

LEARNING ENVIRONMENT IN PHYSICAL EDUCATION IN ŠAKIAI AND ŠAKIAI DISTRICT: COMPARATIVE ANALYSIS

Laima Trinkūnienė, Edvinas Vensas

Lithuanian Sports University, Kaunas, Lithuania

Abstract

Background. According to various research publications, physical education teachers work in the environment where the teaching process is often hindered by low physical education subject status, insufficient number and quality of lessons, lack of facilities and equipment for learning and the environment which is neither functional nor safe or hygienic. Concerned about pupils' physical activity decrease in secondary schools, Education and Sports Department of Šakiai District Municipality submitted a request to Physical Education study programme director of Lithuanian Sports University to carry out research revealing the existing situation about physical education and sports infrastructure in Šakiai district secondary schools. The aim of our study was to compare physical education environment in Šakiai and Šakiai district high schools, junior gymnasiums and lower secondary schools.

Methods. We used a questionnaire for the survey drafted in the international study by Sport Science and Physical Education Council (ICSSPE / IOC) (Hardman & Marshall, 2009) and other references. During the study, we interviewed 13 physical education teachers from 14 Šakiai city and Šakiai district schools (2 women and 11 men).

Results. The quality of learning tools in city schools was seen as excellent or good, while the quantity was also seen only as extensive or above average. Obtained results in the district schools varied, but most of them indicated that the quality (33%) and quantity (50%) was only adequate or sufficient. Physical education subject status in comparison with other subjects in half of the city schools was seen as the same and in the other half – as lower. In most schools in the district, it was seen as the same (92%). City schools did not lack hygienic equipment, but a significant number of district schools did not have changing rooms with lockers and hangers (33%) and showers (25%). In the district schools that had showers, they were not used in 56% of them.

Conclusions. Schools in the city are supplied with more and better teaching tools and equipment. Physical Education subject status in half of city schools is perceived as inferior to other subjects. Hygiene conditions in city schools are good compared to the district schools, where they are poor.

Keywords: physical education, learning equipment, learning environment, status, hygiene conditions.

INTRODUCTION

The aim of Physical Education, as stated in the new Eurydice Report on Physical Education and Sport in 30 European countries, including Lithuania, is to promote direct and lifelong physical, personal and social development and to develop a healthy lifestyle (European Commission/EACEA/Eurydice, 2013). Physical education teachers carry out a key role in realizing the objectives of the training program and applying sports science and pedagogical

knowledge in practice (Kougioumtzis, Patriksson, & Strahlman, 2011).

Research shows that physical education teachers work in an environment where educational activities are constantly hindered by the low status of physical education classes (Christodoulou, 2010; Hardman, 2011), insufficient number and quality of facilities and lack of teaching tools and educational environment (Jankauskienė, 2008; Trinkūnienė & Kardelienė, 2013) which is neither functional, safe

nor hygienic (Dadelo, Tamošauskas, Kazlauskienė, Podlužnas, & Tarulis, 2011).

General Programs for Primary and Secondary Education (Pradinio ir pagrindinio ugdymo bendrosios programos, 2008) maintain that the environment where physical activity takes place must be functional, safe, and hygienic. Premises, facilities, equipment, supplies, etc. must be ergonomic, tidy, appropriately lit, ventilated, and harmless to health, as well as maintained at the optimum temperature and have showers. The learning environment must be organized in a way that students could excel personally.

The Resolution of the Seimas of the Republic of Lithuania of November 18 No. XII-1342 on Sport Policy (2014) proposes to increase the variety of sports for all children and youth so that they can participate in sports, exercise, live healthy lives; improve children's health care, provide proper hygienic conditions and sports infrastructure and finance students' participation in physical education classes; improve the image of physical education teacher; provide the country's secondary education schools with modern sports infrastructure, equipment and tools before 2020.

The educational problem analysis "What are the educational disparities between rural and urban schools?" (2011) reveals that not all the secondary schools of the country have all the necessary premises suitable for education. Fewer rural than urban schools have a sports hall, and city schools lack stadiums and courts, which are more common in rural schools. It is common in schools (especially in small towns or villages) that the learning tools of the educational environment are not fully functional, safe and hygienic or updated. In addition, teachers who face challenges in organizing creative lessons point out the lack of teaching tools to be the main reason (Karbočienė, Alūzas, & Norkus, 2005). Even though the environmental problems of physical education are analysed there are no research related to urban-rural differences of physical education in Lithuania in general.

