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Is Practical Pedagogical Training of Physical Education Students Sufficiently Effective?

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Abstract

Practical pedagogical training (PPT) is a significant element of professional development in the education of physical education teachers. It is important in their professional socialisation while developing teaching competencies and classroom management skills. This paper examines Slovenian physical education students' estimations of their own progress during PPT. In a cross-sectional study, two groups of students ($N_{2007/08}$=84; $N_{2009/10}$=82) who participated in PPT in the 2007/08 and 2009/10 academic years were compared. Basic statistics, the T-test, the Mann-Whitney U-test and the Pearson correlation coefficient were used. The results revealed that teacher-educators' encouragement of students for better preparation for PPT and written students' reflections improved the level of their efficiency and made them more certain of their teaching practice. Better preparation for PPT lead to greater progress of students and helped ensure that administrative and/or pedagogical changes lead to changes in teacher behaviour. The correlations between the observed areas showed that the lesson planning had the strongest influence on students' efficiency at PPT.

Key words: *efficiency; lesson planning; physical education; teacher education; teaching competencies.*

Introduction

Practical Pedagogical Training in Teacher Education

Contemporary teacher education emphasises the integration of the theoretical principles that students learn during their studies into practical pedagogical training (PPT). Consequently, the opportunity for students to learn from experience in close cooperation with teacher-mentors from primary and secondary schools during PPT

is one of the key elements of educational programmes in pedagogical professions (Dall'Alba & Sandberg, 2006; Day, 1999; Edwards, Gilroy, & Hartley, 2002; Hager & McIntire, 2006). During PPT, students develop pedagogical thinking and behaviour in various authentic situations. The said are not based only on implicit theories, but also supported with arguments from theoretical concepts and research results (Kansanen, 1999; Hager & McIntire, 2006) gained during their study.

Apart from practical experience, students also gain confidence and become accustomed to autonomy in pedagogical practices. The evaluations of teacher-mentors and self-evaluation techniques provide informative feedback, which helps students gain insight into their performance, which is valuable to their professional growth (Boshuizen, Bromme, & Gruber, 2004; Brown & Glasner, 1999; Furlong & Maynard, 1995; Tillema, 2009), and it encourages students to become more self-aware (Feiman-Nemser, 2001; Ure, 2009). PPT consists not only of teaching in the classroom or gym: its content extends to different areas of teachers' work (extracurricular activities, collaboration with parents, principals, other teachers, sport clubs, medical workers), which helps students develop autonomous teaching personalities (Cvetek, 2002; Jurak & Kovač, 2011; Kovač et al., 2009).

There are three training models for the professional induction of teachers: the apprenticeship, competency and reflective practitioner models (Maynard & Furlong, 1993). In the apprenticeship model, the mentor plays the role of a model; in the competency model, the task of the mentor is also to observe and provide feedback to his/her students and to play the role of a coach; in the reflective practitioner model, the mentor is co-enquirer, encouraging the trainee to reflect on his/her beliefs, values, conceptions and actions. All three models should be drawn upon in the process of PPT (Valenčič & Vogrinc, 2004).

Teacher-educators from the faculties, students and teacher-mentors are all involved in PPT in different ways. Teacher-educators seem more inclined to look at a student's practice teaching from the perspective of programme standards, teacher-mentors look at a student's classroom performance and how it benefits pupils, while the student (as a learner) is more concerned with coping with the direct demands of teaching a class (Loughran, 2007). These different perspectives require systematic monitoring; a consolidation of their results yields information on the way PPT stimulates student's learning. Students who follow PPT's instruction and advice tend to articulate their proffesional knowledge better (Hagger & McIntyre, 2006). Therefore, PPT needs to be structured as much as necesarry to maximize students' cognitive access to the full normal realities of their teaching (Hagger & McIntyre, 2006).

On the basis of research data about the desired competencies of PE teachers (Kovač, Sloan, & Starc, 2008), a model of PPT at the Faculty of Sport, University of Ljubljana has been developed (Kovač et al., 2009). Improving PPT was attempted through some interventions, while systematic monitoring of students and understanding of the factors that contribute to PPT have proven to be efficient.

Characteristics of Practical Pedagogical Training at the Faculty of Sport, University of Ljubljana

PPT, in the didactics of the physical education (PE) course at the Faculty of Sport, University of Ljubljana, is carried out for all students in their final year of study. Students acquire their first experiences in primary and secondary schools under the guidance of teacher-mentors who are required to have at least five years of practical experience and hold (according to the regulations for the promotion of employees) at a minimum the professional title of 'mentor', which is the lowest possible rank in terms of promotion. The predominant model used at the beginning of PPT is an apprenticeship model, which, after a few lessons, changes to the competency model.

PPT consists of four phases. Students start with observation practice under the guidance of teacher-educators, which serves the purpose of critical analysis of the didactic characteristics of lessons led by an experienced teacher. As there is always a tendency to imitate (Furlong & Maynard, 1995), students observe lessons that vary in content, the developmental levels of pupils, the type of school, and the pedagogical style of the observed teachers.

The second phase is the induction into teaching. In pairs, students teach smaller groups of pupils in facilitated conditions. Within the pair, one student teaches, while the other is his/her assistant. Their lesson plan and its realisation are analysed by the teacher-educator from the faculty in order to provide advice for future work.

The third phase is mentored PPT, held at primary and secondary schools. It consists of three parts of teaching: eight weeks (32 hours; four hours per week) of teaching under teacher-mentors' supervision at primary schools, eight weeks at secondary schools and a week of intensive PPT at primary or secondary schools, when the student teaches all the lessons of their mentors (20 to 22 hours). Prior to starting PPT, students have to fulfil tasks that contribute to the more efficient preparation of PPT: visiting a school, becoming familiar with the teacher-mentor's documentation, analysing the characteristics of the pupils they will teach, analysing the learning environment and preparing a two-month plan on the basis of an assessment of the pupils' motor skills, knowledge and physical fitness. During PPT, they are also obliged to observe and analyse ten hours of the teaching of other students. In compliance with their compulsory tasks, students have to use information and communications technology (hereafter: ICT) during one part of the two-month PPT and an individualised approach during the other part of the two-month PPT.

PPT enables students to gain teaching experience and also to become familiar with activities connected to PE, such as sports days, extracurricular sports activities, sports competitions, etc., and other activities at the school, such as cooperation with parents, principals and keeping school records. Within PPT, students become acquainted with all teaching phases; they improve their lesson planning, they learn to carry out lessons independently using different didactic approaches, and assess pupils' knowledge. Teaching pupils of various ages at primary and secondary schools challenges them to adjust their teaching according to pupils' different developmental stages, their different needs, skills, knowledge and motivation.

The aim of the final phase is the evaluation of student's progress during PPT. Both teacher-mentors and students independently completed the evaluation questionnaires, which are a tool for monitoring the progress of students during PPT, and enabling the identification of stronger and weaker areas that can be improved later (Kovač & Jurak, 2007). The evaluation questionnaire focuses on different areas: students' preparation for PPT (fulfilment of obligations prior to PPT, attitude and communication with other teachers, participation at additional activities after classes during PPT), teaching competencies (focused on lesson planning, lesson realisation and assessment of pupils) and classroom management skills (psychological and pedagogical as well as motivation skills). First is the assessment of the self-evaluation of initial status which helps students to focus on areas where weaknesses have been identified and to work on their improvement, and then there is the final evaluation which helps to identify areas that still need improvement. Also, teacher-mentors independently assess students at the beginning and at the end of PPT. Students put questionnaires in their portfolio; teacher-mentors send it to teacher-educators by mail. The comparison of teacher-mentors' questionnaires and students' self-evaluation questionnaires provides teacher-educators at the faculty with an insight into the deficiencies and enables them to offer advice to students in their preparation for their chosen profession.

Students' self-evaluation questionnaires enable directed feedback, encouraged by thinking about their practice. Besides monitoring their own progress, the self-evaluation of students serves a further purpose: it reminds them about the theory learned during their studies, which can then be transferred into practical situations. The comparison of both evaluation questionnaires also reveals the extent of students' criticism towards their training. Teacher-educators can also recognise the weakest areas of study process.

More quality learning can be achieved with better structured curriculum, more support, students' reflections and the encouragement of students' engagement (Feiman-Nemser, 2001). In 2009/10, an intervention was carried out for students' participation at PPT: a) before PPT teacher-educators at the Faculty of Sport organised a lecture in which they discussed PPT with students and encouraged them to complete all tasks prior and during the PPT; b) the content of the lecture was oriented towards raising the awareness of the importance of individual tasks of PPT; c) students had to write the reflections of their PPT during some parts of PPT (after two, six and eight weeks) in order to be focused on their progress in the observed areas.

