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REVIEW PAPER

OUTDOOR PHYSICAL EDUCATION CLASSES IN THE EDUCATIONAL CONTENT OF LATVIAN AND FOREIGN SCHOOLS

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Abstract

In Latvia, the conduct of outdoor physical education classes is influenced by both the climate and the challenges of the learning process, therefore, conducting the physical education classes outside the school premises (outdoors) is a topical and challenging subject. The purpose of this literature review is to: 1) find out the benefits of organizing physical education classes outside the school premises (outdoors), 2) find out what is the regulatory framework of the outdoor physical education classes would be in general education schools in Latvia and abroad, 3) compare the status of Latvian and foreign outdoor physical education classes in the educational content of schools. Results: conducting physical education classes outside the school premises (outdoors) provides benefits in the following groups of benefits – learning benefits, health, environment. Compared to other countries, outdoor physical education classes in Latvia are possible, but not mandatory. There are countries where the status of outdoor physical education classes is lower, but in the Nordic countries (Finland, Sweden, Estonia, Norway) the status of outdoor physical education classes is the highest, and conducting such physical education classes is especially encouraged.

Key words: *outdoor classes, government, education system, PE curriculum*

Introduction

In the sources analyzed in this document, the term "outdoor PE classes" is defined differently – due to different approaches, understandings and practices, the nature of the analyzed documents, differences in research areas, countries, and cultures (Allison, 2017, Tortella 2021). The concept often includes learning outside the classroom, *udeskole, friluftsliv,* outdoor adventure activities, forest school, and generally speaking, outdoor school education can be described as teaching and learning, experiences that take place outdoors, in an out-of-school setting (Mall et al. 2017). In this study, the outdoor physical education class is defined as the conduct of school pedagogical activities in the outdoor, non-school environment, in the context of the ISCED 1 and ISCED 2 school physical education.

The expected benefits of "outdoor physical education classes" cover various fields and contexts (Waite 2015, Rickinson 2006), moreover, the need for the learning process outdoors is described not only by scientific publications, but also by the European Framework of Quality Physical Education guidelines, in which activities outside the premises and in nature are mentioned as a self-evident part of life. It should also be noted that in the Nordic countries, including Latvia, students spend a lot of time indoors in autumn and winter. The amount of time students spend on smart devices has significantly increased in recent years, for example, the PISA results of the international education assessment (PISA 2015) indicate the need for the most successful students to spend even 4 to 6 hours a day in front of a smart device screen.

On the one hand – the weather and the challenges of organizing and conducting outdoor physical education classes, also the increase in time spent on smart devices as a global trend, on the other hand - the desire of students to have outdoor physical education classes, the significant expected benefits and the support of such education, both in the educational content and in the European Framework of Quality Physical Education (EFQPE) supranational educational programm.

The purpose of this literature review is to find out what benefits are provided and what the regulatory framework is of the outdoor physical education classes in general education schools in Latvia and abroad.

Material and Methods

This is a theoretical study - a literature review. This review consists of two parts.

The first part was carried out with the aim of finding out the benefits of the physical education classes outside the school premises (outdoors). For this purpose, a review of information available online and in English was conducted using the umbrella review method ("Umbrella review", Pollock et

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al. 2020). Publication selection criteria: 1) publication period from 2000 to2022, 2) full online availability of the publication, 3) language – English and Latvian, 4) context – school physical education, 5) publication refers to the ISCED 1/ISCED 2 education stage. Databases used – Scopus, Google Scholar. Search keywords used: "outdoor" + "school", "outdoor" + "education", "outdoor" + "primary education", "outdoor" + "basic education", "outdoor" + "secondary education". The above words were used in the search, as the level of education covered by ISCED 1 and ISCED 2 is defined differently in different countries. The Eurydice report on educational attainment for 37 countries (27 European Member States, Albania, Bosnia and Herzegovina, North Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey) mentions the keywords used (Eurydice: National Education Systems, 2022). From the found studies, the publications were selected that met the criteria described above (time of publication, availability, language, context, stage of education).