Officials at the Department of Šakiai District Municipality are concerned about the decrease of pupils' physical activity in secondary schools and they submitted a request to the Physical Education study programme director of Lithuanian Sports University to carry out research revealing the existing situation of Šakiai district physical education and sports infrastructure in secondary schools.

The aim of the study was to compare physical education environment in high schools, secondary and main schools in Šakiai city and Šakiai district.

METHODS

The study participants, who were interviewed to identify physical education learning environment and situation in Šakiai city and Šakiai district high schools, secondary and main schools, were 13 physical education teachers from 14 Šakiai city and Šakiai district (2 women and 11 men, or 15.38 and 84.62%). One respondent worked in two schools. The mean age of physical education teachers was 49.5 years; the length of their pedagogical experience was 26.2 years. According to the acquired education, most of them (76.9%) were physical education teachers and the others were sports coaches. According to the acquired pedagogical qualification, the majority (69.23%) were senior teachers.

The questionnaire used in the survey was drafted using the materials of the international study by Sport Science and Physical Education Council (ICSSPE / IOC) (Hardman & Marshall 2009); Physical Education and Sports Report in the European schools (European Commission / EACEA / Eurydice, 2013); Lithuania's hygiene standards HN 21:2011 "School Engaged in General Education Programs: General Health Safety Requirements" (2011); the Schools Supply Standards (2001); and General Programs for Primary and Secondary Education (2008).

The questionnaire consisted of 39 questions divided into four groups: quality and quantity of teaching tools and equipment; physical education environment (physical education subject and teacher status in comparison with other subjects and teachers); hygiene of students' educational process; social and demographic data of physical education teachers.

The study took place in Šakiai and Šakiai district high schools, secondary and main schools in February–March, 2015, in the following stages: 1) the necessary data (type of school, address, telephone number) about Šakiai and Šakiai district schools (AIKOS, 2015) and the physical education teachers employed were gathered; 2) Senior Specialist of Šakiai District Education and Sports Department in charge of physical education sent questionnaires to four district teachers; 3) three questionnaires for physical education teachers were handed during the pupils' badminton competition

in Šakiai centre of youth creativity and sports; 4) six teachers were given the questionnaires at their schools agreeing the meeting time by phone in advance; 5) the questionnaires were collected within five working days. During the survey, teachers were introduced to the aim of study, it was emphasized that participation in the study was voluntary and that anyone could withdraw from the study before completing the questionnaire. The survey followed the ethical and legal principles of research. On average, it took 15 minutes to fill in the questionnaires.

The statistical data analysis was performed using MS Excel. We calculated the data distribution frequency in percentage and averages.

RESULTS

The quality and quantity of teaching tools and equipment. Research results showed that half of the physical education teachers in town rated

teaching tools and equipment as of excellent quality and the other half – as good quality (see Figure 1). Meanwhile, the majority (one third) of physical education teachers in district schools indicated that teaching tools and equipment in their schools were of adequate quality, and a quarter – good and below average. Neither city nor district schools rated the quality of physical education teaching tools and equipment as inadequate.

A similar situation was found about the quantity of teaching tools and equipment (see Figure 2). Half of physical education teachers rated teaching tools and equipment as extensive in quantity and the other half as above average. However, only 17% of district school teachers rated the quantity as extensive and above average. Most of them (50%) indicated that the quantity was only sufficient.

According to the Schools' Supply Standards (2001) and Lithuanian Hygiene Standards HN 21:2011 (2011), schools must have a gym (see Table 1). It was found that they were all in city schools,

