

# Bridging the Gap between Teachers' Initial Education and Induction through Student Teachers' School Practice: Case Study of Serbia

Tünde Kovač Cerović<sup>1</sup>, Jelena Radišić<sup>2</sup> and Dejan Stanković<sup>3</sup>

<sup>1</sup>Department of Psychology, Faculty of Philosophy, University of Belgrade

<sup>2</sup>Institute for Educational Research in Belgrade

<sup>3</sup>Centre for Education Policy in Belgrade

## Abstract

*Student teachers' school practice is an important part of initial teacher education (ITE) as it bridges the gap between ITE and subsequent induction and professional development. Since recently, school practice has been obligatory in Serbia as part of ITE. However, this development faces many challenges. We examine the results of a survey carried out to find out how school practice is organized at 44 faculty departments that educate future teachers at the four biggest state universities in Serbia. The results show that the requirements and organization of student teachers' school practice vary across different faculties and that the outcomes and the content of the student teachers' school practices are not aligned with the new demands of the teaching profession. Differences are found between departments educating class teachers and subject teachers, yet intra-group differences are high, indicating overall fragmentation of ITE in this respect. All surveyed departments report on a lack of essential cooperation between the faculty and practice schools, insufficient duration of student practice and a lack of human resources. As a response to the state of affairs in ITE in Serbia, we discuss a "practice school" model, aiming to overcome the gap between the academic part of ITE and student practice, as well as the initial challenges of this model.*

**Key words:** *faculty-school cooperation; initial teacher education; practice schools; student teachers' school practice.*

## Introduction

Contemporary evidence-based policy argues that prospective teachers have to be educated in a professionalized format (e.g. Darling Hammond & Sykes 1999; Buchberger, Campos, Kallos, & Stephenson, 2000; OECD 2005; Sahlberg, 2011; McBeath, 2012). Besides the policy-improving teacher selection, licensing, teacher standards, professional development and career advancement, initial teacher education (ITE) has to be professionalized in terms of its curricula, targets and staff involved (e.g. Buchberger et al., 2000). This needs a reconsideration of the *school practice as part of ITE*. Following current changes of ITE in Serbia, we examine a special, small niche of ITE, the student teachers' school practice. These constitute student teachers' initial education, bridging the gap between the more theoretical parts of ITE and the actual professional realm the school teachers face when they start to work. Student teachers' school practice is the place of the integration of knowledge from a variety of disciplines, and a place for gaining experiences and developing competences that are essential for the teaching profession.

### *The Role of Student Teachers' School Practice*

Initial teacher education (ITE) is considered to be the first crucial stage in the professional journey all future teachers embark on. Over the years ITE has been increasingly influenced by international developments (e.g. Education & Training 2020 strategies, European Higher Education Area development) (Biesta 2012), which to an extent has led to more convergent teacher education practices, at the same time strengthening international academic cooperation (TUNING, 2005; European Commission, 2013).

If we take into account that teachers are considered to be among the most powerful determinants of students' achievement (Hattie, 2008) and the need for every teacher to possess highly refined knowledge and skills on a variety of different strategies for different purposes while working with students (Darling-Hammond, 2006), ITE is there to provide the new teachers with these basic "tools" necessary for meaningful learning to take place in their classroom. This means that through ITE student teachers need to acquire basic classroom teaching competence to be able to perform at a satisfactory level early in their career in order to be prepared for continuous professional development (CPD) and to respond critically to the demands for the innovation and improvement of their own practice (Hagger & McIntyre, 2006).

Student teachers' school practice is considered to be an effective tool within ITE for facilitating just that. Even more so, it has been proven to be an important factor of teachers' preparedness to teach (Darling-Hammond, 2000; OECD, 2014). Therefore, it is recommended that ITE programmes comprise carefully mentored extended school practice (no less than 30 weeks), intertwined with academic coursework (Darling-Hammond, 2006). Within the EU countries school practice is organized in many different ways, but they are required as part of ITE everywhere (EC/EACEA/Eurydice,

2013). According to Eurydice data from 2011/12, in the EU countries the number of hours per student spent in school placement varied most often between 100 and 800, with some exceptions (e.g. Cyprus 67 and UK 1065). TALIS data from 2013 (OECD, 2014) also witness that on average 67.1 % of lower secondary education teachers do their practice in all subjects they teach during their initial education. The percentage is much lower in some countries (e.g. Italy – 35%, Iceland – 42.2%, Spain – 44%) and much higher in others (e.g. Poland – 88%, Croatia – 85.9 %, Singapore – 82.6 %, Netherlands – 82.4 %, OECD, 2014)

Besides the duration of student teachers' practical placement, much attention has been devoted to the structure and content of school practice (i.e. *hospitation*<sup>1</sup>, small-scale teaching, independent teaching), the role of students' applied or action research during practical placement (see Niemi, 2008), the role of mentors and mentoring as assisted performance (e.g. Tharp & Gallimore, 1988; Feimen-Nemser & Beasley, 1997) and the collaborative problem solving arrangements in creating and implementing the curriculum of school practice for each student teacher (Buchberger, 2013). Indeed, having in mind the shift of focus in the teachers' role from 'thought to teach the established content' to 'high-level professional knowledge workers' (Schleicher, 2011), a thorough scrutiny of the ways all these aspects of student teachers' learning during their practical school placement are continuously constructed and reconstructed. This implies that the "learning triangle" consisting of faculties and faculty staff – practice schools and mentors in practice schools and – student teachers is necessary. It seems however, that many critical questions remain yet to be answered by focusing more attention on the complexities of the context, culture, the social and situated nature of the student teachers' learning, to how clinical experience can become critical experience (Anderson & Stillman, 2013) or, to echo Popkewitz (1993), on more subtly understanding the ways of how the rhetoric and social arena of the institutional change of ITE can foster or stall the development of new practices.

An overview of teacher education policies in South-East Europe (Zgaga, 2006) showed that, although ITE institutions conveyed a somewhat optimistic view on their development and their cooperation with schools, practicing teachers were more critical about the pre-service teacher education in their countries. Teachers from Romania, Serbia, Bosnia and Herzegovina, Croatia and Albania emphasized the need for the study programmes to put more stress on practical experiences in the course of student teachers' actual teaching. One of the recommendations of the study is that *regular, e.g. weekly, teaching practice, integrated into the curriculum as a common standard* should be provided to all student teachers (Zgaga, 2006, p. 38)

In the Western Balkans ITE has recently undergone changes as part of wider education reforms, but more has been accomplished on the legislative level than the level of actual practice (European Commission, 2013). ITE, schools, businesses

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<sup>1</sup> As a form of school practice students visit schools, observe the planning and performance of practicing teachers and specific aspects of teacher activities (e.g. innovative teaching, assessing).

and CPD provision remain largely disconnected and recommendations urge for increasing the school practice of students, developing and regulating the profession of teacher mentors, strengthening the dialogue and partnerships between ITE and other stakeholders and developing “hubs of excellence” (European Commission, 2013, p. 59). Nevertheless, in this study we will address mostly structural and organizational issues of ITE in Serbia, and less the intricacies of the collaborative learning processes constructed at the practical placement site.

