

Movement and Health in virtual topics of pedagogy practice of Physical Education students at FSpS MU

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Abstract: The starting point of the article is the question - how to address the pedagogic practices of university PE students at the time of pandemic measures, i.e., the closure of secondary schools and universities and the transition to alternative forms.

Overview of standard teaching practices for TV on FSPS according to accreditation valid from academic year 2019/2020 is described as so as innovative inputs are described.

Alternative performance in PP1, PP2 and PP3 practices, students pedagogy portfolio consisted of: compulsory activities - compulsory-optional activities – participation in “tripartite”. *Tripartite* is a specific form for on-line personal communication of all actors of pedagogic practice at a determined school: student – guiding schoolteacher – FSpS tutor.

The basic method was the assessment of documents processed by 149 students, participating in alternative (virtual, on-line) format of pedagogical practice, i.e. analysis of their work (portfolio) and methodological sheets, pedagogical diaries and reports, schemes for teaching, video shots. Activities oriented on healthy lifestyle were formulated: theoretical topic, practical exercise focused on: a) fitness, b) relaxing. The analysed inputs were assessed by descriptive statistics.

Results show that all 149 students included the healthy lifestyle activities in determined variants in their tasks. It can be deduced students are prepared for teaching this topic. From the other hand students expressed these outputs were the simplest to realize in alternative form.

In conclusion students, guiding teachers and FSpS tutors expressed together: despite of the fact the virtual form cannot in any way replace direct pedagogic activity virtually conceived practices were not a waste of time. Outputs oriented on movement and health can also be part

of the contents for the period of teaching PE in regular conditions. This idea is in line with WHO's objectives.

Key words: pandemic period, guiding PE schoolteacher, PE student, on-line PE inputs, student's portfolio, tripartite

Introduction

The paper informs about the activities of students of the Physical Education (further as PE) Teacher Program for primary and secondary schools at Faculty of Sport Studies (further as FSpS) of the Masaryk University within the framework of pedagogic practices, which had to be solved in the autumn and spring semesters of the academic year 2020/2021 alternatively in virtual reality, online (mostly via the MS Teams platform) due to government pandemic regulations. The existing PE curriculum is profiled as health-oriented according to the current framework educational programmes (MŠMT, 2021, p. 97).

The basic question of the survey presented here was whether the students also included the topic of “lifestyle and health” in an alternative solution by practice, since it was desirable to process this topic for pupils who had online teaching, during which their sedentary behaviour increased.

Another goal was to deduce from the results of the analytical-synthetic probe the readiness of students for orientation in this area, the possibility of inclusion in teaching and to consider application even for the period of actual implementation of the practice under normal conditions.

The accredited documentation valid at FSpS MU since the academic year 2019/2020 defines the scope of practice in the format below (see Table 1). Pedagogical practice begins in the 1st semester of master's follow-up study of PE teaching with the subject Introduction to Pedagogic Practice. However, since this was not included in the alternative implementation of practice, it is also not part of the data presented in this paper. Pedagogic practices for full-time and combined studies are under one code. An integral part of pedagogic practice is students' reflection, which is also included as other subjects in the curriculum of teaching PE at FSpS MU. It is taught in parallel to ongoing pedagogic practices (np/nk4121 Reflection of practice 1 and n4132 Reflection of practice 2).

Table 1

Overview of standard teaching practices for TV on FSPS according to accreditation valid from academic year 2019/2020

Subject Code	Name	Volume - Inclusion	Framework - Objective
n4120	Pedagogic practice 1	2nd semester: exclusively at primary school, 1 day per week during the spring semester (inspection, 10 hours of independent management of teaching units in the length of 45 minutes incl. written preparations, feedback of the accompanying teacher after each teaching unit, administrative activities, other activities normal for the running of the school according to the assignment of the accompanying teacher)	<ul style="list-style-type: none"> – orientation in the practical and theoretical fields of primary education, – familiarization with the administrative tasks of a particular primary school, – deepening the competences to analyse and evaluate the physical education process, – implementation and reflection of various types of teaching units under the guidance of accompanying teachers and field didactics
n4130	Pedagogic practice 2	3rd semester: exclusively at the secondary school, 2 weeks of continuous practice or for students of combined study the possibility of continuous practice (inspection, 14 hours of independent management of teaching units in the length of 45 minutes incl. written preparations, feedback of the accompanying teacher after each teaching unit, familiarization with pedagogical documentation)	<ul style="list-style-type: none"> – orientation in the practical and theoretical field of secondary education, – familiarization with the administrative tasks of a particular secondary school, - deepening of competences to analyse and evaluate the physical education process, – implementation and reflection of various types of teaching units under the guidance of accompanying teachers and field didactics.