Study Purpose

The purpose of the study was to determine if the encouragement of better preparation for PPT, measured with the number of performed activities prior and during PPT, and students' written reflections about their work improve the efficiency of their PPT. Therefore, differences in preparation for PPT, fulfilment of compulsory and optional tasks during PE lessons at PPT, students' teaching competencies and classroom management skills between 2007/2008 and 2009/2010 academic years were

analysed. While the teaching competencies and classroom management skills did not change independently from each other, we determined the relationships between them in order to find the area with the highest impact on others.

Methods

Sample

The sample included 166 students ($N_{2007/08}$ = 84; $N_{2009/10}$= 82) who attended compulsory PPT at 69 primary and secondary schools in the 2007/08 and 2009/10 academic years, and completed the self-evaluation questionnaires. The sample represents 73% of the students in 2007/08 and 77% of the students in 2009/10 in their final year of study at the Faculty of Sport, University of Ljubljana.

Instruments

The self-evaluation questionnaire *Monitoring didactic qualification of students during practical pedagogical training* (Kovač & Jurak, 2007) consists of 53 statements that encourage and guide students in the evaluation of their preparation for PPT and their efficiency during PPT (the planning and realisation of lessons, the assessment of pupils, fulfilling different compulsory and optional tasks, and classroom management skills). Students complete two versions of the questionnaire: one for the first part and another for the second part of eight weeks of PPT.

Table 1. *Measured variables in the self-evaluation questionnaire*

Areas of observation	Evaluations used for this study	Scale	Number of statements
I. Preparation for PPT, fulfilment of compulsory and optional tasks during PPT and communication skills:			
fulfilment of obligations prior to each part of PPT	at the beginning of both parts of PPT	three-level scale (no/on one part of PPT/on both parts of PPT)	6
attitude and communication with other teachers	at the end of both parts of PPT	two-level scale (no/yes)	4
fulfilment of compulsory and optional tasks during PPT	at the end of both parts of PPT	three-level scale (no/on one part of PPT/on both parts of PPT)	6
II. Teaching competencies:			
lesson planning	at the beginning of the first part of PPT and at the end of the second part of PPT	five-point Likert scale (1- the lowest, 2 - acceptable, 3 - average, 4 - good, 5 - excellent level of competency)	9
lesson realisation			14
assessment of pupils			4
III. Classroom management skills:			
psychological and pedagogical skills	at the beginning of the first part of PPT and at the end of the second part of PPT	five-point Likert scale (1- the lowest, 2 - acceptable, 3 - average, 4 - good, 5 - excellent level of competency)	3
motivation skills			4

Procedure

Students completed their self-evaluation questionnaires at the beginning (after two weeks of teaching with teacher-mentors during each part of PTT) and at the end of both parts of PPT. Data were collected at the end of the 2007/08 and 2009/10

academic years. Areas of observation were calculated as means of statements (Table 1). For the evaluation of teaching competencies and classroom management skills, we used the results from the evaluation of the first part of PPT and at the end of the second part of PPT. For this study, the SPSS 18.0 for Windows statistical program was used to calculate basic statistics, the T-test for dependent samples, the T-test and the Mann-Whitney U-test for independent samples and Pearson correlation coefficient. The level of significance was set to $p<0.05$.

Results

Students' Fulfilment of PPT Tasks

In 2009/10, more tasks were fulfilled prior to PPT in comparison to 2007/08 (Table 2). Statistically significant differences between 2007/08 and 2009/10 were observed in three areas (personal visit to the school, familiarisation with teacher-mentors' documentation and with the characteristics of pupils). The percentage of students who did not complete the tasks dropped to (or close to) 0%, while the percentage of students who completed tasks at both PPTs increased. Almost all students visited the school prior to the beginning of both parts of PPT to discuss PPT with their teacher-mentors, to observe and analyse the characteristics of the pupils they were going to teach. In 2009/10, more students familiarised themselves with teacher-mentors' documentation (the school's annual work plan, the teacher-mentor's annual teaching plan, lesson plans for individual lessons) during at least one PPT and observed the practices of their teacher-mentors during both PPTs (Table 2).

Table 2. *Differences in preparation for PPT between two observed years (* p<0.05; ** p<0.01)*

Area of observation	2007/08			2009/10			Mann-Whitney U-test
	no	at least during one part of PPT	during both parts of PPT	no	at least during one part of PPT	during both parts of PPT	Sig.
I personally visited the school.	1.2%	98.8%	91.7%	0%	100%	98.8%	0.050*
I familiarised myself with teacher-mentor's documentation.	15.5%	84.5%	70.2%	4.8%	95.2%	85.5%	0.010*
I analysed the characteristics of pupils I will teach.	0%	100%	90.5%	0%	100%	98.8%	0.029*
I analysed the learning environment and prepared a two-month plan.	0%	100%	89.3%	1.2%	98.8%	96.4%	0.122
I prepared a two-month lessons plan on the basis of assessment of pupils' knowledge, motor skills and physical fitness.	2.4%	97.6%	84.5%	2.4%	97.6%	92.8%	0.138
I observed the lessons of my mentor prior to PPT.	0%	100%	82.1%	0%	100%	90.4%	0.161

Between the two observed years, the changes in fulfilment of two compulsory tasks (usage of ICT and individualised approach) during PPT were not statistically significant. Even though the usage of ICT was not compulsory in both parts, the percentage of students using it has increased, although there was a small number of students who did not use it.

Nevertheless, the percentage of students who completed all tasks on both parts of PPT increased, although some students (around 4%) still did not complete them at all (Table 3). The differences in optional tasks were statistically significant only in the preparation of teaching materials, although the group of students who did not prepare and use such materials has increased from 6 to 9.5 %. The strongest positive influence was recorded in the group of students who carried out optional tasks at both PPTs (11.9%; 19.1%, respectively) (Table 3).

Table 3. *Fulfilment of compulsory and optional tasks during PE lessons at PPT (* p<0.05)*

Area of observation	2007/08			2009/10			Mann-Whitney U-test
	no	at least during one part of PPT	during both parts of PPT	no	at least during one part of PPT	during both parts of PPT	Sig.
COMPULSORY TASKS AT LEAST 6 LESSONS IN ONE PART OF PPT							
I used ICT in lessons.	1.2%	98.8%	42.9%	4.8%	95.2%	47.6%	0.774
I used an individualised approach.	11.9%	88.1%	34.5%	3.6%	96.4%	41.7%	0.133
OPTIONAL TASKS DURING PE LESSONS							
I carried out cross-curricular approach.	19.0%	81.0%	53.6%	14.3%	85.7%	65.5%	0.144
I prepared and used teaching materials.	6.0%	94.0%	47.6%	9.5%	90.5%	66.7%	0.046*

Table 4. *Participation in other activities after classes during PPT (* p<0.05)*

Area of observation	2007/08			2009/10			Mann-Whitney U-test
	no	at least during one part of PPT	during both parts of PPT	no	at least during one part of PPT	during both parts of PPT	Sig.
I participated in the organisation and realisation of sports days.	56.0%	44.0%	9.5%	47.6%	52.4%	23.8%	0.098
I became familiar with extracurricular activities at school.	34.5%	65.5%	34.5%	25.0%	75.0%	47.6%	0.080
I participated in school sports competitions out of school.	71.4%	28.6%	8.3%	60.7%	39.3%	17.9%	0.010*
I became familiar with afternoon school programmes.	69.1%	30.9%	8.3%	66.7%	33.3%	17.9%	0.429
I participated in teacher meetings.	95.2%	4.8%	0.0%	97.6%	2.4%	1.2%	0.410
I participated in parent-teacher conferences.	97.6%	2.4%	0.0%	95.2%	4.8%	2.4%	0.404

Participation in other activities after classes showed statistically significant changes only in the participation in school sports competitions between the two observed years (Table 4), even though the percentage of students who completed them on one or on both parts of PPT increased. Despite that, the percentage of those who did not participate remains high.

There were no statistically significant changes in students' communication skills and the ways they presented themselves during PPT, but the results were very high.

Teaching Competencies and Classroom Management Skills

The progress in teaching competencies and classroom management skills during PPT was statistically significant ($p<0.01$) for all observed areas in both observed years (Tables 5 and 6), but the influence of PPT was greater in 2009/10. In both observed years, 2007/08 and 2009/10, students reported the greatest improvement during both parts of PPT in lesson planning and lesson realisation (Table 5). Standard deviations (SD) showed that teaching competencies and classroom management skills were more dispersed at the beginning of PPT in comparison to the end of PPT (Table 5 and 6). The differences in self-evaluations in teaching competencies and classroom management skills between both observed years were statistically significant only in lesson realisation ($p=0.043$).