### ***Student Teachers' School Practice during Initial Teacher Education in Serbia***

All prospective teachers in Serbia are provided ITE by universities at bachelor level, requiring 240 ECTS. The programme is organized in two different ways: at faculties of teacher education for future class teachers and at faculties of the respective academic disciplines for future subject teachers. Although there is a relatively long tradition of teacher education in Serbia (Official gazette No. 107/2012), there is a broad consensus that its quality is unsatisfactory. The main problem of teacher education is the dominance of academic, disciplinary knowledge and the negligence of the development of the professional, psychological-pedagogical-didactic competences (Rajović & Radulović, 2007; Budić, 2008; Zindović-Vukadinović, 2010; Official gazette No. 107/2012). Teacher education curricula developed by higher education institutions can vary significantly, due to the autonomy of universities (Popović, 2013), and the lack of national curriculum guidelines regulating the content and methods of teaching at these institutions (Kovač-Cerović, 2006).

One of the most important critical issues in teacher education in Serbia is the quantity and quality of student practice. Student teachers' practical placement may be considered as a missing link in the Serbian education system, as there is no real connection between teachers' initial education and their future school practice. Although it seems that there is not enough research in the field of student practice in Serbia (Gajić, 2008), scarce existing analyses do show that the level of student practice is largely uneven across the country (EC, 2013) and that student practice is not designed on a solid conceptual base (Gajić, 2008). An analysis even found that each of the surveyed ITE institutions for preparing class teachers had a different model of school practice regarding the number of hours assigned for practice, the availability of coordinators, the level of development of the respective practice school network and whether manuals are provided or not (Stanojević et al., n.d.).

Until recently the allocation of credits and study time for the professional studies and the school practice in the ITE curriculum in Serbia was not regulated at the national level, but through diverse institutional policies, whereby teacher education faculties had a more developed school practice (around 5% of study programmes according to Zindović-Vukadinović, 2010) and the faculties for academic disciplines much less so, in some cases virtually none (Kovač-Cerović, 2006).

Education of subject teachers seems to be particularly weak – it does not provide future teachers with basic professional competences. Learning academic, disciplinary content is far more valued than learning how to teach and support learning. Rajović and Radulović (2007) found that out of 175 teachers of History, Latin and French language surveyed, most perceive their initial education as being relevant only for learning the academic subject content, and believe that the most common way for developing teacher competences was their own personal experience. The authors go as far as stating that “Our experience tells us that school practice is something almost illegal” (Rajović & Radulović, 2007, p. 431). It is often the case that students perform their practice by finding their own way to do it, and not via systematically organized practice.

Other authors interested in natural science subjects came to similar conclusions. The education of science teachers in Serbia, in general, is very good in terms of academic, disciplinary knowledge, however it is inadequate when it comes to didactics, pedagogy and psychology, and especially in terms of student practice in schools (Segedinac, 2008). Miljanović (2008) describes the school practice of students within the subject didactics of teaching biology as neither institutionally, organizationally nor financially regulated between the faculties and the schools. Therefore, the time students spent in schools was insignificant and consisted of lesson observations and a few teaching opportunities, if any. The students were in school just to accomplish a formal requirement, while their visits had no real substance (Miljanović, 2008).

As already mentioned, this problem is present in the entire region of the Western Balkans. Across the region, not only has the content of teacher education been described as irrelevant and lacking in contemporary theories of teaching and learning and student-centred approaches, but the lack of teaching practice has been one of the most cited deficiencies of teacher preparation in the region (Zgaga, 2006; Pantić, 2008; Pantić, 2012). The lack of student practice in teacher education in Serbia may also be seen as part of another wider problem – in higher education in Serbia in general, i.e. in all study areas, student practice seems to be a widely neglected area (Savić, Živić, & Gavrilović, 2006).

### ***New Developments in Teacher Education Policies in Serbia***

In recent years there has been an increasing awareness of the need to strengthen students' practice and this was reflected in the new legislation and several projects. Relying on analyses and recommendations provided both locally and internationally (Kovač-Cerović & Levkov, 2002; Kovač-Cerović, Grahovac, Stanković, Vuković, Ignjatović, Šćepanović, Nikolić, & Toma, 2004), the 2009 Law on Foundations of the Education System (Official Gazette, No. 55/13) has set 30 ECTS of professional studies and 6 ECTS of practical school placement as minimal requirements for becoming a teacher. Although this requirement barely measures up to those in the EU countries (it represents approximately 15% of ITE study time for professional

studies, and 150 hours of school practice), it has been an important move forward in Serbia. Its implementation, however, is still not fully effective. In 2011, the Standards of competences for the teaching profession have also been adopted (Official Gazette, No. 5/2011). Translating the national requirement into institutional policies and practices of the autonomous faculties is a long process that can result in manifold, often incomplete designs for this part of ITE.

This development process was supported by several projects. In the Serbian Teacher Education Project (STEP), with the support of the government of Finland, teacher education faculties in Sombor and Jagodina have developed a new curriculum, and have dealt with issues of student practice (Macura-Milovanović, Gera, & Kovačević, 2010). The Faculty of Education in Jagodina continued its efforts to improve student practice through the EU TEMPUS project Curriculum Reform in Teacher Education (2007-2009) (Meri, 2009) producing its own concept (Pedagoški fakultet u Jagodini, 2007) and guide for student professional practice (Petrović, 2010). Another TEMPUS project – HAMOC is dealing with the harmonization and modernization of the curriculum for primary teacher education.<sup>2</sup> The project has delivered several analyses of teacher education curricula in Serbia, with one specifically dealing with students' practice (Savić, Živić, & Gavrilović, 2006). Currently, the most ambitious improvements in subject teacher education are created within the TEMPUS MASTS project and the 'Razvionica' project. MASTS deals with the development of interdisciplinary Master programmes for subject teachers in Serbia, that implement the legal requirements for professional and school practice of student teachers and are specially designed to suit the needs of those prospective teachers whose ITE did not provide professional and school practice needed for the teaching profession (TEMPUS MASTS, 2011). In order to facilitate the process of establishing a state of the art nationwide system of school practice, the EC funded project 'Razvionica'<sup>3</sup> has supported the establishment of a network of 41 practice and model schools since 2012 through the development and transformation of already existing regular primary or secondary schools dispersed throughout the country at locations in the vicinity of ITE institutions that would, in cooperation with ITE institutions, provide practical placement for student teachers and organize high quality mentoring. The current study has been developed in the context of this project, and the results of the study have influenced its final setup, hence we will revisit the 'Razvionica' project's development at the end of the discussion section.

