

## The contribution of teacher practices to reading literacy in Serbia – Lessons we missed from PISA 2009

Smiljana Jošić<sup>1</sup> and Sonja Banjac<sup>2,3</sup>

<sup>1</sup>Institute for Educational Research, Belgrade; <sup>2</sup>Institute of Psychology, Faculty of Philosophy, Belgrade, <sup>3</sup>Univ. Grenoble Alpes, Grenoble, France

Corresponding author: Smiljana Jošić, [smiljana.josic@gmail.com](mailto:smiljana.josic@gmail.com)

**Abstract:** The main focus of this paper is the relationship between the teachers' practice in Serbian language (reading) classes and student achievement on PISA tasks. Specifically, in an effort to examine this relationship, we focused on the link between the students' PISA achievements and the strategies teachers use to engage the students during the reading tasks in order to structure and scaffold the work on those tasks. This two-part study relied on a mix-methodology combining quantitative and qualitative analyses. The data from the quantitative study was analyzed using Hierarchical Linear Modeling (HLM) with student and school level. The results indicated that the students have the best achievements when teachers motivate student in engagement reading and sparingly those intended for structuring and scaffolding the work on the reading tasks. The data from the qualitative analyses revealed the most useful strategies teachers and students identify and whether they recognize in their classes those strategies that were included in PISA questionnaire.

**Keywords:** PISA, reading literacy, language teacher practices, students

### Introduction

Life in contemporary society is based on acquiring new information and interpretation of the messages in our environment. The crucial activity that enables this is reading. The importance of this competency is illustrated by the fact that the highest percentage of financial resources for socio-humanistic disciplines is invested in the research of different reading processes (National Reading Panel, 2000). During the last decades, research on the reading competency has mainly been exploring reading as comprehension, usage, and

thinking about written materials for personal goal achievement as well as the development of knowledge and potentials with the aim to participate in the society (Kirsch et al., 2002). In other words, reading competency does not include only the acquisition of certain knowledge, but also the knowledge of how to apply that knowledge (Pavlović-Babić & Baucal, 2009). This competency can be considered as educational capital that students need in order to continue their schooling and to efficiently manage different roles they will encounter in the everyday world (Baucal, 2012). However, mastering the reading skill is a strenuous, time-consuming, and complex process. For that reason, it is essential for education systems to improve and find ways to stimulate this essential competency. Students should receive support from their teachers during the reading process, but not only then. It is vital to use this skill in order to adequately function in the world and to solve everyday problems.

### **Reading literacy**

Mastering the reading competency involves critical reading, identifying key concepts in the text, making a connection between different ideas, asking important questions, and formulating adequate answers (Thoman & Jolls, 2008). The reading competency defined in this way emphasizes on the functional knowledge important for a person's life. Moreover, measuring reading skills has been the focus of several international large-scale assessment studies (e.g., PIRLS, PISA, PIAAC, NAEP). In those studies, the reading competency is defined through several levels: accessing and finding information inside the text, making simple conclusions, linking and interpreting information inside the text, and reflection and evaluation of the text.

In the PISA (Programme for International Student Assessment) study, one of the main domains is precisely reading literacy. This international study examines educational outcomes, specifically the readiness of fifteen-year-olds for life in modern society (Baucal, 2012; OECD, 2010; Pavlović-Babić & Baucal, 2009). PISA defines reading literacy as understanding, using, reflecting on, and engaging with written texts in order to achieve one's goals, develop one's knowledge and potential, and participate in society (OECD, 2004). In order to measure all the diverse dimensions of reading literacy, PISA tasks include different situations and text formats (continuous and non-continuous text). Solving reading tasks also engages various cognitive processes (aspects) of reading: seeking and extracting information, combining and interpreting and reflecting, and assessing.

