

Exploring the Role of Teaching Aids in Enhancing Physical Education for Schoolchildren: A Literature Review

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Authors' Contribution: A – Study design; B – Data collection; C – Statistical analysis; D – Manuscript Preparation

Abstract

Background and Study Aim Physical education is an important aspect of school curriculum, and teaching aids play a crucial role in this process. The purpose of this study is to explore different approaches to defining teaching aids and their functions, as well as to identify sources for selecting them in the context of physical education for schoolchildren.

Material and Methods The study is based on a review of relevant literature, including publications from the Vernadskyi National Library and Google search system. The search criteria used specific keywords related to the topic, and a total of 38 sources were selected for analysis.

Results The study reveals the various approaches to defining teaching aids and their functions in physical education, as well as their sources of selection. A classification of teaching aids used in the process of physical education for schoolchildren is proposed, and the impact of these aids on the content and organization of physical education is highlighted.

Conclusions The study concludes that there is no universally accepted definition of teaching aids, and the classification of these aids in the context of physical education for schoolchildren is yet to be established. Further research is needed to develop a comprehensive classification system that takes into account the various forms of physical education in schools. Ultimately, the findings of this study highlight the importance of teaching aids in the process of physical education and the need for a more systematic approach to their selection and use.

Keywords: teaching aids, content of physical education, physical education, physical culture and sports zones, equipment, inventory, technical teaching aids.

Introduction

The declining state of health among schoolchildren is a growing concern for educational institutions around the world. While medical and physiological factors play a role in this decline, pedagogical factors are also to blame. In particular, the organization of physical education classes and the lack of participation in extracurricular activities are contributing to poor health outcomes among students [1, 2, 3, 4, 5]. In order to address these issues, it is necessary to modernize all components of the educational process, including the goals and objectives, content, teaching methods, and means of education. However, there is currently no clear definition of what constitutes “teaching aids” in the context of physical education.

The importance of teaching aids in the educational process has been widely discussed in the literature [6, 7, 8, 9, 10]. However, the definition of the concept of “teaching aids” is not well substantiated in textbooks and teaching aids on pedagogy and in didactic studies [11]. Some authors use this term to denote both the educational project as a whole and the educational tools themselves, while others include the “tools” of the joint activity of the teacher and students as teaching aids [12, 13, 14, 15]. Additionally, several authors distinguish

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intellectual means of learning, which enable a person to conduct indirect and generalized cognition of objective reality [7, 16, 17, 18, 19]. In the field of physical education, the content of education and the means of education are of great importance. The following sections will discuss the role of teaching aids, the content of physical education, physical culture and sports zones, equipment, inventory, and technical training in the process of physical education of schoolchildren.

In study the American Heart Association provides an overview of various systematic reviews on the impact of sedentary behavior on health outcomes, highlighting the importance of promoting physical activity among children to reduce sedentary behavior [1].

Barlow et al. provide an overview of various systematic reviews on the impact of sedentary behavior on health outcomes, highlighting the importance of promoting physical activity among children to reduce sedentary behavior [20].

Rezende et al. examine the impact of physical education and physical activity on academic achievement in children, highlighting the positive correlation between physical activity and academic performance [3].

Another study outlines the appropriate instructional practice guidelines for elementary school physical education, emphasizing the

importance of teaching students the necessary skills and knowledge to engage in physical activity effectively [12].

Most scientists in their didactic studies constantly use the concept of “teaching aids” [21, 22, 23, 24, 25, 26], but there are almost no thorough works on this problem. Their composition and functions, technology of use during various forms of physical education are not defined.

The purpose of this article is to explore the means of teaching in the process of physical education of schoolchildren, including their composition, functions, and technology of use during various forms of physical education. By doing so, we hope to contribute to the development of effective strategies for promoting physical activity and improving the health of schoolchildren.

Methodology

This study is based on a review of relevant literature on the topic of *Exploring the Role of Teaching Aids in Enhancing Physical Education for Schoolchildren: A Literature Review*. The literature review was conducted using two primary sources: the Vernadskyi National Library and the Google search system. The search criteria used specific keywords related to the topic, including Content, education, theoretical component, intellectual, practical, classification, exercise. After conducting the initial search, a total of 38 sources were selected for analysis. These sources were chosen based on their relevance to the research question and their publication dates, which ranged from 2000 to 2011. The selected sources include academic articles, books, and reports, and they were all written in English (Russian).

