Št./No. 4/2018
Str. /pp. 306–324
ISSN 0038 0474

Jelena Maksimović,
Jelena Osmanović, and Lazar Stošić

Teachers as reflective practitioners with the function of improving educational practice in primary schools in Serbia

Abstract. In modern schools directed towards change, teachers face ever-increasing expectations imposed on them by Ministry of Education and society itself. A teacher is not only a conveyer of knowledge; but also a reflective practitioner. This work discusses educational changes, advancement of educational practice, as well as new roles that teachers assume in contemporary school. Are teachers actively engaged in improving their own educational practice? Answering this question is one of the goals of this study, which is focused on investigating teachers' reflectionson improving their teaching practice. More specifically, teachers' reflections about exchanging experiences with their co-workers, self-evaluation of their own work, their activities aimed at professional development, collaboration with their students, and ways of raising student awareness about current social issues are analyzed. An evaluation scale (Akbari 2007) was used to gauge teachers' attitudes about aspects of reflective practice with respect to the cycle of education (lower- and higher-grade teachers) and their experience level (up to 10 years, from 11–20 years, and over 20 years). Overall, this study was conducted on a sample composed of 240 teachers in Serbia. The empirical part of the research found a positive answer to the question: Are teachers actively included in improving their own teaching practice? This study was an effort to demonstrate the significance of reflective practice in advancing educational processes in Serbian elementary schools.

Keywords: improvement of educational practice, reflective practice, teacher reflection, teacher researcher.

UDC: 37.011.3

Scientific article

Jelena Maksimović, Ph.D, associate professor, University of Niš, Faculty of Philosophy, Department of Pedagogy, Ćirila *i Metodija 2, 18 000 Niš, Serbia e-mail; jelena.maksimovic@filfak.ni.ac.rs*

Jelena Osmanović, MA, teaching assistant, University of Niš, Faculty of Philosophy, Department of Pedagogy, Ćirila *i Metodija 2, 18 000 Niš, Serbia e-mail; jelena.osmanovic@filfak.ni.ac.rs*

Lazar Stošić, PhD, assistant professor, College of academic studies Dositej, Belgrade, Trg Nikole Pašića 7, 11000 Belgrade, Serbia e-mail; lazarstosic@vsdositej.edu.rs

Introduction

In these rapidly changing times, education becomes critically important for the success of every society. Such changes are reflected in the evolving role of the teacher, their relationship with students, their teaching methods, and the overall teaching process. In a school embracing innovative changes directed towards the application of technologically advanced tools for the advancement of learning (the use of multimedia devices, smart boards, power point presentations, etc.), teachers cannot be just passive users of results typically obtained by professional researchers within academic institutions and research centers but must also become active participants in the research process itself. In traditional education, the front-and-center position of the teacher with a pronounced lecturing role was dominant, while the students were more or less passive recipients of information. In contrast, the role of teachers in contemporary schools has changed significantly. Their main role is no longer to merely convey information, but to become a professional and a leader who organizes, directs, and leads the learning process, thus guiding students in adopting practical, useful knowledge and becoming reflective practitioners themselves (Bolton 2010; Jay and Johnson 2002; Urzúa and Vásquez 2008).

The contemporary school is directed towards students and emphasizes learning along with active and interactive lecturing. The main challenge in understanding how schools can improve their educational performance resides in identifying the source of change, which means that scools can identify changes only with the assistance of teachers. There are various theoretical approaches to this matter. One approach, in its simplified version, suggests that school development must be initiated and lead from the outside, as schools have neither the capacity nor the will to change. On the other hand, schools must themselves identify problems and their causes and engage is addressing them. The students should be taught, but it is also necessary to enable them to learn independently. This paper *analyzes* the characteristics of reflexive practice and teacher reflection with an overview of the situation in Serbia.

Reflective practice and teacher reflection

The review of the one hundred-year history of reflective practice confirms the fact that there are various definitions, theoretical foundations, and works of contemporary scientific authorities. Literature surveys on reflective practice point to a multitude of definitions about what the term means and encompasses. Dewey (1933, p. 49) believed that teachers must not only fulfill programs and execute plans, but that they should also play an active role in developing these programs, plans, and educational reforms. Dewey maintained that the learning process should be one of establishing hypotheses, conducting research, testing, evaluations, and reaching conclusions that would result in the modification of current knowledge or, if needed, further research. It is this process that he considered reflective practice. Dewey (ibid) observed that teachers contemplate if their actions are appropriate attempts to analyze lecturing and work experiences, which lead to a further improvement of the teacher, the student, and the learning overall. He viewed reflection as an active, permanent, and careful evaluation of conviction, or an assumed form of knowledge, in light of their support and aspirations.

When comparing Dewey's views on reflective practice with newer definitions, it seems that the definitions provided by other authors treat reflective practice as an approach to teaching that requires practical values and theories be applied in everyday activities through the reevaluation of activities, both reflectively (Bolton 2010) or through the process of self-observation and self-evaluation, of the teachers during lecturing. Meanwhile, Milrood (1999, p. 10) defined reflection as a process of uncritically observing the environment in order to reach decisions.