Serbia has been participating in the PISA research since 2003, five times in total (in 2003, 2006, 2009, 2012, and 2018). In all those cycles, the average score of the students in Serbia in all domains, including reading literacy, was below

average in comparison to the member countries of the Organization for Economic Co-operation and Development (OECD) (Pavlović Babić & Baucal, 2013). Findings of the last PISA cycle carried out in Serbia (2012) indicate that 33% of the students in this country are functionally illiterate (Pavlović-Babić & Baucal, 2013). The average score that Serbian students achieved on the reading literacy scale was 442 points. This can be taken as a very low result having in mind that the mean of this scale was 500 points. These findings are further supported by a national study with fourth-grade students (10 years of age), focusing more generally on the Serbian language (Čaprić et al., 2007). Namely, the students were tested in four language domains – literature, reading, grammar, and writing. The results have shown that every third or fourth student cannot demonstrate that (s)he understands what (s)he reads. It is precisely these findings on the low student achievement that call out for educational quality improvements and moving the focus away from the mere knowledge transfer towards its application.

### **Scaffolding reading literacy**

The goal of different education systems across the world is enabling each student to master all levels of reading competencies in order to become a critical reader. In other words, reading literacy is seen as the primary resource of education and individual development (Kirsch et al., 2002). Reading competence is the basis for developing all other forms of literacy, such as mathematical, scientific, or media, which is the reason behind the continuous search for effective reading modes. A study has shown that earlier investment in the development of the reading competency leads to a better school achievement later on (Cunningham & Stanovich, 1997).

Therefore, it is not surprising that there is a large number of studies on different ways of supporting reading with understanding (for example, Brophy, 2013; Brown & Palincsar, 1989; But & Svorc, 2009; Palincsar & Brown, 1984). Most of these strategies to teach reading can be grouped into two categories: clarifying the context of reading and learning reading strategies. The first group of strategies consists of explaining to the reader all the contexts in which learning takes place. Specifically, this type of support implies asking questions that lead the reader to think about the text actively. The goal of these strategies is to teach a student how to think about the meaning of the text from the perspective of the author, how to recall the information from the text, as well as how to become aware that the author can make mistakes or intentionally misrepresent the information. This kind of

support also means teaching children how to understand and enjoy the text. Some authors emphasize that those who teach reading must allow their students to choose the texts they want to read (Turner, 1995), to have a pleasant reading atmosphere in which they can experience both success and failure (But & Svorc, 2009).

Another kind of support is the one that involves explicit learning strategies for understanding the material read. This type of support always consists of several steps and clearly defines the procedure for implementing the appropriate strategy. Palincsar & Brown (1984) have shown that strategies such as summarizing, searching, identifying key ideas, and re-reading are successfully adopted. These authors later confirmed the importance of explicit learning strategies by showing that seventh-grade students understood 20% of the material they had read before the intervention, while after learning the strategies they understood 80% of it (Palincsar, Brown, & Campione, 1993). Explicit learning strategies emphasize that children are better able to understand teaching materials if teachers give direct instructions on how to read, with what goal to access reading, and how to engage in activities that will help understand further reading (Perfetti, 1995).

The research in Serbia that examined the factors of reading literacy progression by using PISA tasks has shown that students who assess more accurately the efficiency of different reading strategies have better progress in reading competency. These students more often consider summarizing data or identifying the most important information in the text more effective than other reading strategies. Furthermore, they have better reading skills and can identify what is vital for effective reading; in other words, they can express what helps them to understand and identify the essence of the text (Jovanović, 2011).

Nevertheless, some authors point out that it is not the type of support in a school context that matters, but the period of assistance (Clark & Graves, 2005). They pointed out that assistance should be carried out continuously in a given time (moment-to-moment verbal scaffolding). The teacher's role is reflected in the timely setting of questions and the provision of adequate information that can be part of the reading instruction. These types of support are more effective if the teacher knows the child's reading abilities and experience in tasks of the same type.

From the presented studies we can observe that there is no doubt that children need support to become able to take in a large amount of information, to critically examine it, to choose and organize what might be useful and important to them with regards to the material presented to them. Some countries, such as Finland, the Netherlands, and the United Kingdom, have recognized the importance of early reading learning in the first grades of elementary education. Hence, in those countries, a substantial part of the school curriculum is devoted to reading and the abilities related to early reading activity (Treiman, Tincoff, Rodriguez, Mouzaki & Francis, 1998). Empirical findings support the view that if there is quality help, the level of understanding of the read material may increase over time (Treiman et al., 1998). Under appropriate conditions, children who have not mastered reading (Jong, 2006), non-motivated readers (Brophy, 2013), and those with lesser school achievements can make substantial progress.

