

# Team teaching from the perspective of students – future teachers and pedagogues<sup>1</sup>

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## Summary

This paper actualizes the issue of acquisition of team teaching competences of university students – future teachers and pedagogues during their initial education. In light of previous research the paper examines different interpretations of the definition, characteristics, advantages and disadvantages of team teaching. The emphases is on personal integration of teachers and team worker associates, who working together, plan, conduct and evaluate the programme with one group of students.

The paper then presents findings from the research that was carried out with the aim to examine how final year students of basic academic studies (educational profiles: teacher and pedagogue) perceive team teaching and personal integration as its significant dimension. The research was conducted using the descriptive survey method and the data were collected by means of a questionnaire during the two school years (June 2011 and 2012). The research sample comprises 165 participants, specifically two generations of fourth year undergraduate students (final year) of basic academic studies at the Faculty of Education in Sombor (Teacher Education Programme – 36.36%), Faculty of Teacher Education in Hungarian in Subotica (Teacher Education Programme – 24.24%) and Department of pedagogy at the University of Novi Sad (Study Programme in Pedagogy – 39.39 %).

The findings justified our assumption that sampled students would show high interest in team teaching, and that they would, in accordance with their educational profile show preference for certain team roles. Most students think that in order to constitute an efficient team it is necessary to achieve trust and good communication between team members, whose main personal characteristics should be good organization skills, imagination (creativity), friendliness, and willingness to help others.

**Keywords:** personal integration, team roles, teamwork.

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<sup>1</sup> This paper is partly the result of work on the Project "Quality of Educational System of Serbia from European Perspective (KOSSEP)", number 179010 (2011-2015.), supported by the Ministry of Science and Technological Development of the Republic of Serbia.

## Introduction

For a relatively long time, in educational theory team teaching has been considered to be a didactics innovation. The available sources state that it emerged in the mid of the last century in the United States, when solutions were called for more efficient and rational education. The first attempts at performing team teaching were recorded in 1957 in elementary school in Lexington (Massachusetts). After several years of experimentation, team teaching grew into a movement that spread over USA and some other countries (United Kingdom, Sweden, West Germany, Japan, Canada, etc.).

Within a body of literature there are differing views of the definition of team teaching. Commonly, it is defined as instruction where two or more teachers, working together, plan, conduct, and evaluate the learning activities for the same group of students. Two major categories of team teaching could be differentiated. In the first, two or more teachers teach the same students at the same time in the same classroom, and in the second, teachers work together but not necessarily teach the same group of students or at the same time (Goetz, 2000). Team teaching could also be defined as instructional situation with two or more instructors teaching together, assuming that they may achieve collaboration during preparation of teaching, while conducting lessons, and in both processes (Jaruda & Takeuchi, 2007). Some authors lay stress on interdisciplinary character as the important characteristic of this type of instruction since it is advisable that two or more teachers implement teamwork and present contents from closely allied disciplines, although teachers may present contents from fields as disparate as, for example art history and theoretical physics (Shafer, 2001). The literature from the territory of former Yugoslavia speak about organizational form of instruction where teachers collaborate in order to plan, deliver instruction and evaluate classes jointly and in organized manner (Đorđević, 1981), and that the basic feature of this instruction is the personal integration of teachers and other associates in carrying out the program with one group of students (Poljak, 1984; Bogнар & Matijević, 1993).

Đukić and Španović (2006) studied the findings of meta-analysis of empirical research on team te-

aching in the USA in last two decades, which without any doubt prove that team teaching represents a very popular innovation. Its implementation provides for various levels of collaboration between teachers and empowers their professional development. Team teaching has positive effects on students because it fosters better achievements and positive attitude towards schooling (Spraker, 2003; Erb, 2001). Researches show that students who were team-taught scored better on knowledge tests in basic elementary school subjects than students who learned in a traditional classroom (Flowers, Mertens, Mulhall, 1999). A great body of evidence has proved that team teaching positively affects school climate (Rottier, 2002; Erb, 2001), that it encourages the personalization of teacher – student relationship (Ancess, 2000), and that the quality of instruction depends on the extent to which teachers who accept and practise team teaching are generally supported (Strahan et al., 1997). Furthermore, researchers have found a significant correlation between team duration and students' achievement (Felner et al., 1997). It is commonly thought that two teachers make an optimal team for team teaching. It is not desirable that teamwork partners are teachers who demand power and control, or some who are defensive (Robinson & Schaible, 1995).