Table 5. *Teaching competencies (* p<0.05; ** p<0.01)*

	observed areas	PPT		2007/08				2009/10				2007/08 vs. 2009/10	
				min	max	Mean	SD	min	max	Mean	SD	t	Sig.
Teaching competencies	lesson planning	beginning		2.44	4.56	3.625	0.546	1.67	5.00	3.525	0.737	2.806	0.096
		end		2.89	5.00	4.353	0.418	2.93	5.00	4.402	0.416	0.035	0.851
		difference				0.728				0.877			
		beginning vs. end	t	-13.561				-13.868					
			Sig.	0.000**				0.000**					
	lesson realisation	beginning		2.19	4.75	3.650	0.525	1.56	5.00	3.543	0.683	4.180	0.043*
		end		2.99	5.00	4.283	0.432	2.95	5.00	4.302	0.426	0.076	0.783
		difference				0.633				0.759			
		beginning vs. end	t	-13.640				-13.597					
			Sig.	0.000**				0.000**					
	assessment of pupils	beginning		2.00	4.75	3.638	0.626	1.50	5.00	3.534	0.631	0.425	0.515
		end		3.00	5.00	4.237	0.487	2.97	5.00	4.221	0.488	0.004	0.947
		difference				0.599				0.687			
		beginning vs. end	t	-11.055				-11.494					
			Sig.	0.000**				0.000**					

Table 6. *Classroom management skills (* p<0.05; ** p<0.01)*

	observed areas	PPT		2007/08				2009/10				2007/08 vs. 2009/10	
				min	max	Mean	SD	min	max	Mean	SD	t	Sig.
Classroom management skills	psychological and pedagogical skills	beginning		2.00	5.00	4.040	0.570	2.00	5.00	3.941	0.607	0.278	0.599
		end		2.97	5.00	4.479	0.378	2.86	5.00	4.523	0.451	2.945	0.088
		difference				0.439				0.582			
		beginning vs. end	t	-8.590				-11.425					
			Sig.	0.000**				0.000**					
	motivation skills	beginning		2.25	5.00	3.851	0.612	1.50	5.00	3.783	0.679	0.412	0.522
		end		3.89	5.00	4.359	0.433	2.98	5.00	4.465	0.480	0.255	0.615
		difference				0.508				0.682			
		beginning vs. end	t	-8.918				-11.527					
			Sig.	0.000**				0.000**					

Relationships between Different Observed Areas

In 2009/10, correlations between observed areas at the beginning and at the end of PPT were higher in comparison with 2007/08, with the exception of five correlations (Table 7). The correlations between lesson planning and other teaching competencies and classroom management skills increased: its correlation with assessment of pupils increased even by 0.331 (Table 7).

Table 7. *Correlations between observed areas at the beginning and at the end of PPT in 2007/08 and 2009/10; differences were statistically significant; p<0.01 (*Moderate correlation: 0.40 - 0.69; ** High correlation: 0.70 - 0.89)*

			at the end of PPT				
			lesson planning	lesson realisation	assessment of pupils	psychological and pedagogical skills	motivation skills
at the beginning of PPT	lesson planning	2007/08	0.520*	0.425*	0.352	0.439*	0.454*
		2009/10	0.631*	0.611*	0.683*	0.504*	0.600*
		difference	**↑ 0.111**	**↑ 0.186**	**↑ 0.331**	**↑ 0.065**	**↑ 0.146**
	lesson realisation	2007/08	0.507*	0.643*	0.482*	0.487*	0.516*
		2009/10	0.529*	0.656*	0.570*	0.433*	0.476*
		difference	**↑ 0.022**	**↑ 0.013**	**↑ 0.088**	**↓ -0.054**	**↓ -0.040**
	assessment of pupils	2007/08	0.340	0.426*	0.643*	0.294	0.404*
		2009/10	0.467*	0.478*	0.556*	0.416*	0.421*
		difference	**↑ 0.127**	**↑ 0.052**	**↓ -0.087**	**↑ 0.122**	**↑ 0.017**
	psychological and pedagogical skills	2007/08	0.613*	0.553*	0.422*	0.589*	0.607*
		2009/10	0.556*	0.599*	0.445*	0.624*	0.528*
		difference	**↓-0.057**	**↑ 0.046**	**↑ 0.023**	**↑ 0.035**	**↓ -0.079**
	motivation skills	2007/08	0.367	0.400*	0.353	0.509*	0.559*
		2009/10	0.528*	0.553*	0.444*	0.542*	0.603*
		difference	**↑ 0.161**	**↑ 0.153**	**↑ 0.091**	**↑ 0.033**	**↑ 0.044**

Furthermore, at the end of PPT, differences in correlations between observed areas were statistically significant and correlations were higher than at the beginning of PPT

(Table 8). Correlations became stronger between the observed years: from ten moderate correlations (0.422 to 0.686) in 2007/08 to five moderate correlations (0.577 to 0.682) and five high correlations (0.725 to 0.834) in 2009/10. The strongest correlations were between lesson planning and three other observed areas: lesson realisation, assessment of pupils and motivation skills. Correlation between lesson planning and assessment of pupils increased the most (from 0.499 to 0.753) (Table 8). The weakest correlation was observed between the assessment of pupils and psychological and pedagogical skills.

Table 8. *Correlations between observed areas at the end of PPT in two years 2007/08 and 2009/10; differences were statistically significant; p<0.01 (*Moderate correlation: 0.40–0.69; ** High correlation: 0.70–0.89)*

			at the end of PPT				
			lesson planning	lesson realisation	assessment of pupils	psychological and pedagogical skills	motivation skills
at the end of PPT	lesson planning	2007/08	1	0.686*	0.499*	0.613*	0.667*
		2009/10	1	0.834**	0.753**	0.681*	0.749**
		difference	0	**↑ 0.148**	**↑ 0.254**	**↑ 0.068**	**↑ 0.082**
	lesson realisation	2007/08	0.686*	1	0.575*	0.553*	0.640*
		2009/10	0.834**	1	0.725**	0.667*	0.682*
		difference	0.148	0	**↑ 0.150**	**↑ 0.114**	**↑ 0.042**
	assessment of pupils	2007/08	0.499*	0.575*	1	0.422*	0.499*
		2009/10	0.753**	0.725**	1	0.577*	0.649*
		difference	0.254	0.150	0	**↑ 0.155**	**↑ 0.150**
	psychological and pedagogical skills	2007/08	0.613*	0.553*	0.422*	1	0.607*
		2009/10	0.681*	0.667*	0.577*	1	0.775**
		difference	0.068	0.114	0.155	0	**↑ 0.168**
	motivation skills	2007/08	0.667*	0.640*	0.499*	0.607*	1
		2009/10	0.749**	0.682*	0.649*	0.775**	1
		difference	0.082	0.042	0.150	0.168	0

Discussion

Students' Fulfilment of Different Tasks Prior and during PPT

In 2009/10, teacher-educators paid special attention to encouraging students to prepare more responsibly for PPT. The discussion with students about the importance of the completion of individual tasks prior and during PPT and written reflections were effective in most tasks (Table 2 and 3). We can confirm the results of Flecknoe (2010) that administrative and/or pedagogical changes lead to changes in teachers' behaviour. Moreover, higher correlations between lesson planning and other teachers' competencies and classroom management skills confirmed that raising the awareness of the importance of better preparation for PPT and better planning contributes to higher realisation of programme elements (Hagger & McIntyre, 2006; Ure, 2009). The results suggest that it is possible to increase the realisation programmes solely by raising the students' awareness and encouraging them to complete each individual PPT task (Feiman-Nemser, 2001; Ure, 2009).

It is compulsory for students to use ICT and individualised approaches in at least six lessons in one part of PPT. The remaining few percentages of students who were not able to complete these two tasks in the 2009/2010 academic year can be explained by the students' specific working conditions (e.g. the school did not have the ICT for the tasks; pupils did not want to participate in individual programmes) or by students' incapability to carry out PE lessons with the use of ICT due to the higher complexity of the execution of such lessons. In 2009/10 an interesting phenomenon appeared: the group of students who used ICT and individualised approaches more often than required increased; they used them during both parts of PPT even though it was compulsory only in one part of PPT (Table 3). The increase in the results could be a consequence of students' realisation of the benefits of individualised approach and the better familiarisation of students with ICT from activities outside of teacher initial training programme.