### **Scope of the study**

Unfortunately, in recent years, international studies have shown that a large number of children around the world fail to master the basic level of this critical competency, which is true in the case of Serbia (Pavlović-Babić & Baucal, 2009). In addition, national studies have shown that every third child is functionally illiterate at the end of the fourth grade. Although the concept of reading literacy is an important issue in Serbia, there is no systemic support for its development. Specifically, there are not many programs for the professional development of teachers that are focused on reading literacy development. Out of 81 programs in total, only 13 are devoted to literacy and adopting reading strategies (Catalog of professional training programs for 2018/2019).

The main focus of this paper is the relationship between the practices teachers employ during the reading classes (Serbian language classes) and student's functional literacy. Specifically, we were concentrating on the link between the strategies teachers use, on the one hand, to engage students during reading tasks and to structure and scaffold their work on these tasks, and, on the other, the students' performance on PISA reading tasks. This link was investigated in two ways: firstly, the results of the quantitative study will be presented, followed by the qualitative analysis, after which the discussion of both groups of findings will be provided.

## Study 1 - Method

*Sample:* For this part of the research, 155 Serbian high schools and gymnasiums were selected from the original sample that participated in the PISA 2009 cycle. This was the last PISA cycle that included reading literacy as the main domain, and that provided accessible data.

*Instruments:* In PISA 2009, three subject domains were tested, with reading as the major domain and mathematics and science as minor domains. The PISA 2009 assessments consisted of paper-and-pencil tests, whereas the question format varied (passages of the text, graphs, and diagrams, often in combination). The reading ability for each student was evaluated using 37 paper-based reading units.

In order to gather contextual information, PISA asks the students (and the principals of the schools participating in the study) to respond to background questionnaires. These questionnaires provide information about an array of student and school characteristics. In the 2009 survey, the central topic of the inquiry was reading. Thus, the students' questionnaire was dedicated to the examination of the relationship towards reading as a school subject. Additionally, a set of questions examining reading and reading strategy was also included in the questionnaire.

*Variables: Teachers' stimulation of reading engagement (STIMread)*

The scale from the student questionnaire was used that investigated strategies teachers use to encourage engagement in reading tasks (OECD, 2009; Table 1). The STIM scale comprised seven items, with a good reliability in the Serbian sample ( $\alpha=.88$ ). The students evaluated on a four-point Likert scale (never – in all lessons) how often their teacher used described strategies. The STIM score was calculated for each school as the average score of its students.

*Teachers' use of structuring and scaffolding strategies (USSS)*

This student questionnaire scale included nine items and had good reliability in the Serbian sample ( $\alpha=.86$ ). On the USSS scale, the students rated how often their teachers used practices and strategies focused on organizing their work (Table 1). The process of answering and calculating the scores for the scale were the same as for the previous one.

Table 1 *Items from the student questionnaire*

<b>Strategies for stimulating reading engagement (STIMread)</b>	<b>Structuring and scaffolding strategies (USSS)</b>
1. The teacher asks students to explain the meaning of a text.	1. The teacher explains beforehand what is expected of the students
2. The teacher asks questions that challenge students to get a better understanding of a text	2. The teacher checks that students are concentrating while working on the reading assignment
3. The teacher gives students enough time to think about their answers	3. The teacher discusses students' work after they have finished the reading assignment
4. The teacher recommends a book or author to read	4. The teacher tells students in advance how their work is going to be judged
5. The teacher encourages students to express their opinion about a text	5. The teacher asks whether every student has understood how to complete the reading assignment
6. The teacher helps students relate the stories they read to their lives	6. The teacher marks students' work
7. The teacher shows students how the information in texts builds on what they already know	7. The teacher gives students the chance to ask questions about the reading assignment
	8. The teacher poses questions that motivate students to participate actively
	9. The teacher tells students how well they did on the reading assignment immediately after

*Students Socioeconomic status (S\_SES)*

This measure we based on several data: parents' ISCED level, parents' profession and its prestige, the financial status of the family, and cultural resources of the family (OECD, 2009).

*School Socioeconomic status (SCH\_SES)*

This measure was obtained as a mean score of S\_SES for all students for one school.

*Reading achievement*

This variable was operationalized as the average achievement score on the PISA reading items.

## Quantitative results

Descriptive data for all variables are presented in Table 2. All variables are presented at the school level.