All studies on team teaching show that team teaching produces significant (or at least acceptable) results and is beneficiary for both teachers and learners, regardless of whether it is about language or math instruction, or elementary, secondary or university level of education. Teamwork develops new approaches to instruction delivery and helps overcome academic isolation (Jaruda & Takeuchi, 2007). It supports team member communication and fosters closer relationship between teachers and their students. Students gain a mature level of understanding knowledge, and different methods and approaches in teaching encourage students to consider the validity of different concepts and analyse alternatives within the context of a given theme (Goetz, 2000). If carefully planned and efficiently executed, team teaching can be a strategy that will result in significantly better outcomes of students, enable a more comprehensive insight into thematic contents, and

reinforce cooperation and respect for different opinions (Jaruda & Takeuchi, 2007). It is said that team teaching creates supportive learning environments where each student is given more attention, while variety of teaching approaches used can also increase the potential for the team to meet the various learning styles of students (Brandenburg, 1997, as cited in: Goetz, 2000).

A study titled *Effects of team teaching on students* was published in Michigan. It shows that after they had experienced team teaching, students stated that this kind of instruction helped them prepare to overcome difficulties they would face in lower and upper secondary school (more subjects and more instructors). Moreover, it is quite clear that this model of instruction induces self-responsibility (students do their best to satisfy expectations of their teachers), as well as that learning becomes interesting and fun when instruction is delivered by a team comprised of teachers who have different styles and expertise in different disciplines. (Jaruda & Takeuchi, 2007, cited In: Španović & Đukić, 2010). Team-taught courses have been actively practiced at Stanford University, which experience lead to the conclusion that team teaching requires different preparation, particularly in regard to organization and course management. First of all, it is necessary to plan meetings that will allow teachers become familiar with their partner's material. Team teaching can help create a dynamic and interactive environment and also encourage new research ideas. Students have the opportunity to observe integration in action and the high-level intellectual debate among colleagues, which can help them better understand what is expected from them and therefore consequently improve their learning (Leavitt, 2006).

In addition to the emphasized advantages of team teaching, some authors warn of its potential drawbacks. While team teaching may prove beneficial for many students, some of them may feel frustration and dissatisfaction about having more than one teacher in the classroom. Since planning how to team-teach, and the preparation of programmes require more time from teachers than traditional teaching, if team teachers do not have sufficient time to prepare, they can easily become stressed and this can consequently reflect on the quality of teaching

(Goetz, 2000). There is a risk of conflict among team members. Although differences may be overcome by the harmonization of different concepts and approaches to team teaching, there is still a risk of teachers not being able to reach a compromise (Freeman, 1969; Harslofsky, 1969; Polos, 1965, as cited in: Jaruda & Takeuchi, 2007). When the rotating model of team teaching is implemented (each instructor teaches his/her own specialized skills area), consideration of viewpoints from different perspectives may be restricted to the same topic, which is the precondition for achieving a high level of knowledge synthesis and integration (Leavitt, 2006).

Various models applied in team teaching have been recorded throughout the world. The College of engineering and environment at Oklahoma University (USA) has introduced a new teaching concept of "mentoring through teamwork" where professors-mentors take over the role of leading teachers and create teams of graduate students in order to teach engineering to undergraduate students, and where co-teaching assistants prepare themes for discussion and participate in delivering the curriculum. The research findings on students' attitudes about this teaching method showed that majority shared positive views about team teaching. Students reported that due to a larger number of teachers it was easier for them to get information needed, and that they enjoyed reading learning materials written by authors with different styles and approaches. In Japan, team teaching has been in official use since 1970, particularly in English as a Second Language courses that are run by a team of two teachers, Japanese and a native speaker, usually from the United Kingdom or the United States. In this way, English classes not only include learning English language, but they create a multicultural environment where different cultures and traditions intervene (Jaruda & Takeuchi, 2007, as cited in: Španović & Đukić, 2010).