In order to analyze the selected sources, a qualitative approach was used. The sources were read carefully and analyzed for their content and key themes related to the topic. The results of this analysis are presented in the following section.

Results

Physical education is a unique educational subject that requires a specific approach to the organization of the learning process. The primary goal of physical education is to develop practical skills and abilities through physical exercises and exposure to the healing forces of nature and sanitary and hygienic factors. Given the broad range of teaching aids available for physical education, there is a need to establish a rational classification system that takes into account the subject’s unique characteristics.

Our proposed classification system identifies five leading blocks of learning tools that are instrumental in the teaching of physical education. The first block includes physical culture and sports areas for

conducting educational classes, such as stadiums, sports halls, gyms, sports grounds, gymnastics camps, places for conducting classes in ski training, skating training, and other activities. The second block includes sports equipment and equipment for classes in gymnastics, athletics, sports games (basketball, football, volleyball, etc.), moving games, ski training, wrestling, tourism, and other activities.

The third block includes sports equipment for each section (module) of the curriculum, as well as equipment for conducting physical culture and health activities during the school day, physical culture and sports events during extracurricular work, and physical culture mass and sports events during extracurricular and extracurricular work. The fourth block comprises means of visibility of a mobile nature, such as diagrams, tables, drawings, models, and other aids that can be used to enhance students’ understanding of theoretical concepts and practical skills.

Finally, the fifth block comprises technical teaching aids, including tape recorders, slide projectors, TVs, film projectors, overhead projectors, computers, multimedia devices, and other means that can be used to supplement the teaching process.

It is worth noting that each of the above blocks has specific positions that are essential for teaching physical education effectively. For example, sports halls are of different sizes and have different functional orientations, such as exercise, athletic gymnastics, choreography, or dance. Additionally, technical means of education are divided into means of transmission of visual and sound information, or means whose primary function is control and measurement.

In conclusion, our proposed classification system for teaching aids in physical education provides a comprehensive framework for organizing the learning process effectively. By using these means of teaching, physical education teachers can create a conducive learning environment that promotes the development of practical skills and abilities among schoolchildren.

Discussion

The use of teaching aids in physical education has been a topic of interest among researchers and educators [27, 28, 29, 30, 31]. Vygotsky emphasized the importance of introducing new instruments in human behavior, which leads to the development of new functions related to their use [16]. While textbooks and other printed materials have been widely studied in the context of teaching aids [26, 32, 33, 34], there is a lack of research on the role of teaching aids in physical education at the theoretical level.

The analysis of the problem suggests that the content of education is the system-forming element of teaching aids. The content determines the methods

and means of its assimilation, and it is observed that the unity of educational, developmental, and health aspects is essential. Didactic concepts suggest that the content of education is studied at different levels, and each level requires a specific system of teaching aids [21, 35, 36, 37, 38].

The first two levels of creating the content of education consider the main components of education as tools, while the next three levels require a separate component of the educational process that serves the goals, content, methods, and forms of joint activity of the teacher and students. The system of teaching aids is a set of objects and actions necessary and sufficient to realize the goals of the educational process in the didactic cycle.

Educational resources include various elements such as textbooks, visualization tools, and places of classes [16, 17, 18]. While technical teaching aids are essential, it is crucial to note that they cannot replace the role of the teacher in the educational process,

as highlighted by pedagogues and psychologists [2, 3]. Thus, the word of the teacher remains the main means of education.

Conclusions

In conclusion, the analysis of the issue of teaching aids in physical education of schoolchildren indicates the lack of a universally recognized definition and classification of these aids in the general didactic aspect and in relation to the field of school physical culture. This article attempted to fill these gaps by providing a definition of the concept and a classification of teaching aids based on their use in different forms of physical education at school.

Future research should focus on determining the specific functions of each block of teaching aids and developing effective technology for their use. This will help improve the quality of physical education in schools and contribute to the overall development of schoolchildren.

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