In addition to teaching PE, PE teachers do a great deal of additional work. No changes were found between the two observed years in the participation of students in other activities after classes (participation in the organisation of sports days, extracurricular activities, school sport competitions, afternoon school programmes, teacher meetings and parent-teacher conferences) (Table 4). The percentage of students who have been involved in this part of teachers' work is still insufficient. The reason could be that this model of PPT is too short and consequently it is mainly orientated to the realisation of PE lessons and not sufficiently to other areas of teachers' work represented by the participation in other activities after classes, although those activities are important in students' development as teachers (Hagger & McIntyre, 2006). The reason that a very small number of students attended teacher meetings and parent-teacher conferences could also be the scheduled time of PPT: these events mainly take place in the afternoon, when students have other obligations. Therefore, changes will have to be made to enable students to get the experiences at these events. The lower response of students could also be the result of the strength of the influence that teacher-educators at the faculty have on students. This influence is stronger before PPT, when PPT is being set and students have the most contact with teacher-educators; during PPT, when students and teacher-mentors were working together twice a week, teacher-mentors' influence is very strong (Hobson, 2002; Ashby et al., 2008), probably stronger than teacher-educators. One of the tasks of teacher-mentors is to encourage students to experience that part of the work (Kristl & Repe, 2007); therefore, it would be necessary to educate teacher-mentors on the importance of a comprehensive view of the work of teachers in school as part of student's professional socialisation in order to encourage them to place more attention on this area. The influence of the lecture before PPT, in which the importance of individual elements of PPT was presented, was effective. Therefore, we should extend the influence of teacher-educators with additional activities during PPT.

Teaching Competencies and Classroom Management Skills

After the realisation of PTT in the 2007/08 academic year (Kovač et al., 2009) and on the basis of the analysis of PE teachers competencies (Kovač et al., 2008), teacher-educators at the Faculty of Sport attempted to improve students' awareness of the importance of individual elements of PPT in the light of enabling their development. Students had to make the reflections of their PPT at the beginning, in the middle and at the end of PPT. Differences occurred in most correlations between the observed areas and were much higher in 2009/10 (Table 5 and 6), which means that they progressed more and were therefore more certain about their practice.

This model of PPT offers a great deal of practice in lesson planning; students have to prepare two-month lesson plans and individual lesson plans for every lesson, so it was expected that students would progress the most in it (Table 5). Our results confirm that better preparation before PPT in 2009/10 (Tables 2, 3 and 4) contributed to the greater progress of students (Hager & McIntire, 2006; Ure, 2009). Higher familiarisation with the school system helps students while teaching and enables the more effective development of teaching competencies and classroom management skills during PPT. Better preparation also influenced the strength of correlations of lesson planning to other observed areas, which have increased the most in 2009/10 (Table 8). Better preparation enables students to plan lessons more precisely, more effectively consider tasks that motivate pupils, better enables them to select and use proper psychological and pedagogical skills and more successfully carry out assessments (Ure, 2009). All of this also influences the lesson realisation in which students achieved great progress in 2009/10 (Table 8).

Less improvement was expected in the assessment of pupils (Table 5). The assessment of pupils does not occur in PPT as often as lesson planning; therefore, students have fewer opportunities to practice assessment in comparison to the first two observed areas. Assessment is also a very sensitive area of teachers' work (Kirk, 2001; Popham, 2011; Newton & Bowler, 2010). Therefore, teacher-mentors find it difficult to leave it to the students during PPT.

Less improvement in psychological and pedagogical and motivation skills (Table 8) may result from the greater complexity of these two observed areas (Loughran, 2007), which would therefore probably require more development time and special attention. These results confirm the findings of Loughran (2007) who reduced students' capability during PPT to coping with only the direct demands of teaching a class. The results confirm that this model of PPT is efficient for developing basic teaching competencies, but not as much as classroom management skills.

The results of this study confirm the findings of other studies (Dall'Alba & Sandberg, 2006; Day, 1999; Edwards, Gilroy, & Hartley, 2002; Hager & McIntire, 2006) that PPT is very important for students' professional preparation. Since teacher-educators' efforts in 2009/10 improved the results regarding the fulfilment of tasks prior to PPT, higher correlations between the areas (Table 7 and 8) indicate that better

understanding of school system and pupils before PPT and higher self-awareness encourage development of teaching competencies and classroom management skills. The results of our research confirm the results of Ure (2009) that the quality of preparation of the students influences the quality of professional learning with PPT.

The research has some limitations. The results could be the consequence of other, unobserved factors. The changes in the results could be a consequence of the amount of experience students attained during PPT because of different competencies of teacher-mentors. The second reason could be the amount of experience with teaching outside the official faculty programme before PPT. Therefore, it would be important to determine whether students in 2009/10 experienced less or more teaching outside the faculty's curriculum than students in 2007/08, and how that influenced their starting point at the beginning of PPT. The third reason could be some more global changes in the school system, which we would have to explore.

Conclusion

PPT of students is a significant element of professional development in physical education teacher education programmes (Dall'Alba & Sandberg, 2006; Day, 1999; Edwards, Gilroy, & Hartley, 2002; Hager & McIntire, 2006). The essence of teacher preparation programmes is not only the mastery of a teacher's subject area, teaching methods and a system of knowledge, but also the ability to carry out all the demanding tasks of teaching, to analyse one's everyday experience and to learn from it (Kansanen, 1999; Nikolić, 2008). The PPT at the Faculty of Sport, University of Ljubljana, Slovenia is effective in the acquisition of basic professional competencies of students, which require more pragmatic approaches.

Improvement of the PPT results solely by raising the awareness of the importance of individual elements of PPT, which leads to higher realisation of its individual elements before the actual training, is effective. This study confirms the findings and assumptions found in the academic literature that better preparation for PPT leads to greater progress of students (Hager & McIntire, 2006) and that administrative and/or pedagogical changes lead to changes in teacher behaviour and increased student achievement (Flecknoe, 2010). While we did not raise the participation of students in additional activities after classes during PPT, new ways will have to be found to achieve progress.

Better preparation and students´ reflections contribute to the balanced and correlated development of teaching competencies and classroom management skills. Knowledge of those correlations is important in setting a model of PPT, or in the improvement of an existing model. The results are in compliance with the results of Hager and McIntire (2006) who state that to be effective we need to move towards a well-planned school-based curriculum for initial teacher training.

Among the observed teaching competencies and classroom management skills, lesson planning had the strongest correlation to all other observed areas. This could

mean that if we improve the knowledge of lesson planning before PPT, we can improve the conditions for the development of other areas; this also confirms the findings of Ure (2009) that the quality of preparation of the students influences the quality of professional learning on PPT. Therefore, a strong emphasis on lesson planning before PPT is an important part of the foundation for successful PPT.

We confirmed that teacher-mentors are one of the most powerful sources of influence on student teachers' PPT (Hobson, 2002; Ashby et al., 2008). Therefore, we have to promote the fact that teacher-mentors' encouragement of students should be more systematic and should have a more responsible approach towards their learning; we should also nurture the ability of teacher-mentors to identify students' problematic areas, which can positively influence students' learning. To reach the areas that still need improvement, more attention will have to be paid to teacher-mentors in order to help them recognise and accept the importance of wider role of mentorship, which includes a wider field of teachers' work.

We can also conclude that we should extend the influence of teacher-educators with additional activities during PPT. The change would be achieved with weakly cohort seminars of students with teacher-educators at the faculty. Such seminars would raise the influence of teacher-educators during PPT. With more experience, students would gain better access to experienced teachers' work (Hagger & McIntire, 2006). Therefore, its absence could be a deficit in the PPT of students, as they do not receive insight into activities that are also an important part of the successful work of every teacher.

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Je li praktična pedagoška obuka studenata tjelesnoga odgoja dovoljno učinkovita?

Sažetak

Praktična pedagoška obuka (PPO) važna je sastavnica profesionalnog razvoja u obrazovanju učitelja tjelesnoga odgoja. Važna je u njihovoj profesionalnoj socijalizaciji, istovremeno razvijajući učiteljske kompetencije i vještine upravljanja razredom. U ovom se članku proučavaju procjene slovenskih studenata tjelesnog odgoja u pogledu vlastitog napretka tijekom PPO-a. U ovoj usporednoj studiji uspoređivane su dvije skupine studenata ($N_{2007/08}$=84; $N_{2009/10}$=82) koji su sudjelovali u PPO-u akademske godine 2007./2008. i 2009./2010. Upotrijebljena je temeljna statistička analiza, kao i T-test, Mann-Whitney U-test i Pearsonov korelacijski koeficijent. Rezultati otkrivaju da su poticaj za bolju pripremu za PPO profesora metodičara i učitelja mentora, kao i pisane refleksije studenata pridonijeli poboljšanju razine uspješnosti i da im je to ojačalo sigurnost u vlastite vještine. Bolja pripremljenost za PPO vodi prema znatnijem napretku studenata i jamči da će administrativne i/ili pedagoške promjene dovesti do promjena u ponašanju učitelja. Korelacije između proučavanih područja pokazuju da je planiranje nastavnoga sata imalo najveći utjecaj na uspješnost studenata tijekom PPO-a.