Figure 1. Assessment of the quality of teaching tools and equipment

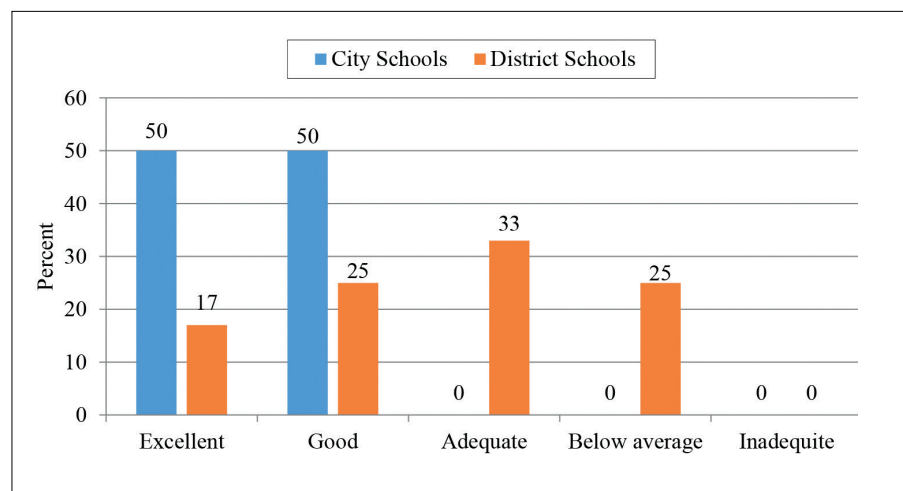
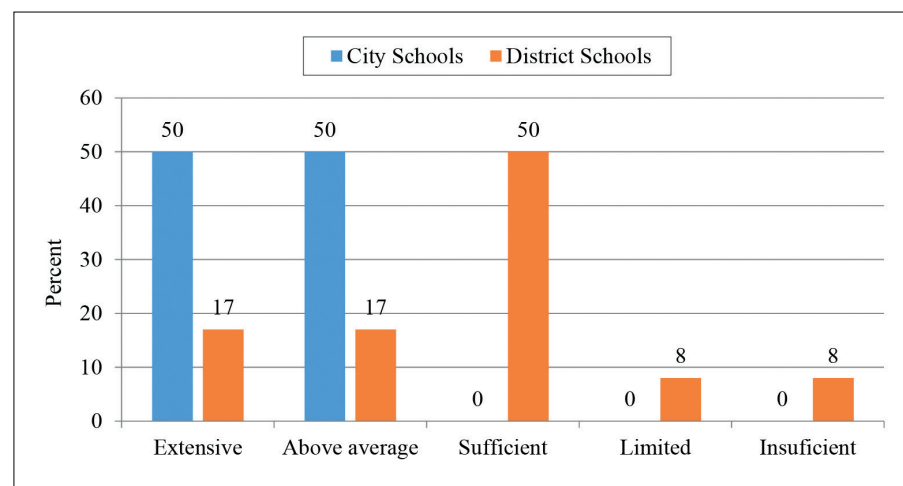


Figure 2. Assessment of the quantity of teaching tools and equipment



Sport facilities and their features	City Schools (%)		District Schools (%)	
	Yes	No	Yes	No
Do you have a gym?	100	0	92	8
Do you have a separate exit from the gym outdoors?	50	50	58	42
Do you have a pool?*	0	100	0	100
Do you have a stadium?	100	0	75	25
Do you have a football pitch?	100	0	75	25
Does the football pitch have running tracks around it?	100	0	58	42
Do physical education teachers have a separate office?	100	0	42	58

Table 1. Sports facilities and their features

Note. * – it is recommended to have one according to Schools' Supply Standards (2001).

but 8% of district schools did not have gyms. Much worse was the situation with gyms' separate exits outdoors. Half of the schools in the city (50%) and in the district (42%) did not have it. Not a single school in the city or district had a pool, but it is not necessary to have one. All schools in the city had a stadium with a football pitch surrounded by running tracks and a separate office for physical education teachers. Meanwhile, in the district only three-quarters of schools had a stadium with a football pitch and only 58% of them had running tracks around it. The study showed that as many as 58% district schools did not have a separate office for physical education teachers and often they had to use the equipment room as an office.

It was found that all the schools in town had gyms that met the standard size (The Schools' Supply Standards, 2001), and in the district only one school did. The remaining schools had substandard gyms. Football pitch area in schools with at least 1000 students should seek 3000 m², but such schools existed neither in the city nor in the district (Lithuania's hygiene standards HN 21:2005 "Secondary School: General health safety requirements", 2005).

According to the Schools' Supply Standards (2001), Physical Education teaching tools and equipment, which are required in schools, are divided into seven categories: track and field athletics, gymnastics, sports games, skiing, learning tools, informational tools and media. The results showed that the majority of schools in the city had track and field athletics tools, but not the district schools. Gymnastics equipment was in an analogous situation as almost all city schools had the necessary teaching tools, but the situation was worse in the district. Only a quarter of schools had resistance bands, balance beams, lifting weights,

universal simulators, jump ropes, climbing ropes, pull up bars, a third of them – parallels bars, and a fifth – clubs.