### ***Purpose of the Study***

The study represents a situation analysis and needs assessment conducted with the purpose of designing the details of the development of the network of practice and

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<sup>2</sup> More information may be found at <http://www.hamoc.pef.uns.ac.rs/>

<sup>3</sup> Full title: Support Human Capital Development and Research — General Education and Human Capital Development, 2012/295-369 / Europeaid/131556/C/SER/RS. More information may be found at <http://en.razvionica.edu.rs/>

model schools, including the format and content of mentor training provided by the 'Razvionica' project. Having in mind the stalling of the implementation of the national requirement for 6 ECTS allocated to school practice, and the fact that accreditation standards for this part of ITE have not yet been developed, the study collected data from ITE institutions themselves, thus allowing an insight into the specificities and peculiarities of responding to the new legal requirements and organizing the school practice of student teachers. Specifically, we were interested in discovering the organizational aspects of student teachers' school practice, the characteristics of the curriculum, cooperation and role division between schools and faculties and potential problems associated with these issues. In all these respects we were looking to discover the range and pattern of variation between universities and/or types of study programmes that can incite subsequent interventions and the design of appropriate support mechanisms.

## **Methods**

This study provides a thorough descriptive overview of the current practices of student practice in Serbia. The following questions are examined:

- (1) How is school practice of student teachers organized in Serbia (e.g. number of students, number of schools used, number of faculty staff and school mentors engaged)?;
- (2) Which forms of students' school practice are provided during ITE (e.g. "hospitation", supervised teaching practice); in what amount (in hours and ECTS) and structure (stand alone, dispersed through courses) and how is curricula organized for each (e.g. type, support, organization)?;
- (3) What models of cooperation exist between schools and universities? (e.g. role of university staff, role of mentors in schools, communication scheme between university, school and student prior to, during and after student practice); and
- (4) Which are the typical problems both faculty departments and schools encounter while organizing school practice?

The research study also provides an overview of the existing analysis of student practice and the existing university-based training of the staff involved in the delivery or the organization of student teachers' practice.

The study was performed in October and November 2013 when 65 different departments and faculties educating teachers as their primary or secondary mission in the five state universities in Serbia (University of Belgrade, Novi Sad, Niš, Kragujevac and Novi Pazar) were contacted in order to gather data on student teachers' school practice. Faculty staff assigned by the deans as persons in charge of school practice were contacted with the request to respond to the questionnaire, but participation in the study was voluntary. 44 departments (total response rate 68%) responded to the query. The highest response rates were from the University of Novi Sad, followed by the universities in Kragujevac and Belgrade. Non-response was somewhat systematic:



the newest and smallest university, State University of Novi Pazar did not respond and neither did several faculties of philology from the other universities. Hence, our results will depict the situation in the majority of faculties except those preparing language teachers, and all state universities but one.

The questionnaire was administered online and comprised of several sections. The first part addressed general questions about when the school practice takes place, with how many students, in how many practice schools, etc. The second part of the questionnaire related to the constitutive features of school practice in terms of curricula, how teaching is embedded in the school practice, which activities are stressed and graded, etc. The third part relates to the role and workload of the faculty teachers and teacher mentors involved in the school practice, the characteristics of the cooperation between the faculty/department and schools, professional development, etc. The final part of the questionnaire provided an opportunity to talk about the perceived benefits and problems connected to school practice.

Data analysis included both quantitative and qualitative forms of analysis.

*Quantitative analysis.* The first level of analysis was descriptive. Following Mann Whitney test and Kruskal-Wallis Test, as well as Pearson product-moment correlation coefficient were utilized to assess whether paired observations of variables were independent of each other. All analysis was conducted using SPSS 20.

*Qualitative analysis.* All answers to open ended questions were analysed through thematic analysis by recording patterns within the gathered data. The obtained patterns consequently became categories for the analysis (Guest & MacQueen, 2012). All curricula were analysed with respect to their aims, outcomes and contents. With respect to the perceived benefits of the school practice, these were observed for students and teacher mentors, following the topic of the perceived flaws in the current system of the school practice. The description of the current cooperation between the universities and the schools was analysed from the perspective of the roles performed by the faculty members and teacher mentors and schools, factors hindering cooperation and the proposals for enhancing future cooperation.

## Results

In the following sections we describe the system of school practice based on the answers provided by the 44 departments' school practice coordinators. We address the organizational aspects of school practice, the characteristics of the curriculum, cooperation and role division between schools and faculties and the potential problems encountered.

### ***Organization of Student Practice: "A System without a System"***

In Serbia student teachers' school practice takes place at the bachelor, master or both bachelor and master levels (Table 1). School practice takes place at the bachelor level in 66% of the departments which participated in the study. School practice is far more frequent from the 6<sup>th</sup> semester (third year of studies) onward.



Table 1

*Level allocation of the student teachers' school practice irrespective of the University*

Study programme	Bachelor level	Master level	TOTAL
Class teachers	5	0	5
Kindergarten teachers	1	0	1
Mathematics teacher	2	1	3
Informatics teacher	0	1	1
Biology teacher	1	4	5
Physics teacher	2	2	4
Chemistry teacher	2	0	2
Physical education teacher	2	0	2
Geography teacher	3	0	3
History teacher	0	1	1
Music teacher	4	1	5
Arts teacher	1	1	2
Foreign language teacher	3	3	6
Philosophy teacher	1	0	1
Sociology teacher	1	0	1
Pedagogue	1	0	1
Master programme for subject teachers	0	1	1
	29	15	44

The number of students involved in school practice varies to a great extent throughout the departments/faculties both at bachelor level (median=7, min=0, max=560) and at master level studies (median=18, min=2, max=100; Table 2).

Table 2

*Number of students involved in school practice, academic year 2012/2013*

Number of students	0	1-35	36-70	71-105	106-150
% year 1	81.4%	9.3%	0%	2.3%	7%
% year 2	83.7%	7%	0%	2.3%	6.9%
% year 3	72.1%	13.9%	4.6%	2.3%	7%
% year 4	50%	29.7%	9.1%	2.3%	9.1%

All departments use a number of schools in order to organize student teachers' school practice. Although a variation in the number of schools the departments collaborate with is observable (Figure 1), half of the departments use up to five schools to organize school practice (median=4, min=1, max=100). There are no significant differences in this respect between class teacher education faculties vs. subject teacher education departments (Man Whitney U=88.500, p=0.607). As expected, a positive correlation exists between the number of schools the departments use and the total number of students in school practice taking place during the bachelor programme studies ( $r=0.45$ ,  $p=0.004$ ). However, no such associations were found at the level of master programmes ( $r=-.125$ ,  $p=0.455$ ).

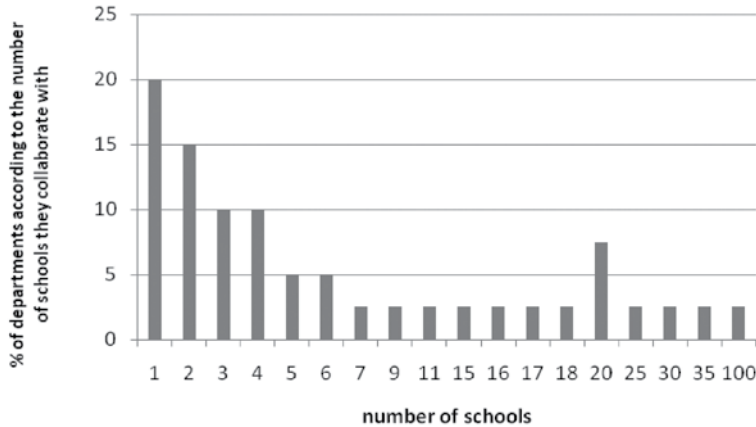


Figure 1. Overview of the number of schools the university departments use for student teachers' school practice

The main factors determining the choice of a particular school were similar across universities. Respondents mentioned the following: *cooperative teachers and school principals* (e.g. they are willing to take students in, there is prior experience of good cooperation, teacher mentors are willing to cooperate with students); *the quality of teaching staff* (e.g. teachers are highly trained in subject didactics, they have previous good results with talented students, they participate in professional development courses, and are active in different teams); *school is equipped with teaching aids and has enough space*; *proximity of the school to the faculty*; *type of school* (e.g. preference for general upper secondary schools); *personal contact with specific teachers from the school* (e.g. former students) and *students' choice*.

