

# The Impact of Additional Sports Activities on the Development of Students in General Education Schools

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## ABSTRACT

Sports can be diverse – dual career, sports for the general public, youth sports, and other levels. However, the level of general education schools is vital, as it is compulsory in the Latvian education system. Thus, for approximately 70% of Latvian children and young people, sports lessons are the only places to do sports. The study's author has analyzed the "Sport everyone in the class" project organized by the Latvian Olympic Committee. The essence of the project is related to additional sports activities that depend on the capabilities of the particular school – both in terms of infrastructure and human resources. A quantitative and qualitative survey method has been performed. Data were obtained from 26 schools participating in the project. Number of respondents – students – n-582. The author analyzed the impact of additional sports activities on students' work ethic, learning achievements, physical fitness, etc. Data were processed using the Windows SPSS program. It is concluded that students improve their ability to concentrate and complete the learning process and their eating habits. In qualitative surveys – interviews with school management, it was found that this type of process is recommended for all educational institutions because the benefits are more than the negative factors.

*Keywords:* Sport, education, health, kids, societies well-being

## Introduction

The importance of sports in society is becoming more and more critical. Overall, health trends at different age stages have a negative trend. The World Health Organization (WHO) points out a significant trend related to the poor physical fitness of young people and the consequences of these processes. Unhealthier children and young people are not a good development vision for the country's general well-being (World health..., 2021). It is possible to develop and improve the country's welfare based on a better understanding of the level

of sports and general health. Youth, who will better understand the importance of sports, will be able to perform primary activities – study, work, and improve themselves – with better quality.

An increasingly pronounced correlation can be observed with integrating education into sports. Educational institutions of different levels – primary schools, secondary schools, universities – associate their identity with sports, thus combining two vitally essential directions of development – sports and education. Today it is defined as a dual career. However, its manifestations and possible variations can be different. A dual career is a collaborative process of activities in which the athlete develops his athletic and academic competence and promotes psychosocial and psychological development (Stambulova, 2009).

However, a dual career is not the only development direction in the combination of sports and education. The author of the study points out that the conduct of sports lessons in general education schools is vital in ensuring society's well-being.

## Theory

The author considers integrating different sports necessary for the overall education system. It is indicated that regular physical activity can avoid signs of anxiety and depression (Eime et al., 2013). The author wants to emphasize two theses. Firstly, in the EU Member States, the average number of hours of sport is 3-4 times a week. This does not correspond to the required volume because, in the context of mainstream schools, it would be possible to provide sports activities every working day or five times a week. Although the importance of sport in society is quite understandable, in Latvia and elsewhere in Europe, the number of sports lessons is not enough. For example, in the 2018/2019 school year, public education institutions (France, Germany, and Greece) held sports lessons three times a week (D'anna et al., 2019). Most Member States organize sports lessons in mainstream schools three times a week as part of sports lessons. This practice is still in Finland and Estonia, while there are sports hours four times a week in Austria. Although the overall trends in the Member States of the European Union focus on integrating relatively high levels of physical activity in education, some countries behave differently. For example, in Swedish secondary schools, sports activities are recommended but not mandatory (Physical activity..., 2018). In the future, it is planned to increase the number to three times, similar to other parts of Europe. WHO has developed analytical information material describing data related to the Sports Guidelines of the Member States of the European Union.

Sports activities can also integrate students with learning problems (Nopembri et al., 2019). Students can feel relatively more unrestricted and more comfortable in sports infrastructure – in the hall, stadium, or elsewhere. This way, the

inequalities likely to form in the rest of the learning process can be reduced. Using different types of activities – games, games, or other activities- a sports teacher can promote mutual communication between students.

However, in different studies, researchers from sports, medicine, and psychology indicate a more significant number of desired daily sports activities. For example, in Australia (Bateman et al., 2020), the researcher and his team studied how sports can affect the psychological and social aspects of adolescence.

The development of an educational institution depends on several factors. One of the most important is to define the activity and quality of the director of the educational institution. Education researchers have concluded that the competence of an education leader is the second most significant influencing factor concerning students' learning performance. Even more significant is the class teacher's work, which is more frequent and direct contact with students (Geske & Račs, 2019). The strategic role and overall vision of school leaders are of great importance. Other authors have also pointed this out (Stoll & Temperley, 2009).

