

The Quality of Pre-service Teacher Training during the Pandemic through the Eyes of the Slovenian Physical Education Pre-service Teachers

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ABSTRACT

In 2020, physical education teacher education (PETE) students of the Faculty of Sport of University of Ljubljana (N = 46) had to complete a large part of the pre-service teacher training online. Using an online questionnaire, we investigated how they managed distance learning in Physical Education (PE) at primary schools. The delivery mostly depended on whether the school included PE in the timetable. On average, most lessons took the form of independent student activity following written or recorded instructions, and the rest took the form of online outdoor or indoor live classes. The latter were often used to give instructions, check tasks and motivate. Some schools organized at least one sports day (26%), active break (21%) or active class break (9%). Most pre-service teachers chose different objectives compared to traditional form of instruction: they emphasized the development of motor and functional abilities rather than the acquisition of new motor and social skills. All student teachers delivered physical fitness, followed by athletics (59%), dance and aerobics (43%). However, ball games (except volleyball 33%) were represented in a smaller proportion. 21% of the students taught content continuously. Assessment was done by 71.4% of the students (many of them only assessed the completion of the tasks) and evaluation by only 31.0%. They used a workout diary, videos or photos, or live conference calls. The average response rate was 71% for 1st-6th graders and 59% for 7th-9th graders. 21% did not attempt to reach non-responding students, while 10% indicated that they did not have problems with nonresponding.

Key words: COVID-19 pandemic, online Physical Education, pre-service teacher training, quality

Introduction

Pre-service teacher training (PTT) is a very important part of physical education teacher education (PETE). During PTT pre-service teachers learn and reinforce the previously learned knowledge and skills for teaching Physical Education (PE) under the mentors' guidance in schools for a certain period of time. They are fully immersed in the reality of school, gradually gain mastery of the teaching process, experience in independent work, self-confidence and begin to develop an autonomous teacher personality¹. Therefore, PTT is considered as one of the most important dimensions of pre-service teachers' education, which has a great impact on the development of teachers' pedagogical skills² and personality³ and is strongly correlated with their feelings of self-efficacy^{4, 5}. However, we must keep in mind that the nature, structure and organization of PTT has a crucial role in the quality of pre-service teachers' experience⁶.

Slovenian model of PTT for PE

The PTT of PE students (pre-service teachers) at the Faculty of Sports of the University of Ljubljana (UL FS) is gradually developed through several academic years. The introduction to professional work takes place in the third year of undergraduate studies. It includes job shadowing, teaching practice and co-teaching with a mentor, where pre-service teachers gradually increase the amount of independent teaching in classes. In the initial phase they teach only a part of the lesson or help with a small group, and by the end they are already leading classes independently, which is also the aim of this practice⁷.

During a 2-year master's programme, pre-service teachers teach in primary schools (PS) in the first year and in secondary schools (SS) in the second year of the study. PTT consists of five phases⁷⁻⁹ and is graphically represented in Figure 1.

Pre-service teachers start with observation practice in a larger group under the guidance of teacher-educators,

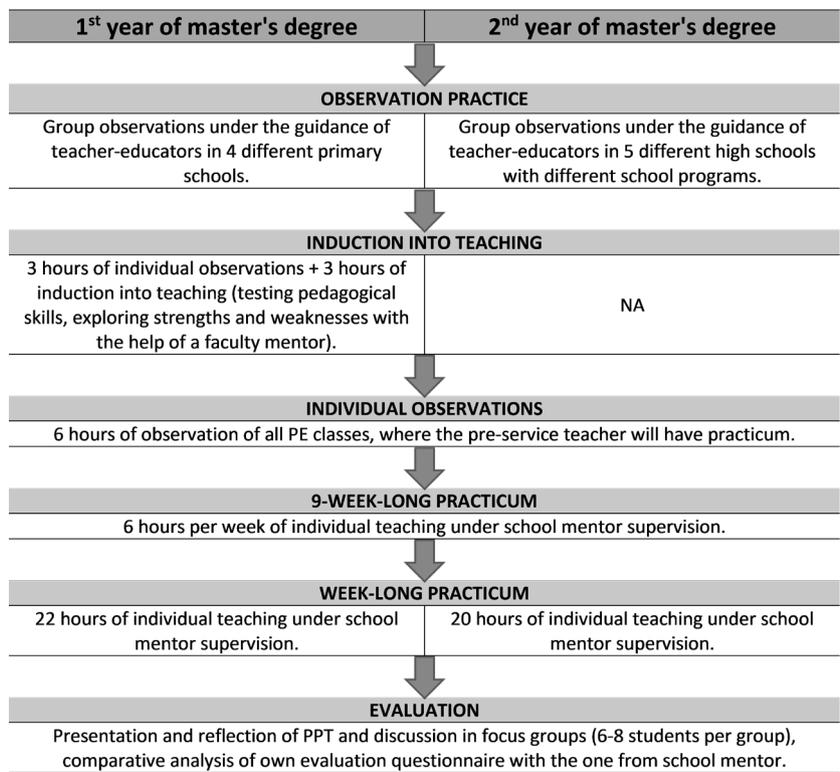


Fig. 1. Five parts of PPT in 1st and 2nd year of master's degree.