Teaching reflection is a theoretical concept accepted in the literature and is one of the most significant ways of examining and changing both the teacher as a professional and their own practices (Colton and Sparks-Langer 1993; Dewey 1933; Jay and Johnson 2002; Rodgers 2002; Schön 1983; Schön 1991; Urzúa and Vásquez 2008). Schön's (1983, 1991) concepts of thinking *in* and *about* action conceptualized the teacher's discussions and classroom learning and constitute a sociocultural context for their learning. Reflection is, according to this division, a method of self-examination aimed at evaluating if the correct and appropriate course of action was taken in order to progress and assign meaning to individuals' actions by examining their motives and attitudes. In other words, reflection means achieving intentions and self-criticism with the goal of refining an individual's teaching practice.

Urzúa and Vásquez (2008) described reflection as reflection for action and future practice. Zeichner (1994a, 1994b) made a considerable contribution to the area of teacher reflection by considering its social, moral, and political aspects of lecturing. From his perspective, teachers should not only reflect generally but should also utilize specific concepts and ideas to reflect upon, such as teaching methods, teaching materials, communication with students, cooperation with colleagues. Jay and Johnson (2002, p. 20) stated that reflective lecturing assumes recognizing, examining, investigating, and reflecting upon implications of someone's beliefs,

experiences, attitudes, knowledge, and values, as well as upon possibilities and limitations present in the social environment in which the teacher works. Based on the above definitions, it can be stated that reflection means to stop and think about one's own actions and thoughts.

Many experts in this area (LaBoskey 1994; Schön 1987; Zeichner and Liston 1996) researched, both theoretically and empirically, the contribution of reflective practice on the teacher's efficiency. The results of those studies indicate that reflective practice helps teachers avoid impulsive and routine behavior, helps them in acquiring daily experiences, and enables them to act intentionally and with a purpose, all of which elevates their awareness of teaching, enables deeper understanding, and results in a positive change. As a result of reflective practice, teachers become better observers of classroom behavior, which raises self-awareness about their teaching decisions and reasons behind them. This in turn contributes to increased precision in practice, given their increasing ability to understand the motivation behind intuitive decisions (Nolan and Huebner 1989). This understanding offers information about the teacher's approach and reduces their cognitive dissonance, which then reduces reliance on traditional practice, should it not produce the desired educational results (Deutsch 1996). In turn, this independence from conventional practice contributes to forming opinions based on convictions (LaBosky 1994), whereby teachers become not only consumers of knowledge, but above all, the primary creators of new knowledge. Consequently, this contributes to the teacher's intellect, improves practical self-management, increases their ability as a practitioner to stay current with their work, and to realize the constructivist paradigm of lifetime learning (Kelly 1993; Nolan and Huebner 1989).

In addition to its influence on practicality, reflectivity is considered to influence students as well. How the teacher's reflective practice influences the critical abilities of their students is a topic often discussed in the literature and was at the core of recent appeals for educational reforms in Serbia. As teachers increase their awareness of reflective practice, they become behavioral models for their students and are more likely to incite similar behavior (Nolan and Huebner 1989). However, a cursory survey of the literature reveals a lack of empirical studies on the direct influence of the teacher's reflectivity on student achievements (Stewart and Richardson 2000).

Contemporary education requires competent teachers who organize lectures and encourage and motivate their students, since the competence of teachers has a direct influence on the achievements of their students. Teachers who are thoughtful and rational strive to achieve more so that the next generation of teachers will influence their students more positively. This is attainable only through constant professional development, as educational institutions can neither be developed, nor educate a competent student without a learned teacher and their skills, abilities, motivation, and expanded professional role. One way to introduce the teacher's innovations into the educational process is accredited professional meetings of the Republic of Serbia, aimed at advancing teaching practice through exchanging professional experiences (Nikolić 2015). Information that teachers obtain in this way helps them gain insight into their own work, spot deficiencies and advantages,

and motivates them to identify other means of bettering their educational practice. Stošić and Stošić (2013) noted that teachers need to prepare themselves for the implementation of innovations in education in order to get the most out of them and therefore shift from a traditional to modern school. Today, teachers are trained to use innovations in teaching, but they are not sufficiently trained to implement it in the classroom (Stošić and Stošić 2015).

Therefore, a reflective teacher should be capable of conducting small-scale research aimed at evaluating the efficiency of new ideas in their own classroom. Such a teacher not only adopts didactic models encountered in the literature but is also expected to test and modify different approaches through a cycle of carefully evaluated research. Thus, the teacher becomes a reflective practitioner, focused on improving their own educational work.

This study focuses on examining teacher reflections on improving their *teaching practice.* The goal of this study is to evaluate the importance of the teacher's efforts and participation in advancing their own teaching practice.

Methods

Research problems and tasks

Specific tasks established in this research led to the postulation of the following hypotheses: 1) there is an exchange of experiences between teachers; 2) teachers are engaged in self-evaluation of their work; 3) teachers are engaged in activities directed at their professional development; 4) there is a collaboration between the teacher and students; and 5) teachers contribute to raising students' awareness about current social issues (tolerance, discrimination, addiction) through their own practice. The hypotheses of the research were postulated on the basis of the stated tasks—to examine the levels of statistically significant differences in the respondents' answers regarding two variables: the stage of education (primary or secondary school teachers) and the years of teaching experience (0–10, 11–20, over 21).

The sample

The sample consisting of school teachers is seen as an appropriate one as it includes teachers of both lower and higher grades of primary schools in Serbia. Part of this study was conducted by forwarding the instruments to teachers on social networks and included a total of 240 teachers: 108 lower grade teachers (4 grades) and 132 higher grade teachers-class elders (8 grades) in elementary schools during the 2016/2017 school year.