Some departments allow their students to find a school in which they will perform school practice on their own. Yet again the number of such schools varies (median=10, min=4, max=30), but there are no differences in this regard between different universities ( $\chi^2=5.202$ ,  $df=3$ ,  $p=0.158$ ), nor between class teacher education faculties vs. subject teacher education departments ( $\chi^2=6.092$ ,  $df=5$ ,  $p=0.297$ ).

There are substantial differences in the number of teacher mentors the departments collaborate with (median=4, min=0, max=90, Table 3). Class teacher education faculties use a significantly higher number of mentors than the subject teacher education departments do (Man Whitney U test=19,000?,  $p=0.005$ ). However, there are no significant differences between various subject teacher education departments ( $\chi^2=8.287$ ,  $df=5$ ,  $p=0.141$ ).

Table 3  
Number of teacher mentors departments collaborate with

Number of teacher mentors		0	1-9	10-20	Over 35
Class teacher education faculties	frequency	0	0	2	3
Subject teacher education departments	frequency	2	22	7	3

At each faculty/department several members of staff are involved in school practice. Despite some variations, in most cases 1 teaching assistant and 1 coordinator is involved in carrying out the practice (Table 4).

Table 4

*Number of university staff involved in student teachers' school practice*

	Teachers involved in school practice	Assistants involved in school practice	Coordinators involved in school practice
Mean	1.80	1.31	.71
Std. Deviation	2.974	2.858	.815
Minimum	0	0	0
Maximum	15	14	4

Each department was asked about the regulation of time in terms of its amount devoted to school practice on a weekly and on a yearly basis. As for the time spent on activities related to school practice per week 41% of the respondents report on up to 5 hours per week, 33% report 6-10 hours, 15% report 11-20 hours, while 11% of the respondent staff spend more than 20 hours per week on activities related to school practice (median=6, min=4, max=60). On annual basis (academic year) 46% of the staff spend under 50 hours on activities related to school practice, 15% spend between 51 and 100 hours, 14% spend around 150 hours, while the rest report on more than 300 hours up to incredible 1600 hours at one department (median=60, min=4, max=1600). In relation to the total workload during the school year 25% of staff time on average is devoted to the programme of school practice (median=20%, min=8%, max=60%).

The universities were also surveyed on the number of employees involved in the school practice in relation to the number of students involved in the school practice. Around 40% of the respondents did not answer the question. For those who did, the results point to the conclusion of a relatively favourable ratio between the number of students and teachers involved in school practice (on average 1:25). In the case of 42% of the departments, one university teacher involved in school practice deals with 10-18 students, whereas in 27% of the cases this ratio is higher (Figure 2).

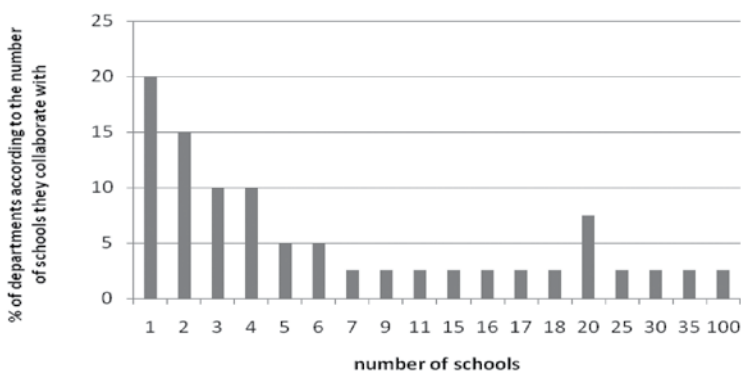


Figure 2. Ratio of university staff involved in student teachers' school practice and number of students involved in school practice

Regarding the ratio between the number of university staff involved in the school practice and teacher mentors in schools, data show that one university teacher cooperates with up to five school teachers in about 60% of the departments, 16% deal with between 6-15 teachers, while another 16% work with more than 16 teachers.

The above provided results clearly speak about a great variation between the practices described by the responding departments. However, surprisingly, we found no easily interpretable patterns or any patterns that would reflect a university culture in organising student teachers' school practice. Moreover, we found no patterns stemming from the characteristics of the specific academic discipline required to meet a certain kind of an organizational approach across all universities. The only interpretable differences found were derived from the number of students for whom practice had to be organized, and in some cases from the differences between the class teacher and subject teacher education institutions. It should also be noted that a high level of missing responses was registered regarding questions that required more specific numerical answers on the workload, teacher-students or teacher-mentor ratio, thus indicating that universities, faculties and departments do not keep accurate records and statistics, and do not organize their practice based on this kind of evidence.

### ***Organisation of Curricula: Multiplicity of Out-Of-Date Models***

The curricula for almost 40% of the surveyed faculties/departments were adopted in 2008, whereas in the case of 15% of the surveyed institutions this was done in 2011. The two oldest programmes date back to 2005.

In the majority of the surveyed faculties/departments school practice constitutes a separate subject (63%). In 20% of the cases school practice is part of a subject course of the faculty curricula, whereas only in 6% of the departments school practice is part of the programme of several courses. There are no differences between class teacher education faculties vs. subject teacher education departments in this respect.

At the majority of the departments school practice is treated as an obligatory faculty course (76%). Faculty courses which involve school practice carry 5 ECTS<sup>4</sup> credits on average (SD=3.3, min=2, max=21), whereas 4.3 credits are awarded for the school practice itself (SD=2.1, min=2, max=8). Yet the latter information we take with caution due to a high number of missing data related to the ECTS points assignment for school practice.

As for the number of hours students are engaged in school practice (Table 5), 1/3 of our respondents did not provide an answer to this question. For the rest, there seemed to be no differences between different universities ( $\chi^2=0.303$ , df=3, p=0.959). However, differences do exist between future class teachers and future subject teachers (Mann Whitney U test=0.000, p=0.300). Teachers trained at class teacher education faculties spend more time in school practice. The same is evident in the school practice of future school pedagogues, students from art departments and a new interdisciplinary master programme created for subject teachers.

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<sup>4</sup> European Credit Transfer System

Table 5

*Amount of time spent in school practice*

<i>Hours spent in school practice</i>		0	1-50	50-100	101-150	Over 151
Class teacher education faculties	<i>frequency</i>	0	1	0	0	4
Subject teacher education departments	<i>frequency</i>	2	13	15	3	2

The break-down of time spent in engaging in specific activities during school practice is provided in Table 6.