which serves as a critical analysis of the didactic characteristics of lessons led by an experienced teacher. As there is always a tendency to imitate, pre-service teachers 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. Three pre-service teachers teach smaller groups of pupils in facilitated conditions. Within the group, one teaches, while the other is his/her assistant, and the third observes their work. Their lesson plan and its realisation are analysed by the teacher-educator from the faculty in order to explore their pedagogical strengths and weaknesses. At the beginning of the 9-week-long PTT, pre-service teachers and their mentors discuss the objectives and content, schedule, specifics of the school, departments, individual students, etc. They learn about individual characteristics of PE groups that they will teach during the practicum in individual observations of each PE group prior to teaching. In a week-long practicum they teach independently all mentor's lessons to experience the teacher's workload and a distribution of their own energy through a working week. The last part of PTT is the evaluation phase, where both the pre-service teachers and their mentors complete the evaluation questionnaires, and the pre-service teachers create a personal portfolio in which they collect the preparations for the lesson, all the materials they have created during PTT and a personal diary. They present their pedagogical work and reflection of their PTT at a

focus groups, held at the faculty in small groups (6 to 8 students per group).

PTT during the COVID-19 pandemic

During the pandemic, education faced many challenges that schools and universities addressed to the best of their ability. In response, many educational institutions are now considering a technology-based distance education, but we must remember that emergency remote teaching¹⁰ or emergency eLearning¹¹ is only a lifeline to continue educational programs. Probably PTT experienced an even greater challenge due to the possibility that schools might refuse to place pre-service teachers because of the fear of spreading the virus or confusions about epidemiological measures.

According to a SWOT analysis, conducted in some European countries¹², the school placement experience for PE pre-service teachers was explained as both a weakness (due to the diversity of content lost through the medium of online learning environments) and a strength (despite the need for better articulation of the online environment). They concluded that 'face-to-face' experiences with the PE subject are essential for pre-service teachers. Pre-service teachers pushed their own limits during the pandemic due to the exceptional situation that occurred, which affected both their practical performance and their evaluation of their own performance in distance PTT¹³.

Due to the experience of distance learning and the observed restrictions of PE teaching to prevent the spread of the coronavirus a research on PTT of Spanish PE students in spring 2020 showed similar results. The internal construct of the PE perception among pre-service teachers was at risk of changing towards a reduction of touch and compassion in teaching and towards the use of more individual tasks and activities, more practice management instead of learning new content¹⁴. They experienced a range of emotions: they especially missed personal contact and touch (which they described as key features of teaching PE), but, above all, they experienced fear and uncertainty¹⁵.

Similar experiences were reported by Chilean pre-service teachers: virtual teaching generated in them a certain frustration and uncertainty about the future¹⁶. They lacked a space of presence and contact with their students, an important feature of PE. The loss of classroom presence and the formative potential of the PTT and the professional identity of pre-service teachers have produced consequences that could affect their future professional practice. In the research, they also found that communication with the supervising teacher was sporadic and unsystematic and their mentors in the schools were somehow disconnected from their formative role. The teachers had to implement new strategies to address the content of the national curriculum, which was later prioritized and restricted by the Chilean Ministry of Education. The methods used by pre-service teachers were based on developing guides, creating videos, using social media and, sometimes, using virtual platforms.

Aim of the study

In Slovenia, PE students also completed a large part of their PTT as distance learning during the closure. At the beginning of 2020, the first-year students of the master's program PE PTT started at primary schools. In February 2020, they conducted group visits to mentor schools. In March 2020, they had completed individual observations and some of them even learning performance inductions when the schools were closed due to the pandemic. In consultation with the students and UL FS management, the PTT was moved to the second year of their program. In September 2020, pre-service teachers who had not completed the introductory learning performances in March returned to their mentor schools to complete them. PTT began for all pre-service teachers on September 21, 2020. During the first three weeks of PTT, pre-service teachers taught "live," i.e., in the traditional manner. However, since October 19, 2020, when schools switched to distance learning due to pandemic circumstances, until the end of the two-month PTT in December 2020, they taught online. The one-week PTT was completed in late January or February 2021, after other study obligations were completed or when PTT could already be done live.

This generation of students gained the unique experience of teaching PE at a distance, and their mentors also supervised the students in practice at a distance for the

first time. The EUPEA noted that students need a critical face-to-face experience from PE to maintain control and quality of the overall teaching and learning experience¹². We contend that this is also true for pre-service teachers. Nonetheless, like all other school subjects, PE was taught at a distance during the school closure in the time of pandemic. In Slovenia, teaching PE at a distance has not yet been known, although some teachers have already supplemented PE lessons by working in online classrooms or used e-portfolios. PE teachers gained their first experience in the first wave of the pandemic in spring 2020, so it is justified to ask what learning experiences PE pre-service teachers had during their PTT. We were interested in how the pre-service teachers conducted the distance PE teaching, the extent to which they succeeded in achieving the goals of encouraging students to be physically active, delivering content, and assessing student knowledge. Therefore, the main objective of this study is to analyze the learning experiences of Slovenian pre-service teachers in the context of PTT during the COVID-19 pandemic.