Techniques and instruments

A descriptive method was used for the research, while a scaling technique was used for data gathering. A Likert scale (Teacher Reflectivity Questionnaire) by Akbari (2007) was translated into Serbian, modified as needed, and used as an instrument in this study. A five-grade estimations scale containing 28 items was used.

Data processing

Besides frequencies and percentages, the following statistical procedures were used in the data analysis: Cronbach's Alpha test, factor analysis, the arithmetic mean, the standard deviation, the t-test, and ANOVA for independent samples.

Results

The reliability of the teacher reflectivity scale was determined to be very high (Cronbach's Alpha test = 0.93) by examining the metric characteristics of the instrument (Table 1).

Cronbach's Alpha test	**N**
0.93	28

Table 1: Reliability scale of Teacher Reflexivity (TR)

The data factoring performed in this study emphasized the importance of the following factors: professional development, social themes, lecturing, observation and teaching, tolerance and democracy, and communication with students (Table 2).

Factors	% of Variance				
Professional development	**Social issues**	**Lectures**	**Lecture observation**	**Tolerance and democracy**	**Conversation with students**
0.80*	0.00	-0.00	-0.06	-0.05	0.04
0.72	0.03	-0.12	0.00	-0.07	-0.04
0.59	0.15	0.01	-0.01	0.11	-0.15
0.47	0.10	-0.00	0.22	-0.03	-0.23
0.45	0.30	0.02	0.02	0.34	-0.10
0.38	-0.15	-0.15	0.29	-0.03	-0.15
0.05	**0.78**	0.01	-0.03	0.16	0.07
0,06	**0.72**	-0.15	-0.09	0.04	0.11
-0.07	**0.71**	0.14	0.12	-0.08	-0.30
-0.03	**0.66**	-0.05	0.07	0.00	-0.18
0.05	**0.63**	-0.22	0.11	-0.10	0,12
0.03	**0.50**	-0.06	0.16	-0.26	-0.17
0.30	**0.36**	-0.18	0.02	-0.21	-0.05
0.07	-0.02	**-0.72**	-0.00	-0.36	-0.04
-0.03	0.11	**-0.69**	-0.03	0.06	-0.27
0.19	0.23	**-0.63**	-0.23	0.17	-0.02
-0.14	0.17	**-0.60**	0.29	0.19	-0.12
-0.15	0.01	**-0.58**	0.43	0.06	-0.02
0.24	0.19	**-0.52**	-0.14	0.07	0.01
0.33	0.02	**-0.50**	0.07	-0.27	0.03
0.31	-0.01	**-0.45**	0.06	-0.39	-0.05
-0.05	0.15	0.06	**0.80**	-0.15	0.05
0.42	-0.02	-0.11	**0.51**	0.34	-0.09
0.34	0.05	-0.06	0.49	**0.40**	-0.12
0.14	0.41	0.07	0.18	**-0.45**	-0.14
-0.16	0.05	-0.10	-0.04	0.11	**-0.91**
0.12	-0.06	0.00	-0.07	-0.03	**-0.79**
0.30	0.03	0.01	0.08	-0.24	**-0.54**

Table 2: Factor analysis
** The values of the items with the highest cumulative % of variance that comprise the first factor further analyzed in the statistical data processing*

The first extracted factor is termed *professional development* and encompasses the following statements: I read news articles or search the Internet to learn about the latest achievements in my profession. I read books/articles on efficient lecturing to improve my performance in class. I conduct small-scale research in my class to improve awareness about teaching process. I learn/train at meetings/workshops related to teaching/teaching issues. I have considered writing articles about my experiences in the classroom. I communicate/exchange my experiences with my colleagues and seek their feedback/advice.

The second extracted factor is *social theme* and encompasses: I think about political aspects of my lectures and about ways in which I influence the political attitudes of my students. I think about cases of social injustice in my environment and try to discuss them during my lectures. I include less-frequently discussed topics such as: age, HIV, discrimination towards women, poor, and minorities. I think about how gender, social background, and race influence the accomplishments of my students. I think about other events that can influence my lectures. I think of ways to enable my students to change their social behavior to combat poverty, discrimination, and racial/ethnic stereotypes. I think about inconsistencies and contradictions in my work.

The third extracted factor is *teaching* and involves: I think about the meaning and significance of my work as a teacher. I think about ways my life experiences and background influence the way I define myself as a teacher. I think about my teaching philosophy and the ways it influences my teaching. I observe lectures of other teachers in order to become acquainted with their work. After every lecture, I document its accomplishments and failures, or discuss them with my colleagues. I think about positive or negative role models I had as a student and the way they influenced my work. I think about my advantages and disadvantages as a teacher. I try to find out which aspects of my work I enjoy.

The fourth extracted factor is *observation of teaching* and encompasses the following: I discuss practical/theoretical questions with my colleagues. I retain lecture material for subsequent discussions.

The fifth extracted factor is *tolerance and democracy* and includes: I ask my colleagues to observe my classes and comment on them. I think about ways to promote tolerance and democracy in my classes, and in the society in general.

The last extracted factor is *conversation with students* and encompasses: I talk with my student in order to learn more about their families, hobbies, interests, and inclinations, as well as their learning styles and tendencies. I ask my students if they like their assignments or not.

For the purposes of this research, the first factor with the highest percentage of variance is analyzed (Table 2).