Table 6

*Break-down of activities related to school practice<sup>5</sup>*

Type of activities	Number of hours devoted (student time)
Lesson observations/hospitation.	median=8; min=0; max=252
<i>Lesson observations of other students.</i>	median=9; min=0; max=80
Analysis of observed lessons with teacher mentor.	median=2; min=0; max= 50
<i>Analysis of observed lessons with a teacher from the university.</i>	median=5; min=0; max= 40
Working with the teacher from the university in planning and preparing lessons.	median=5; min=0; max= 72
Working with the teacher mentor in planning and preparing lessons.	median=3; min=0; max= 30
Individual preparation of students for teaching a lesson.	median=10; min=0; max= 60
Group preparation of students for teaching a lesson.	median=0; min=0; max= 60
Teaching under supervision.	median=4; min=0; max= 30
Analysis of performed lessons with teacher mentor.	median=1.5; min=0; max=10
<i>Analysis of performed lessons with faculty teacher.</i>	median=2; min=0; max= 24
Preparation of student's report or portfolio.	median=5; min=0; max= 200

The data provided in Table 6 show that individual student preparation for teaching a lesson and lesson observation are activities to which most time is devoted at most of the faculties/departments, while the group preparation of students, analysing the lesson performed by the student with the teacher mentor or with the faculty staff, and analysing the observed lesson of the teacher with the teacher mentor are activities that are least present at most of the faculties/departments.

No statistical differences were found between the universities that took part in the study for any of the activities listed in table 6. No differences were found between class teacher education faculties and subject teacher education departments either with respect to six of the twelve activities – Lesson observations/hospitation (Mann Whitney U test=76,00, p=0.945), Group preparation of students (M-W U test=62,00, p=0.496), Teaching under supervision (M-W U test=44,00, p=0.139), Analysis of performed lessons with teacher mentor (M-W U test=47,00, p=0.167), Analysis of performed lessons with faculty teacher (M-W U test=37,00, p=0.069) and Preparation of student's report or portfolio (M-W U test=52,00, p=0.272).

<sup>5</sup> Throughout the results section we use median as a measure of central tendency when distributions are not normal.

Differences between class teacher education faculties and subject teacher education departments were found for Lesson observations of other students (M-W U test=22,00,  $p=0.011$ ), Analysis of observed lessons with teacher mentor (M-W U test=28,00,  $p=0.020$ ), Analysis of observed lessons with a teacher from the university (M-W U test=2,00,  $p=0.00$ ), Working with the teacher from the university in planning and preparing lessons (M-W U test=15,50,  $p=0.004$ ), Working with the teacher mentor in planning and preparing lessons (M-W U test=15,00,  $p=0.004$ ), and Individual preparation of students (M-W U test=3,00,  $p=0.001$ ). In all cases more time is devoted to these activities at class teacher education faculties than at subject teacher education departments. No differences were found between subject teacher education departments, except for the activity Teaching under supervision ( $\chi^2=9.465$ ,  $df=4$ ,  $p=0.050$ ), which was more evident at arts departments.<sup>6</sup>

In analysing the text of the curricula obtained from the faculties/departments we focused on content analysis by key words analysing the curricular aims, outcomes and content of specific faculty courses which involve school practice. The following key words: *acquiring knowledge, teaching units, teacher plans and programmes, teacher, didactics, methods of teaching, education process* were used as descriptors of a traditional practice. For the key words more compliant with current trends in teacher education the following descriptors were used: *competences, reflexive practitioner, self-evaluation, critical thinking, self-regulation, extracurricular activities, complexity of the teacher profession, professional identity, action research, cooperative learning, standards, up-to-date teaching methods*.

The analysis showed that key words such as acquiring knowledge (total count=18), teaching units (total count=68), teacher plans and programmes (total count=16), didactics and methods of teaching (total count=13), and education process (total count=22) dominated the language of the prescribed curricula. In contrast to that, only in few cases key words such as competence (total count=4), self-evaluation (total count=2) and professional identity (total count=1) were identified in the curricula. Surprisingly, no differences were found with respect to when the curriculum was adopted. In most cases the focus of the curriculum was on students' ability to teach independently, while the content of the curricula described writing a lesson plan, observing lessons and keeping a journal on the practical placement.

School practice is mostly *assessed and graded* by the university teacher(s) (60%). In few cases this is done by the school teacher mentor (2%), whereas in 21% of the departments assessment and grading is accomplished jointly by both teacher mentors and teachers from the university. Again, 17% of the departments participating in the survey did not provide their answers and only one entry clearly specified how the final grade is formed and how points leading to the grade are distributed among specific activities. Overall, no differences were found between universities ( $\chi^2=10.324$ ,  $df=6$ ,

<sup>6</sup> Marginal significance only for the Analysis of performed lessons with faculty teacher ( $\chi^2=9.160$ ,  $df=4$ ,  $p=0.057$ )

$p=0.112$ ). However, some differences were identified between the practices of class teacher education faculties vs. subject teacher education departments ( $\chi^2=10.000$ ,  $df=2$ ,  $p=0.007$ ). The dominant practice in both cases is still that of the university teacher grading the school practice, yet the second most frequent model at subject departments is the one when the grade is given jointly by the teacher mentor and the university teacher (Table 7).

Table 7

*Modes of grading school practice*

<i>Person in charge of the grading</i>		University teacher	Teacher mentor	University teacher and teacher mentor jointly
Class teacher education faculties	<i>frequency</i>	3	1	0
Subject teacher education departments	<i>frequency</i>	27	0	9

The survey also looked into the specific elements that are taken into account when assessing the student teachers' performance during the school practice. Teaching under supervision and lesson "defence" are taken into account by over 70% of the departments. The analyses of the performed lessons with the teacher from the faculty and individual students' preparation (including time and products in the form of written preparation, etc.) are taken into account by 80% of the departments when grading the students' school practice performance. Frequently found elements are also "student teachers' work with mentor teachers in planning and preparing the lessons" (53%) and "portfolio" (52%). The oral exam is the least present, yet it still exists at almost half of the surveyed departments (46%). The first group of these practices is more frequent as a means of assessment in the group of natural science and art subject departments. The report of the teacher mentors on the students' professional practice is taken into account by 63% of the departments, whereas 70% predominantly grade the work done with teachers from the faculty in planning and preparing the lessons.

The inspection of the description of curricular activities and assessment practices submitted by the responding departments, as well as the analysis of the curricula regarding their aims, outcomes and contents identifies the practices, concepts and discourse that are more similar across universities, faculties and departments than are the organizational aspects of the school practice. However, this similarity is more obvious in terms of maintaining traditional concepts of teaching as a curriculum delivery, teaching as a dominantly individual activity, that is learned more by observation and less by analysis; students' preparation in groups that would foster cooperation among future teachers is neglected, as well as providing feedback essential for learning after performing or observing a lesson. We found only meagre and scattered reference to the concepts dominating contemporary academic discourse on what teaching is about, what complexities it subsumes, and what new ways of practice enhance student teachers' learning the most. Class teacher education faculties devote more time to some activities than subject teacher education departments do,



however, not all of this falls under innovative practices. The overview of the assessment practices reinforces the finding about predominant practices that are out of date, although some new assessment practices seem to be emerging as well.

