup> It seems that in modern context, more and more is being sought (and expected), and when it comes to literacy, a satisfactory level has not been reached at the basic level. Thus, for example, the representation and frequency of spelling mistakes on the corpus of 3,000 written assignments (Djordjev, 2016: 43–54) shows that in the written expression of students, the orthographic norm is not properly nourished and respected, or spelling as one of the most visible aspects of literacy.

<sup>6</sup>The results of the research conducted with the students of the High School "Borislav Petrov Braca" in Vrsac, June 2014 (Djordjev, 2015: 230-231) showed that the majority (69% of the students) think that the orthographic norm is only relevant in the notes from the subject Serbian language and literature. This result points to the permissive attitude of teachers of non-linguistic subjects according to spelling mistakes, which certainly contributes to the development of thinking that it is correct to write exclusively in the lessons of the mother tongue, which makes the understanding of the obligation of the orthodox norms is worryingly narrowed. There is no doubt that the knowledge and respect of the spelling must be given equal attention in all school textbooks, as well as in all forms of written expression, processing, exercises, textual parts of tasks, etc. from other subjects. It is also very important that the language norm is known and respected by all teachers in their linguistic expression, because they – as educators and intellectuals – are equally responsible for the education of many generations. Therefore, it would be extremely important that the subject of Serbian language be introduced into all higher education institutions, which would provide a reasonably and functionally higher demand for the development of a spoken literacy culture, without which there can be no serious progress in the profession, nor the progress of the society as a whole.

experience / understand literacy in the 21st century. Literacy is (supplement):		<b>Literacy is ...</b>
Coverage of the notion of <i>literacy</i> oscillates	40.5 %	ABILITY TO READ, WRITE AND CALCULATE, KNOWLEDGE AND RESPECT OF LANGUAGE RULES, PART OF THE GENERAL CULTURE, THE BASIS OF COMMUNICATION, THE USE OF COMPUTERS
Diagnostics (degree of <i>literacy</i> development)	40 %	POSITIVE: VALUABLE/ IMPORTANT / SIGNIFICANT / IN DEVELOPMENT NEGATIVE: CATASTROPHIC, IN A BAD VOICE, SAD, IS NOT IMPORTANT AS IT USED TO BE, IGNORED, BORING
The diversity of the <i>literacy</i> concept	8.5 %	MIRROR OF AN INDIVIDUAL'S EDUCATION, PRIMARY LIFE, ART, CULTURE ITSELF PRIVILEGE , GOLD
NA (no answer)	11 %	-
In total	100 %	-

3.2. Question no. 2 in the questionnaire wanted to determine what, in the opinion of high school students, should (a) *know / recognize* and (b) *can literate person* (Table 3). More than half of all respondents (51%) believe *literate person* should (a) *know / recognize*: grammar (28.5 %) and spelling (22.5%), and the attitude of a third (27%) is that he should know letters, numbers, to be able to read, write and count. Other answers concern knowledge of different forms of literacy, greater knowledge in the field of (general) culture and literature. Only 1.5% pointed out that a literate person should know / recognize the foreign language.

And in the visions of high school students , a literate man (b) *knows how to read, write, calculate, count (elementary literacy) (61%), apply knowledge from spelling and language culture (10%), and communicate others' opinions and attitudes to others, can successfully communicate and actively listens (13.5%)*. As we see, the students give priority to linguistic knowledge and workmanship that are manifested and in oral and in written communication, which confirms *H2: Students of high school students evaluate the basic traditionally accepted parameters in understanding literacy (knowledge and respect of language standards)*. In category *Other (7.5%)* usually points to the importance of using a computer and modern e technologies, as well as the recognition and correction of errors.