Table 2 *Descriptive data for used variables*

Variable	M	SD	Min	Max
Average reading score	441.03	52.15	287.64	550.15
SES	0.05	0.44	-0.65	1.37
STIM	0.35	0.28	-0.41	1.00
USSS	0.07	0.22	-0.50	0.69

Data were analyzed using the two-level Hierarchical Linear Modeling (HLM) with student and school level.

*Model 0: Baseline HLM model*

$$Y_{ij} = B_0 + R_{ij}$$

$$B_0 = N_{00} + U_0$$

$$Y = N_{00} + U + R$$

For the HLM baseline model, we included two levels, where Y is the average achievement score on reading for a particular student (i), B<sub>0</sub> is the regression intercept of a particular school (j), R is the random effect of a student in school, N<sub>00</sub> is the overall average reading score for all schools, and U<sub>0</sub> is the random effect of school j.

*Proposed model*

$$Y = N_{00} + \beta_{SCH\_SES}(SCH\_SES) + \beta_{STIM}(STIM) - \beta_{USSS}(USSS) + \beta_{S\_SES}(S\_SES) + i$$

The proposed model includes students' socio-economic status (*S\_SES*) on the first level, with schools' socio-economic status (*SCH\_SES*) and two types of teacher's strategies in reading - stimulation (*STIM*) and scaffolding (*USSS*) - comprising the second level.

The baseline model, Model 0, indicates that 40% of the total variance can be explained with school differences. On the other hand, 60% of the total variance can be explained with student differences. The fix effect intercept was 443.19 (SE=4.58).

The goal of the proposed model was to explore the impact of teachers' practices on the reading literacy tasks, controlling at the same time the impact of the socio-economic status. Table 3 presents the structure of variables on each level.



Table 3 *Proposed HLM model*

	Variables	Coef.	SE
	Intercept	439.933**	2.9
Level 1	SES school level	75.997**	5.61
	STIM	36.97*	15.426
	USSS	-50.433*	19.635
Level 2	SES student level	7.48**	1.257

\*  $p < 0.05$ .; \*\*  $p < 0.01$ .

Based on the obtained results, we proposed a model with students' socio-economic status on the student level and schools' socio-economic status as well as with both groups of investigated teacher practices in reading classes at the school level. The proposed model explained 25% of the overall variance in student achievement, i.e., 24.67% at the school level and 0.57% on the student level. Teacher practices, as a school-level factor, explain 0.8% of the variation in the average reading achievement.

Chart 1 illustrates the students' reading achievement predicted by the level of using two teaching strategies. Schools were divided into three groups based on the employment of stimulation and scaffolding strategies. It is important to emphasize that the signs of the coefficients indicate that the students' reading scores get higher when teachers encourage student to read and, conversely, they get lower with higher use of structuring strategies.

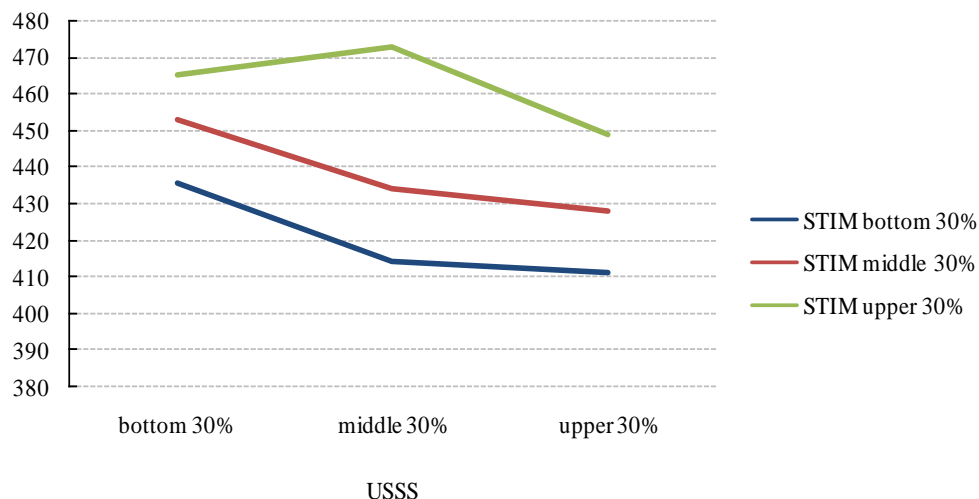


Chart 1 *Prediction of the students' reading achievement based on two types of strategies*