n4131	Pedagogic practice 3	3rd semester: exclusively for single-subject students, primary/secondary school with sports focus, continuous practice (inspection, 10 hours of independent management of teaching units for 45 minutes incl. written preparations, feedback of accompanying teacher after each teaching unit, introduction to pedagogical documentation)	<ul style="list-style-type: none"> – orientation in the practical and theoretical field of sports classes in primary or secondary schools, – familiarization with administrative tasks within the sports classes of a primary or secondary school, – deepening the competences to analyse and evaluate the physical education process, – skills to prepare, implement and reflect different types of teaching (training) units under the guidance of accompanying teachers or coaches and field didactics.
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Government regulations related to the covid-19 pandemic situation have intervened in the teaching schedule of all schools. Contact of university students with other schools, respectively teachers and pupils, was practically closed for 3 semesters: spring 2020, autumn 2020 and spring 2021. All faculties preparing teachers had to look for adequate alternatives to fulfilling pedagogical practices. Due to the government's recommendations to delay the teaching of education, among them PE, this meant preparing the concept of alternative format of practice for FSpS MU, which was fully organized only from the autumn semester 2020. The main reason, in addition to meeting the requirements of the ZIP project for a somewhat unconventional solution by PE practice, was that students who entered a two-year master's degree from the autumn semester 2019 have at least a partial opportunity to confront pedagogical situations and thus interact with “real” pupils. Although these situations were very different from the practice we have known so far. Another reason was the possibility to provide pupils with at least some form of physical activity, which could partially compensate for the increasing sedentary behaviour enhanced by various forms of online teaching.

Alternative performance in PP1, PP2 and PP3 practices consisted of:

1. in compulsory activities: setting a timetable for practice with the accompanying teacher, creating a methodological sheet (2×) and a worksheet (2×);
2. in compulsory-optional activities (different combinations were possible to meet them, not all of them can be listed here): 2× video recording consisting of either/or 1x direct teaching via virtual platform (MS Teams, etc.) and either/or 1× video call (pre-recorded recording for pupils), 4× written preparation for the teaching unit;
3. active participation in “*tripartite*” in the presence of a student – guiding school teacher – FSpS tutor.

The alternative implementation of PP3 consisted of the same activities, with only half of the loading.

During the practice, students should keep a so-called *pedagogical diary*, based on self-notice (introspection). Its purpose was to self-reflect intentions, its filling, a critical view of themselves. By asking questions of yourself, you can understand more precisely to what extent the set goals of the practice have been met and what are the causes of success or failure. Both are important for further self-development of personal potential. The recommended guide for introspection was the scheme (not dogma): the chosen pedagogical and didactic procedure, individual approach, climate of the class or school, personal experiences. Completed inputs (task) were composed in student’s pedagogy portfolio.

Students, as well as the guiding schoolteacher and the FSpS tutor, completed the so-called self-assessment questionnaire. The questionnaire was created by the team of Pedagogy Faculty MU and used with their permission for the project ZIP purpose (OPVVV, ZIP).

Tripartite is a specific form for personal communication of all actors of pedagogic practice at a determined school. In this case, meetings were held online in MS-Teams or Zoom. The organizational side of the meeting was provided by the student. Tripartite could only take place after all declared outputs had been fulfilled and was the last point for successful implementation of the practice. An essential part, in addition to commenting on fulfilled tasks, was a discussion on the overall course of practice and forms in alternative (virtual) teaching. To achieve the above objective, we have formulated **key questions**:

1. Has the topic of lifestyle and health-oriented PE content been implemented in any of the outputs of alternative performance practices? If so, then:

- what was the frequency of occurrence of these topics,
- what specifically addressed the topics in particular,
- in what context of practice, the topics were.

2. How was the inclusion/non-inclusion of the topic reflected by the guiding schoolteachers?

Methods

Participants: the survey included all students of the PE teaching programme entered in the given semester in the academic year 2020/2021 in full-time and part-time studies who, according to the faculty schedule, completed their internships as of 30 May 2021, including completed reflections in “tripartite” on 30 June 2021 (see Table 2). The decrease of the number of participants between PP2 and PP3 was mainly due to the fact the PP3 was only for single-disciplinary TV students. Another factor in the decline in the number of participants was official postponements or interruptions of studies, which was often due to the absence of full-time teaching at higher education institutions.