Table 3. *Profiling the competence of a written man from the pupil's vision*

2. What knowledge and skills should a literate man have?	Frequency of concepts in answers to an open type question
<i>a) A literate person should know / recognize:</i>	<b>In total (%)</b>
spelling and grammar	51% (22.5% – spelling, 28.5% – grammar)
elementary literacy (letters, numbers, reads, writes, accounts)	27%
different forms of literacy	2.5%

(general) culture	3%
literature	3%
other	5%
NA	8.5%
In total	100%
<i>b) A literate man can:</i>	<b>In total (%)</b>
read, write, calculate, count (elemental literacy)	61%
apply literacy knowledge (functional literacy)	10%
successfully communicates (communicative role of literacy)	13.5%
Other	7.5%
NA	8%
In total	100 %

3.3. In Table 4 we bring the typology of students' answers to the question of which one wanted to find out what an illiterate man (a) does not know, (b) does not recognize, as well (c) in which situations he does not manage. The analysis of the answer shows that, in the opinion of more than half of the interviewed students, the illiterate man (a) does not know: to read, write, account (64%), does not know basic language rules (9.5%) and spelling (9%). The application of knowledge and skills, as well as communicative function, are neglected in students' responses.

An analysis of the type of responses to open type (b) questions have shown that an illiterate person cannot understand read, write, calculate, count (elemental literacy, 57.5%), expresses it properly (speech culture) and adjusts the language to the situation (15.5%), and applies knowledge from spelling and linguistic culture in every situation, write a letter, an application, a request, fill in the document (9%).

In the opinion of the students (the answers to question 4 (c)), the illiterate do not work well in various communicative (verbal) situations (60.5%), with the most problems in communicating with (more educated) people, formal situations, interviews for work (20%), filling out different documents (19.5%), and public appearances (7%). Only 1% of respondents identified problems that illiterate people may have in non-verbal situations such as traffic, and the observation in the category Other (2.5%) that illiteracy is most noticeable when there is a change in context (eg. going abroad). Almost a third of respondents (30%) did not answer this question.

Summary view of the answers show that of someone who is literate expected primarily skills (spelling and grammar) (3.2), and illiteracy is recognized first when linguistic knowledge in communicative situations is to be applied (60.5%), as confirmed by H<sub>3</sub>: High school students recognize illiteracy most often as the lack of ability to apply knowledge in the field of language. The result obtained points to the need to simultaneously develop linguistic and communicative competence.

Table 4. Profiling illiteracy as missing at competencies

3. When you say that someone is illiterate, it means that this person: a) does not know _____; b)	Frequency of concepts in answers to an open type question
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does not recognize that _____;	
c) does not work well in _____	
a) does not know :	<b>In total (%)</b>
Spelling	9%
to read, write, count	64%
Grammar	3.5%
basic language rules	9.5%
to apply linguistic knowledge (functional) literacy	5.5%
keep talking (communicative function)	2%
Other	0.5%
NA	6%
In total	100%
b) he cannot :	<b>In total (%)</b>
language adapts to the situation and is properly expressed	15.5%
reads, writes, counts, counts	57.5%
applying knowledge from spelling and linguistic culture	9%
successfully communicates	3%
Other	0%
NA	15
In total	100%
c) does not work well in:	<b>In total (%)</b>
verbal communication situations ( conversation with educated people, business conversations, formal situations, administration , public appearance )	60.5%
non-verbal situations (music, play, traffic)	1%
Other	8.5%
NA	30%
In total	100%

3. 4. Question 4 was aimed at self-evaluation of students (Table 5). Almost half of all respondents (46%) assess their knowledge as very good, something less than excellent (40.5%). Only 11% of students (b + c) notice problems with their own literacy, while insufficient grades are largely absent (only 0.5% of answers of this type). The results obtained were confirmed by H4: *High school students highly value their own literacy*. The question is - how these results are consistent with the real situation particularly when you have results of scientific research for orthographic knowledge of students. So, for example, a survey conducted in 1997 (Brboric, 2004), which included 1.122 students of elementary and secondary schools and students, found that secondary school pupils in spelling tests achieved a barely satisfying result (ib., 222) and that in spelling knowledge they were lagging behind pupils of elementary schools – pupils of elementary schools gave higher percentages of correct answers (61.3%) than secondary school pupils (58.3%) (ib., 222) in spelling tests and dictates. Also, the functional literacy of students in our high schools is on an unhealthy level – each student made on average three spelling mistakes in a written assignment



(Djordjev, 2016: 48), and in addition to spelling and other grammatical, stylistic and errors that undermine the aesthetic appearance of work. Comparison of what is in the field of instructional instruction in moral (according to plan and program) must be addressed in a certain classroom and student achievement in written tasks (when the acquired knowledge should be applied) has shown that the spelling knowledge that the students adopt in high school is unreliable, insufficiently established, that they have not reached a high degree of applicability and are automatic with me, and are superficial and non-functional (Djordjev, 2015 : 220 ).