In the last decades, team teaching has been the subject of both theoretical and empirical research carried out in a large number of schools at different locations throughout the developed world. However, on the territories of former Yugoslavia, relatively little research literature exists on team teaching, perhaps reflecting its theoretical aspects. The exception is a research on effects of team-based instruction in the

field of labour-technical education, which included 180 first grade students and 150 second grade students of preparatory level of vocational education in the Centre for Nautical Education in Split (Republic of Croatia). Team-based instruction provided personal integration of teachers and co-workers, and it was organized so that students carried out their activities in different group sizes; in large groups, small groups or individually. This research findings proved that team teaching had positive effects on interpersonal relationships both between teachers and between students, higher level of initiative in teaching (particularly in professional practice training), and assessment. Teaching organized in varying group sizes had positive influence on students' activity and their motivation for work (Jovan, 1987).

Recently, the scientific interest of this paper authors has focused on team teaching, as a relevant innovation in elementary school practice in Serbia. They have studied the way how teachers and expert-associates perceive team teaching. The sample included 220 class and subject teachers (Španović and Đukić, 2006) and 80 expert-associates, namely, pedagogues and psychologists (Španović and Đukić, 2010). The evidence collected from questionnaires explicitly show that both teachers and expert-associates positively evaluate team teaching and express high level of interest in its implementation. Among other things, the research has shown that class teachers have more knowledge on team teaching and greater experience in team work than subject teachers. The prevailing opinion shared by the majority of surveyed teachers and expert-associates is that a flexible work organisation represents the greatest advantage of this type of instruction, and that the clear and strict distinction of team roles among team workers is seen as the most acceptable (Španović and Đukić, 2006, 2007, and 2010).

The task of a pedagogue, as an expert-associate is to affirm educational ideas for the knowledge society in which planning, realization, and evaluation of educational processes are conducted in accordance with the European standards. It is expected that a pedagogue should unite activities into a consistent system of school plans and programmes development, analytical and research work, advisory work and cooperation with the community (Kopas-Vuka-

šinović and Maksimović, 2011). Most of his/her professional tasks can be met through teamwork, where a pedagogue integrates knowledge and experience with teachers and other expert-associates. They participate in teams whose members combine expertise, competence and personal resources with the aim to perform a complex task that does not represent a simple sum of individual elements of the task (Kobolt and Žižak, 2007). On the other hand, teachers are also expected to be trained to practice new modes of direct work with students, which among all include "teamwork with other teachers and other expert-associates that participate in educational process with the same students" (Razdevšek-Pučko, 2003, p. 44). Additionally, another unavoidable task is to train teachers so as to be able to motivate their students properly for work in contemporary forms of teaching (Csapó and Ivanović, 2013).

## Method

The goal of the research that was carried out was to examine how students – future teachers and pedagogues perceive team teaching and personal integration as its key characteristic. Within this context the research tasks were determined as follows:

- to determine how students assess their personal knowledge of team teaching and how much they are interested in its performance, as well as to determine whether there is a statistically significant difference in students' responses with regard to the time of testing (school year)
- to find out which roles in the team students prefer and which, in their opinion, contribute to building a successful team and to determine whether there is a statistically significant difference in responses with regard to the educational profile
- to examine how students evaluate their personal features that can help them (and they would like to possess) become successful team workers.
- In line with the so defined tasks and research problems, we examined the hypotheses rooted in relevant concepts and results from the existing research on team teaching:
- Although they estimate they are partially familiar with team teaching concepts, students show interest to apply team teaching in practice. There is statistically significant difference in respon-

ses in regard to time of the research, or final year of study.

- Future teachers will prefer a strict division of roles in a team and the role of a team-worker, whereas future pedagogues will show preferences for a more flexible division of team roles, the role of a coordinator, researcher and evaluator regardless the time of research.
- When analysing which of the characteristics required for team teaching they possess, students will primarily choose: sociability, readiness to accept other opinions, organizational skills, responsibility and discipline.