The study's author emphasizes the need for sports lessons and their content side. Starting from the 2021/2022 school year, the new competence approach was introduced into the Latvian education system. They are learning content based on several guidelines – self-critical thinking, transversal skills, interdisciplinary linkages, and other relevant aspects. The changes also relate to the field of sports, since not only the names of the subject are changed, but also a large part of the curriculum. The official name of the change in educational content is "Competence approach to learning content School 2030" (School 2030, 2020).

By the 2021/2022 school year, the content of sports lessons was much different. Their content was primarily based on the testing and measurement of physical abilities. For example, a test of physical characteristics – tests of speed, strength, or endurance. The students performed runs to time control and performed physical exercises by another. As a result, differences in achievements were visually visible within the framework of sports lessons, contributing to the reluctance to attend sports lessons. In the context of the new competence approach, the evaluation criteria to date are broader and more democratic:

- Progress;
- Attitude;
- Self-esteem;
- Assessment of other class members;
- Ingenuity or creativity;
- The result presented;
- The indicated result in the technical field, etc.

The integration of self-assessment into the evaluation process is of great importance for the evaluation criteria. Self-esteem is essential for further personal development (Prihadi & Chua, 2012).

By critically evaluating one's development and activities, it is possible to make significant progress in various aspects. From an early age, students should be taught how a meaningful and thoughtful analysis of their actions takes place. Of course, in specific age periods with the involvement of self-critical thinking in the learning process, educators should be cautious. For example, at the stage of adolescence, when schoolchildren have an exacerbated perception (Malm et al., 2003).

Successful inclusion of additional sports students in the daily learning process requires a strong management stance and appropriate action. In the context of education, the concept of "leadership" is translated from English as Leader or Leadership. The term "leader" controls individual human resources of individuals, groups, states, or people of a different size. The leader may have various specific directions—for example, religious deviance (Cambridge Dictionary, 2022). On the other hand, the scientific article focuses on the difference between the concept of "leader" and "leadership." The leader's activity focuses on developing specific people or groups, while the leadership process includes many people (Day et al., 2014).

There are different levels in the field of educational management, so that the responsibilities may be different. There are three levels of managers – first-level, middle-level, and senior managers. The first is responsible for the operational level of management, the second tactical, and the third strategic (Clark, 2009). Each of them has its specialized task at the management level. For example, in the context of education, the middle manager is more often the school director.

In education and other areas, communication abilities are of great importance (Armstrong & McCain, 2021). Through communication, school management can better define the goal and play an essential role in defining the potential benefits of the process in question.

Managerial skills can directly contribute to the quality of an institution in the context of the learning process and work ethic. Above, a manager's necessary skills were listed to successfully direct an educational institution toward achieving specific goals. The aspects mentioned in other literary sources are somewhat different from those already considered above.

Skills:

- Technical;
- Human;
- Conceptual;
- Delegation skills;
- Knowledge of foreign languages (Coleman, 2012).

For the school to include additional sports lessons, it is necessary to carry out organizational activities. For example, in the Latvian education system, the Latvian Olympic Committee's project "Sport everyone in the class" has been

integrated into the education system for a long time. As part of this, schools receive methodological materials in addition to implementing sports studies. However, the financial aspect remains in the hands of school management. In order to successfully attract the additional financial resources needed, school leaders must be able to justify the purpose and added value of the necessary funding. One option is to include sports in the planning document of a medium or long-term institution. For example, by including a desire to emphasize student health in the development of the strategy, school authorities can clearly define their need for additional funding.

The concept of “strategy” has historically been associated with various military operations. Several definitions are given in the scientific literature. However, they are primarily associated with business development and the basic principles of sustainability. Dr.oec. Janis Caune and Dr.sc.ing. Andrejs Dzedons, in his book “Strategic Management,” pointed out that the strategy includes

- all the essential activities of the company,
- causing the direction of the company’s activities and the goal of existence,
- pushing the necessary changes that are determined by the operating environment.