Materials and Methods

Study design

This descriptive study was designed to:

- (1) review different protocols of distance education of PE carried out in mentoring primary schools in Slovenia and
- (2) to determine the learning outcomes of PTT achieved by pre-service teachers during PE teaching in primary schools at a distance.

The participants, pre-service teachers, completed an on-line questionnaire as part of their PTT evaluation after they completed PTT in spring 2021. This study was conducted in full accordance with the ethical guidelines of the University of Ljubljana and approved by the relevant ethics board (UL FS, No. 28:2021).

Participants

The participants of the study were 2nd year students of the Master's program in PE at UL FS, who conducted PTT in primary schools from late September to December 2020. All 46 pre-service teachers responded to the online questionnaire. The sample consisted of 25 female and 21 male students, which were distributed to 33 primary schools. The majority of pre-service teachers taught PE from Year 6 to Year 9 and only a few taught early years or elective PE (Table 1).

Data collection and data analysis

The pre-service teachers completed an online questionnaire on the *Ika* portal as an obligatory part of evaluation phase of pre-service pedagogical training. The questionnaire included questions about organizing PE education at a distance, aligning goals and content, assessment, using ICT tools and creating instructional materials, and com-

TABLE 1

THE DISTRIBUTION OF STUDENTS TEACHING PE IN DIFFERENT GRADES AND THE OPTIONAL SUBJECT SPORT

Grade	f (students teaching a grade)	% (students teaching a grade)	% among grade
1.	3	6.5	1.3
2.	3	6.5	1.3
3.	3	6.5	1.3
4.	9	19.6	3.8
5.	17	37.0	7.2
6. (m)	22	47.8	9.4
6. (f)	29	63.0	12.3
7. (m)	23	50.0	9.8
7. (f)	24	52.2	10.2
8. (m)	23	50.0	9.8
8. (f)	21	45.7	8.9
9. (m)	26	56.5	11.1
9. (f)	27	58.7	11.5
Optional subject Sport	5	10.9	2.1
SUM			100%

Note: (f) – female classes of PE, (m) – male classes of PE

municating with their mentors. All questions related only to the part of PTT they had done as distance learning. Prior to data collection, the questionnaire was tested among SLOfit team members. SLOfit is a national surveillance system for physical and motor development of children and youth which was formerly known as Sports Educational Chart. The system was implemented in 1982 on a sample of Slovenian schools and after 5 years of testing it was introduced to all Slovenian primary and secondary schools.

The questions were of open and closed type. The closed question type included YES –NO type questions and if applicable the optional Likert scale question type with an option for respondents to write their own response. We used descriptive statistical analysis (frequencies) for these variables. The responses on the open-ended questions were firstly grouped on similarity of content by two research members independently. Then we used descriptive statistical analysis (frequencies). All calculations were performed and graphical representations designed by using MS Excel.

Results

Communication with the mentor

Students compared online communication with their mentor to the communication they had with another mentor in the previous school year when their undergraduate PTT took place in schools. Half of the students (49%) re-

ported that communication with their mentor was better, while 21% rated it as worse. Due to the epidemic circumstances in Slovenia and the constant changes in the organization of distance learning that this entailed, students stated that they needed to communicate more frequently and intensively. According to students, communication technology provided constant opportunities for communication and mentors were more accessible and combined different means of communication compared to the previous year's placement (Figure 2). Traditional technology (phone, text message, or email) was the most extensive, while the use of video calls (MS teams and Zoom predominated) was the least important among the means of communication between students and mentors.

The biggest problem that emerged was the lack of experience with online communication: most of the students who complained felt uncomfortable during the conversations and lacked certainty of meaning due to the lack of non-verbal communication when using communication technology.

The organization of the distance teaching of PE

Pre-service teachers were required to conform their practice to the official requirements of the Ministry of Education, Science and Sport. With the schools closure, online teaching continued under the model D¹⁷: schools had to establish a single channel of communication, adjust timetables to cope with students' and teachers' workloads, while PE teachers had to adjust the objectives and content of the national curriculum.

In some schools, physical activity was seen as an important factor in keeping children healthy. Just over one-third of students (36%) reported that PE is in the schedule as it was before distance learning, but unfortunately, the majority of students (40%) reported that school administrators had reduced the number of hours in the timetable for PE and none of the mentor schools provided more hours of PE. A quarter of students (24%) reported that PE was excluded from the timetable, so they only taught through assigned tasks to students.

Of the six hours of PTT per week, PE was conducted on average for 3.8 hours as an independent student activity following written or recorded instructions (SD =1.96), for 1.9 hours through concurrent indoor video meetings (SD =1.72), and for half an hour through concurrent outdoor video meetings (SD =1.07). Some indoor video meetings were not for practice, but included giving verbal instructions for independent student activities, evaluating tasks and motivating students, solving their problems, etc.