The research was conducted using the descriptive survey method and the data were collected by means of a questionnaire during the two school years (June 2011 and 2012). Within the context of a broader research on perception of team teaching (Španović and Đukić, 2006 and 2010), a special instrument was constructed. For the purpose of this study, students' responses in the survey were analysed. The set of questions in the questionnaire related to students' knowledge of team teaching, their interest to apply this form of teaching, preferences of team roles and flexibility in their distribution, beliefs about what is necessary for building a successful team, and evaluation of their own personal features strongly required for a successful team work. Independent variables in the research are features for which we assumed would differentiate students' preferences, interests, and beliefs, and they include time of research (final year of basic academic studies: academic year 2010-2011 and 2011-2012) and educational profile (teacher and pedagogue). In the context of increased social changes both pedagogues and teachers represent the crucial link within the structure of education system reform. There is no reform that could be carried out if it lacked the approval and support by the pedagogues (Knežević-Florić, 2006). The survey of teacher and pedagogue education study programmes in Vojvodina has shown that they contain explicitly defined contents about team teaching through didactic and methodology subjects and that the defined learning outcomes underline the importance of team-based work and collaboration. As O. Knežević-Florić (2006) has put it, the whole concept of developmental and educational activities relies on scientific methodo-

logy in the work of the pedagogues, whose task is to develop action programmes that help apply theoretical knowledge into practice. On the other hand, it is the task of the teachers to implement and realize these action programmes in practice. In the light of both intervening pedagogical activities and differences between the primary tasks of teachers and pedagogues, the educational profile is seen as an independent variable. If we have in mind that the acceptance of the new Law on Higher Education of the Republic of Serbia (2005) initiated increased activities in the process of implementation of the Bologna Declaration into institutions of higher education, it was rightly expected that teacher and pedagogue education faculties would intensify the acquisition of interpersonal competences such as team work and the ability to work in interdisciplinary teams (Vukaso- vić, 2006). This is why the choice of the independent variable – time of research (final year of study) is based on our expectations that students enrolled in academic year 2008-2009 would have better knowledge and would show greater preference to apply team teaching in comparison to students enrolled in academic year 2007-2008. The dependent variable is defined as students' perception of team teaching that implies their opinions (and beliefs) about team teaching and personal integration therein, and interest for its implementation. The research sample comprises two generations of fourth year undergraduate students (final year) of basic academic studies at the Faculty of Education in Sombor (60 students of Teacher Education Programme – 36.36%), Faculty of Teacher Education in Hungarian in Subotica (40 students of Teacher Education Programme – 24.24%) and Department of pedagogy at the University of Novi Sad (65 students of Study Programme in Pedagogy – 39.39%). According to the criterion related to the final year of basic studies which lasted four years, 85 examinees (51.52%) from the sample graduated in academic year 2010-2011 (they were questioned in 2011), while 80 students (48.48%) belong to the generation who completed their studies in academic year 2011-2012 (enquiry conducted in 2012). The data indicate to the approximate uniformity of the sample for variable: time of research (academic year). In the sample structured after the educational profile we examined 100 future teachers

(60.61%) and 65 future pedagogues (39.39%). Although the number of student respondents comprises higher percentage of future teachers, the sample evenly represents the cohort of fourth year students enrolled in basic academic studies of both educational profiles who are educated at faculties in Vojvodina. From 165 students, only 17 (10.30%) of them were male students, therefore this variable was not taken into consideration in the concluding remarks. At the moment of research, the age of students was in the scope from 22 to 24.

## Research results

The data collected from the responses (frequency and percentage) are categorized in regard to time of research and educational profile. The significance differences among them, in regard to the above mentioned variables, were examined by the means of chi-square test. The results follow the defined tasks of the research.

Starting from the fact that subject programmes that fall under the scope of pedagogical disciplines (didactics and methodology of teaching) involve contents about team teaching, we wanted to find out how students assess their own knowledge of this innovation. In table 1, we can clearly see that the majority of students stated they have partial (but insufficient) knowledge about team teaching concepts, although

we have to consider that almost one third of all student respondents gave a positive answer to the question. If we compare the results against the variable – time of research, it can be seen that students who were questioned in 2012 have more favourable assessment. The number of positive responses is slightly increased, while the number of negative answers is significantly lower. There is no statistically significant difference between students' responses, as indicated by the value of chi-square test ( $\chi^2 = 0.874$ ;  $df = 1$ ;  $p > 0.05$ ). Due to low frequency of responses, second and third option were conjoined.