The School's Supply Standards (2001) do not have specific requirements for schools to have non-traditional physical activity equipment, but a general and expanded physical education course includes non-traditional physical activity corresponding to the age of the pupils. Safe non-traditional, non-olympic sports: dancesport, aerobics, skateboarding, roller-skating, darts, bowling, weight lifting, yoga, martial arts, frisbee and others. However, the study showed that the schools did not have abundant means for these activities. It was found that almost all city and district schools had checkers, but only a quarter had pins. Neither the city nor the district school had skateboarding or roller-skating. Half of the schools in the city had an audio player.

Physical Education environment. It was found that half of the physical education teachers in the city schools pointed out that the subject status of physical education at school was the same and lower than other subjects (see Figure 3). Meanwhile, almost all (92%) district school teachers noted that the subject status of physical education was the same as of other subjects.

Similar results were obtained for physical education teacher status (see Figure 4). It was found that most of town and district school physical education teachers indicated that their status was the same as of other subject teachers.

During the study the teachers pointed out the most important problems related to physical education which they faced in their schools. In the city schools, most of them were related to physical education process hygiene. They mentioned that pupils did not have enough time to have a shower

Figure 3. Physical education subject status compared to that of other subjects

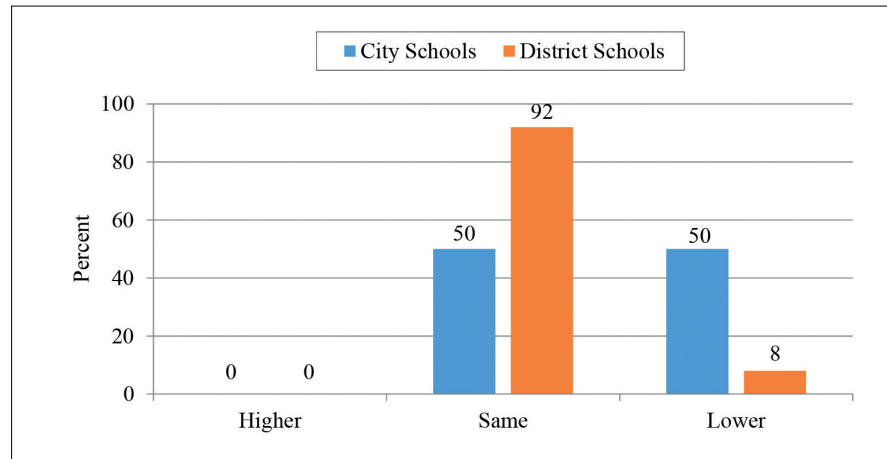


Figure 4. Physical education teacher status compared to that of teachers of other subjects

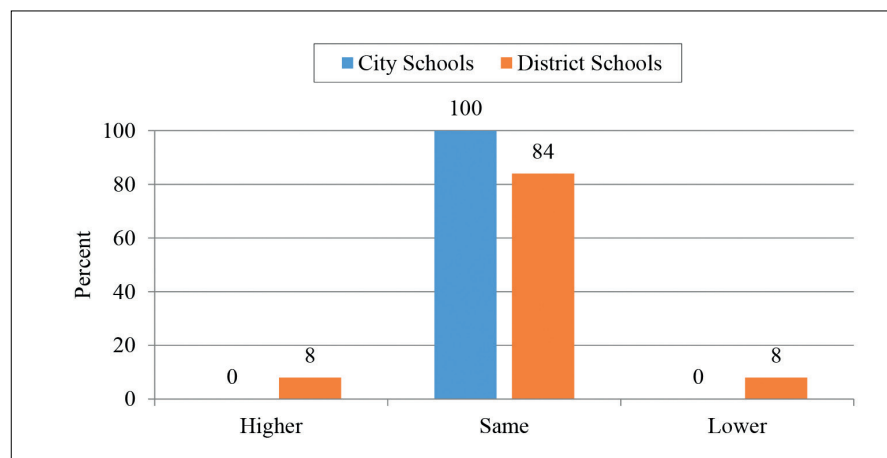


Table 2. Hygiene conditions in physical education classes

Hygiene conditions in physical education classes	City schools (%)		District schools (%)	
	Yes	No	Yes	No
Are there separate dressing rooms for boys and girls?	100	0	83	17
Are there toilets?	100	0	100	0
Are there showers?	100	0	75	25
If there are showers, is there hot water?	100	0	89	11
If there are showers, do pupils use them?	100	0	44	56
Do dressing rooms have lockers for clothes?	100	0	67	33
Does special equipment protect gyms' windows and radiators?	100	0	83	17