The relevant ministry encouraged schools to organize a sports day on a cross-curricular basis¹⁷ but only 26% of pre-service teachers reported that they had conducted a distance sports day, and two of them reported that they had conducted as many as three sports days. Perhaps the schools had provided for new epidemic restrictions in the fall and probably had at least one sports day (out of five mandatory per year) in the first few weeks of the school

year. The implementation of sports days varied widely: a sports day could be conducted for all students in the school on a specific day, on several days separately for different grades, or they set a specific time frame in which students individually completed the assigned tasks. The most common content was winter activities (4 students), a hiking sports day (3 students), or a combination of walking with additional physical activity tasks (3 students).

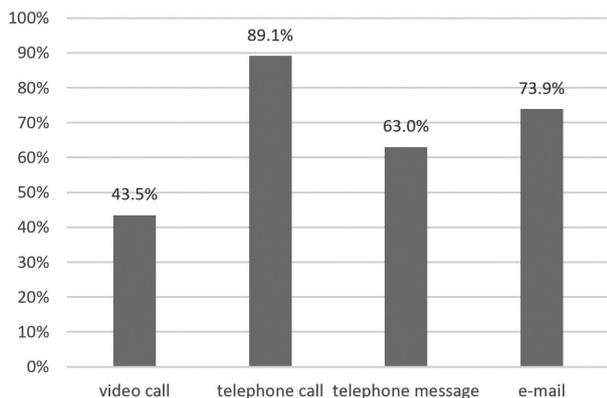


Fig. 2. Means of communication between students and mentors.

Students’ physical activity in school can be enriched by physically active recess or physically active breaks during lessons (e.g. One Minute for Health) in addition to the mandatory PE. Some schools have used this form of student activity to increase physical activity during the school day (Figure 3).

Seven pre-service teachers conducted an active school recess live via video meeting, and 3 via assignments in the online classroom. They performed short intense exercises (exercises to develop strength or increase heart rate) and/or stretching exercises. During active breaks in the course of the lessons, pre-service teachers performed exercises to reduce excessive sitting. 57% of pre-service teachers do not even know whether or not the school has implemented active breaks during class.

Pre-service teachers used various ICT tools: online classrooms (69.6%) and video conferencing programs (MS Teams and Zoom) (65.2%) were used most frequently. Among video portals, only YouTube was used (37%), while mobile applications (Strava, Sports Tracker, various step counting applications, GoPro, Padlet, Plotaroute) were the most used (28.3%). Instructions were also sent by email (32.6%).

Pre-service teachers were required to produce various instructional materials during their practicum (Figure 4). All students produced written materials with exercise instructions and video recordings (fitness exercises or to assist in learning dance or technical elements of a single sport). Pre-service teachers produced the majority of materials on their own initiative (61.4%), with just over a third following instructions from mentors (38.6%). They used a variety of sources to prepare the classroom materials (Figure 4), but mostly relied on professional literature, textbooks, and their own notes from class. They also found the

useful SLOfit Youtube channel and the Facebook group of Slovenian PE teachers, where teachers from all over Slovenia shared their own materials, ideas, etc.

The adaptation of the objectives and contents of PE

The operational objectives in the Slovenian PE curriculum¹⁸ are divided into four areas (adequate physical fitness; acquisition of basic movement skills and sport skills; understanding the importance of physical activity and sport; and formation of attitudes, habits and enjoyable sporting experiences). PE departments in schools had to adapt these objectives and contents according to the recommendation of National Education Institute Slovenia (NEIS), which had labelled the objectives according to the priority and the possibility of implementation in distance education (Table 2).

In all educational periods, all or almost all of the operational objectives in the three domains are identified as objectives that can be pursued: adequate physical fitness, understanding the importance of physical activity and sport, and forming attitudes, habits, and enjoyable sporting experiences. In the domain of acquiring various sports skills, all objectives are indicated in the first (1st to 3rd grade) and second (4th to 6th grade) educational periods, except for those related to swimming, ball games, and gymnastics (in the first educational period) or involve tools and equipment that most students do not have at home. In the third educational period (7th through 9th grades), all objec-

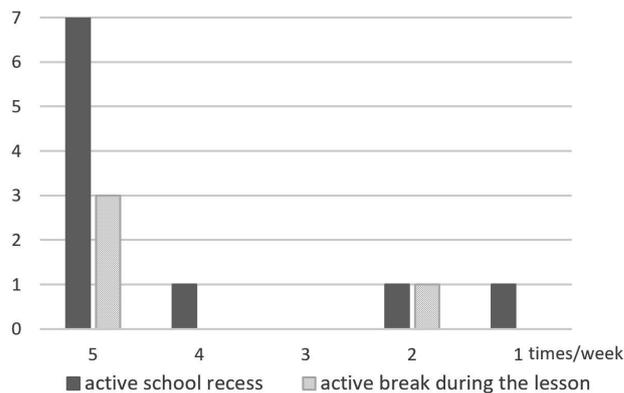


Fig. 3. Frequency of active school recesses and active breaks during the lessons.