The teacher's awareness of what is desired does not always influence their practice or implicit pedagogy, even when it fits the norms. Therefore, the prevailing normativity theories need to be enhanced with experimental insights into the teacher's work. The results of this study are described below.

This study sought to answer the question of whether teachers exchange experiences with their colleagues. The teachers expressed the highest agreement with

the statement that they exchange classroom experiences with their colleagues and seek their advice. Most teachers (64.2%) stated that they exchange their classroom experiences with, and seek advice from, their colleagues, while over half (55.8%) discussed practical or theoretical questions with them. About a third of teachers (37.5%) occasionally observe lectures by their colleagues, while 36.3% do not ask for their lectures to be observed by another teacher. Observing lectures of others is particularly useful, as it can incite the teacher to think about their own work. Lectures by colleagues can serve as a model for the teacher, albeit either good or bad. Also, observing lectures by others is significant due to the creative tension that results from the teacher comparing their own methods with those of their colleagues.

Analysis of the t test results (Table 3) shows that the level of statistical significance (p) was lower than 0.05 for only two statements. For the statement "I observe lectures by other teachers in order to become acquainted with their work," the statistical significance was found to be 0.01, which implies that there is a statistically relevant difference in the answers depending on the educational stage of their students. Also, a statistically significant difference in answers was also found for the statement "I ask my colleagues to observe my lectures, and comment on my teaching" ($p = 0.00$), with lower grade teachers standing out, based on the arithmetic mean. By comparing the values of arithmetic mean (M), it can be observed that higher grade teachers ($M = 3.25$) appear more inclined to observe lectures by their colleagues compared to their lower grade counterparts ($M = 2.75$).

Professional development		**M**	**SD**	**t**	**p**
I observe lectures by other teachers in order to become acquainted with their work.	lower grade teachers	3.31	1.13	2.70	0.01
	higher grade teachers	2.94	0.97		
I ask my colleagues to observe my lectures and comment on my teaching.	lower grade teachers	3.25	1.20	3.29	0.00
	higher grade teachers	2.75	1.14		

Table 3: Exchange of experiences with colleagues with respect to the educational cycles

By analyzing the ANOVA test (Table 4), it was found that a statistically significant difference in the answers of teachers with different work experience only exists for the statement about discussing practical/theoretical questions with their colleagues ($p = 0.00$). Based on the M value, the strongest inclination was observed among the least experienced teachers. This is not surprising, given that teachers in the early stages of their career often rely to their senior colleagues for advice, and, as stated by Kyriacou (1997), they spend a certain amount of time observing more experienced teachers in the classroom. Kundačina and Stamatović (2011) indicated that a majority of teachers asked about it exchange the learnings and information gathered through professional development programs with their colleagues through both formal and informal communication. In addition to the knowledge and skills required for the job, collaboration with their colleagues is important. Relationships

in a school often depend on the distribution of power, standing, and reputation. Every organization, schools included, is a system of small groups with working interpersonal relationships.

Professional development		M	SD	ANOVA	p
I discuss practical/theoretical questions with my colleagues.	Up to 10 years	3.97	0.86	7.30	0.00
	11–20 years	3.47	0.88		
	More than 21 years	3.47	0.95		

Table 4: Exchange of experience with colleagues in relation to years of experience

The obtained results confirm the hypothesis that teachers exchange experiences with their colleagues, although slightly more than a third are not interested in attending or having their lectures attended by other teachers. This is surprising given that observing lectures by other teachers can serve as a model for one's own lectures. The greater inclination displayed by lower grade teachers is not surprising given that they typically deal with the same topics and have the same interests, and hence can learn more by observing lectures of their colleagues, which is one of the methods of self-evaluation.

In this study, a hypothesis was put forward that teachers do engage in self-evaluation of their work. Data analysis indicates that every statement has a high level of agreement amongst teachers (from 51.7–80.8%). The highest number (80.8%) agreed with the statement that they try to determine which aspect of their work offers the greatest student satisfaction, compared to a mere 2.9% who had a negative attitude towards that statement. The importance of self-evaluation was emphasized by Stančić (2015), whose study shows that self-evaluation is useful for evaluating one's own traits and work, improving practice, and in contributing to the feeling of satisfaction and motivation for further work.

By analyzing the t test results (Table 5), $p < 0.05$ was found only with the statement "as a teacher I think about my teaching philosophy and the ways it influences my teaching" ($p = 0.01$). The M value indicates that higher grade teachers ($M = 3.75$) think more about their teaching philosophy compared to their lower grade counterparts ($M = 4.10$). This is not expected, given that higher grade teachers spend more time dealing with science and theoretical and philosophical issues, while lower grade teachers are primarily occupied with teaching.

Professional development		N	M	SD	t	p
As a teacher, I think about my teaching philosophy and the ways it influences my teaching.	higher grade teachers	108	3.75	1.04	2.66	0.01
	lower grade teachers	132	4.10	0.97		

Table 5: Evaluation of one's own work based on the stage of education

Regarding their dependence on work experience, the ANOVA test results (Table 6) display a statistically significant difference with two statements. Comparison of arithmetic mean values indicates that less experienced teachers tend to contemplate more both their strengths and weaknesses as teachers ($p = 0.04$; $M = 4.35$), and the positive and negative role models they encountered as students ($p = 0.03$; $M = 3.92$).