Table 5. As high school students assess their own literacy

4. Assess your own literacy:	In total (%)
a) inadequate (1)	0.5%
b) sufficient (2)	1.5%
c) good (3)	9.5%
d) very good (4)	46%
e) excellent (5)	40.5%
NA	2%
In total	100%

3.5. When it comes to how to improve spelling skills and knowledge (Table 6), the overall results show that the most frequently requested assistance on site internet a (55.5%), immediately followed by the team of "help a friend" (55%). Although they rarely attend specialized courses (1.5%), self-taught is 23.5%, and only 19.5% use various manuals. This picture is confirmed by H5: *When they have spelling doubts and/or want to improve their own spelling knowledge, high school students' first look answers/help on the Internet.* In total 9.5% of students believe that their knowledge acquired during their education is sufficient, and they do not feel the need for further training in the field of spelling. Students are corresponding to the set of the issue (s), taking the actions that are seen as meaningful for the promotion of literacy and knowledge of spelling, but among them stands out reading.

Table 6. Improving literacy from the visions of high school students

5. How do you improve your knowledge of the spelling:	In total (%)
a) I do not improve it; I have enough knowledge that I acquired during my schooling.	9.5%
b) I attend specialized courses for improving different forms of literacy.	1.5%
c) When I have any doubts, I look for a solution on the Internet.	55.5%
d) I ask a friend or acquaintance whose literacy and knowledge I do not doubt.	55%
e) I use various manuals.	19.5
f) am mostly self-taught, I learn a little bit by the way, and that's when I need it.	23.5%
g) In some other way. Indicate how.	8%

**Note:** The students had the possibility of a multiple answer, i.e. they could round out one or more offered answers.

3.6. The statement that the literacy in the 21<sup>st</sup> century, important to know the basic rules of language and spelling of the mother tongue (Table 7) in the mostly agrees 34%, totally

agree 60% of the surveyed students. Those who mostly (6, d) agree have in mind (i) other forms of literacy. Such results deny H6: *In the 21<sup>st</sup> century, according to high school students, knowledge of the basic language rules and the spelling of the mother tongue is not important.* It is possible that partially the result of this impact and awareness of the students about the answers expected from them on time.

Table 7. *The importance of the linguistic and orthographic norm for literacy in the 21<sup>st</sup> century*

6. Literacy in the 21st century is essential to the knowledge of basic language rules and the spelling of the mother tongue.	In total (%)
a) I totally disagree.	0.5%
b) I mostly disagree.	1.5%
c) I am not sure.	3%
d) I mostly agree.	34%
e) I totally agree.	60%
NA	1%
In total	100%

3.7. Question no. 7 was of an open type, and it was required of students to tell briefly their proposals on the possibilities of improving the teaching of spelling in secondary schools (see Table 8). In the opinion of the respondents, the teaching of spelling in secondary schools could be improved in the following way: more frequent classes of spelling and language culture (21%), more frequent spelling exercises on examples from everyday life and examinations (14.5%), as well as the creation of more creative lessons of the spelling (use of games, ICTs) that would include all students and improve degree of pupil's interest in dealing with spelling issues (10%). A total of 5.5% of students believe that teachers need to be stricter when it comes to spelling issues, and that everyday teaching should be enriched with more teacher-student conversation about spelling. From the diverse responses in the category *Other*, we highlight the students' remark that they need to correct the books before printing.