Ključne riječi: *obrazovanje učitelja; planiranje nastavnog sata; tjelesni odgoj; učinkovitost; učiteljske kompetencije.*

Uvod

Praktična pedagoška obuka u obrazovanju učitelja

U suvremenom obrazovanju učitelja naglašava se integracija teorijskih načela koje studenti usvajaju za vrijeme studija u praktičnu pedagošku obuku (PPO). Shodno tomu, prilika koja se pruža studentima da uče iz iskustva u bliskoj suradnji s učiteljima mentorima iz osnovnih i srednjih škola tijekom PPO-a jedna je od ključnih sastavnica obrazovnih programa u pedagoškoj struci (Dall'Alba i Sandberg, 2006; Day, 1999; Edwards, Gilroy i Hartley, 2002; Hager i McIntire, 2006). Tijekom PPO-a studenti

razvijaju pedagoške načine razmišljanja i ponašanja u raznoraznim autentičnim situacijama. To nije utemeljeno samo na implicitnim teorijama, već je i potkrijepljeno teorijskim konceptima i rezultatima istraživanja (Kansanen, 1999; Hager i McIntire, 2006) s kojima su se studenti upoznali tijekom studija.

Osim praktičnog iskustva, studenti stječu i samopouzdanje i navikavaju se na autonomiju koja je urođena pedagoškoj praksi. Procjene učitelja mentora, kao i tehnike samovrednovanja, omogućuju informativne povratne informacije, zahvaljujući čemu studenti dobivaju uvid u vlastitu uspješnost, što je iznimno vrijedno za njihov profesionalni rast (Boshuizen, Bromme i Gruber, 2004; Brown i Glasner, 1999; Furlong i Maynard, 1995; Tillema, 2009), uz to što potiču studente da postanu svjesniji samih sebe (Feiman-Nemser, 2001; Ure, 2009). PPO se ne sastoji samo od nastave u učionici ili dvorani. Njegov sadržaj proteže se preko niza različitih područja učiteljskog rada (izvannastavne aktivnosti, suradnja s roditeljima, ravnateljima, ostalim nastavnicima, sportskim klubovima, liječnicima), što pomaže studentima u razvoju autonomne učiteljske osobnosti (Cvetek, 2002; Jurak i Kovač, 2011; Kovač et al., 2009).

Postoje tri modela obuke kada je riječ o profesionalnoj učiteljskoj praksi: naukovanje, model utemeljen na kompetencijama i model refleksivnog praktičara (Maynard i Furlong, 1993). Kod modela naukovanja mentor ima ulogu modela, u modelu utemeljenom na kompetencijama mentorov je zadatak pratiti i davati povratne informacije studentima i imati ulogu trenera, dok je u modelu refleksivnog praktičara mentor suispitivač i potiče studente na propitkivanje njihovih uvjerenja, vrijednosti, koncepcija i djelovanja. Tijekom procesa PPO-a trebala bi se bar djelomično koristiti sva tri modela (Valenčič i Vogrinc, 2004).

Fakultetski profesori metodičari, studenti i nastavnici mentori uključeni su u PPO. Metodičari su, čini se, skloniji promatrati praktičnu nastavu studenata kroz prizmu programskog standarda, učitelji mentori se usmjeravaju na uspješnost studenta u nastavi i kako on ili ona pridonose boljitku učenika, dok studente (kao one koji usvajaju znanja i vještine) najviše zanima kako riješiti izravne potrebe koje nameće održavanje nastavnog sata (Loughran, 2007). Te različite perspektive zahtijevaju sustavno praćenje, a konsolidacijom njihovih rezultata dolazi se do informacija o tome kako PPO potiče učenje studenata. Naime, studenti koji slijede upute i savjete PPO-a obično bolje artikuliraju svoja profesionalna znanja (Hagger i McIntyre, 2006). Stoga PPO mora biti strukturirano u najvećoj mjeri, odnosno koliko god je potrebno, tako da se maksimalno poveća kognitivni pristup studenata potpunoj uobičajenoj realnosti rada u nastavnom procesu (Hagger i McIntyre, 2006).

Na temelju podataka studija o poželjnim kompetencijama učitelja tjelesnog odgoja (Kovač, Sloan i Starc, 2008) Sportskog fakulteta Sveučilišta u Ljubljani razvijen je PPO model (Kovač et al., 2009). Program PPO-a pokušalo se poboljšati određenim intervencijama, no učinkovitim se pokazuje sustavno praćenje studenata i razumijevanje čimbenika koji pridonose PPO-u.

Značajke praktične pedagoške obuke na Sportskom fakultetu Sveučilišta u Ljubljani

U sklopu kolegija Didaktika tjelesnog odgoja na Sportskom fakultetu Sveučilišta u Ljubljani tijekom završne godine studija svi studenti obvezni su proći PPO. Studenti tako stječu prva iskustva u osnovnim i srednjim školama pod vodstvom nastavnika mentora koji moraju imati najmanje pet godina praktičnog iskustva te (prema pravilima za promaknuća zaposlenika) minimalni profesionalni status „mentora", što je najniži status kada je riječ o promaknućima zaposlenih u školama. Prevladavajući model koji se koristi na početku PPO-a jest naukovanje, koji se nakon nekoliko nastavnih sati mijenja i postaje model utemeljen na kompetencijama.

PPO se sastoji od četiri faze. Studenti praksu započinju promatranjem pod vodstvom metodičara s fakulteta, što služi svrsi kritičke analize didaktičkih obilježja nastavnog sata koji održava iskusni nastavnik. S obzirom na to da uvijek postoji tendencija oponašanja (Furlong i Maynard, 1995), studenti promatraju nastavne sate koji se razlikuju po sadržaju, razvojnoj razini učenika, tipu škole i pedagoškom stilu promatranih učitelja.

Druga je faza uvod u nastavni rad. Studenti u parovima poučavaju manje skupine učenika u olakšanim i ublaženim uvjetima. Jedan od studenata u paru poučava, dok mu je drugi pomoćnik. Metodičar s fakulteta analizira njihov nastavni plan i njegovu realizaciju kako bi dao savjet za budući rad.

Treća je faza mentorirani PPO koji se održava u osnovnim i srednjim školama. Sastoji se od tri dijela poučavanja: osam tjedana (32 sata; četiri sata tjedno) poučavanja pod nadzorom učitelja mentora u osnovnoj školi, osam tjedana u srednjoj školi i tjedan intenzivnog PPO-a bilo u osnovnoj bilo u srednjoj školi, kada student održava svu nastavu svojeg mentora (20 do 22 sata). Prije početka PPO-a studenti moraju ispuniti zadaće koje pridonose učinkovitijoj pripremi PPO-a: posjet školi, upoznavanje s dokumentacijom učitelja mentora, analiza osobina učenika kojima će predavati i priprema dvomjesečnog plana na temelju procjene učeničkim motornih vještina, znanja i tjelesne spremnosti. Tijekom PPO-a također su obvezni promatrati i analizirati deset sati nastave drugih studenata. U skladu s obveznim zadaćama, studenti moraju koristiti informatičko-komunikacijsku tehnologiju (u daljnjem tekstu: IKT) tijekom jednog dijela dvomjesečnog PPO-a i individualizirani pristup u drugom dijelu dvomjesečnog PPO-a.

PPO omogućuje studentima da steknu iskustvo rada u nastavi i da se upoznaju s aktivnostima vezanima uz nastavu tjelesnog odgoja, kao što su sportski dani, izvannastavne sportske aktivnosti, sportska natjecanja i tako dalje, kao i ostalim aktivnostima u školi, uključujući suradnju s roditeljima, ravnateljem i vođenje školske dokumentacije. U sklopu PPO-a studenti se upoznaju sa svim fazama nastave; poboljšavaju planiranje nastavnog sata, uče samostalno izvoditi nastavu koristeći se različitim didaktičkim pristupima i vrednuju učeničko znanje. Poučavanje učenika različite dobi u osnovnim i srednjim školama stavlja pred studente izazov prilagodbe

stila poučavanja ovisno o različitim razvojnim stadijima učenika, njihovim potrebama, vještinama, znanju i motivaciji.