## Study 2 - Method

*Sample:* For the second part of the research, two focus groups were created. The participants of the first focus group included the students enrolled in the eighth grade of elementary school (around 14 years of age). All nine students attended the same school but in different classes. Teachers of the Serbian language (seven in total) from different elementary schools in Serbia participated in the second focus group. It was decided to perform this part of the study with students and teachers of the last grade of elementary school since the students in the first grade of high school (PISA sample) had only spent a couple of months with their high school teachers. In other words, we assumed that the foundation for student achievement had been created during the years they spent in elementary school rather than during the several months spent in high school and that the focus groups with these participants would be more informative.

*Procedure:* For this part of the research, a trained interviewer led the focus groups using the guidelines developed based on the data obtained in the quantitative study. The themes that were covered in the student focus groups corresponded to those that were discussed with the teachers. The participants were first asked to state all teachers' strategies they had experience with or that they use in their everyday work. After that, they were given a list of strategies that were investigated in the quantitative part of the study. The goal was to explore what strategies teachers and students can identify and whether they can recognize in their classes the strategies that were included in PISA questionnaires. The participants of both groups were also asked to comment on the usefulness of these strategies.

## Qualitative results

The first task in both focus groups was to come with a list of all the strategies teachers use in teaching reading. However, it turned out that the participants in both groups had different perspectives in replying to this question than had been expected. Namely, the participants of both groups focused on reading as a process of decoding and therefore saw no importance in the reading strategies and the strategies for teaching them. Specifically, the teachers believed that the students should start senior grades as fully formed readers with developed reading habits.

*It's not my job to teach the students how to read; it is something that they should have learned with their first-grade teacher. (teacher, 45 years old)*

*If they don't understand what they are reading, I don't know how they managed to get to the eighth grade. They (students) know that long before they come to us. (teacher, 38 years old)*

*It is something that you learn in the first grades; you don't need to practice it. (teacher, 56 years old)*

The students shared the teachers' views on reading. Their responses also reflected the orientation towards the process of reading and decoding. When asked about the reading strategies, they gave the following statements:

*Well, it's like knowing how to read letter by letter and then how to connect it into a word while reading. Is that what you were thinking of? (student 15 years old)*

*But we already know how to read. We learned that in the first grade. (student, 15 years old)*

Following that, we explained to the participants of both groups the concept of reading literacy and provided them with a list of all reading strategies (Table 1) used in the first part of the study so they can discuss it. Both the students and the teachers were asked to think about these strategies in terms of their usefulness.

Table 4 presents the most common answers from the two focus groups. By observing the table, it can be seen that, from the students' point of view, the most useful strategies are the ones related to the stimulation of reading engagement. In contrast to that, teachers emphasize the usefulness of structuring and scaffolding strategies.

Table 4. *Participants' answers about the usefulness of reading support strategies*

Question	Strategies students highlight	Students' comments	Strategies teachers highlight	Teachers' comments
Most useful strategy	The teacher asks questions that challenge students to get a better understanding of a text (STIM)	<i>This is great! I like it when somebody asks me how I understood a book....because those questions make me think in a different way</i>	The teacher tells students in advance how their work is going to be judged (USSS)	<i>If we don't tell them in advance that the work will be graded, they won't do it.</i>

		<i>Sometimes it confuses me (the question the teacher asks), but later I understand what it was for.</i>	
	The teacher gives students enough time to think about their answers (STIM)	<i>...to give us (teachers) enough time because sometimes it is all very fast. By the time I think what I would like to say somebody else interrupts me and says the answer.</i>	The teacher marks students' work (USSS)
	The teacher poses questions that motivate students to participate actively (USSS)	<i>When the teacher says something from the text, and I can do that. ... to imagine that I am a character from the book.</i>	The teacher tells students how well they did on the reading assignment immediately after (USSS)
The strategies they don't find very useful	The teacher checks that students are concentrating while working on the reading assignment (USSS)	<i>Well, this is like punishment because if you don't pay attention, she (the teacher) punishes you. How is this done?</i>	They acknowledge all strategies but do not think that it is possible to use them all
	The teacher discusses students' work after they have finished the reading assignment (USSS)	<i>We don't do this. The discussion always turns into a fight in our class. The school bell rings (for the end of the class), and we never finish this.</i>	
			<i>For example, I give pluses when they read a book. Five pluses is an A. Only for a grade. The grade is the only thing that matters. The grade is the only thing that motivates them (the students).</i>
			<i>If I tell him right away what he didn't understand in a story, then I think he hears me. They like to know right away how they did on the test.</i>
			<i>It is not possible to give them enough time. First, they are not quiet. While one is thinking about the answer, the other one wants to leave the class because he is bored. You cannot employ this (strategies) because of the other children. I cannot check if everyone understood the text and if they are focused while they are reading. I have classes with 36 students.</i>