### ***Cooperation between Schools and Universities?***

In what way are faculty staff engaged in the implementation of the school practice?

No teachers from schools were involved in the development of the curriculum in 20 programmes (out of 44 we have data for), and in the case of 24 programmes some teachers were partially consulted during the process. Only in the case of one programme both teachers from the universities and the schools participated equally in the development of the curriculum.

With respect to the exchange of information with the schools almost 50% of the respondents did not define what the cooperation looked like. However, those who did, described it as being focused mostly on practical issues. The university staff contact the school, the time frame is set and the teacher from the school receives clear instructions on what is expected from him or her (in 80% of the reports). Students are then appointed to specific schools in accordance with the set time frame. The university staff are also responsible for providing the required teaching materials (e.g. laboratory kits). Their mentoring of the students during the school practice contains the following activities: selecting instructional issues, consulting with students regarding the tasks required for the practice, providing information regarding the content of student notes (diary), observing students' practice in practice schools, analyzing students' products, carrying out joint reflection in small groups of students, carrying out evaluation of daily practice and evaluation of students' practical classes.

And what about the school staff? According to the data obtained from the faculties/departments on the specific time devoted to working with (individual) students in relation to teacher workload, on average 13% of mentor teacher time in school is devoted to the school practice of student teachers. The minimum percentage of time spent at school reported to be devoted to the activity was 8% and the maximum was 15%. Although practices of schools were shown to somewhat differ, no statistical differences were found between universities or specific departments. 56% of teacher mentors supervise up to seven students, 32% supervise between 8 and 20 students, whereas the rest supervise more than 40 students. However, these results should be taken with caution due to the high level of missing responses to this question and wide variance in the answers (median=7, min=0, max=51).

Only half of the responding faculties/departments regulate the practical placement of their student teachers through a formal contract signed with the schools, while the others rely only on oral agreements between the faculty staff and the school mentor or the school principal. If a contract exists, in 90% of the cases it covers all the schools a department collaborates with. However, from the small number of contracts the departments were willing to share, it was visible that they were very general stipulating

only the time frame and the number of students the school receives and settling no other matters relevant for a meaningful substantial cooperation to occur. In several cases the faculties also make individual contracts with the teachers, however, we did not have a chance to see such contracts, except for one. The study did not inquire about the financial aspects of the cooperation, however, there is anecdotal evidence that some faculties provide a small compensation to the school or to the mentors (this practice seems to be widespread at the University of Novi Sad), but the majority of them do not.

Based on the gathered data it seems appropriate to seriously question whether any cooperation beside the most pragmatic one around student placement exists at all, and if so, whether its scope and quality are such to create a fertile developmental context for the student teachers' learning.

### *Perceived Problems and Available Support Systems*

In their responses the faculties and departments also mentioned some *benefits of school practice*. As the major advantage of the school practice the departments name the student teachers' actual chance to see and feel what teaching is really like. Mentors are thought to have a positive role in helping students learn. They provide them with advice on the procedural aspects of school life and on how best to prepare for the teaching profession. It is also recognized that students gain knowledge on classroom management since they encounter the "harsh reality of maintaining discipline" among students.

As for the *flaws of the current system of practice* the most important seem to be the ones related to *the high number of students in relation to the available number of schools and university staff working with the students, that school practice is too short and that there is no substantial cooperation between the faculties and the schools*.

Fourteen departments stressed that they deal with a high number of students, which is due to a low number of available schools and departments being understaffed. This, in turn, leads to a very short school practice time. Furthermore, the fact that Serbian schools mostly work in two shifts further hinders a better organisation of school practice.

Ten departments admit that the cooperation between the universities and the schools is not a substantial one. They believe that there is a strong need for establishing a framework of formal cooperation and emphasize that it is necessary to set up and intensify periodic meetings of the faculty/departments and schools responsible for organizing school practice. It is recognized that many schools are under-resourced, while many show lack of commitment and motivation to cooperate with the universities due to increased teacher workload when working with students. Several departments also recognize that selection criteria for the teacher mentors should be formalized as there are cases when teachers do not display practices that would be in line with up-to-date trends in education.

What kind of *support system* is developed both for the university staff and the teachers involved in the school practice? Data show that there are no formal

requirements for either of the sides involved in the school practice, and professional development courses in this area are scarce, and so is the available literature. Only 32% of university staff were given a chance to follow some kind of a professional training course addressing school practice. For 11 departments we have not received an answer to this question, indicating a high probability that these departments were not involved in professional development courses either.

We did not receive any information from 11 departments on the opportunities for the professional development courses aimed at teacher mentors from schools. If we consider only the valid cases, 24% of the departments have organized some kind of development courses. However, these are mostly class teacher education faculties and several departments for chemistry, biology and physics. Yet no details were received even from these departments on how these courses were organized or by whom.

These reflections on perceived problems and the predominant lack of capacity building somewhat mirror the results of our analysis, and thus create an opportunity to build further development also through addressing the problems perceived by the faculties themselves.

## **Discussion**

One of the major and pervasive results of this study points at the differences between the faculties and departments in the ways they organize student teachers' practice in schools, and how the curriculum of the school practice unfolds. While many departments/faculties can cooperate with as many as 100 schools for the practical placement of their students, some have only 1; at some faculties the staff spend 20 hours per week on their engagement in the school practice and at some others they use only 5; some work with 100 students, some with 2; at some departments school practice carries 21 ECTS, at others only 5, the same kind of activity during this practice can have any number of hours between 0 to 200 or 250 allocated – just to name a few of the most obvious discrepancies. Although some of the differences are the result of a smaller or bigger number of students the teachers mentored, and class teacher education faculties might somewhat differ from subject teacher education institutions due to a greater number of students, longer duration of school practice, and longer tradition of organizing students' practical school placement, most of them do not differ. Moreover, differences that could guide future interventions and reflect university or study area-based differences were not found.

Multiplicity and diversity of practices between different teacher education institutions would be expected to occur in countries with a well-developed ITE as a result of contextualized problem solving strategies of development (as for example in Finland, Austria or Switzerland, Buchberger, 2014) we have reason to believe that this is not the case with the surveyed departments and faculties in Serbia. Rather, the situation analysis has revealed a picture of this area of ITE which is mostly unregulated, not attended to, and left to the isolated individual commitment (or lack

of it) of specific departments or even individual professors responsible for the school practice to organize themselves and their students to the best of their ability or will, without visible support, recognition, national level guidance or requirements. This study certainly captures a snapshot in a period of intense development in education, and the findings can mask the existence of “hubs of excellence” but also departments that are still disregarding the legislative requirement for a minimum of 6 ECTS (150 hours) allocated for the school practice of student teachers and thus exercise “power as sovereignty” (Popkewitz, 1992). The described findings are similar to those found in other Western Balkan countries (Zgaga, 2006; European Commission, 2013). However, they question the results of other studies that drew data from a subset of ITE institutions in Serbia without looking into the broader picture of variations. Another concerning finding refers to the variations in the characteristics of the student teacher school practice between the faculties and departments of the same university (sometimes even of the same faculty regarding different academic disciplines). The practical consequences of this fragmentation can result in the fragmented approaches to student teacher practice in schools catering for students from the same location but from different departments and having to fulfill different requirements for the student practice that are not systematic and can hardly be seen as meaningful. Unless practice schools are seriously empowered, they will not be able to mitigate the discrepancies of requests regarding student teachers’ practice in their school, or capitalize upon the diversity of approaches. Such fragmentation will not create the type of setting where learning can be socially constructed and school practice can become truly educational (Anderson & Stillman, 2013).