Cilj posljednje faze jest evaluacija napretka studenata tijekom PPO-a. Učitelji mentori i studenti neovisno jedni o drugima ispunjavaju upitnik o evaluaciji, koji služi kao alat za praćenje napretka studenata tijekom PPO-a i omogućuje identifikaciju jačih i slabijih točaka koje se tako kasnije mogu poboljšati (Kovač i Jurak, 2007). Upitnik o evaluaciji bavi se raznolikim područjima: pripremom studenata za PPO (misli se na ispunjavanje obveza prije PPO-a, stav i komunikaciju s drugim učiteljima, sudjelovanje u dodatnim aktivnostima nakon nastave tijekom PPO-a), učiteljskim kompetencijama (usmjerenima na planiranje nastavnog sata, realizaciju nastavnog sata i vrednovanje učenika) i vještinama upravljanja razredom (psihološko-pedagoške i motivacijske vještine). Najprije se izvodi vrednovanje samoprocjene inicijalnog statusa, što pomaže studentima da se usredotoče na područja na kojima su utvrđeni nedostaci i da porade na njihovu poboljšanju. Istodobno učitelji mentori provode vlastitu procjenu studenata na početku i na kraju PPO-a. Studenti upitnike spremaju u svoje portfelje, a učitelji mentori ih elektroničkom poštom šalju metodičarima na fakultet. Usporedbom upitnika mentora i studenata profesori metodike uočavaju nedostatke i savjetuju studentima u pripremi za odabrano zvanje.

Studentski upitnici za samoprocjenu omogućuju izravnu povratnu informaciju potpomognutu promišljanjem o vlastitoj praktičnoj nastavi. Osim što njome prate vlastiti napredak, samoprocjena studenata ima i drugu svrhu: podsjeća ih na teorijska znanja koja su usvojili tijekom studija, a koja se tada mogu prenijeti u praktične situacije. Usporedbom oba evaluacijska upitnika otkrivaju se i razmjeri studentske kritike prema obuci. Profesori tako prepoznaju i najslabije karike studijskog procesa.

Kvalitetnije učenje postiže se bolje strukturiranim kurikulom, boljom podrškom, promišljanjem studenata i poticanjem angažmana studenata (Feiman-Nemser, 2001). Akademske godine 2009./2010. provedena je intervencija u vezi sa sudjelovanjem studenata u PPO-u: a) prije početka PPO-a metodičari sa Sportskog fakulteta organizirali su predavanje u kojemu su sa studentima razgovarali o PPO-u i potaknuli ih na obavljanje zadaća prije i za vrijeme PPO-a; b) sadržaj predavanja bio je usmjeren prema osvještavanju važnosti pojedinačnih zadataka PPO-a; c) studenti su tijekom određenih dijelova PPO-a (nakon dva, šest i osam tjedana) morali napisati svoje refleksije o PPO-u kako bi se usredotočili na vlastiti napredak u proučavanim područjima.

Svrha istraživanja

Svrha istraživanja bila je utvrditi poboljšava li poticaj bolje pripreme za PPO, mjerene brojem izvedenih aktivnosti prije i za vrijeme PPO-a te pisanim refleksijama studenata o vlastitom radu i učinkovitosti PPO-a. Stoga su analizirane razlike u pripremi za PPO, ispunjavanje obveznih i izbornih zadataka tijekom nastavnih sati tjelesnog odgoja, učiteljske kompetencije studenata i njihove vještine upravljanja razredom

u akademskoj godini 2007./2008. i 2009./2010. Iako se učiteljske kompetencije i vještine upravljanja razredom nisu promijenile neovisno jedne o drugima, proučili smo njihove međuodnose radi pronalaženja područja koje je imalo najjači učinak na ostala područja.

Metode

Uzorak proučavanih ispitanika

U uzorak je bilo uključeno 166 studenata ($N_{2007/08}$ = 84; $N_{2009/10}$= 82) koji su pohađali obvezni PPO u 69 osnovnih i srednjih škola tijekom akademske godine 2007./2008. i 2009./2010. te ispunili upitnike za samoprocjenu. Uzorak predstavlja 73% studenata akademske godine 2007./2008. i 77% studenata akademske godine 2009./2010. na završnoj godini studija Sportskog fakulteta Sveučilišta u Ljubljani.

Instrumenti

Upitnik za samoprocjenu pod nazivom *Praćenje didaktičkih kvalifikacija studenata tijekom praktične pedagoške obuke* (Kovač i Jurak, 2007) sastoji se od 53 izjave koje potiču i vode studente u evaluaciji vlastite pripreme za PPO te njihove učinkovitosti tijekom PPO-a (planiranje i realizacija nastavnih sati, procjena učenika, ispunjavanje raznih obveznih i izbornih zadataka te vještine upravljanja razredom). Studenti ispunjavaju dvije inačice upitnika: jedan za prvi dio i drugi za drugi dio osmotjednog PPO-a.

Tablica 1. *Izmjerene varijable u upitniku za samoprocjenu*

Promatrana područja	Procjene korištene za ovo istraživanje	Ljestvica	Broj izjava
I. priprema za PPO, ispunjavanje obveznih i izbornih zadaća tijekom PPO-a i komunikacijske vještine			
Ispunjavanje obveza prije pojedinačnih dijelova PPO-a	Na početku oba dijela PPO-a	Trorazinska ljestvica (ne/u jednom dijelu PPO-a/ u oba dijela PPO-a)	6
Stav i komunikacija s drugim učiteljima	Na kraju oba dijela PPO-a	Dvorazinska ljestvica (ne/ da)	4
Ispunjavanje obveznih i izbornih zadataka tijekom PPO-a	Na kraju oba dijela PPO-a	Trorazinska ljestvica (ne/u jednom dijelu PPO-a/ u oba dijela PPO-a)	6
II. učiteljske kompetencije			
Planiranje nastavnog sata	Na početku prvog dijela PPO-a i na kraju drugog dijela PPO-a	Likert ljestvica s pet razina (1- najniža, 2 - prihvatljiva, 3 - prosječna, 4 - dobra, 5 – odlična razina kompetencija)	9
Realizacija nastavnog sata			14
Procjena učenika			4
III. vještine upravljanja razredom			
Psihološko-pedagoške vještine	Na početku prvog dijela PPO-a i na kraju drugog dijela PPO-a	Likertova ljestvica s pet razina (1 – najniža, 2 – prihvatljiva, 3 – prosječna, 4 – dobra, 5 – odlična razina kompetencija)	3
Motivacijske vještine			4

Postupak

Studenti su ispunili upitnike za samoprocjenu na početku (nakon dva tjedna nastave uz nastavnika mentora u svakom dijelu PPO-a) i na kraju oba dijela PPO-a. Prikupljeni su podaci za akademsku godinu 2007./2008. i 2009./2010. Mjerenje promatranih

područja izvršeno je putem izjava (Tablica 1). Za procjenu učiteljskih kompetencija i vještina upravljanja razredom koristili smo rezultate evaluacije iz prvog dijela PPO-a i s kraja drugog dijela PPO-a. Za ovaj rad je s ciljem izračuna temeljne statistike korišten program SPSS 19.0 za Windowse, T-test za ovisne uzorke, T-test i Mann-Whitney U-test za neovisne uzorke i Pearsonov korelacijski koeficijent. Stupanj bitnosti označen je kao $p<0.05$.

Rezultati

Ispunjavanje zadaća PPO-a

U usporedbi s 2007./2008., u akademskoj godini 2009./2010. ispunjeno je više zadataka prije početka PPO-a (Tablica 2). Statistički značajne razlike između akademske godine 2007./2008. i 2009./2010. uočene su na tri područja (osobni posjet školi, upoznavanje s dokumentacijom nastavnika mentora i osobinama učenika). Postotak studenata koji nisu izvršili zadatke pao je na gotovo 0%, dok se postotak studenata koji su ispunili zadatke u oba dijela PPO-a povisio. Gotovo svi studenti posjetili su školu prije početka oba dijela PPO-a ne bi li razgovarali o PPO-u s nastavnicima mentorima i radi promatranja i analize osobina učenika koje će poučavati. Godine 2009./2010. još se veći postotak studenata upoznao s dokumentacijom nastavnika mentora (školski godišnji plan i program rada, godišnji nastavni plan nastavnika mentora, nastavni plan za pojedinačne nastavne sate) tijekom bar jednog dijela PPO-a i promatrali su praktične sate nastavnika mentora u oba dijela PPO-a (Tablica 2).

Tablica 2.

Tijekom dvaju promatranih akademskih godina razlika u ispunjavanju dva obvezna zadatka (uporaba IKT i individualni pristup) tijekom PPO-a nisu bile statistički značajne. Premda uporaba IKT nije bila obvezna u oba dijela, postotak studenata koji su je koristili porastao je usprkos činjenici da je mali broj studenata nije koristio.