Professional development		M	SD	ANOVA	p
I think about my strengths and weaknesses as a teacher.	Up to 10 years	4.35	0.70	3.40	0.04
	11–20 years	4.01	0.89		
	More than 21 years	4.12	0.86		
I think about the positive and negative models that I had as a student and how they influenced my work.	Up to 10 years	3.92	0.88	3.48	0.03
	11–20 years	3.59	0.09		
	More than 21 years	3.50	1.15		

Table 6: Evaluation of one's own work based on the years of work experience

The data indicate that a large number of teachers contemplate the importance of their work, their teaching philosophy, their role models as students, and their strengths and weakness.

One hypothesis put forward in this study is that teachers engage in professional development activities. The data show that a high number of teachers (75.4%) read articles pertaining to efficient lecturing in order to improve their work, 70.5% read articles or utilize the Internet to stay current with advancement in their profession, while 57.9% of all teachers attend workshops and professional meetings. However, less than a third have contemplated writing articles based on their classroom experiences.

The t test results (Table 7) point to a statistically significant difference in answers related to writing articles, depending on the grade they are teaching ($p = 0.01$). The M value shows that a higher number of lower grade teachers ($M = 3.08$) contemplates writing articles compared to higher grade teachers ($M = 2.65$).

Professional development		N	M	SD	t	p
I think about writing articles that are based on my class experiences.	lower grade teachers	108	3.08	1.17	2.72	0.01
	higher grade teachers	132	2.65	1.22		

Table 7: Doing the activities aimed at the professional specialization of a teacher considering the stage of education of the students' that they teach

The ANOVA test analysis (Table 8) shows that $p < 0.05$ ($p = 0.02$) with only one statement: I think about writing articles that are based on my class experiences. However, the results show that less-experienced teachers are more likely to follow advancements in their profession ($M = 4.25$), while teachers with 11–20 years of experience appear less interested ($M = 3.86$).

Professional development		**M**	**SD**	**ANOVA**	**p**
I read news articles or search the Internet to familiarize myself with the latest achievements in my field.	Up to 10 years	4.25	0.83	4.35	0.02
	11–20 years	3.86	0.91		
	More than 21 years	3.97	0.95		

Table 8: Engaging in the activities aimed at the professional specialization, considering the years of work experience

The obtained data thus indicate that teachers do engage in professional development activities (reading articles about efficient lecturing, advancements in their profession, and participate in workshops).

It was also hypothesized that teachers collaborate with their students. Students will learn better when there is mutual understanding and respect with their teachers. A student should be viewed as an individual with their own needs, and their opinion about different values and experiences should be appreciated. Results indicate that 83.3% of all teachers communicate with their students in order to learn their inclination and learning styles, 67.1% try to learn about their students' families, hobbies, and interests, while many teachers (79.6%) seek feedback from students about their assignments.

The t test results for two statements (Table 9) point to the existence of a statistically significant difference in answers, dependent on educational cycle ($p = 0.00$ and $p = 0.00$). By comparing M values, it is clear that lower grade teachers use communication with students to learn about their inclinations and learning styles ($M = 4.39$). By comparison, higher grade teachers ($M = 4.37$) use communication to learn about a student's family, hobbies, interests, and inclinations ($M = 3.47$). This is hardly surprising given that lower grade teachers spend more time with their students and therefore have opportunities to talk about family, hobbies, etc., compared to higher grade teachers who, due to the limited time spent with their students are more focused on lecture contents.

Professional development		M	SD	t	p
I talk to my students so as to learn what their talents and learning styles are.	lower grade teachers	4.39	0.64	3.33	0.00
	higher grade teachers	4.08	0.79		
I talk to my students so as to learn more about their family, hobbies, interests, and talents.	lower grade teachers	4.37	1.02	7.22	0.00
	higher grade teachers	3.47	0.91		

Table 9: The presence of collaboration between the teacher and students considering the stage of education

A statistically significant difference in answers depending on work experience is only present with the statement about conducting small-scale research in the classroom (Table 10). The level of statistical significance is $p = 0.03$. Research activities are conducted more by less-experienced teachers, which is expected given their increased motivation for research and improvement of their work in general, because young teachers do have a strong desire to prove their worth as teachers at the very start of their career. The data suggests that less-experienced teachers assume a research role more readily.

Professional development		M	SD	ANOVA	p
I conduct small-scale research in my class to improve awareness about teaching process	Up to 10 years	3.73	0.83	3.418	0.03
	11–20 years	3.39	0.95		
	More than 21 years	3.38	0.95		

Table 10: The presence of the collaboration between the teacher and the student considering the years of work experience

Therefore, it can be concluded that more than two thirds of surveyed teachers communicate with their students to learn about their hobbies, inclinations, capabilities.

Another question asked in this study was whether teachers contribute to raising student awareness of relevant issues in today's world (tolerance, discrimination, substance abuse and addictions, etc.). The results show that teachers do contemplate ways to promote tolerance and democracy in their classes (75.4%), ways to enable students to engage in efforts against poverty, prejudice, and discrimination (64.6%), and ways in which gender, social groups, and race influence the accomplishments of their students (50.8%). This is significant since Akbari (2007) emphasized teaching that is connected to broader social issues, such as gender equality, justice, poverty, and discrimination. He also emphasized that reflexive learning should contain a moral dimension, since teachers should regard themselves as reflective practitioners and consider the social and ethical consequences of their work (Akbari 2007). The one place where the study saw a large degree of disagreement amongst teachers

(67.5%) was the statement that teachers ponder political aspects of their lectures and the ways in which they influence the political opinions of their students. This is to be expected considering that politics is often a sensitive discussion topic.