Table 2

Number of students completing selected pedagogic practice in the academic year 2020/2021

Subject Code	Male No	Female No	SUM
PP1	37	22	55
PP2	35	21	56
PP3	18	16	34
SUM	90	59	149

Data collection and processing, investigation process

The outputs of students from their pedagogic practices in the academic year 2020/2021 served as the data for analyses. The basic method was the assessment of documents processed by students, i.e., analysis of their work and methodological sheets, pedagogical diaries and reports, schemes for teaching, video interviews. In total, there were 6 possible outputs for each student. Furthermore, reports from the so-called “tripartite” were also analysed, glossaries from reflective self-records were also used, but only as additional information used in the discussion. Students have been informed that their resulting work is archived in the FSpS MU electronic informatic and it is only available to guiding teacher and FSpS staff under a personal code and is treated anonymously for the purpose of evaluating practices and other innovative measures.

In the analysis process, account was taken of both the frequency of topics and their content focus or inclusion in the possible context of the subject. The frequency of topics (healthy lifestyle) in general without distinction according to other aspects was processed by descriptive statistics.

If 6 outputs were possible for each student, the absolute frequency number was 111×6 , i.e., a total of 666 outputs for PP1 and PP2. For PP3, this was half the subsidy, i.e., $3 \text{ outputs} \times 34$, i.e., a total of 102 outputs.

Results

To the purpose of virtually conceived pedagogic practices, we included in the thematic area “lifestyle” the topic of self-movement according to possibilities at home or in nature, eating, drinking regime, smoking, alcohol, movement and hygiene, sleep, sedentary activity (especially at the computer). These topics individually or comprehensively were mainly part of theoretical inputs, motivational quizzes, assigned tasks for independent work. Theoretical inputs were included by all students (149).

In the thematic area we have included two sub-areas: a) exercises of a fitness like strengthening body, limbs, exercise, exercises developing a cardiorespiratory system, b) relaxation, stretching, un-blocked exercises, yoga elements and psychomotor exercises. Again, all students (149) used exercises from sub-area a) or b), and in some, both.

Table 3 presents the use of the topic for the number of students, not in which of the 6 possible outputs. If we mechanically increase the number of student elections (447) who applied this topic regardless of the frequency in the possible outputs, to the total number of options (895), which is almost 50% of the possible outputs.

Table 3

Frequency of the topics focused of healthy lifestyle

Domain	No of students	Topics, contents
1. Theoretical	149	Exercise, nutrition, drinking regimen, alcohol, smoking, regimen of the day, sleeping, hygiene
2. Sub-area a)	149	Fitness, exercises of a body strengthening, exercises developing a cardiorespiratory system
2. Sub-area b)	149	relaxation, stretching, relaxing, yoga, postural, psychomotor exercises
Sub-area a) plus b)	103	

Discussion

We do not have relevant data on formats of pedagogical practices in PE teaching students at other universities in the Czech Republic or abroad at the pandemic stage, so only phenomena identified at FSpS MU in Brno can be discussed. The communication can then be an incentive for further initiative, for the comparative of solutions at other workplaces in the Czech Republic (3 faculties of sports and 8 pedagogical faculties) and, of course, at workplaces abroad. We are based here primarily on discussions in “tripartite” meetings and on student reflections.

I consider the inclusion of the topic “lifestyle and health” in an alternative solution by practice in almost 50% of the full range of possible outcomes to be very high. There would be a speculative conclusion that practising students consider this topic to be very serious. However, according to the students, these outputs were the simplest in terms of alternative processing of “physical activities” or in video outputs in content and implementation at home.

This is because students have already completed teaching subjects with these possibilities, many topics are circulating on video pages of various providers today, and it is possible to use “home” exercise aids: chair, carpet, mat, scarves, underwear pins, small balls, massage balls, large gymnastic balls, etc. Furthermore, it is possible to encourage even little exercise or non-exercise and so-called “exclusion from PE”. In preparation – worksheets – they adequately assigned sub-area a) to the main part of the hour and sub-area b) to the final. They focused intensively on video challenges with presentations of both sub-parts, these were presented as separate themes. Often, students pointed to the possibility of auto-testing fitness variables, using both well-known tests from the EUROFIT battery and modified simpler tests for seniors. These were then recommended to less able or smaller children from the 1st grade of the school, such as a modified step-test, modified sit-ups, etc.