Since the research participants were final year students who completed all courses of their study programmes, we wanted to find out whether they attended any form of education/training about team teaching that was organized outside the regular classes, at Universities or some other institutions. We started from a new instructional paradigm which implies that both teacher education and pedagogy study programme should increase students' interest to create their own pedagogical training programmes and to take part in parallel professional development programmes. Findings presented in table 2, explicitly show that over 95% of students have not attended any seminar, conference, or related additional training on team teaching. This fact leads us to conclude that initial education of teachers and pe-

**TABLE 1** THEORETICAL KNOWLEDGE AND UNDERSTANDING OF TEAM TEACHING (RESPONSES BY TIME OF RESEARCH/ACADEMIC YEAR)

Responses	2010–2011		2011–2012		Total	
	f	%	f	%	f	%
Yes	24	28.24	28	35.00	52	31.52
Partially, but insufficiently	50	58.82	51	63.75	101	61.21
No	11	12.94	1	1.25	12	7.27
Total	85	100	80	100	165	100

**TABLE 2** ATTENDANCE OF SEMINARS, CONFERENCES, AND OTHER FORMS OF TEAM TEACHING EDUCATION (RESPONSES BY TIME OF RESEARCH/ACADEMIC YEAR)

Responses	2010–2011		2011–2012		Total	
	f	%	f	%	f	%
Yes	3	3.53	3	3.75	6	3.64
No	82	96.47	77	96.25	159	96.36
Total	85	100	80	100	165	100

**TABLE 3** STUDENTS' INTEREST FOR IMPLEMENTING TEAM TEACHING IN PRACTICE (RESPONSES BY TIME OF RESEARCH/ACADEMIC YEAR)

Responses	2010–2011		2011–2012		Total	
	f	%	f	%	f	%
Very interested	24	28.24	28	35.00	52	31.52
Interested in occasional team teaching	58	68.24	50	62.50	108	65.45
Not interested at all	3	3.53	2	2.50	5	3.03
Total	85	100	80	100	165	100

**TABLE 4** PREFERENCES OF TEAM ROLE DISTRIBUTION IN RELATION TO THE LEVEL OF DISTINCTIVENESS (RESPONSES BY EDUCATIONAL PROFILE OF STUDENTS)

Responses	Teacher		Pedagogue		Total	
	f	%	f	%	f	%
Clear and distinctive team role distribution	57	57.00	33	50.77	90	54.55
Blurred distinction of roles	18	18.00	3	4.62	21	12.73
Team roles created as needed	25	25.00	29	44.62	54	32.73
Total	100	100	65	100	165	100

dagogues still rests on the traditional paradigm of high education.

The evidence presented in table 3, seems to indicate that both generation of students show interest for the implementation of team teaching in practice, although the younger generation cohort slightly edges out the older generation. The value of chi-square test brings us to the conclusion that there is no statistically significant difference in students' responses ( $\chi^2 = 0.874$ ;  $df = 1$ ;  $p > 0.05$ ). Due to low frequency of responses, second and third option were conjoined.

A large body of studies on team teaching concerns teamwork dynamics (Jovan, 1987; Jaruda &

Takeuchi, 2007; Kobolt & Žižak, 2007; Đukić & Španović, 2008; Jurčić, 2011). A successful team relies on more or less precise distinction of roles assigned between team members who are connected by a mutual goal and vision. The results say that more than a half of future teachers and pedagogues prefer teams with clear and distinct role distribution (table 4). However, chi-square test value shows there is a statistically significant difference in respondents' responses ( $\chi^2 = 10.457$ ;  $df = 2$ ;  $p < 0.05$ ). The significance of the test was influenced by the fact that a larger number of pedagogy students (44.62%) showed interest in teams in which roles were created as needed.