Data from the t test (Table 11) show a statistically significant difference in almost every statement in this specific category. By calculating M values, it was observed that, compared to higher grade teachers, lower grade teachers spend more time contemplating ways to enable their students to change their social attitudes and ways to promote tolerance and democracy in their classes. This is expected given that these teachers spend more time with their students and are more focused on their class, which allows them to engage in these issues. On the other hand, higher grade teachers spend more time on cases of social injustice in their environments and on political aspects of teaching. Lower grade teachers are more oriented towards teaching practice and relations between students in their class, while higher grade teachers deal more with social and political issues.

Professional development		**M**	**SD**	**t**	**p**
I think about cases of social inequality in my surroundings and I try to discuss them in my classes.	Lower grade teachers	3.16	1.06	2.10	0.04
	Higher grade teachers	3.46	1.14		
I think about the ways in which I can encourage my students to change their social attitude in the fight against poverty, discrimination, and gender prejudices.	Lower grade teachers	4.01	0.86	2.55	0.01
	Higher grade teachers	3.71	0.96		
I think about the political aspects of my teaching and about the ways in which I can influence my students' political attitudes.	Lower grade teachers	1.98	1.26	2.05	0.04
	Higher grade teachers	2.33	1.35		
I think about the ways in which I can promote tolerance and democracy in my classes and in society in general.	Lower grade teachers	4.11	0.77	2.29	0.02
	Higher grade teachers	3.83	1.04		

Table 11: The contribution of a teacher to raising student awareness of current world problems, considering the stage of education

All the items belonging to factor 1 and extracted by factor analysis were grouped into a single factor that carries the highest percentage of cumulative variance, so that a comparison of the responses with respect to the education cycle has been made.

	Group Statistics	**M**	**SD**	**t**	**p**
Professional development	Lower grade teachers	20.91	3.99	1,49	0.04
	Higher grade teachers	20.13	4.03		

Table 12. Professional improvement factor considering the stage of education

The research data proved statistically significant differences in the respondents' answers regarding the professional development factor. This factor was valued more highly by lower-grade teachers than by higher-grade teachers. This result confirmed the hypothesis that the teachers' answers would differ significantly when considering the stage of education variable, $p < 0.05$; $p = 0.04$.

(I) Years of teaching experience	(J) Years of teaching experience	Mean Difference (I-J)	Std. Error	p	95% Confidence Interval	
up to 10 years	11–20 years	1.58*	0.62	0.03	0.06	3.09
	over 21 years	1.42	0.67	0.10	-0.19	3.04
11–20 years	up to 10 years	-1.58*	0.62	0.03	-3.09	-0.06
	over 21 years	-0.16	0.61	1.00	-1.64	1.32
over 21 years	up to 10 years	-1.42	0.67	0.10	-3.04	0.19
	11–20 years	0.16	0.61	1.00	-1.32	1.64

Table 13: Professional development factor in comparison to the years of teaching experience variable
** The mean difference is significant at the .05 level.*

The results obtained for the *professional development* factor show statistically significant differences in the respondents' answers when consider the years of teaching experience variable. The methods of multiple comparison and Bonferroni post hoc test determined a difference between the teachers with less teaching experience and those with more. Professional improvement was valued more highly by the teachers with fewer years of teaching experience than by their more experienced colleagues ($p = 0.03$). The results confirmed the hypothesis that the teachers' answers would differ significantly based on the years of teaching experience variable ($p < 0.05$).

Discussion and conclusion

The justification for this study was to provide an opportunity to gain insight into the complex phenomena of teaching reflection and change. It highlighted the complexity and constantly changing nature of teaching, as well as the way reflexive teaching should develop.

One conclusion of the study was that reflection means constant learning and continuous contemplation by teachers about their actions. The opportunity to reflect on their own practice creates a specific picture within a supportive environment, but the picture that cannot be generalized to involve the whole population. It thus represents one of the limitations of this research. This also creates possibilities for teachers to use reflective action to determine future areas of improvement in their lectures.

The data showed that 64.2% of those surveyed exchange classroom experiences with their colleagues, while slightly more than half (55.8%) contemplates practical and theoretical questions. Therefore, it can be concluded that an exchange of knowledge exists between colleagues. The comparison of M values suggests that lower grade teachers are more inclined to attend and observe lectures by their colleagues, compared to higher grade teaches, and that they seek the presence of their colleagues in their classes more frequently. By comparing answers of the surveyed groups, it was determined that practical and theoretical questions are more often contemplated by colleagues with less than 10 years of experience

Since a large portion of those surveyed (from 51.7–80.8%) ponder the significance of their work, their strengths and weakness as teachers, their teaching philosophy, and the positive and negative role models they had as students, it can be concluded that they are involved in self-evaluation. The results of the ANOVA showed that self-evaluation is more prevalent among those surveyed who are at the beginning of their careers.

A total of 75.4% of those surveyed answered that they read articles pertaining to efficient lecturing in order to improve their work, while 70.5% both reads articles and used the Internet in order to stay abreast of the developments in their professional area. Another 57.9% of participants take part in workshops or professional meetings, which confirms that teachers engage in professional development activities. The data from F test also showed that the teachers with less than 10 years of experience are more interested in learning about developments in their profession. Generally, all surveyed showed low inclination to write articles about their classroom experiences, with the t test data showing that this trend is more pronounced among lower grade teachers.