and that affected their general unwillingness to participate in the lesson. In the district schools, the answers were divided nearly equally – 55% teachers indicated that existing teaching tools and sports facilities were poor, outdated. The remaining 45% reported that pupils avoided physical education classes (did not participate or participated passively).

Pupils' education process hygiene. The results show (Table 2) that one of the reasons why the pupils avoided participating in physical education classes was unsatisfactory hygiene conditions. In the city schools, the situation was excellent, but the district schools had some problems: 17% schools did not have separate changing rooms for boys and girls; 25% of schools did not have showers and 11%

of schools that had showers did not have hot water. Even though 75% of district schools had showers accessible to students, they were used only in 44% of schools.

DISCUSSION

The study was conducted in order to learn and to compare the current situation of teaching tools in Šakiai city and Šakiai district high schools, secondary and main schools. In *Physical Education and Sport at School in Europe Eurydice Report* (2013), physical education strategy and objectives in European countries, including Lithuania, have been analysed to make physical education classes more diverse. Considering the study results we can see that in the city teachers rate the quality of teaching tools and equipment as excellent or good. However, the situation in the district schools is absolutely different. According to one-third of teachers (33%), the quality of the equipment and teaching tools is only adequate. Only 42% of them rate it as good or excellent. Similar situation is seen by comparing the results of the *Worldwide Survey of School Physical Education* (2013) and Al-Mohannadi and Capel (2007), suggesting that in the world the quality teaching tools and equipment is rated as adequate by 33% of schools (25% say that it is below average and 14% – inadequate). Assessment in Europe is quite similar – 38% of schools rate it as adequate (20% – below average and 6% – inadequate).

Most schools worldwide (37%) rate the quantity of teaching tools as limited and insufficient (24%), limited but sufficient (21%), above average (12%) and extensive (6%). The situation in Europe is not good either because the majority split between adequate or limited (33% of each). Šakiai city teachers rate the quantity as excellent or good. Meanwhile, most of the teachers of district schools (50%) rate the quantity as only sufficient. Other significant group of them (34%) rates it as extensive or above the average. In summary, one could say that the quality and quantity of training tools and equipment in district schools is not very good and is significantly different from the situation in Šakiai city schools.

In 2013, Lithuanian School Students Union received many complaints about the quality physical education lessons and hygiene standards, and therefore they became concerned about those problems and exercising conditions for pupils in

Lithuanian secondary schools. In order to assess the overall situation in Lithuanian schools, the School Students Union conducted a survey that was given to 5–12-grade Lithuanian pupils to present their views about the quality of physical education classes. 2110 pupils from various regions of Lithuania participated in the survey. It showed that only 48% of pupils participated in physical education classes willingly. About half of the respondents indicated that the inventory of physical education was adequate or below average. In addition, about one-third of pupils assessed their school gyms. Our study shows that the district schools experience a shortage of gyms. A quarter of Šakiai district schools do not have stadiums with a football pitch and running tracks around needed for track and field athletics, which are necessary for General Programmes for Primary and Secondary Education (2008) from the fifth grade. Nevertheless, generally not all district schools have any football pitch or gym. Among the district schools with gyms, only 55% of them meet the standards (*Schools Supply Standards*, 2001). *Worldwide Survey of School Physical Education* (2013) showed that the majority (30% of the world schools) rated the quantity of their sports facilities as sufficient (6% above average, 20% extensive, 27% limited and 17% inadequate). In Europe, most schools (38% of them) also rated the quantity of sports facilities as sufficient (9% extensive, 27% above average, 18% limited and 8% insufficient). Judging by the study results, we can see that the majority of the district school sports facilities were in poor condition and that is one of the reasons that influence pupils' reluctance to participate in physical education.