**TABLE 5** TEAM ROLE PREFERENCES (RESPONSES BY EDUCATIONAL PROFILE OF STUDENTS)

Responses	Teacher		Pedagogue		Total	
	f	%	f	%	f	%
Coordinator	25	25.00	21	32.31	46	27.88
Team worker	44	44.00	26	40.00	70	42.42
Original thinker	7	7.00	5	7.69	12	7.27
Evaluator	10	10.00	4	6.15	14	8.48
Reporter-Spokesperson	5	5.00	6	9.23	11	6.67
Researcher	3	3.00	2	3.08	5	3.03
Specialist	6	6.00	1	1.54	7	4.24
Total	100	100	65	100	165	100

From the data presented in table 5, it can be recognized that the respondents mostly opted for the role of a team worker (42.42 %). Slightly less interest was shown for the role of coordinator (27.88%), while the preference for other team roles was rather poor. Despite the fact that, when compared to teacher students, the majority of pedagogy students would choose the role of a coordinator, the value of chi-square test does not show a statistically significant difference in their responses ( $\chi^2 = 1.263$ ;  $df = 3$ ;  $p > 0.05$ ). Due to low frequency the following options were conjoined: original thinker and researcher; evaluator, reporter and specialist.

The literature states that team teaching offers huge possibility for instructional process rationalization, it encourages stronger cooperation between school personnel and student groups, strengthens individual

and shared responsibility, and the like (Jovan, 1987; Ancess, 2000; Rottier, 2002). This is why we wanted to find out which advantages would drive students to implement team teaching in practice. The analysis of research data clearly show that there is a statistically significant difference in the responses offered by future teachers and pedagogues, which is justified by the chi-square test value ( $\chi^2 = 9.178$ ;  $df = 3$ ;  $p < 0.05$ ). Due to low frequency the last two options were conjoined. Majority of pedagogy students are interested in team teaching because it can increase dynamics both of teacher's and of student's work. The test significance was influenced by different distribution of teacher students' responses, since their responses are evenly distributed to the above mentioned advantage (34%) and to the possibility to achieve better correlation between academic disciplines (35%).

**TABLE 6** INTEREST FOR TEAM TEACHING IN RELATION TO ITS ADVANTAGES (RESPONSES BY EDUCATIONAL PROFILE OF STUDENTS)

Responses	Teacher		Pedagogue		Total	
	f	%	f	%	f	%
Increased dynamics of both student and teacher activity	34	34.00	34	52.31	68	41.21
Stronger cooperation between teachers and between students	18	18.00	14	21.54	32	19.39
Better correlation between academic disciplines	35	35.00	10	15.38	45	27.27
Implementation of differentiated instruction	9	9.00	6	9.23	15	9.09
Teacher is primarily the one who programmes and organizes the teaching process	4	4.00	1	1.54	5	3.03
Total	100	100	65	100	165	100

**TABLE 7** MOST IMPORTANT ASPECTS IN BUILDING A SUCCESSFUL TEAM FOR TEAM TEACHING (RESPONSES BY EDUCATIONAL PROFILE OF STUDENTS)

Responses	Teacher		Pedagogue		Total	
	f	%	f	%	f	%
Trust and good communication between team members	37	37.00	49	75.38	86	52.12
Distinct distribution of tasks and responsibility for team members	36	36.00	8	12.31	44	26.67
Ability to respect rules in making team decisions	19	19.00	5	7.69	24	14.55
Ability to give up own ideas	8	8.00	3	4.62	11	6.67
Total	100	100	65	100	165	100



According to the opinion shared by three quarters of pedagogy students (75.38%), trust and good communication between team members are the key characteristics needed for a team to be successful. In this respect, the opinions of students –future teachers differ, since they almost evenly opted for the above mentioned response (37.00%) and for the option saying that tasks and responsibility should be clearly and distinctively assigned to the members of a team (36.00%). The value of chi-square test shows that the difference between the participants' responses is statistically significant at both levels with conjoined responses for the last two options, due to low frequency ( $\chi^2 = 23.437$ ;  $df = 2$ ;  $p < 0.05$ ).