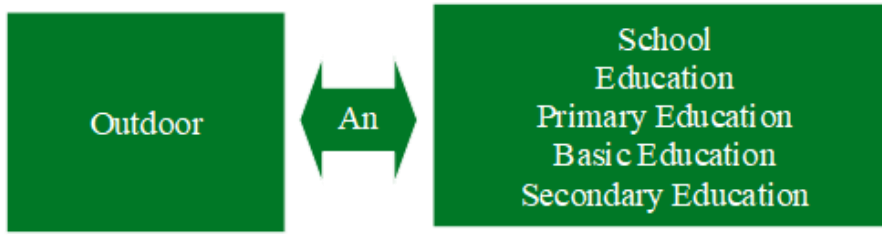

Figure 1. An illustration of the search string used for search for publications.

From all potentially relevant publications we selected publications that met all the eligibility criteria. 19 studies were thus selected. After analysing these studies, the benefits of conducting physical education classes outside the school premises (outdoors) were identified. If other scientific publications describing benefits were mentioned in the analyzed study, these publications were also included in the list of analyzed materials – without time and language restrictions. A further 6 studies were found in this way. The next step was the grouping of identified benefits. The expected benefits of outdoor physical education classes were described differently and covered significantly different categories. Therefore, an initial and repeated grouping of indications was performed. The number of obtained categories (combining them) was reduced by the agreement of the authors of the study.

For example, the physical and mental categories defined by Mall (Mall et al. 2017) were combined into one – health category; social competences, relationships were included in the learning benefits category. In this way,

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indicators were obtained for qualitative, substantive analysis in the second part of the study.

The second part of the study. In this part, an analysis of the regulatory documents of physical education in general education schools of 34 countries was carried out at the ISCED 1 and ISCED 2 stages of education (classes 1 – 7 of the schools in Latvia). The aim of the second part of the study is to find out what the regulatory framework of the outdoor physical education classes is in Latvian and foreign general education schools, and to compare the status of Latvian and foreign outdoor physical education classes in the educational content of schools. Country inclusion criteria - belonging to the European cultural space, geographical proximity, EU member states. Data was collected for 34 countries: The European Union (27 countries) and United Kingdom, Iceland, Russia, Liechtenstein, Norway, Switzerland, Turkey. Selection criteria of the analyzed documents: type of publications – 1) descriptions of the educational content of national schools, 2) a review of the hierarchically higher organization – Eurydice on the activities specified in the strategic documents, intended for the first stage of primary and secondary education (ISCED 1 and ISCED 2). Time period: 1) the latest available documents of the hierarchically higher, supranational Eurydice reviews, 2) current documents regulating the content of education (documents valid in 2022). The elements related to the conduct of outdoor physical education classes, the organization of physical education classes and other activities in the outdoor space were determined in the analysis of information. After determining these elements in the summary of results, indicators were grouped into four levels according to the importance of these elements in the analyzed document.

Figure 2. An illustration of included countries and documents used in analysis.

The data of 27 European Union member states and the United Kingdom, Iceland, Liechtenstein, Norway, Switzerland, Turkey were obtained from national education regulation documents and the Eurydice education review report (European Commission/EACEA/Eurydice report). The data of Russia was not included in this review report, therefore, in order to obtain comparable results, the content of school education regulatory documents was analyzed according to the Eurydice criterion "Activities specified in centralized educational content instructions or strategic

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documents intended for primary school education (ISCED 1) and the first stage of secondary education (ISCED 2)".

Results

The first part of the study analyzed the benefits of outdoor physical education activities. The obtained results show various significant benefits of outdoor physical education activities. In several analyzed studies, the authors have grouped these benefits. For example, Mall et al. have grouped the benefits as follows: 1) physical activity level of students, 2) mental health status, 3) social competences and relationships, 4) academic achievements (Mall et al. 2017). However, there are studies that describe the benefits in other categories due to different opinions. For example, Humberstone mentions the opportunity to move in nature, explore and experience natural places, visit remote places and wilderness (mountains, rocks, forests, lakes, rivers) as the educational benefits of outdoor activities, especially if the beauty, drama, wildness, and magnificence of nature is seen (Humberstone, 2001).