Following that, we explained to the participants of both groups the concept of reading literacy and provided them with a list of all reading strategies (Table 1) used in the first part of the study so they can discuss it. Both the students and the teachers were asked to think about these strategies in terms of their usefulness. Table 4 presents the most common answers from the two focus groups. By observing the table, it can be seen that, from the students' point of

view, the most useful strategies are the ones related to the stimulation of reading engagement. In contrast to that, teachers emphasize the usefulness of structuring and scaffolding strategies.

Generally, the findings suggest that the students find those strategies that challenge them to form and express their opinion to be the most useful, e.g., giving them more time to think, asking them for their opinion, and trying to connect the text with their personal life.

### **General discussion**

This research was focused on the practices and strategies that teachers use when teaching reading and on the teaching practices that are associated with effective reading. In addition, we also wanted to explore the teachers' and students' opinions on the practices teachers use in the classroom during reading classes. For this research, we chose mix-method analyses by employing qualitative and quantitative data.

Quantitative data revealed evidence about teachers' practices for reading engagement and work organization. Specifically, the results indicate that the students achieve the most when the teachers use many strategies to stimulate the reading engagement and sparingly those intended to structure and scaffold the work on the reading tasks. In other words, teachers' efforts to encourage the students to use different reading strategies or to explain the meaning of the text, express their opinion about the text, connect what they have read with other books, their lives, as well as with what they already know is related to better solving reading tasks. These were precisely the strategies students considered to be the most effective.

On the other hand, the results suggest that when the teachers focus on the grades, this relates to a poorer result on the reading literacy tasks. However, this relationship is not that exclusive, i.e., the teachers should structure the work moderately and predominately invest their attention and time in encouraging the students to think about the texts they read and to learn how to express their opinions in order to raise their functional literacy. These findings are in accordance with the recommendations given by certain researchers for reading strategies teaching (But & Svorc, 2009; Palincsar & Brown, 1984). Importantly, teachers with whom we have talked expressed very directly the attitude that the grades are the most important motivator for the students. This is a potential risk, as can be seen from our data, and that could send the implicit message to the students that reading is something that

only happens in school and its sole purpose is getting a grade. The alternative is to make an effort to engage the students in the process of reading actively. Hence, it is vital to get the students interested and develop their relationship with the texts that they are working on. In doing so, the strategies for the stimulation of reading engagement presented in Table 1 could be the first step. It is essential that teachers allow room for the deeper processing of texts and the formation of the students' opinions on the texts they are reading. It is necessary to teach the students how to develop their attitudes, conclusions, and ideas using and referring to the texts that are being analyzed in the classroom. In other words, teachers should seek to guide their students from reproduction to making conclusions. Furthermore, it is also important to teach the students how to express their opinions and convey them to others, and to empower them to practice it during reading classes.

These strategies should be applied during all reading classes or in the classes during which a text material is being analyzed. Of course, as teachers in the focus groups highlighted, the teacher cannot provide every student with an opportunity to speak in each class. They could, instead, provide support by demonstrating to the students how they draw conclusions themselves and express their opinions after reading the text, encouraging such learning by modeling it. The conducted focus groups suggest that there is a need to empower and train teachers in Serbia to lead their students through the process of forming opinions by reading and expressing them as well as to equip them with the methods to teach reading strategies. All of the aforementioned should be incorporated into the existing curricula of initial education of Serbian language teachers as well as foreign language teachers. At the same time, in-service teachers could become acquainted with these themes through programs of continuing professional development.