Assuming they participate in teamwork, the students were expected to chose from the corpus of proposed characteristics, the one for which they assume can help become successful, and the one they would like to have in order to become successful. The majority of students chose the characteristic that describes a team member as sociable and a good team worker (24.85 %), and afterwards follow: ability to accept what others think (17.58 %), responsibility and discipline (16.36 %), and organization skills (12.12 %). A very small number of students chose other characteristics (enthusiasm, perfectionism, reliability, imagination and creativity, and commitment to work). Among the characteristics they would like to have in order to become successful team workers, students chose as follows: Organizational skills (22.42 %), imagination and creativity (22.42 %), sociability (16.36 %), and ability to accept other opinions (10.91 %). Other characteristics were less preferred.

## Discussion

We assumed that students would declare that during their initial education they have acquired sufficient theoretical knowledge on team teaching. However, we could but partially prove this hypothesis. On the one hand, there emerged the question about whether and how team teaching contents are represented in pedagogical, didactic and methodology disciplines within initial education study programmes. On the other hand, no matter how comprehensive theoretical knowledge students have acquired, it is evidently clear that what is missing is a stronger link between

theory and practice as a condition of reflexive processing of the acquired knowledge. The survey of the opinions, collected from Sombor Faculty of Education students, on the role of professional practice in the acquisition of professional competences, reveals the fact that teacher education students hardly had the chance to apply their knowledge on team teaching during the execution of professional practice (Španović, 2008). It is only possible to implement theoretical knowledge about team teaching, when students, prospective executors of educational activities consider it desirable. "Compared to knowledge, teacher beliefs have more influence on the way they define their professional tasks and roles, and therefore they represent stronger predictors of behaviour" (Pajares, 1992, as cited in: Macura-Milovanović, 2012, p. 250). What we find encouraging is that students have shown high interest in team teaching, which tends to increase year after year. Consequently, the articulated need for intensified training in team teaching during students' professional practice is justified. In her research on educational concept of fourth year students at Teacher education faculties in Serbia, Vujisić-Živković (2005) observes that prospective student teachers prefer a concept of professional education in which a key feature of the curricula is the importance accorded to practical training. The results indicate that majority of students think that only applicable knowledge matters.

More favourable results regarding knowledge about this innovation were achieved in the research on teachers' perception of team teaching in 2006 (38.18% of teachers stated they were well familiar with team teaching, while 53.18% said their knowledge on team teaching was insufficient). This insignificant variance may have occurred because students acquired only theoretical knowledge as the result of the pedagogical-didactical scientific discourse. The lack of action, professional, and practical knowledge had implications on the overall results. What we find inspiring is the findings which indicate that the younger generation of students has shown a higher level of knowledge on team teaching. However, in 2002 the teachers had a chance to participate in the process of school developmental planning, and throughout the training to learn about the conditions for successful team building, team work characteri-

stics, and different approach to team roles. It is evident that in the last decade no professional training in this field has been available in Serbia.

In respect to the nature of professional activities, we started from the hypothesis that future teachers will prefer clear and distinct distribution of roles in a team and the role of a team worker, while future pedagogues will chose a more flexible role distribution and activities which have to do with coordination, research and evaluation. Our hypothesis was mainly proved, except for that we erroneously assumed that future pedagogues would choose the roles of researcher and evaluator, which did not happen. Majority of teachers, questioned in 2006, also found that a clear and distinctive team role distribution was acceptable (60.45 %). The result was just what we expected when we keep in mind that at certain stages of team teaching, competition and comparison of engagement may occur among teachers.

Team dynamics is complex and each team member interprets his/her reactions differently according to his individual feelings and previous experience. Each team activity has individual attribute, which is to say that it provokes subjective experience in every team member, so the difference between own views and other members' views can lead to disorientation in team work (Kobolt and Žižak, 2007). Regardless this circumstance, school tasks to be realized by pedagogues imply greater flexibility when team roles are concerned. As for the role of a team worker, teachers who participated in the previous research (2006) gave very similar responses (40.45%). The findings could be interpreted in the light of cognition that professional and team roles intertwine and students opted for the roles of a team worker and a coordinator in accordance with their professional competences. However, it is generally thought that an effective team is a team which can ensure the synergy between different roles in different activities (Kobolt and Žižak, 2007). N. Vlah and Z. Pinoza Kukurin advocate the thesis that "in the hidden curriculum context teachers and educators must have cooperative attitudes and acquire them during their studies" (Vlah & Pinoza Kukurin, 2012, 49).