In the *Schools' Supply Standards* (2001) state what physical education requires the schools to have means for track and field athletics, gymnastics, sports games, skiing. The study has shown that in the city schools almost all the equipment is available (with a few exceptions), but in the district schools they are not available in one third of schools, and in some cases – half of the schools. As to track and field athletics equipment, schools often lack the relay baton and pole vault; gymnastics lack lifting weights, resistance bands, universal simulators, jump ropes, gymnastics pins, sticks, climbing ropes, balance beam and parallel bars; sports games lack badminton rackets and balls, badminton poles with net, board games, volleyball poles with the net. While skiing equipment should

also be in every school, it is missing nearly in all Šakiai city or district schools (only 8% of district schools have it).

According to Christodoulou (2010) and Jenkinson and Benson (2010) we know that the subject status in Europe is rated as lower than that of other subjects in 46% of schools (Worldwide Survey of School Physical Education, 2013). Our study shows that in half of the schools (50%) the subject is rated just as important as other subjects, but in the other half – as less important. That is similar to the situation in the whole Europe. However, in Šakiai district schools, this problem is insignificant since only in 8% of schools physical education classes have a lower status. Due to this problem, lessons are cancelled for unplanned circumstances.

According to Trinkūnienė and Kardelienė (2013), Physical Education teacher status is seen as lower compared to that of math or Lithuanian language teachers. The same tendency can be seen in Worldwide Survey of School Physical Education (2013). Globally, 18% of teachers experience a lower status, while in Europe, 9% of teachers experience it. Our study shows that this problem is not common among our respondents. Šakiai city physical education teachers have the same status as the teachers of other subjects and in the district schools, only 8% of teachers meet the lower status problem (8% of them have even a higher status).

In the aforementioned Lithuanian Schools Students Union survey (2013), pupils point out three reasons that cause their reluctance to participate in the lessons: after lessons there is no place to have a shower or showers are in a very poor condition, dressing rooms and halls are cold in winters, gyms are dirty and messy.

In our study, the biggest problems indicated by teachers (100% city schools and 55% district schools) are related to physical education teaching tools and hygiene conditions (pupils do not use the showers, avoid classes, avoid using showers, schools lack showers). Although, the city schools do not lack hygiene facilities (despite the fact that pupils do not want to use the showers, which leads to avoiding classes), district schools face various problems: there are no separate changing rooms for boys and girls (in 17% of schools), no racks and lockers for clothes (in 33% of schools), gyms' windows and radiators are not protected

by special equipment (in 17% of schools). A study (Dadelo, Tamošauskas, Kazlauskienė, Podlužnas, & Tarulis, 2011) investigated the attitude of first-year VGTU students to physical education lessons at their senior high school. Respondents stated that in Lithuanian schools physical education lessons conducted to 9–12th grade pupils often did not conform with the basic principles of pedagogy, hygiene, and physiology. In Lithuanian Schools Students Union survey (2013), pupils rate changing rooms mostly as a good or at least adequate and the gyms as very good, good or average. However, almost 50% of respondents from all over Lithuania rated showers/washrooms as very poor. In our study, most schools had showers (82.6%), but in 64.6% of them, pupils simply did not use them. Pupils point out these reasons: showers are locked (inaccessible); there is not enough time; teachers do not allow using them; there is no light; no hot water; no blinds (lack of privacy); not enough showers; they seem unhygienic. Among the aforementioned reasons, even five of them are related to the hygiene conditions.

CONCLUSIONS

1. After identifying and comparing teaching tools and equipment in Šakiai city and Šakiai district high schools, secondary and main schools, the situation revealed that city schools were better equipped with both – tools and equipment. Moreover, the quality of available tools and equipment was better. District schools generally lacked some of the necessary teaching tools and equipment.

2. After identifying and comparing the physical education subject status to that of other subjects in Šakiai and Šakiai district high schools, secondary and main schools, it turned out that it is the same in almost all district schools and in half of city schools it is lower. It was found that in four fifths of all city and district schools physical education teacher status was the same as that of other subjects.

3. After identifying and comparing the educational process hygiene situation in Šakiai and Šakiai district high schools, secondary and main schools, it was revealed that it was good in all city schools while in the district schools it was poorer. Teachers pointed out that the biggest problem in the district schools was that pupils did not use the showers.