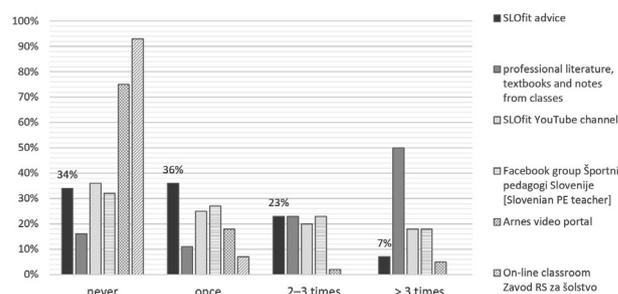


Fig. 4. Percentage of students using different relevant sources to create learning materials.

TABLE 2
THE RECOMMENDED OBJECTIVES DURING DISTANCE TEACHING

Objectives	1 st to 3 rd grades	4 th to 6 th grades	7 th to 9 th grades
Adequate physical fitness (physical development, motor and functional abilities)	form the correct physical posture with conscious body control		
	improve motor and functional abilities: coordination, strength, speed, mobility, precision, balance, overall endurance		
	perform movements in a different rhythm on music	detect rhythm in motion	are able to go through longer distances
		compare their growth, development and motor efficiency in terms of population values	are capable of prolonged walking effort
			regularly monitor their physical efficacy and make comparison with average peer population values
	implement the basic prims of athletics	running, jumping and throwing different sports gadgets in different ways,	aesthetically performing different movement tasks on music
Acquisition of basic movement skills and sport skills	handle various sports equipment		
	consciously control the body in different positions and movements, which they perform in different directions and around different body axes	consciously control their body in gymnastic positions and movements in different directions, around different axes	
	dance children's and folk dances	dance selected children's, folk and social dances	
	imitate a wide variety of objects, animals, natural phenomena		
	express their feelings and moods through movement		
	implement natural movements under different conditions		
Understanding the importance of physical activity and sport	Learn about suitable sports clothing and footwear	name sports tools and equipment and know their safe use	understand the impact of regular sports exercise and appropriate nutrition on health and well-being
	name the body positions, different movements and certain learning forms	use basic notions of sports terminology	understand influence of the different modes of exercise and the response of the organism to effort
	know different sports surfaces and devices, name some tools and accessories	know the characteristics of individual sports, especially those related to our past	differentiate aerobic and anaerobic exercise depending on the heart rate
	know the correct physical posture		know how to choose a suitable sport activity based on their physical characteristics and fitness
	know the basic principles of safety in the gym, playground, snow and hiking		know the proper nutrition for sports
			identify risk factors in everyday life and in sport
			respect the basic principles of safety in sport
			understand the preventive role of sport in raising awareness against various forms of addiction and other pathological phenomena of modern society
Forming attitudes, habits and enjoyable sporting experience	develop positive behavioral patterns		
	develop self-confidence, determination and perseverance	understand diversity in the physical efficiency of individuals	have a responsible attitude towards their health
	acquire basic hygiene habits associated with sports exercise	comply with the hygiene rules associated with exercise	respect diversity in the individual's physical performance
	test their capabilities while mastering their body and expressing themselves through movement	understand the importance of protecting natural and cultural heritage	respect the effort, while experiencing greater physical strain
			learn about ecological issues related to sport
			develop views on the side of modern sport

tives in this domain are dropped except those related to performing various movement tasks within a musical accompaniment.

Pre-service teachers had to follow the adapted curriculum as the individual school adapted it to their own capabilities and environment. As many as 74% of the pre-service teachers believe that they chose different objectives because of distance education than they would in the traditional form of instruction. About 17% of pre-service teachers reported that they carefully chose PE objectives that were still reasonably feasible; they adapted objectives to external conditions (safety precautions, previously taught content, accessibility of equipment). They also reported focusing more on objectives that aimed to raise awareness of the importance of physical activity, provide preventive health care, promote outdoor exercise, or even provide exercise at all. They chose mostly objectives related to developing physical fitness (21%), and fewer objectives related to drill or improving skills at ball games. They also wrote that they had no objectives related to developing cooperative skills and fewer objectives related to acquiring new sports skills.

In achieving their operational objectives, pre-service teachers paid the most attention to developing adequate physical fitness (more than 40%), with scores ranging from 10 to 90%. The other three areas were almost equally represented (averaging about 20% each), with scores ranging from 5% to 50% (Figure 5).

The consequence of focusing on the first domain of operational objectives was that all pre-service teachers decided to place more emphasis on physical fitness when teaching a content. The content they taught included athletics (59%), dance and aerobics (43%), and volleyball (33%). Other sports were represented in a smaller proportion (between 7% and 13%) (Figure 6).

Only a small proportion of pre-service teachers (21%) taught the content in the subject areas sequentially, as they would in live lessons. One-third of pre-service teachers constantly adapted content to external factors, while 38% used a combination of both approaches (they intended to teach content in topic areas, but also adapted to external factors as needed).

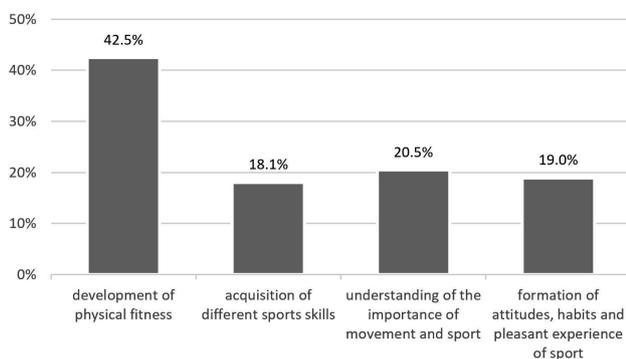


Fig. 5. The percentage of objectives from four main areas chosen for distance teaching of PE.