Teachers do engage with their students and try to learn about their students' interests, tendencies, and learning styles. The M data showed that lower grade teachers engage in such activities more often than their higher-grade counterparts.

It can also be concluded that teachers contribute to raising awareness in their students about current problems (tolerance, discrimination, substance addictions, etc.). From the ANOVA test, a level of statistical significance greater than 0.05 ($p < 0.05$) was found, so it can be concluded that there is no statistically significant difference between answers of the surveyed with different experience levels. From the t test and the M values, it can be seen that lower grade teachers think more about enabling their students to change their social behavior and about ways to promote tolerance and democracy in their classes, compared to their more experienced colleagues.

Finally, we can conclude that teachers do collaborate with their colleagues and students, engage in professional development activities, and, through their own work, help raise awareness among their students about current problems. The t test data showed that lower grade teachers are more oriented towards teaching practices and their enhancement and try to know their students better, which is expected given the amount of time they spend with their students. On the other hand, higher grade teachers are more focused on the taught subject and social issues. The ANOVA test data showed that teachers with less than 10 years

of experience are more willing to collaborate with their colleagues and engage in self-evaluation, stay informed about advancements in their profession, and perform small-scale classroom research compared to their more experienced colleagues, and can therefore be considered more interested in improving their work.

The hypotheses of the research were postulated on the basis of the stated tasks—to examine the levels of statistically significant differences in the respondents' answers regarding two variables: the stage of education (primary or secondary school teachers) and the years of teaching experience (0–10, 11–20, over 21). All of the postulated hypotheses were confirmed by the results obtained from the t test and ANOVA test.

The reflective approach to one's own practice, whether teaching or research, is an important precondition to learning what teachers do, what they know, and how to make improvements, both as individuals and as a society. This study was an effort to demonstrate the significance of reflective practice in advancing educational practice in Serbian schools.

References

Akbari, R. (2007). Reflections on reflection: A critical appraisal of reflective practices in L2 teacher education. *System*, 35, issue 2, pp. 192-207.

Avramović, Z. and Vujačić, M. (2010). *Nastavnik između teorije i nastavne prakse*. Beograd: Institut za pedagoška istraživanja.

Banđur, V. and Maksimović, J. (2012). Uloga akcionih istraživanja u unapređivanju vaspitno-obrazovne prakse. *Nastava i vaspitanje*, 61, issue 1, pp. 22-32.

Bognar, B. (2008). *Mogućnost ostvarivanja uloge učitelja–akcijskog istraživača posredstvom elektroničkog učenja* (Doctoral dissertation). Retrieved from http://darhiv.ffzg.unizg.hr/id/eprint/2345 (Accessed on 1. 12. 2018).

Bolton, G. (2010). *Reflective practice: Writing and professional development*. London: Sage.

Colton, A. B. and Sparks-Langer, G. M. (1993). A conceptual framework to guide the development of teacher reflection and decision making. *Journal of teacher education*, 44, issue 1, pp. 45-54.

Deutsch, G. L. (1996). Influencing factors along the road to reflective practice: Learning styles, school improvement. *Dissertation Abstracts International*, 57, issue 4, p. 1569.

Dewey, J. (1933). How we think: A restatement of the relation of reflective thinking to the educative process. Boston: D.C. Heath & Co Publishers.

Hoffman-Kipp, P., Artiles, A. J., and Lopez-Torres, L. (2003). Beyond reflection: Teacher learning as praxis. *Theory into practice*, 42 issue 3, pp. 248-254.

Jay, J. K. and Johnson, K. L. (2002). Capturing complexity: A typology of reflective practice for teacher education. *Teaching and teacher education*, 18, issue 1, pp. 73-85.

Kelly, T. (1993). *The Impacts of Structured Reflective Practice on the Teaching Decisions of Inservice Teachers (abstract).* Retrieved from https://scholarworks.umass.edu/ dissertations/ AAI9316680/ (Accessed on 1. 12. 2018).

Kundačina, M. and Stamatović, J. (2011). Stručno usavršavanje nastavnika - preduslov unapređenja vaspitno-obrazovnog procesa i profesionalnog napredovanja, *Nova škola,* 8, pp. 43-54.

Kyriacou, C. (1997). *Temeljna nastavna umijeća: metodički priručnik za uspješno poučavanje i učenje*. Zagreb: Educa.

LaBoskey, V. K. (1994). *Development of reflective practice: A study of preservice teachers*. Teachers College Press.

Lalović, Z. (2009). *Naša* škola*: Metode učenja/nastave u* školi*.* Podgorica: Zavod za *školstvo*.

Lasić, K. (2015). Uloge nastavnika u tradicionalnoj i kvalitetnoj školi. *Putokazi*. 3, issue 2, pp. 101-110.

Maksimović, J. (2013). Nastavnik – akcioni istraživač vaspitno-obrazovne prakse. *Godišnjak Učiteljskog fakulteta u Vranju*, 4, pp. 131-146.

Milrood, R. (1999). *A module for English language teacher trainers.* British Council: Moscow.

Nikolić, B. (2015). Razmenom profesionalnih iskustava učitelja do inovativnosti u obrazovanju. *Zbornik radova Učiteljskog fakulteta*, 9, pp. 315-319.