Table 8. *Possibilities of improving the teaching of spelling from the perspective of high school students*

7. The teaching of spelling at high schools could be improved in the following way:	In total (%)
A greater number of lessons (spelling, linguistic culture ..., more classes of spelling and less literature in high school)	21%
More often spelling exercises on examples from everyday life and examination of knowledge (dictation, test, writing composition)	14.5%
Designing a more creative teaching of spelling (use of games, ICT) that would involve all students and improve students' level of interest in spelling themes	10%
Does not know:	7.5%
Less leniency of teachers when it comes to spelling issues and more dialogues teacher- pupil about spelling	5.5%
Reading	4%
There is no need to improve	4%

Additional spelling courses, linguistic culture workshops	3.5%
Pay more attention to emphasizing the importance and importance of respecting the spelling norm	3.5%
Other: 0.5% (correction of books before the press, hours of Serbian language without words from foreign languages, purchase of language manuals ...)	0.5%
NA	26%
In total	100%

The results that we have come to disapprove of H7: *High school students believe that teaching of spelling could first be improved by the use of information and communication technologies, since in the foreground they emphasize the quantity in spelling (more hours and exercises in the field of spelling).*

3.8. Question no. 8 pupils were asked to brief description on what would have happened if we had woken up one morning as illiterate. The answers are found four different scenarios (Table 9):

1. More than a third of the total number of respondents (28.5%) provided their responses scenario vulnerability: the inability of communications (17%); vulnerability of society and culture (3.5%); vulnerability to everyday life (8%). The following answers are indicative: *There would be serious misunderstandings. / We would not understand. We would not know anything or how to talk. // No science would make progress. Literature would collapse. The country would collapse. // Everything in the apartments would stop working. People could not go shopping, use computers. We would not know how to read traffic signs.*

2. In the second place according to the representation (20.5%) are the answers that bring the apocalyptic scenario: *The World's End. General chaos. Catastrophe. Collapse. General misery and dissension.*

3. We called the third scenario, "The scenario of renewal". Out of the total number of answers, 6% presupposes the birth of new literacy: *People would eventually come up with new rules. We would all start again in the 1st grade of elementary school. People would make a new grammar.*

4. Patient, i.e. the egalistic scenario is low presented (5%). The students wrote: *Nobody would notice anything. Nothing would happen. Everyone would behave normally even though they would not know to read and sign.*

The students' answers, as we see, did not confirm the H8 hypotheses: *Students have a conciliatory (egalistic) attitude about general illiteracy, but they predict that communication and everyday life would be threatened in the event of a lack of literacy, and maybe there would be an apocalypse.*

A total of 25.5% of the questionnaires processed do not have an answer to this question, and from the category Other (14.5%) we list the following answers: on the one hand, students cannot imagine the given situation (6.5%), feel: (a) Relief / Relief (3.5%: *We would all be equal: it would be much easier for us to not get upset and when I hear and correct another (unknown) person, no one would pay any attention to errors*) or (b) Resistance (4%: *I wake up every day illiterate and it's okay! It's like that every day and I do not miss anything!*)

Table 9. Typology and percentage representation of the answer to the question: *What would happen if we woke up one morning as illiterate?*

8. What would happen if one morning we woke up illiterate?	In total (%)	The students' answers
Scenario of vulnerability: inability to communicate	17%	There would be serious misunderstandings. / We would not understand. We would not know anything or how to talk.
Scenario of vulnerability: the threat to society and culture	3.5%	No science would make progress. Literature would collapse. The country would collapse.
Scenario of vulnerability: vulnerability of everyday life	8%	All institutions would stop working. People could not go shopping, use computers. We would not know that we read traffic signs.
	20.5%	End of the world. General chaos. Catastrophe. Collapse. General misery and dissension.
Recovery scenario: the birth of new literacy	6%	People would come up with new rules over time. We would all start again in the 1st grade of elementary school. People would make a new grammar.
A calming / egalistic scenario / indifference	5%	Nobody would have noticed anything. Nothing would happen. Everyone would behave normally even though they would not know to read and sign.
Other	14.5%	We would all be equal! It would be much easier because I would not be upset when I hear and correct another (unknown) person. No one would pay any attention to errors anymore // I'm up every day illiterate and its ok! It's so every day to me, and nothing is wrong with me!
NA	25.5%	-
In total	100%	-

3.9.H9: Students do not know when the Historic announces International Literacy Day is confirmed by the disciples (Table 10) to question 9 in the questionnaire. Only slightly more than half of respondents (55.5%) know that September 8 was proclaimed International Literacy Day.<sup>7</sup> Promulgated by 1965, the UNESCO, and with a view to the international community every year recall the essential importance of literacy and education on a global level, while warning on a cultural and civilization consequences of illiteracy.