Contrary to the variations in the amount of time, ECTS, and organizational culture, we found striking similarities across universities, faculties and departments regarding the curricula of school practice of student teachers. However, we would not expect such a similarity given the new regulations pertinent to the work of schools in Serbia (developing the students’ general and subject related competences, achieving standards, inclusive education, cooperative learning, modern teaching methods, school self-evaluation, school development planning, etc., Official Gazette, No. 55/13), and the Strategy for the Development of Education in Serbia 2020, 2012) and to the required characteristics of the teaching profession regulated through sublegal acts (Standards of competences for the teaching profession, Official Gazette, No. 5/2011). To a large extent to the contrary, with only some exceptions, the discourse used in the school practice curriculum statements is dominated by the traditional concept of teaching as curriculum delivery and not as facilitating learning of a diversity of students. During student teachers’ practice we identified that most neglected were the activities that have the potential of developing future teachers as critical and reflexive practitioners collaborating with each other. Aspects of the curriculum that have a potential to facilitate student teachers’ learning are partially visible only in the accounts on assessment (e.g. portfolio is required in half of the departments, pre- and

post-lecture discussions with mentors and/or faculty are part of the assessment at least in some of the departments), but the data did not yield enough details to assess the quality of these practices from the perspective of their meaningful contribution to the student teachers' learning, and the more traditional approach of "defending" a lesson or the lesson plan in front of the faculty teacher dominates. School practice curricula are closely tied with the traditional subject didactics with its narrow focus on how to correctly teach the class, while all other aspects of the teachers' work in the school are disregarded in most cases. These characteristics imply a view of learning as gaining and delivering knowledge and skills and not an understanding of learning as mediated social construction (Vygotsky, 1978; Cole & Engeström, 1997). We did not inquire about the profession of the faculty staff assigned to lead the practice studies, nor into whether the curriculum was developed in cooperation with other staff at the corresponding faculties, but the results of the analysis indicate that mostly subject didactics faculty are engaged in conducting practice studies, and that wider aspects of school life dealt with in other courses have no reflection on the school practice.

Based on the data obtained about the roles of faculty staff and school mentors in the school practice of student teachers and the assessment of the biggest problems in this part of ITE provided by the respondents it seems that the possibilities of cooperation between the faculties/departments are not utilized and nurtured. In the development of the school practice curriculum, there was only one instance in which equal cooperation between the faculty and schools was reported, while almost half of the programmes were developed without consulting the practicing school teachers. The cooperation is predominantly reduced to dealing with the logistics of the student allocation to schools; curriculum development, assignment of concrete tasks to student teachers as well as the assessment of their performance is conducted predominantly by the faculty staff; joint meetings of mentors and faculty are held rarely, and the role of mentors in schools is left rather unspecified and not supported. All these characteristics seem to be contrary to best practice models (Buchberger, 2014), and opposite to the recommendations provided both in science (e.g. Darling Hammond, 2006; Anderson & Stillman 2013) and in education policy (e.g. Popkewitz, 1993; Fullan, 2000; Zgaga, 2006; European Commission, 2013). It seems that these institutions still belong to two different realms and instead of capitalizing upon the possibility of mutual development and exchange, they avoid it or reduce it to logistical agenda setting. The two types of institutions (schools and faculties) are regulated by two different sets of legal and sublegal acts, supervised by two different types of councils, ministry departments and inspection personnel, accreditation based on two different sets of criteria, financed and governed in fundamentally different ways, and in the vast majority of cases they simply do not meet or know about the specificities of each other. Student teachers' learning is greatly jeopardized in such a context. They seem to be the solemn bridge between the two systems, yet achieving the major aim of the school practice, the integration of the academic knowledge and practice cannot

be done easily, or in the best case, might happen without the authentic support from one or the other system. Thus, the students' dilemmas will not be duly articulated and dealt with, and they will not receive the kind of feedback most conducive to learning.

Finally, throughout the study we have also detected a lack of human resources at the faculty level (mostly one professor or one professor and one teaching assistant dealing with school practice), as well as a lack of attention to capacity development for this part of ITE. As noticed also by the study conducted on the Western Balkans (European Commission, 2013), only a small number of the departments provide training for the school mentors and professional development for the area of school practice for faculty staff is also scarce. Without any additional efforts and resources allocated to professional development for the sake of developing the school practice both at the faculty and school level, the prospects of the entire system will remain grim.

The data gathered through this study suggest the need for a number of urgent developments:

1. The Serbian education system needs a *system of school practice*, instead of fragmented individual and idiosyncratic endeavors, which build upon dispersed good practices in the country, ensure meeting the minimal requirements depicted in the legislative documents and take inspiration from European best practice. This at least means that the accreditation criteria for school practice need to be developed, mentor and school selection procedures and criteria adopted, incentives set right, and quality assurance mechanisms implemented.
2. *Curriculum development* for the ITE part devoted to the school practice of student teachers need to be taken care of, including modernization, enrichment, diversification and new forms of practice (e.g. action research), and a focus on student teachers' learning.
3. *Institutional development* both at faculty/department and school level is needed that should jointly ensure the best logistical arrangements for the school practice, and create a space for collaborative problem solving between schools, faculties/ departments and the student teachers themselves.
4. *Investment in human resources development* seems to be a must that would encompass both faculty staff and mentors at schools, and that would also target future cooperation and communication between them, as well as empower them to move the students' school practice from the "almost illegal status" to the forefront of the educational development.
5. All these developments need to be conducted through meaningful and extensive *consultations* with all stakeholders. Given that the scope of the suggested changes amounts to a paradigm shift, special attention needs to be focused on the involvement of higher education institutions, councils, different departments of the ministry, schools and student teachers themselves.

With the aim to provide a concrete illustration of the development number 3 from our list, we describe the ways in which we used the results of the study.

### ***Experiences on Establishing a System of Practice Schools through 'Razvionica'***

As we have already mentioned, this study was situated in the context of the 'Razvionica', project implemented in Serbia since the middle of 2012. In one of its components the project establishes a system of 41 practice schools, using the development and transformation of the already existing regular primary or secondary schools dispersed throughout the country at locations in the vicinity of ITE institutions. The purpose of the study was to provide an assessment of the practices of different ITE departments/faculties in organizing the school practice of student teachers so that the respective practice schools could be prepared for an adequate intake of the student teachers from these faculties/departments. The results of the study could only be partially used for the intended purpose of designing tailor made support interventions in particular schools due to the lack of clear university based patterns in this respect. However, many of the aforementioned findings depicting fragmentations and missing links in the evolving system of school practice instigated interventions of a wider scope and not originally foreseen by the project. In the following paragraphs we describe the most important one – the design of mentor training during the spring semester of the academic year 2013/2014 that was specifically motivated by the findings of the study. Altogether 1335 school teachers that took up the role of mentors to the student teachers during their school placement were trained to upgrade their mentorship competences through a short 32 hours training, organized in two weekend seminars of 2 days each. Three characteristics of this training are worth highlighting, as they respond to the fragmentation in the approaches to school practice discovered by the study.