Authors dealing with preconditions for effective team building agree on the fact that team teaching may give good results if teachers and other team

associates work together as partners. Only in this way can they focus on instructional goals, procedures and outcomes, both for students and for partners (Maroney, 1995). Since future teachers are more oriented to direct performance of team teaching, it was expected they would emphasize the importance of tasks and responsibility distribution among team members. This could be explained by the fact that they did not have a chance to experience working in a team, and that a team development journey is rather complex. Before team positions and roles are well established, a team has to pass through the first stage which carries a range of uncertainty, quest for assurance, and expectations analysis. Only after positioning it is possible for a team to build confidence, which enables the achievement of consensus on team goals (Kobolt and Žižak, 2007).

When we talk about the benefits of team teaching, it is interesting that in terms of highlighting the importance of correlation between educational areas there is a significant difference in the opinions of students studying to be teachers and teachers in practice. While 35% of students believe that it is a significant advantage of team teaching, this option is chosen by only 7.35% of teachers questioned in 2006. Result can be explained by the fact that the study of the didactic-methodical disciplines, in students – future teachers promotes and intensifies the understanding of an integrated approach to teaching and develops the capacity for thematic planning.

In accordance with the findings that explicitly see team teaching as beneficiary, we have justified our expectations that in the analysis of their own attributes needed for successful teamwork, students would most commonly chose: sociability, readiness to accept other opinions, organizational skills, as well as responsibility and discipline. We have considered these responses important, because it has been proven that the construction of professional knowledge is based on students' beliefs and personality traits which can be acquired and verified only in action, through personal experience in a classroom or school. Professional associates have expressed similar views (Španović and Đukić, 2010). The majority express readiness to accept other people's opinions and think they need organizational skills in order to be successful team workers. Researchers into group processes point

out that individual characteristics may have positive effects on team activities, among which the most important are: goal orientation, self-consciousness, ability to communicate and integrate different opinions, responsibility, team commitment, persistence in advocating personal beliefs, and so on (Mass & Ritschl, 1998, as cited in: Kobolt and Žižak, 2007, p. 375).

## Conclusions

Scientific and technological development and globalization require from individuals and societies to quickly and effectively adapt to the changes. Team work must therefore be recognised as a postulate of a new era that aims to change the established academic practice in which teachers are isolated, and generally teach solo. Orientation to team work has held a prominent place in the reform of elementary school in Serbia since the beginning of this century. Even the UNESCO Commission in its Report on Education for the Twenty-first Century (1997) has pointed out that the foundations of future education are the development of team work skills and competences to overcome various challenges and contingencies. It is known today that in the first phase or initial teacher education students are trained to master new competences including teamwork skills, which teachers need in order to work in the classroom and/or school, but also in a broader social context, or in collaboration with other social partners. It is of great importance to know the views of students-future teachers and pedagogues about team teaching as

a new organizational form of instruction, because both positive and negative beliefs may have immediate impact on the way they will behave in practice. A professionally qualified teacher is supposed to have reflexive competences in order to apply theoretical knowledge into practice appropriately; therefore it is necessary that action and reflection continually interchange in the process of teaching.

The study, whose results are presented in this paper, has predominantly focused on the perception of team roles and requirements for building a successful team. The reason for this lies in the fact that future teachers are expected to directly implement team teaching, while the task of future pedagogues will be planning, monitoring and evaluating effects of teaching. The evidence seem to indicate that students' perception of team teaching is basically positive, although it is necessary to ensure that both future teachers and future pedagogues can have a systematic and continual training in teamwork, addressing issues such as exchange of experience and material, utilization of school premises, equipment and teaching aids, team planning, preparation, realization, and evaluation of teaching. Since, schools provide general preconditions for team teaching (diversity of learning contents, parallel classes, additional instruction, optional instruction, elective instruction, multimedia approach to teaching, and so on), we may rightly expect that teachers and expert-associates will receive pedagogical education that can help them acquire these competences.

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