Table 10. *When is the International Literacy Day Celebrated?*

9. When is the International Literacy Day celebrated?	In total (%)
a) on February 21st	14.5%
b) on March 16th	17.5%
v) on September 8th	55.5%

<sup>7</sup> Perhaps the students replaced the International Literacy Day with the International Day of Mother Language, which has been celebrated since 1999 on February 21 with the aim of raising awareness of the importance of mother tongue and multilingualism.

NA	12.5%
In total	100%

3. 10. In the last question (Table 11) there are several types of literacy. Students were tasked to identify three forms of literacy and should – according to their own priorities has – line up according to an estimate which of them (1) *today, the most important is for every educated man*, (2) *neglected and/or undervalued* where to (3) *is given too much attention*. Students therefore, they had the possibility of a multiple, gradient-specific answer, and the more chosen answers should have been compared to the importance; so the numerical results in Table 11 are given by the supremacy of the selected responses in the first, second and third place in the series, which ensures a high degree of accuracy in presenting the results.

Detailed analysis of responses under 1. (Table 11) indicates that the spelling of (A – total 175 replies), reader's competence (B – 132) and electronic literacy (F – 69) have a non-human primate, except that the spelling is by far dominating (singled out 175 times and, of which 150 times at the position 1, 20 times at the position 2 and only 5 times in the third).

In the opinion of students, today scientific (D – 115), health (H – 84) and mathematical literacy (C – 79) are neglected and / or underestimated.

The examiners consider that the importance of the electronic (F – 108), media (E – 105) and financial literacy (G – 74) is too rare. Electronic literacy, on the one hand, found itself among the most important literacy for every educated man of the 21<sup>st</sup> century, and that, on the other hand, in students' opinion too much attention is paid to it. The reason for the overlapping of contradictory responses is probably that media and electronic literacy are closely linked and act in symbiosis.

The answers we came to have denied H10: *High school students believe that today's most important electronic literacy is for every educated man that she is neglected and / or underestimated and that too much attention is paid to the spelling.*

Table 11. With the carefully presented answers to question no. 10: *Priorities among different forms of literacy*

<p><b>10.</b> In the 21st century, various forms of literacy are discussed. In addition to elemental literacy (the ability to read, write and calculate), the significance of: A) spelling; B) reading literacy; C) mathematical literacy; D) scientific literacy; E) media literacy; F) electronic literacy; G) financial literacy; H) health literacy; I) functional literacy.</p>	<p><b>Overall results</b></p>
<p>1. By priority, identify for yourself three forms of literacy that, according to your opinion, are today most important for every educated person:</p>	<p><b>A) TR. 175 (150, 20, 5)</b>  <b>B) TR. 132 (21, 91, 20)</b>                  C) TR. 62 (2, 16, 44)                  D) TR. 14 (1, 9, 4)                  E) TR. 18 (0, 13, 5)                  F) TR. 69 (8, 12, 49)                  G) TR. 36 (3, 18, 15)                  H) TR. 29 (0, 7, 22)                  I) TR. 30 (2, 5, 23)</p>

	NA - 13
2. Which of these forms of literacy are today neglected and / or underestimated?	A) TR. 35 (21, 10, 4) B) TR. 45 (14, 26, 5) C) TR. 79 (34, 15, 30) <b>D) TR. 115 (55, 38, 22)</b> E) TR. 36 (6, 12, 18) F) TR. 35 (11, 11, 13) G) . 55 (17, 20, 18) <b>H) TR. 84 (17, 39, 28)</b> I) TR. 72 (12, 17.43) NA - 12
3. What forms of literacy does attach great importance?	A) TR. 52 (30, 12, 10) B) TR. 48 (9, 23, 16) C) TR. 36 (7, 13, 16) D) TR. 37 (10, 13, 14) <b>E) TR. 105 (57, 38, 10)</b> <b>F) TR. 108 (48, 36, 24)</b> G) TR. 74 (16, 23, 35) H) TR. 33 (3, 12, 18) I) TR. 41 (3, 10, 28) NA - 16

Legend : TR. – total response; A) spelling; B) reading literacy; C) mathematical literacy; D) scientific literacy; E) media literacy; F) electronic literacy; G) financial literacy; H) health literacy; I) functional literacy; NA – no answer.