The choice of theoretical content was similar. Pre-service teachers predominantly chose physical fitness content (89% of students), focusing mainly on proper warm-up, composition of training to develop motor skills (especially strength), and validation of heart rate values. The technique of individual sports was taught to a lesser extent (from 6% to 30%). Nearly 20% of pre-service teachers used cross-curricular approaches related to biology and science, physics, music, and history. The health effects of physical activity were offered by 15% of pre-service teachers, while 13% offered various topics in the area of norms, habits and behavior.

To support the delivery of content, students produced mainly videos (75%), but to a much lesser extent written products (8%), worksheets, knowledge quizzes, e-textbooks and mobile guides (all listed at 4%).

Experiences with assessment

During distance teaching, 71.4% of pre-service teachers (or their mentors if students did not have access to student assignments) assessed student knowledge, while only 31.0% of pre-service teachers (or their mentors) also graded student knowledge.

Most pre-service teachers used multiple methods of assessment, most commonly workout logs, videos or photographs, and video meetings. They most frequently assessed student performance via videos, photos or video meetings (Figure 7). We did not ask about the content of the assessment as we assumed that there would be little assessment practices (according to the preliminar informal information) and that the content of the assessment would be the same as they taught. But individual comments indicated that some pre-service teachers only reviewed task performance.

Dealing with non-responsive students

The average student response rate was 71% in the first and second educational period, while it was lower in the third training period (59%). 69% of pre-service teachers attempted (with or through mentors) to persuade non-responsive students to become physically active.

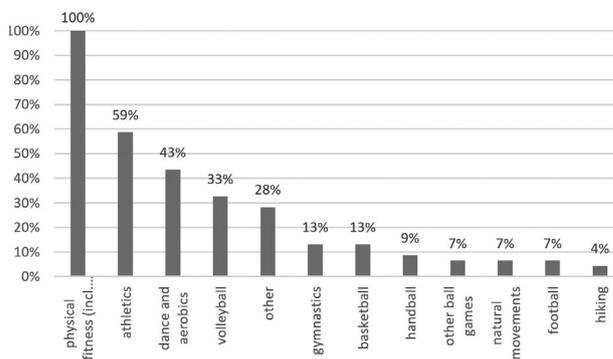


Fig. 6. The percentage of students who chose individual content in PE distance teaching.

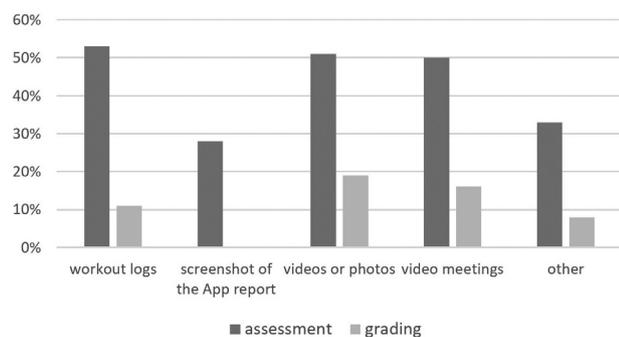


Fig. 7. The percentage of pre-service teachers who had experience of assessment during distance teaching.

This was mostly attempted through motivational talks during video meetings, extending deadlines for submission of assignments and with interesting assignment content, as well as through personal calls in an online classroom, information to parents or through classmates, and in some cases deciding on actions for non-responsive students at school level. 21% of pre-service teachers did not even attempt to contact non-responsive students, while 10% indicated that there were no non-responsive students at all.

Discussion

PE teachers were mostly aware of the importance of physical activity during the pandemic, as children worked more on computers, had fewer opportunities to play outside, play sports at school and in their free time, and use physical activity to get to school, practice, and other extracurricular activities¹⁹. They encouraged headteachers to maintain the provision of PE. They were certainly encouraged by the results of the SLOfit study, which showed a remarkable decline in physical fitness among primary school children²⁰. We assume that the headteacher's evaluation of sport, the activity of PE teachers in the school and the so-called status of PE in the school²¹, are key factors that shaped school sporting life during the pandemic, but these are assumptions that should be investigated further.

Different schools have shown that school sport can be organized in different ways to maintain the wide range and diversity of students' physical activity. For example, some PE teachers have taken the opportunity by introducing active school recesses and active breaks during distance learning to prevent overload from increasing sedentary lifestyles and computer work. Thus, many good examples of active school recesses and active breaks during lessons were presented on the SLOfit website, in the online classrooms of the study groups for Slovenian PE teachers and on the FB site of Slovenian PE teachers. Some good examples were also prepared by pre-service teachers during their PTT (alone or together with mentors)^{22, 23}.