Nolan, J. E. and Huber, T. (1989). Nurturing the Reflective Practitioner through Instructional Supervision: A Review of the Literature. *Journal of Curriculum and Supervision*, 4, issue 2, pp. 126-145.

Radulović, L. (2007). Istraživanje i razvijanje obrazovanja nastavnika za refleksivnu praksu–Kritički prikaz jednog istraživanja kao građenja obrazovnog programa. *Pedagogija*, 62, issue 4, pp. 597-609.

Rodgers, C. (2002). Seeing student learning: Teacher change and the reflective process. *Harvard Educational Review*, 72, issue 2, pp. 230-253.

Schon, D. A. (1983). *The reflective practicioner: how professionals think in action*. New York: Basic Books.

Schön, D. A. (1987). *Jossey-Bass higher education series. Educating the reflective practitioner: Toward a new design for teaching and learning in the professions.* San Francisco: Jossey-Bass.

Schön, D. A. (Ed.). (1991). *The reflective turn: Case studies in and on educational practice*. New York: Teachers College Press.

Stančić, M. (2015). Nastavničke refleksije o evaluaciji sopstvenog rada. *Nastava i vaspitanje*, 65, issue 4, pp. 697-713.

Stanković, D. (2009). Involving teachers in school development. *Zbornik Instituta za pedagoska istrazivanja*, 41, issue 2, pp. 315-330.

Stewart, S. and Richardson, B. (2000). Reflection and its place in the curriculum on an undergraduate course: should it be assessed? *Assessment & Evaluation in Higher Education*, 25, issue 4, pp. 369-380.

Stošić, L. and Stošić, I. (2013). Diffusion of innovation in modern school. *International Journal Of Cognitive Research In Science, Engineering And Education (IJCRSEE)*, 1, issue 1, pp. 5-13.

Stošić, L. and Stošić, I. (2015). Perceptions of teachers regarding the implementation of the internet in education. *Computers in Human Behavior*, 53, pp. 462-468.

Urzúa, A. and Vásquez, C. (2008). Reflection and professional identity in teachers' future-oriented discourse. *Teaching and teacher education*, 24, issue 7, pp. 1935-1946.

Vujisić-Živković, N. (2007). Pedagoška istraživanja i obrazovanje nastavnika. *Zbornik Instituta za pedagoška istraživanja*, 39, issue 2, pp. 243-258.

Zeichner, K. (1994a). Conceptions of reflective practice in teaching and teacher education. In: G. R. Harvard and P. Hodkinson (Eds.). *Action and reflection in teacher education*. New Jersey: Ablex Publishing, pp. 15-34.

Zeichner, K. M. (1994b). Research on teacher thinking and different views of reflective practice in teaching and teacher education. In: I. Carlgren, G. Handal, and S. Vaage (Eds.). *Teachers' minds and actions: Research on teachers' thinking and practice*. London: The Falmer Press, pp. 9-27.

Zeichner, K. M. and Liston, D. P. (1996). *Reflective teaching: An Introduction*. Mahwah: Lawrence Erlbaum Associates.

Jelena Maksimović in Jelena Osmanović (Univerza v Nišu, Srbija), Lazar Stošić (Visoka šola akademskih študij, Dositej), Srbija)

UČITELJI KOT RAZMIŠLJUJOČI PRAKTIKI IN NJIHOVA VLOGA PRI IZBOLJŠANJU VZGOJNO-IZOBRAŽEVALNE PRAKSE V OSNOVNIH ŠOLAH V SRBIJI

Povzetek: V sodobni šoli se od učiteljev pričakuje vse več. Niso zgolj prenašalci znanja, temveč tudi razmišljujoči praktiki. V prispevku obravnavamo spremembe na področju vzgoje in izobraževanja, izboljšave pedagoške prakse, pa tudi nove vloge, ki jih učitelji prevzemajo v sodobni šoli. Ali ti dejavno sodelujejo pri izpopolnjevanju lastne pedagoške prakse? Iskanje odgovora na to vprašanje je eden od ciljev raziskave, ki se je osredotočala na proučevanje razmišljanj učiteljev o možnostih izboljševanja lastne prakse poučevanja, oz. natančneje, na razmisleke učiteljev o tem, kako lahko svoje izkušnje izmenjajo s sodelavci, opravijo samoevalvacijo svojega dela, svoje dejavnosti usmerijo v profesionalni razvoj, sodelujejo z učenci ter kako lahko ozaveščajo učence o družbenih izzivih. Uporabili smo evalvacijsko lestvico (Akbari 2007), s katero smo ocenili odnos razrednih in predmetnih učiteljev do omenjenih vidikov reflektivne prakse glede na to, koliko let izkušenj imajo (do 10 let, od 11 do 20 let, več kot 20 let). V raziskavo je bilo vključenih 240 učiteljev iz Srbije. Z empiričnimi podatki smo prišli do ugotovitve, da je mogoče na vprašanje, ali so učitelji dejavno vključeni v izpopolnjevanje lastne pedagoške prakse, odgovoriti pozitivno. Pokazali smo tudi na pomen reflektivne prakse za izboljšanje kakovosti pedagoškega dela v srbskih osnovnih šolah.

Ključne besede: izboljšanje pedagoške prakse, reflektivna praksa, refleksija učiteljev, učitelj raziskovalec, razmišljujoči praktik

Elektronski naslov: jelena.maksimovic@filfak.ni.ac.rs