REFERENCES

- Al-Mohannadi, A., & Capel, S. (2007). Stress in physical education teachers in Qatar. *Social Psychology of Education, 10*(1), 5–75. doi: 10.1007/s11218-006-9004-9
- Atvira Informavimo Konsultavimo Orientavimo Sistema (AIKOS). (2015). Retrieved from http://www.aikos.ipc.lt/aikos/svietimo_ir_mokslo_institucijos.htm
- Christodoulou, D. (2010). The status of physical education in Cypriot schools. *Physical Culture and Sport. Studies and Research, 50*(50), 110–117. doi: 10.2478/v10141-010-0028-7
- Dadelo, S., Tamošauskas, P., Kazlauskienė, V., Podlužnas, V., & Tarulis, A. (2011). Vilniaus Gedimino technikos universiteto studentų požiūrio į kūno kultūros pamokas mokykloje tyrimas. *Sporto mokslas, 1*(63), 44–56.
- European Commission/EACEA/Eurydice. (2013). *Physical Education and Sport at school in Europe Eurydice Report*. Luxembourg: Publications Office of the European Union.
- Hardman, K. (2011). Global issues in the situation of physical education in schools. In K. Hardman, K. Green (Eds.), *Contemporary issues in PE: International perspectives* (pp. 11–29). Maidenhead, Berkshire, England: Meyer & Meyer Sport (UK) Ltd.
- Hardman, K., & Marshall, J. (2009). *Second world-wide survey of school physical education*. Final report. Berlin: ICSSPE.
- Jankauskienė, R. (2008). Lietuvos gyventojų fizinio aktyvumo skatinimo strategija: kūno kultūra ar kūno kultas? *Medicina, 44*(5), 346–355.
- Jenkinson, K. A., & Benson, A. C. (2010). Barriers to providing physical education and physical activity in Victorian state secondary schools. *Australian Journal of Teacher Education, 35*(8), 1–17. doi: 10.14221/ajte.2010v35n8.1
- Karbočienė, E., Alūzas, R., & Norkus, S. (2005). Šiaulių miesto kūno kultūros mokytojų bendrųjų profesinių kompetencijų raiška (empirinis tyrimas). *Mokytojų ugdymas, 4*, 38–44.
- Kougioumtzis, K., Patriksson, G., & Strahlman, O. (2011). Physical education teachers' professionalization: A review of occupational power and professional control. *European Physical Education Review, 17*(1), 111–129. doi: 10.1177/1356336X11402266
- Lithuania's hygiene standards HN 21:2005 „Bendrojo lavinimo mokykla. Bendrieji sveikatos saugos reikalavimai“ (2005). Retrieved from <http://www.spec.lt/index.php?cid=32579>
- Lithuania's hygiene standards HN 21:2011 „Mokykla, vykdanči bendrojo ugdymo programas. Bendrieji sveikatos saugos reikalavimai.“ (2011). Retrieved from <http://www.rokiskis.lt/download/11015/dok404809.doc>
- Lithuanian Schools Students Union. (2013). *Kūno kultūros pamokų kokybės ir higienos normų laikymosi mokyklose analizė*. Retrieved from <http://duomenys.ugdome.lt/?/veikla/kk/med=5/naujiena=29>
- Pradinio ir pagrindinio ugdymo bendrosios programos. (2008). Vilnius: Švietimo aprūpinimo centras.
- Resolution on Sport Policy. (2014). Lietuvos Respublikos Seimas. Vilnius. Retrieved from http://www3.lrs.lt/pls/inter/w5_show?p_r=4445&p_d=152701&p_k=1
- The Schools' Supply Standards. (2001). Vilnius. Retrieved from http://www.sac.smm.lt/images/file/mokymosi%20istekliai/Mokyklu_aprupinimo_standartai_2001.pdf
- Trinkūnienė, L., & Kardelienė, L. (2013). Occupational difficulties at work of physical education teachers. *Ugdymas. Kūno kultūra. Sportas, 88*(1), 88–96.
- What are the educational disparities between rural and urban schools? (2011). Vilnius: Švietimo aprūpinimo centras.
- Worldwide Survey of School Physical Education. Final Report. (2013). Retrieved from <http://unesdoc.unesco.org/images/0022/002293/229335e.pdf>

Received on June 30, 2015

Accepted on September 07, 2015

Corresponding author **Edvinas Vensas**
Lithuanian Sports University
Sporto str. 6, LT-44221 Kaunas
Lithuania
Tel. +370 693 99627
E-mail edvinasvensas@gmail.com