The project engaged an interdisciplinary group comprised of three types of professionals that rarely meet and work together: university professors of subject didactics from various academic fields who were assigned to conduct the school practice curriculum at their faculties (altogether 13 of them conducting practice for various fields, from mathematics to physical education), experienced trainers-professionals for education development (also 13, mostly school psychologists), and 4 education researchers. The named professionals' primary role in the project was that of the developers of the training curriculum and their secondary role was that of trainers. In the course of several months this interdisciplinary team worked together to develop a training curriculum comprised of a series of interactive workshops addressing the topics they assessed as being most needed by the mentors, and that integrated their diverse competences as well. The workshop topics ranged from psychological ones (i.e. school motivation, cooperation with parents, classroom observation), through general educational topics (e.g. school development, classroom management, teachers' competences, mentoring skills), specific subject didactics and student teacher practice related topics (planning of innovative lessons that develop student competences, providing feedback to student teachers, collaborative problem solving in the context



of lesson planning, organizing the steps in student teachers' learning experiences), to research topics (how to conduct an effective action research in the practice school), and involved also tasks to be accomplished by the mentors between the two seminars. In the course of the lengthy development of this curriculum the group faced and overcame all the challenges of interdisciplinary collaboration – differences of their scientific concepts, focus, orientation, language, entrenched procedures, etc., and as a side effect of the endeavor the project has created a team of 30 professionals who are aware of the tensions and can promote mutual understanding and integration of all disciplines pertinent to success of student teachers' school practice. Also, there is anecdotal evidence that several of them already changed, enriched and introduced innovations into their own curricula at their respective faculties and their practice.

Secondly, during the implementation of the training they always worked in interdisciplinary pairs comprised of a subject didactics professor and a school psychologist, or (for a part of the training), a subject didactics professor and a researcher. This way a safe space was created for the mentors that acknowledged and legitimized their complex role as being members of the school community who at the same time cooperated with faculty.

Thirdly, the project developed a complex organizational structure for the training itself. It was organized for all mentors cooperating with the same university (or faculty, in case of class teacher education faculties detached from the university center) together, at the same time and in the same facility thus fostering mutual communication of all involved in the same role and kind of activity and allowing for all faculty staff of the respective university to visit the training. This design also allowed mentors to be grouped into groups of around 25-30 participants according to their schools in the part of the training that was more oriented towards the activities encompassing the whole school. In other parts of the training mentors could be grouped into subject area groups that were more subject-specific. This training design allowed for a mutual exchange of experiences and cooperation between mentors for different subjects at the same school on the one hand, and between mentors of the same subject area across different schools connected to the same university on the other.

Although the interventions described above will certainly not solve all the problems and challenges that student teachers, mentors and faculty staff face with respect to the ITE part of school practice, they might create a new space in which collaborative problem solving and joint construction of new ideas and developments have a higher probability to occur than was the case before the intervention.

## **Conclusions and Limitations of the Study**

The original purpose of the study was a pragmatic one – to provide information on the status of the implementation of new national policies in Serbia in ITE regarding the school practice of student teachers, based on which specific tailor-made support

could be provided to the schools where student teachers conduct their practice. Despite the limited and pragmatic way the study was organized (an online administered questionnaire, without in vivo observation of the process of school practice in both university departments and schools), the results of the study reached far wider than expected, depicting a missing system with overwhelming fragmentations between departments, between and inside of the faculties and between individual faculty staff.

The study also revealed both the developed practice but also the out-dated and fossilised curricula of the school practice of ITE that do not sufficiently reflect the contemporary education discourse and do not even meet the modest requirements of the contemporary education policy in Serbia.

Finally, the study showed that cooperation between faculties/departments and practice schools was by and large underdeveloped, thus stripping faculty members off any deeper insights into the reality of the education context, schools and mentors off professional advancement, student teachers off a rich learning environment, and the system of ITE off any development potential.

The findings call for sustained and intense institutional, curriculum, and human resources development that amount to a paradigm shift. A first step of this development was enacted through an on-going 'Razvionica' project that focuses on the mentors' capacity development and creates new collaborative spaces between the school and the faculty, different academic disciplines, education professionals and researchers.

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**Tünde Kovač Cerović**

Department of Psychology, Faculty of Philosophy,  
University of Belgrade  
18-20 Čika Ljubina Street, 11 000 Belgrade, Serbia  
tkovacs@f.bg.ac.rs

**Jelena Radišić**

Institute for Educational Research, Belgrade  
Dobrinjska 11/III, 11 000 Belgrade, Serbia  
jradisic@ipi.ac.rs

**Dejan Stanković**

Centre for Education Policy, Belgrade  
Carigradska 21/20, 11 000 Belgrade, Serbia  
stadejan@gmail.com

# Premošćivanje jaza između početnog obrazovanja nastavnika i uvođenja u profesiju pomoću stručno-pedagoške prakse: studija slučaja u Srbiji

## Sažetak

Stručno-pedagoška praksa koju pohađaju budući nastavnici važan je dio njihova početnog obrazovanja (PON) jer premošćuje jaz između PON-a i njihova kasnijeg uvođenja u profesiju, kao i profesionalnog razvoja. Donedavno je stručno-pedagoška praksa bila obvezna u Srbiji te je činila neizostavan dio PON-a. Međutim, taj je razvoj suočen s mnogim izazovima. Istražujemo rezultate studije provedene kako bi se utvrdilo na koji je način stručno-pedagoška praksa organizirana u 44 fakultetska odsjeka koji obrazuju buduće nastavnike na četiri najveća državna sveučilišta u Srbiji. Rezultati pokazuju da se uvjeti i organizacija stručno-pedagoške prakse razlikuju od fakulteta do fakulteta i da ishodi i sadržaj stručno-pedagoške prakse nisu usklađeni s novim zahtjevima nastavničke profesije. Nailazimo na razlike između odsjeka na kojima se obrazuju učitelji razredne nastave i predmetni nastavnici, no i razlike unutar skupina su velike te ukazuju na opću fragmentaciju PON-a. Svi proučavani odsjeci izvještavaju o nedostatku osnovne suradnje između fakulteta i škola vježbaonica, nedovoljnom trajanju prakse i nedostatku ljudskih resursa. Kao odgovor na to razmatramo model „škole vježbaonice“ s ciljem nadilaženja jaza između akademskog dijela PON-a i stručno-pedagoške prakse te istražujemo početne izazove tog modela.

**Ključne riječi:** početno obrazovanje nastavnika; stručno-pedagoška praksa; suradnja između fakulteta i škole; škole vježbaonice.