The type of communication (e.g., written instructions, video sessions to review work performance, or practice through video meetings) can also have a significant impact on student activity. The teacher can deliver instruction synchronously through video meetings or asynchronously through written or video instructions^{24, 25}. Teachers can also use video meetings to check whether students understood the instructions, how they performed the tasks, working conditions, and learning skills, or, more importantly, to motivate them and help them solve potential problems in the learning process. Pre-service teachers used videos meetings less than half of the time. A quarter of the students did not have this opportunity at all because PE was not on the school timetable. Some used video meetings to give verbal instructions on tasks, to check task completion, and to motivate. Some took the opportunity to do sports drills indoors. And few encouraged themselves to use video meetings for synchronous outdoor training, which is somehow to be expected since PTT took place in late fall and winter when the weather is not optimal for outdoor exercise. Compared to the survey from the USA²⁶, Slovenian students used more written instructions to perform sports activities (more than two thirds compared to 51% of PE teachers in the USA).

Another important factor is the quality of lesson planning. During initial and in-service training, pre-service teachers and their mentors did not have the opportunity to be trained for distance learning. Moreover, the instructions from the government and the relevant ministry were constantly changing, which significantly influenced the planning of the learning process. Students and their mentors were constantly learning and adapting on a trial and error basis. The result was that less than a quarter of the students and their mentors managed to implement the objectives and content in thematic areas. Such a principle of distance learning is less successful²⁷.

Since the Slovenian PE teachers and pre-service teachers had no previous experience with planning and distance learning of the PE, we can say that many of them prepared interesting content and effective lessons, even pursuing the objectives that were not foreseen by the NEIS as feasible. Of course, nearly three-quarters of the students and their mentors chose different objectives than they would have if they had taught live in the gym. On average, they were more likely to choose the objectives of understanding the importance of sport (raising awareness of the importance of exercise and developing health care) and developing motor and functional abilities. The results are similar to the USA survey²⁶, where PE primary and secondary teachers were more likely to select the objectives positive appreciation of sport and enjoyment of physical activity (42%) and develop and acquire skills and knowledge about health-related physical activity (32%). Similar was found in an Australian survey²¹: PE teachers reported that physical activity had been often marginalized and replaced with physical activity tasks and in some cases online fitness activities. PE teachers should focus on maintaining a level of physical fitness in students with the

goal of remaining healthy and physically sustainable²⁵, which makes sense and is logical in the times of pandemic. Nonetheless, these are very important objectives that many of the PE teachers in countries where the concept of sports services is more present often neglect in live lessons²⁸, focusing more on teaching movement skills²⁹.

In the case of distance education, since the teacher must also adapt the content to the sports equipment available to the students at home, many of the objectives are difficult or impossible to achieve, especially those related to the acquisition of practical sports skills. Such adaptation of objectives and content risks monotony and thus a decline in students' motivation²⁷. In Slovenia, a good fifth of pre-service teachers reported this. Nevertheless, pre-service teachers were also able to adapt objectives and content from thematic sets of ball games that focus on individual technique and tactics.

At this point, one can also discuss the fact that some pre-service teachers omitted objectives related to the development of collaborative skills. Similarly, Spanish pre-service teachers expressed concern that PE practices are becoming more individualized and sociality is falling by the wayside¹⁴. It is understandable that this type of skill is best developed in a group that is together in time and space³⁰. However, some objectives related to children's social development can be developed and strengthened at a distance. An example is creative movement challenges, such as Triglaving³¹, that set a goal for a group of students or a class or the whole school that can only be achieved together. By focusing on health-related objectives and content, and through the external conditions of distance learning, pre-service teachers pursued to a greater extent objectives of forming attitudes, habits, and the enjoyable experience of sport, so-called utilitarian objectives such as health care or taking responsibility for one's own physical activity. The introduction of cross-curricular links (for example healthy life style, taking responsibility for someone's own health, sport physiology, safe exercise, environmental protection) opens up even greater opportunities to pursue objectives and content in the domain of understanding the meaning of physical activity and sport and forming attitudes, habits and pleasurable experiences of sport.

Most controversy is caused by two issues: non-responsive students and remote assessment of knowledge. It is the omission of objectives and content that can affect both dilemmas. On the one hand, the omission of intended objectives and content can lead to monotony in PE²⁷, which can keep students' motivation to practice low and lead to avoidance of task completion²⁵. Of course, this is not the only reason for students' unresponsiveness. It can also be students' lack of responsibility for their own learning²⁷, difficulties in organizing school work, problems with the Internet, lack of knowledge or skills, problems at home and many more. Most pre-service teachers or their mentors tried to use empathic methods of encouragement: motivational talks, solutions to possible problems in task performance (mostly working conditions), creating inter-

esting content, etc. On the other hand, pre-service teachers or their mentors also intervened with repressive methods, such as informing the class teacher, parents and enforcing measures at school level.

On the other hand, the omission of objectives and content poses a problem in the evaluation of knowledge. The question immediately arises as to what should be assessed at all, or whether assessment makes sense at all. The teacher can assess what students have learned, practiced, and evaluated³²; phases of the learning process simply cannot be omitted. If the teacher only provides content that sufficiently motivates students and does not require effort to learn, the teacher can only assess whether the objectives have been met, but cannot assess the content.