Usprkos tome, postotak studenata koji su izvršili sve zadaće u oba dijela PPO-a se povisio, premda ih neki studenti (oko 4%) još uvijek uopće nisu ispunili (Tablica 3). Razlike su kod izbornih zadataka bile statistički značajne samo kada je riječ o pripremi nastavnih materijala, iako se skupina studenata koji nisu pripremili i koristili takve materijale povećala sa 6 na 9.5%. Najjači pozitivni utjecaj zabilježen je u skupini studenata koji su izveli izborne zadatke u oba dijela PPO-a (11.9% i 19.1%) (Tablica 3).

Tablica 3.

Sudjelovanje u ostalim aktivnostima nakon nastave iskazuje statistički značajne promjene samo u pogledu sudjelovanja u školskim sportskim natjecanjima u obje promatrane akademske godine (Tablica 4), premda se postotak studenata koji su tu zadaću ispunili u jednom ili oba dijela PPO-a povećao. Usprkos tomu, postotak onih koji nisu u njima sudjelovali i dalje je visok.

Tablica 4.

Nije bilo statistički značajnih promjena u komunikacijskim vještinama studenata i njihovu načinu predstavljanja tijekom PPO-a, no zabilježeni su rezultati vrlo visoki.

Učiteljske kompetencije i vještine upravljanja razredom

Napredak na području učiteljskih kompetencija i vještina upravljanja razredom tijekom PPO-a pokazao se statistički značajnim ($p<0.01$) u svim promatranim područjima tijekom obje promatrane akademske godine (Tablice 5 i 6), no utjecaj PPO-a bio je jači u akademskoj godini 2009./2010. Tijekom obje promatrane akademske godine, 2007./2008. i 2009./2010., studenti su iskazali najveći napredak u oba dijela PPO-a u pogledu pripreme i realizacije nastavnog sata (Tablica 5). Standardne devijacije (SD) pokazuju da su učiteljske kompetencije i vještine upravljanja razredom više disperzirane na početku PPO-a u usporedbi sa završnim stadijem PPO-a (Tablice 5 i 6). Razlike u samoprocjeni učiteljskih kompetencija i vještina upravljanja razredom između dvaju promatranih akademskih godina bile su statistički značajne samo kada je riječ o realizaciji nastavnog sata ($p=0.043$).

Tablica 5.

Tablica 6.

Međuodnosi između promatranih područja

U akademskoj godini 2009./2010. korelacije između promatranih područja na početku i kraju PPO-a bile su veće nego u akademskoj godini 2007./2008., uz iznimku pet korelacija (Tablica 7). Povećale su se korelacije između planiranja nastavnog sata, ostalih učiteljskih kompetencija i vještina upravljanja razredom: korelacija s procjenom učenika čak za 0.331 (Tablica 7).

Tablica 7.

Nadalje, na kraju PPO-a razlike u korelacijama između promatranih područja bile su statistički značajne, a korelacije su bile veće na početku PPO-a (Tablica 8). Korelacije su ojačale u razdoblju između dvaju promatranih akademskih godina: od deset umjerenih korelacija (0.422 do 0.686) u 2007./2008. do pet umjerenih korelacija (0.577 do 0.682) i pet visokih korelacija (0.725 to 0.834) 2009./2010. Najjače korelacije zabilježene su na području planiranja nastavnog sata i još tri promatrana područja: realizacija nastavnog sata, procjena učenika i motivacijske vještine. Korelacija između planiranja nastavnog sata i procjene učenika najznačajnije se povisila (s 0.499 na 0.753) (Tablica 8). Najslabija korelacija zabilježena je između procjene učenika i psihološko-pedagoških vještina.

Tablica 8.

Rasprava

Ispunjavanje zadaća prije i tijekom PPO-a

U akademskoj godini 2009./2010. profesori metodičari posebnu su pozornost posvetili poticanju studenata da se odgovornije pripremaju za PPO. Rasprava sa studentima o važnosti ispunjavanja individualnih zadataka prije i tijekom PPO-a, kao i pismene refleksije, bili su učinkoviti u velikoj većini zadataka (Tablice 2 i 3). Stoga možemo potvrditi rezultate koje je dobio Flecknoe (2010) koji govore u prilog činjenici da administrativne i/ili pedagoške promjene uzrokuju promjene u ponašanju učitelja. Štoviše, veće korelacije između planiranja nastavnog sata i ostalih učiteljskih kompetencija te vještina upravljanja razredom potvrđuju da podizanje svijesti o važnosti bolje pripreme za PPO i boljeg planiranja pridonosi višoj realizaciji programskih elemenata (Hagger i McIntyre, 2006; Ure, 2009). Rezultati ukazuju na to da je moguće povećati realizaciju programa isključivo podizanjem svijesti studenata i poticanjem da ispune pojedinačne zadatke PPO-a (Feiman-Nemser, 2001; Ure, 2009).

Obveza je studenata upotrijebiti IKT i individualizirani pristup u najmanje šest nastavnih sati u jednom dijelu PPO-a. Nizak udio studenata koji nisu uspjeli izvršiti ta dva zadatka u akademskoj godini 2009./2010. može se objasniti specifičnim uvjetima rada pojedinih studenata (npr. škola nije posjedovala potrebnu IKT opremu za te zadatke; učenici su odbili sudjelovati u individualiziranim programima), odnosno nesposobnošću studenata da izvedu nastavni sat tjelesnoga odgoja uz upotrebu IKT zbog iznimne složenosti izvedbe takvog sata. U akademskoj godini 2009./2010. došlo je do pojave jednoga zanimljivog fenomena: povećao se broj studenata koji su upotrebljavali IKT i individualizirani pristup češće no što je bilo potrebno; koristili su ih u oba dijela PPO-a iako je zahtjev bio da se koriste samo u jednom dijelu PPO-a (Tablica 3). Porast tih rezultata možda se može pripisati činjenici da su studenti uvidjeli koristi individualiziranog pristupa i boljeg upoznavanja studenata s IKT iz aktivnosti izvan inicijalne obuke učitelja.

Osim nastave tjelesnog odgoja nastavnici tjelesnog odgoja zaduženi su za niz dodatnih aktivnosti. U dvije promatrane akademske godine nije bilo promjena u pogledu sudjelovanja studenata u ostalim aktivnostima nakon same nastave (sudjelovanje u organizaciji sportskih dana, izvannastavnim aktivnostima, školskim sportskim natjecanjima, poslijepodnevnim programima u školi, nastavničkim vijećima i roditeljskim sastancima) (Tablica 4). Postotak studenata uključenih u taj dio nastavničkih aktivnosti i dalje je prenizak. Razlog je možda činjenica da je taj program PPO-a prekratkog trajanja i da je stoga uglavnom usredotočen na realizaciju nastavnih sati tjelesnog odgoja, a nedovoljno na ostala područja nastavničkog rada koje predstavlja sudjelovanje u ostalim aktivnostima nakon nastave, premda se te aktivnosti bitne za razvoj budućih učitelja (Hagger i McIntyre, 2006). Razlog zašto je vrlo malen broj studenata prisustvovao nastavničkim vijećima i roditeljskim sastancima možda je u rasporedu PPO-a. Naime, te se aktivnosti uglavnom odvijaju u poslijepodnevnim satima, kada studenti imaju druge obaveze. Stoga će morati doći do promjena koje

će omogućiti studentima da steknu iskustvo i u pogledu navedenih aktivnosti. Nesudjelovanje studenata možda je i rezultat utjecaja metodičara s fakulteta. Njihov je utjecaj najsnažniji prije početka PPO-a, dok se PPO postavlja i studenti ostvaruju najintenzivniji kontakt s metodičarima; tijekom PPO-a, kada studenti dva puta tjedno surađuju s mentorima. Mentori su oni koji imaju najjači utjecaj na studente (Hobson, 2002; Ashby et al, 2008), vjerojatno jači od metodičara. Jedna od zadaća mentora jest potaknuti studente da iskuse i nenastavni dio nastavničkog rada (Kristl i Repe, 2007). Stoga je nužno educirati mentore o važnosti sveobuhvatnog pogleda na nastavnički rad u školi kao dijelu profesionalne socijalizacije studenata kako bi ih se potaknulo na to da više pozornosti posvete upravo tom području. Utjecaj predavanja netom prije početka PPO-a, u kojemu je predstavljena važnost pojedinačnih elemenata PPO-a, bio je učinkovit. Stoga bi se utjecaj metodičara mogao ojačati dodatnim aktivnostima tijekom PPO-a.

Učiteljske kompetencije i vještine upravljanja razredom

Nakon realizacije PPO-a u akademskoj godini 2007./2008. (Kovač et al., 2009) i analize kompetencija učitelja tjelesnog odgoja (Kovač et al., 2008), metodičari sa Sportskog fakulteta pokušali su podići svijest studenata u pogledu važnosti pojedinačnih elemenata PPO-a s ciljem omogućavanja njihova daljnjeg razvoja. Studenti su trebali napisati refleksije o PPO-u na početku, za vrijeme trajanja i na kraju PPO-a. Razlike su zabilježene ponajviše u korelaciji promatranih područja i bile su puno veće u akademskoj godini 2009./2010. (Tablice 5 i 6), što znači da su studenti postigli značajniji napredak i stoga bili i puno sigurniji u vlastitu praksu.