After summarizing the different visions and taking into account the context of school physical education, the authors of this study developed the following three groups of benefits in the framework of this study:

1. learning benefits - for example, the connection with the content of other learning subjects, the formation of a deeper understanding of culture, literature and art, the promotion of extracurricular physical education activities and nature-friendly attitudes (Hurych 2012), non-linearity and variability (Collella 2021), the requirements of the health and physical activity subject (Cabinet Regulation No. 747), students' positive assessment and desire to participate in outdoor physical education classes (Jansone et al. 2016),

2. health benefits - for example, health and environmental skills (Bowker 2007, Andrieieva et al. 2022), more attention to natural light (Hatori 2014), development of visual perception and promotion of vision-enhancing health habits (Tzu-Hsun Tsai 2017, Description of the study on pupil vision, University of Latvia), for optimizing sleep/wake rhythm and active mood (Hatori 2014, Ardahan 2012), lower risk of respiratory infections (Cabinet Regulation No. 662),

3. environmental benefits - for example, natural elements of various surfaces, textures, and shapes (Hurych, 2012), the possibility to diversify the content of physical education classes (Mutz 2016), economy of school premises and less noise pollution (European Agency for Safety and Health at Work – Factsheet 56, Cabinet Regulation No. 66).

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These groups of benefits were applied in the second part of the study with the aim of identifying the characteristics of outdoor physical education classes in the different understandings and forms of expression of different countries. The criteria used by Eurydice are close to most countries, but the form of such documents can differ significantly – for example, Latvian and Norwegian educational content guidelines.

The second part of the study. The descriptions regulating the content of school education in different countries are different both in terms of form and content. Other related documents and document attachments also regulate outdoor physical education classes. Below are the results of the study according to the status of outdoor physical education classes in the education regulation of each country, according to the criteria used in the Eurydice review report. The status of outdoor physical education classes was assessed at four levels (see figure explanation).

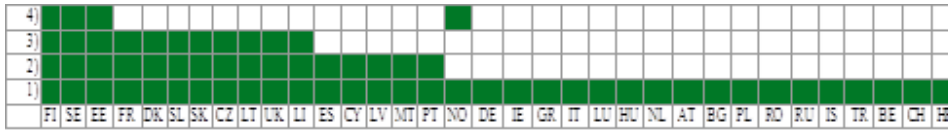

Figure 3. Outdoor PE classes in 34 countries: four levels of outdoor PE status.

Explanation of the figure:
Vertically – status of outdoor physical education classes:
1. outdoor physical education classes are possible,
2. the conduct of outdoor physical education classes is not mandatory, or it applies only to students of a certain age,
3. outdoor physical education classes are a mandatory part of the curriculum and apply to students of all ages,
4. additional programs have been created for learning the content of outdoor physical education classes.
Horizontally – country names (abbreviated):
FI-Finland, SE-Sweden, EE-Estonia, FR-France, DK-Denmark, SL-Slovenia, SK-Slovakia, CZ-the Czech Republic, LT-Lithuania, UK-the United Kingdom, LI-Lichtenstein, ES-Spain, CY-Cyprus, LV-Latvia, MT-Malta, PT-Portugal, NO-Norway, DE-Germany, IE-Ireland, GR-Greece, IT-Italy, LU-Luxembourg, HU-Hungary, NL-the Netherlands, AT-Austria, BG-Bulgaria, PL-Poland, RO-Romania, RU-Russia, IS-Iceland, TR-Turkey, BE-Belgium, CH-Switzerland, HR-Croatia.

The regulation of outdoor physical education classes in Latvia stipulates that the status of outdoor physical education classes corresponds to Level 2, which allows physical education classes to be organized outdoors, and outdoor physical education classes are not mandatory – elements that would require the organization of physical education classes outdoors, can also be organized in school premises.

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In the Baltic States, the status of outdoor physical education classes is determined as follows: Estonia – 4th, i.e. at the highest level, Lithuania – at the 3rd level (Lithuania) and Latvia – at the 2nd level.