However, when students learn and practice new content at a distance, a new dilemma arises: the fairness of assessment. The PE teacher may initially wonder whether it is fair to assess a lesson that students have largely worked on independently using written explanations or notes, without the traditional supervision and support of the teacher at the time of practice. One of the important roles of the PE teacher is to provide movement correction as students learn new movement patterns, which PE teachers and pre-service teachers are largely unable to do in distance learning. Therefore, due to differences in physical ability, knowledge and environmental opportunities, students are placed in an unequal position in terms of assessment. In addition, the question for the PE teachers is whether they can ensure the fairness of the students in the assessment process. Especially when it is not directly evident from the learning evidence that the task was solved by the students themselves without help. Many PE teachers have been prohibited by principals from collecting photos and videos of students, which are important evidence of learning in both immersion and assessment.

It is likely that most PE teachers have not taken assessments in distance education because of these dilemmas. Those pre-service teachers who reported that they or their mentors assessed remotely wrote that they assessed live in video meetings, and some through photos or videos. This suggests that assessment was not primarily the responsibility of those PE teachers and pre-service teachers who worked in schools without a scheduled PE and/or were not allowed to request photos and videos as evidence of learning. Pre-service teachers were thus largely deprived of the experience of assessment and the development of the necessary skills. Only one-third of pre-service teachers reported that they or their mentors had assessed their students' knowledge, and the proportion of pre-service teachers who actually had the opportunity to assess was even lower. However, we cannot know exactly how many pre-service teachers actually had the opportunity to assess student knowledge because their comments on this issue suggest that most of them misunderstood the question: They indicated whether they were checking students' physical activity and task performance, not whether they were assessing their knowledge.

Conclusion

Teaching and learning at a distance places different demands on the participants in the learning process compared to live teaching. In order to achieve the objectives, the planning of students' and teachers' work tasks must include different learning content and forms, different timing, different form of communication between partners in the learning process. Distance learning is primarily based on taking greater responsibility for the learner's own learning. Since there are major differences between live teaching and distance learning in PE, the skills of a PE teacher required for successful distance education are also somewhat different (for example ICT skills, writing understandable assignments, leading online PE class, correcting the movement without a touch or presence, giving an appropriate feedback at a distance, maintaining positive atmosphere and good spirit without presence). As a result, pre-service teachers were not fully prepared for distance education. Consideration needs to be given to how important skills for distance education

will become in the future and complement the PE program in this direction.

Distance education has confirmed a long-held belief: books, videos, and other online sources cannot fully replace the teacher in teaching new content, and learning alone cannot replace the classroom as the social environment where "learning for life" takes place. This is even more true for subjects such as PE, where practical skills, habits, personality attitudes and other important social skills are developed. If schooling in the future shifts, at least in part, to distance education and learning, then students should be encouraged and enabled during contact hours to take more responsibility for their learning. Therefore, pre-service teachers should also be able to develop the skills they need in distance education to provide students with personal (e.g. taking responsibility for one's own learning, organizational skills, self-motivation, short- and long-term planning) and social skills (e.g. collaboration at a distance, motivating others, asking for a support from others, communication skills) for successful independent learning.

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KVALITETA INICIJALNE IZOBRAZBE UČITELJA TJELESNE I ZDRAVSTVENE KULTURE TIJEKOM PANDEMIJE KROZ POGLED SLOVENSКИH UČITELJA TJELESNE I ZDRAVSTVENE KULTURE

SAŽETAK

Zbog pandemijskih razloga, studenti izobrazbe nastavnika tjelesne i zdravstvene kulture Fakulteta za šport Sveučilišta u Ljubljani (N = 46) morali su završiti velik dio početne edukacije putem interneta u 2020. godini. Koristeći online upitnik, istražili smo kako su uspjeli učiti na daljinu u okviru predmeta tjelesne i zdravstvene kulture. Provedba nastave je najviše ovisila o tome je li škola uključila predmet unutar obavezne satnice. U prosjeku, većina programa bila je organizirana u obliku samostalne aktivnosti učenika slijedeći pisane ili snimljene upute, a ostatak je bio u obliku online nastave uživo na otvorenom ili u zatvorenom prostoru. Tijekom takve vrste nastave često su davane upute, provjeravanje zadataka i motiviranje. Neke su škole organizirale barem jedan sportski dan (26%), aktivni odmor (21%) ili aktivni odmor za vrijeme sata (9%). Većina nastavnika izabrala je različite ciljeve u usporedbi s tradicionalnim oblikom nastave; naglasak su stavljali na razvoj motoričkih i funkcionalnih sposobnosti, a ne na stjecanje novih motoričkih i socijalnih vještina. Najčešće je naglasak bio na razvoj fizičke kondicije, a slijedile su aktivnosti poput atletike (59%), plesa i aerobiak (43%). No, igre loptom (osim odbojke 33%) bile su zastupljene u manjem postotku. Sadržaje je kontinuirano provodio 21% nastavnika. Provjeravanje je provodilo 71,4% nastavnika, a ocjenjivanje samo 31,0% nastavnika. Često su bili korišteni dnevnic i vježbanja, videozapisi, fotografije ili konferencijski pozivi uživo.