Takav model PPO-a omogućuje puno vježbe kada je riječ o planiranju nastavnog sata. Studenti moraju pripremiti dvomjesečni nastavni plan i pojedinačne nastavne planove za svaki nastavni sat, pa se i očekuje da će studenti najveći napredak ostvariti upravo na tom polju (Tablica 5). Naši rezultati potvrđuju da je bolja pripremljenost prije PPO-a u akademskoj godini 2009./2010. (Tablice 2, 3 i 4) pridonijela značajnijem napretku studenata (Hager i McIntire, 2006; Ure, 2009). Bolja upoznatost sa školskim sustavom pomaže studentima u poučavanju i omogućuje učinkovitiji razvoj učiteljskih kompetencija i vještina upravljanja razredom tijekom PPO-a. Bolja pripremljenost također utječe na jakost korelacije između planiranja nastavnog sata i ostalih proučavanih područja, koja je ponajviše porasla u akademskoj godini 2009./2010. (Tablica 8). Bolja pripremljenost također omogućuje studentima preciznije planiranje nastavnih sati, uspješniji odabir aktivnosti koje motiviraju učenike, omogućuje im bolju selekciju i uporabu prikladnih psihološko-pedagoških vještina i uspješnije izvođenje vrednovanja (Ure, 2009). Sve navedeno utječe na realizaciju nastavnog sata, u čemu su studenti postigli sjajan napredak u akademskoj godini 2009./2010. (Tablica 8).

Manji napredak bio je očekivan na području vrednovanja učenika (Tablica 5). Vrednovanje učenika ne događa se tijekom PPO-a tako često kao planiranje nastavnog

sata, pa stoga studenti imaju manje prilika vježbati vrednovanje u odnosu na prva dva promatrana područja. Vrednovanje je isto tako vrlo osjetljivo područje nastavničkog rada (Kirk, 2001; Popham, 2011; Newton i Bowler, 2010), zbog čega je nastavnicima mentorima taj dio vrlo teško prepustiti studentima.

Manji napredak u pogledu psihološko-pedagoških vještina i motivacijskih vještina (Tablica 8) može se pripisati znatnijoj složenosti tih dvaju promatranih područja (Loughran, 2007), koja bi vjerojatno zahtijevala više vremena i posebnu pozornost. Ti rezultati potvrđuju spoznaje Loughrana (2007), koji je sposobnost studenata tijekom PPO-a suzio samo na bavljenje izravnim zahtjevima nastave. Navedeni rezultati također dokazuju kako je taj model PPO-a učinkovit samo kada je riječ o razvijanju temeljnih učiteljskih kompetencija, ali ne i vještina upravljanja razredom.

Rezultati ovoga istraživanja potvrđuju spoznaje drugih istraživanja (Dall'Alba i Sandberg, 2006; Day, 1999; Edwards, Gilroy i Hartley, 2002; Hager i McIntire, 2006), to jest činjenicu da je PPO bitan za profesionalnu pripremu studenata. S obzirom na to da su nastojanja metodičara u akademskoj godini 2009./2010. pridonijela boljim rezultatima u pogledu ispunjavanja zadataka prije početka PPO-a, viši stupanj korelacija između područja (Tablice 7 i 8) ukazuje na to da bolje razumijevanje školskog sustava i samih učenika potiče razvoj učiteljskih kompetencija i vještina upravljanja razredom. Rezultati našega istraživanja u skladu su s rezultatima Urea (2009) o kvalitetnoj pripremi studenata koja utječe na kvalitetu profesionalnog učenja u sklopu PPO-a.

Ovo istraživanje imalo je i određena ograničenja. Dobiveni rezultati možda su dijelom i posljedica drugih, neprimijećenih čimbenika. Promjena u rezultatima možda je posljedica količine iskustva koje su studenti stekli tijekom PPO-a zbog različitih kompetencija učitelja mentora. Drugi bi razlog moglo biti iskustvo poučavanja izvan službenoga fakultetskog programa prije početka PPO-a. Stoga bi bilo dobro utvrditi jesu li studenti u akademskoj godini 2009./2010. imali više ili manje iskustva u nastavi izvan fakultetskog kurikula od studenata u akademskoj godini 2007./2008. te kako je to utjecalo na polazišnu točku na početku PPO-a. Treći razlog tiče se općenitih promjena u školskom sustavu, koje bismo trebali pomnije istražiti.

Zaključak

PPO je bitna sastavnica profesionalnog razvoja studenata u PETE programima (Dall'Alba i Sandberg, 2006; Day, 1999; Edwards, Gilroy i Hartley, 2002; Hager i McIntire, 2006). Suština programa učiteljske pripreme ne počiva samo na ovladavanju predmetnog područja, metodama poučavanja i sustavu znanja, nego i na sposobnosti izvršavanja svih onih zahtjevnih zadaća vezanih uz poučavanje, analize svakodnevnog iskustva i učenja iz tih iskustava (Kansanen, 1999; Nikolić, 2008). PPO na Sportskom fakultetu Sveučilišta u Ljubljani učinkovit je kada je riječ o usvajanju temeljnih profesionalnih kompetencija studenata, što zahtijeva pragmatičniji pristup.

Došlo je i do poboljšanja rezultata već i samim podizanjem razine svijesti o važnosti pojedinačnih elemenata PPO-a, što vodi do bolje realizacije tih elemenata prije

početka obuke. Istraživanje je potvrdilo spoznaje i pretpostavke iz literature o tome da bolja priprema za PPO vodi prema značajnijem napretku studenata (Hagen i McIntire, 2006) i da administrativne i/ili pedagoške izmjene uzrokuju promjene u učiteljskom ponašanju i bolje rezultate studenata (Flecknoe, 2010). Premda nismo povisili kvantitetu sudjelovanja studenata u dodatnim aktivnostima nakon nastavnih sati tijekom PPO-a, morat će se pronaći način da se i na tom području postigne napredak.

Bolja pripremljenost i studentske refleksije pridonose uravnoteženom i korelacijskom razvoju učiteljskih kompetencija i vještina upravljanja razredom. Poznavanje tih korelacija važno je u postavljanju modela PPO-a, odnosno u poboljšanju postojećeg modela. Rezultati su u skladu s rezultatima Hagera i McIntirea (2006), koji tvrde da se učinkovita obuka učitelja mora pomaknuti prema dobro isplaniranom školskom kurikulu.

Od svih proučavanih učiteljskih kompetencija i vještina upravljanja razredom, planiranje nastavnoga sata imalo je najsnažnije korelacije sa svim ostalim promatranim područjima. To znači da ako poboljšamo poznavanje planiranja nastavnog sata prije PPO-a, možemo poboljšati i uvjete za razvoj drugih područja, što potvrđuje rezultate Urea (2009) o tome da kvalitetna priprema studenata utječe na kvalitetu profesionalnog učenja tijekom PPO-a. Stoga jak naglasak na planiranje nastavnog sata prije PPO-a postaje važan dio temelja za uspješni PPO.

U ovome istraživanju također smo potvrdili da su nastavnici mentori jak izvor utjecaja na studente na praksi (Hobson, 2002; Ashby et al., 2008). Stoga moramo promicati činjenicu da mentorski poticaj studenata mora biti sustavniji, što bi značilo da bi mentori trebali imati odgovorniji pristup prema učenju studenata. Trebali bismo njegovati i poticati sposobnost mentora da odrede problematična područja pojedinačnih studenata, što može pozitivno utjecati na njihovo učenje. Ako želimo dotaknuli područja na kojima još ima mjesta za poboljšanja, moramo posvetiti više pozornosti nastavnicima mentorima kako bismo im pomogli u prepoznavanju i prihvaćanju važnosti uloge mentorstva, što uključuje i šire područje nastavničkog rada.

Također možemo zaključiti da bismo trebali povećati opseg utjecaja profesora metodičara dodatnim aktivnostima tijekom trajanja PPO-a. Promjena bi se mogla uvesti već tjednim seminarima studenata i metodičara. Takvim seminarima ojačala bi moć utjecaja metodičara za vrijem PPO-a. Uz više iskustva, studenti bi dobili bolji pristup radu iskusnih nastavnika (Hager i McIntire, 2006). Dakle, to iskustvo može se smatrati manom u PPO-u jer studenti nisu ostvarili uvid u aktivnosti koje su također bitan dio uspješnog rada svakog nastavnika.