Since the FSpS MU studies a relatively high number of so-called “top-athletes” from league level to international level, their samples from both sub-areas were highly motivating (biathlon, hockey, football, handball, weightlifting) for school pupils. Elements of training used in a sport were also presented, e.g.: interval training, circular training, tabata training, core training. Students were also often aware of smaller opportunities for various physical activities (e.g., closing sports clubs, children who had never been in line for physical activity, now had little or no physical activity, more than usual sitting at the table behind the computer, etc.) due to online learning, so they focused video content on other compensatory exercises – relaxation and stretching.

In purely theoretical lessons in addition to the above topics, the students also noticed safety, both during “home exercises” and when using sports equipment in real conditions (type and quality of balls for given activities, spatial conditions, preparation of cross-country skis, bike inspection and cycling equipment, etc.). In most schools, PE lessons were not a priority, either it was completely cancelled and practising students confronted their performances with the guiding teacher opinion, or they could hang them on the website of the school system for use by school students. Where participation in all pupil outcomes was voluntary, FSpS students were interested in feedback, but with minimal impact, which was frustrating for them. That's why at one of the schools, students created (with guiding teacher's support) a motivational system for earning points for fulfilling video interviews with a simple exercise for the environment at home and outdoors. The point system has been adapted for both individuals and class groups. The contents were again health oriented.

According to the response, the guiding schoolteachers appreciated the knowledge of topics “movement and health”, the flexibility of students relative to the given age of the pupils, respect for the limited conditions regarding to lock-down, but also local and social conditions in families. Guiding teachers also appreciated the knowledge of students in the topic of “movement and health”, (but also other, not discussed here), skills working with informatic technologies.

They also stated that many of the topics with the permission of the students – trainees – would be used in further teaching under normal conditions.

Overall, the students stated that although personal contact with school pupils was limited or none, even virtual practice was important, mainly due to the high-quality personal and professional approach of guiding teachers, and that it was not a waste of time. They were aware of the principled moments of PE management in real conditions.

The advantage here was given to those students who had their own leisure experience at any performance level or experience in leading leisure groups. At the same time, they expressed regret at the impossibility of practicing in the original conditions, which also led them to prefer topics taken out of the context of the entire **curriculum of PE** or school educational programmes of determined schools. A frequent slight sigh of students was expressed: we devoted more skills to working as cameramen and editors than gym teachers. However, we also give somewhat sceptical statements: what effect will the absence of the third season in swimmers and the general impossibility of swimming in young children have. Swimming is also part of a healthy lifestyle. At the same time, the question is to what extent at least some ideas will be applied in real-world conditions, with some children almost not moving for almost a year. But also, the fact that some children can continue to be physically restricted or stimulated by the urban environment of the development and the lifestyle of the family.

Conclusion

The topic of lifestyle and health-oriented physical education all students (149 in total) involved in their tasks by practice, which in the frequency of possible chosen outputs was 447, that is almost 50 percent. We categorized the content focus into 3 areas (see Table 3):

1. theoretical inputs and information, motivational episodes as so as competitions;
2. practical solutions such as fitness-oriented exercises or relaxation-oriented exercises.

Both variants were applied by 103 students. Such oriented exercises were most often included according to the content 2a) in the main part of the training unit, according to the content; 2b) in the final relaxing part. Video challenges were as separate presentations and motivational topics. It can be deduced that students have good knowledge of this topic from the preparation at the faculty, that they are flexible enough for physical activities in limited conditions, but also objectively – short inputs with limitations can be better realized by “health topic” than practicing skills from real sports given by the curriculum.

The reflection of the guiding teachers was positive, both in terms of themes, the use of these themes in the “home environment” and in terms of motivation for everyday activities as part of the lifestyle.

The overall view of alternative solutions by practice, both guiding teachers and students, can be summarised in 2 ways:

- the virtual form cannot in any way replace direct pedagogic activity and the question is whether pandemic recommendations to delay education, including PE in schools or leisure groups, were adequate and whether measures related to physical activities could not be formulated differently,
- virtually conceived practices were not a waste of time, it was necessary to search, think, correct, prepare outputs, with very precise terminology or movement demonstrations, addressing topics that were more easily addressed by students, except for the skills to “process video challenges”,
- outputs can also be part of the themes for the period of teaching PE in normal conditions.

It is all a matter of thinking and setting educational objectives in accordance with the framework of educational programmes in force and appropriately chosen innovations. The attractive exercises would encourage children to engage in various physical activities carried out more frequently and regularly, which in turn fulfils the function it is intended to perform, and which is in line with WHO's objectives.

References

All information is drawn from the Information System of Masaryk University and from the internal materials of the ZIP MUNI project.

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