Nevertheless, one of the limitations of the present study is the correlational design of the quantitative study. Therefore, we have to be open to two interpretations. The first option is that the students' reading competencies direct and limit teachers' strategies so that the teachers adapt their strategies to students. Alternatively, it might be the case that the teachers' strategies influence the students' reading competency. Prospective studies should explore the direction of this relationship, given that this is a critical question. The teachers' responses could suggest that the first possibility might be more plausible; however, we have decided to interpret the data more in the light of the second possible interpretation, offering thus practical suggestions for teachers.

## References

- Baucal, A. (2012). *Ključne kompetencije mladih u Srbiji u PISA 2009 ogledalu. (Key competences of young people in Serbia in PISA 2009 mirror)*. Beograd: Institut za psihologiju, Filozofski fakultet u Beogradu i Tim za socijalno uključivanje i smanjenje siromaštva Vlade Republike Srbije.
- Brophy, J. (2013). *Motivating students to learn*. New York: Routledge.
- Brown, A. L., & Palincsar, A. S. (1989). Guided, cooperative learning and individual knowledge acquisition. *Knowing, learning, and instruction: Essays in honor of Robert Glaser*, 393-451.
- But, D. & Svorc, L. (2009). *Uspešno čitanje i pisanje-tehnike za razvoj pismenosti*. Beograd: Kreativni centar.
- Čaprić, G., Vukmirović, J., Najdanović-Tomić, J., Todorović, O., Stanić, A., Pejić, A., Pantić, J., Nikolić, J., Džida, B., Glamočak, S. (2007). *Nacionalno testiranje učenika četortog razreda osnovne škole*. Beograd: Zavod za vrednovanje kvaliteta obrazovanja i vaspitanja.
- Clark, K. F., & Graves, M. F. (2005). Scaffolding students' comprehension of text. *The Reading Teacher*, 58(6), 570-580.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental psychology*, 33(6), 934.
- Jovanović, V. (2011). Faktori napredovanja na testu čitalačke pismenosti. *Psihološka istraživanja*, 14(2), 135-155.
- Jong, P. (2006). Understanding Normal and Impaired Reading Development: A Working Memory Perspective. In: S. Pickering (ed.) *Working Memory and Education*. 33-60. Elsevier, London
- Kirsh, I., de Jong, J., Lafontaine, D., McQueen, J., Mendelovits, J., Monseur, C. (2002): *Reading for Change: Performance and Engagement across Countries*, Paris: OECD Publications
- National Reading Panel Report (2000). *Teaching children to read. An evidence-based assessment of the scientific research literature on reading and its implications for reading instructions*. Washington, DC: National Institute of Child Health and Human Development. [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org)
- OECD (2004). *Learning for Tomorrow's World: First Results from PISA 2003*, Paris: OECD.
- OECD (2010). *PISA 2009 Results: What Students Know and Can Do*, Paris: OECD.

- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and instruction*, 1(2), 117-175
- Palincsar, A. S., Brown, A. L., & Campione, J. C. (1993). First-grade dialogues for knowledge acquisition and use. *Contexts for learning: Sociocultural dynamics in children's development*, 43-57.
- PavlovićBabić, D. & Baucal, A. (2009). *Razumevanje pročitano: određnje i testiranje. (Understanding Reading: Defining and Assessment)*. Ministarstvo Prosvete Republike Srbije, Zavod za vrednovanje kvaliteta obrazovanja i vaspitanja, Institut za psihologiju Filozofskog fakulteta u Beogradu.
- Pavlović Babić, D., & Baucal, A. (2013). *Inspiriši me, podrži me, PISA 2012 u Srbiji: prvi rezultati*. Beograd: Institut za psihologiju.
- Perfetti, C. A. (1995). Cognitive research can inform reading education. *Journal of Research in Reading*, 18(2), 106-115.
- Thoman, E., & Jolls, T. (2008). *Literacy for the 21st Century: An Overview and Orientation Guide to Media Literacy Education*. Theory CML MediaLit Kit. Center for Media Literacy.
- Treiman, R., Tincoff, R., Rodriguez, K., Mouzaki, A., & Francis, D. J. (1998). The foundations of literacy: Learning the sounds of letters. *Child Development*, 69, 1524-1540.
- Turner, J. C. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading Research Quarterly*, 410-441.