The pupils were able to supplement the survey with the form (or forms) of literacy that was not stated, and in their opinion it is very important for the life of a modern man. We bring students' answers in alphabetical order: *grammatical literacy; Dialogue (communicative) literacy; Life literacy (literacy for life); Internet / computer / computer literacy; Modern literacy; Musical Literacy; General literacy; Literacy culture; Knowledge of foreign languages; Political Literacy; Professional literacy; Reading literacy (understanding of the read); Traffic literacy; Sports Literacy; Professional Literacy; Insert Railway literacy (freedom of writing, I do not know (7) All listed (17) Each literacy is important.* Although nearly 3/4 (73.5 %) of the questionnaires remained unanswered to this part of the questionnaire, we highlight those who attribute the significance of dialogue (communicative direction) and literacy and culture.

#### 4. Conclusion

High-school pupils in the 21<sup>st</sup> century are see literacy as a complex term, which is not surprising because with the higher expectations of modern society they contribute to the continuous spread of the concept of *literacy*. Of those who are literate learners they most often expect linguistic knowledge, what are the basic, traditionally accepted parameters, and illiteracy is recognized as the lack of ability to apply knowledge in the field of language.

The range of the original domains and the diversity of the acquired concepts of secondary school students on literacy map out the fields in which the secondary school literacy in the 21<sup>st</sup>

century needs to be improved, the word – the primary research hypothesis has been confirmed: *The discovery and a more detailed study of the concept of the secondary school pupils on literacy identifies fields in which to improve the teaching of the Serbian language as the mother tongue in secondary schools, which are:*

- it is necessary to improve the efficiency of teaching approaches aimed at improving functional literacy, because illiteracy is most often manifested when *applying* language and knowledge, in a variety of communicative situations (up to the communicative role of literacy); at the same time, both linguistic and communicative competence should be developed;
- it is necessary to increase the number of classes and exercises in the field of spelling, but also to nurture other teaching and extracurricular activities that favor the introduction and development of different forms of literacy, that is, networking of different competencies necessary to navigate in many life and communicative situations;
- more attention should be paid to including relevant language lessons in teaching;
- more explicit, on frequent and learners' close examples, point to the advantages of knowing and respecting the linguistic norm, thus paving the way for a better linguistic culture and enrichment of the mother tongue.

### Special appreciation

In this way I express my gratitude to Prof. Dragana Veljkovic Stankovic, PhD (Faculty of Philology, Belgrade) on scientific and expert advice during the entire research work. I also thank professors of the Serbian language and literature at the High School "Borislav Petrov Braća" (Vrsac), Pharmaceutical and Physiotherapeutic School (Belgrade), the Nikola Tesla School Center (Vrsac), which enabled the research to be conducted and provided necessary and experienced material for work.

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### **Biographical note**

Ivana Djordjev is a doctor of philological science (scientific field: Methodology of Serbian language teaching, Serbian language). She worked 10 years as a Serbian language teacher in a gymnasium. She was the winner of the second prize from the Institute for the Advancement of Education in 2012. Since 2013 she has been working as a lecturer at the Preschool Teacher Training College "Mihailo Palov" in Vrsac, since 2015 she is a professor in the same school. So far published several monographs, (hand)books for students and other publications and more than 50 research papers in various journals and proceedings. Actively participates in scientific conferences in Serbia and in projects, she is a peer-reviewer of several journals. Particular interests: teaching methods, contemporary Serbian language, orthography. All the relevant information regarding her scientific work and publications available at: <http://www.uskolavrsac.edu.rs/profesori/dr-djordjev-ivana/>.