The highest, or fourth status of outdoor physical education classes is held by the Nordic countries – the countries that are characterized by being similar to Latvia and with even greater autumn and winter (the coldest period of the year) weather challenges.

However, climate challenges do not mean the self-evident inclusion of these elements in school education.

The lowest or first status of outdoor physical education classes is in countries with significantly different climatic challenges. This group includes the southern countries – Turkey, Greece and Italy, as well as Russia and Iceland.

Discussion

Limitations of the first part of the study (examining the benefits of outdoor physical education classes): limitation of the publication period (from 2000 to 2022) and grouping of the identified benefits. The initial and repeated grouping of the expected benefits of outdoor physical education classes was done by agreement of the authors of the study. Such an approach is closely related to the context of this study, other studies may require a different approach.

Limitations of the second part of the study (comparison of different countries): availability of documents, information on related documents – documents regulating the educational content of schools in different countries differ significantly both in form and in content. Specific issues may be described in another document, which may not be mentioned in the main documents; a limitation is also a different understanding of concepts, different contexts.

For the purposes of this study, the above-mentioned limitations were solvable, as the main guidelines were also duplicated in the Eurydice report (except for one country – Russia). However, for future and practical studies, it is useful to supplement the study methods with the comments of experts from each country.

It is important to emphasize the following discussion topics:

1. access to data. The study showed a significant and institutionally solvable problem in educational research – access to data. There is no single database where school curriculum documents from different countries are available, and such documents are often not available in English. For example, the Cabinet Regulation No. 747, Appendix 8 (which describes the results to be reached in the area of health and physical activity education for grades 3, 6,

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and 9) will be difficult for an English-reading researcher to find on the Internet among many other publications related to educational content.

Therefore, a single database with English translations of all documents would be useful in educational research for access to educational regulatory documents of different countries. An explanation of document hierarchy, related documents is also needed. For example, the necessity of conducting outdoor physical education classes in Russia results from the regulation of school curriculum (Russia, description of school education content, 2021), but the conduct of physical education classes in relation to air temperature and humidity is determined by an approved table, which is part of the rules of the school agenda (Russia, sanitary norms in schools, 2010).

2. Regularity of reports. Possible inaccuracies in education research are also caused by breaks in the regularity of publications – although the educational curriculum documents of the schools of different countries have experienced significant changes in recent years, even the hierarchically higher reports (for example, the Eurydice report of the European Commission on physical education and physical activities in European schools) are not of sufficient regularity. This study used the Eurydice 2022 data and 2013 data. For example, in the case of Latvia, such report does not show any changes after the 2018 education reform. This is also a problem that can be solved institutionally.

3. Study context. The Nordic countries (Finland, Sweden, Estonia, Norway) have emphasized the importance of outdoor activities the most, and the expected type of activities (if related to the weather) is often related to the weather in the coldest period of the year – the period of the school year (autumn - winter - spring). For this reason, the comments of the authors of several studies about the lack of studies on outdoor physical education classes at school (Humberstone, 2001, Mall et al. 2017) are understandable, as many studies on the effects of weather, thermoregulation, thermal stress, link the challenges of outdoor physical education activities to other and irrelevant challenges for the period of the Nordic school year, such as heat (Konefal et al. 2020). Longitudinal studies on the benefits of outdoor physical education classes are also lacking (Mall et al. 2017).

Conclusions

The regulation of physical education classes in force in Latvia gives the opportunity to use the benefits of outdoor physical education classes in the pedagogical process of schools: physical education teachers may conduct physical education classes outside the school premises (outdoors, moreover, for the learning of several topics, it would be necessary to organize the physical education classes outside the school premises.

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The Nordic countries (Finland, Sweden, Estonia, Norway) promote outdoor physical education classes in a special manner – describing them both as a separate category and implementing various additional programs for outdoor physical education classes. There are no legislative obstacles for outdoor physical education classes in Latvia to be implemented at the level of the Nordic countries.

The Nordic countries have the highest or fourth outdoor physical education class status, that is, countries characterized by autumn and winter (the coldest period of the year) weather challenges. However, climate challenges do not mean the self-evident inclusion of these elements in school education.

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