It defines how organizations create a competitive advantage and ensure sustainability (Caune & Dzedonis, 2009). A strategy is a plan of senior management to achieve long-term results by the organization’s operational goals.

Including additional sports lessons are vital because it facilitates several positive processes, but from a management point of view, it is an essential prerequisite for several variables.

School management must be able to successfully define its goal of integrating sport. The process must be justified in the context of infrastructure and human resources, and, of course, there must be a target audience that can and wants to implement the planned process.



Figure 1. Important factors in the process of integration of sports students (create by author)

## Methodology

The operation of the projection “Sport everyone in the class” was studied. One quantitative survey with students, who participated in this project and one quantitative survey with educators were conducted, bringing the total respondents to n-683: n-582 students; n-75 teachers; n-26 school’s directors.

Its mission is to strengthen the ideals of the Olympic Movement and the values of the high achievements of Latvian athletes in society by interesting children and young people to engage in physical activity, improving the health of pupils and their quality of life (Olympic, 2021).

The author used the quantitative method because it has more positive aspects that contribute to the quality of the study: Economy of resources (so-called time and financial); Anonymity; Includes many responses (Geske & Grinfelds 2006).

## Research

Through the mediation of school management, questionnaires were sent to students, teachers, school principals, or their deputies. Questionnaires were sent only to those schools that participated in the project with at least two classes. The obtained data were processed with the Windows SPSS 16.00 program. Pearson correlation was used to find a correlation between two variables. With its help, it is possible to calculate the correlation coefficient obtained based on quantitative data. Pearson correlation is usually used if the variables are measured on an interval or proportional scale.

The most significant respondents were students who participated in the whole class sports project. The study’s author wanted to determine the effect of sports lessons every day from the student’s point of view.

Table 1. Obtained correlations from students’ responses to the statements

		Since doing more sports, I have started to study better	Since I've been doing more sports, it's easier for me to concentrate and study	I have become more athletic
Since doing more sports, I have started to study better	Pearson Correlation	1	,419**	,095*
	Sig. (2-tailed)		,000	,022
	N	582	582	582
Since I've been doing more sports, it's easier for me to concentrate and study	Pearson Correlation	,419**	1	,076
	Sig. (2-tailed)	,000		,066
	N	582	582	582
I have become more athletic	Pearson Correlation	,095*	,076	1
	Sig. (2-tailed)	,022	,066	
	N	582	582	582
I have started to eat healthier	Pearson Correlation	,247**	,290**	,035
	Sig. (2-tailed)	,000	,000	,394
	N	582	582	582

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

It can be seen that several significant correlations with a high degree of confidence have emerged. The data were obtained by collecting the answers given by all  $n=582$  students-respondents. There is a significant correlation between the statements about the student's opinions regarding the impact of sports on their studies and the fact that it is easier for students to concentrate and learn. The  $p$ -value of the corresponding correlation is 0.00, which is very high confidence. On the other hand, the correlation is 0.419, which can be evaluated as relatively high and significant.

The content of both statements indicates a positive trend concerning the sports integration process. For a higher-quality learning process to take place, students need the ability to concentrate and perceive new information. The unifying element of both statements is the sport. Therefore, it can be concluded that it has contributed to the level of concentration abilities, which has also contributed to academic achievements.

The study's author emphasizes another binding correlation that was not predicted before. The fact is related to eating habits, which have been facilitated by daily extra sports hours. Although the need for healthy eating is not explicitly emphasized within the sports lessons (the content of the lessons may differ for each school), the students were pointed to positive changes. The correlation (0.247 and 0.290) between statements about eating habits and the ability to concentrate better or academic achievement is not exceptionally high, but it does indicate a positive trend.

In the project "Sports for everyone in the class," educators who work with children, especially sports teachers, are essential. The author also raised the opinion of pedagogues regarding their views regarding including additional sports lessons in the learning process. The main emphasis of the statements was focused on the same guidelines as for the students.

A significant correlation was obtained between the statements "I believe that additional sports activities positively affect the work ethic of students (for example, concentration, etc.)" and "I believe that additional sports activities positively affect the success of students," a high correlation is observed. The  $p$ -value of the resulting correlation is 0.00, which is high confidence. On the other hand, the correlation is 0.682. The obtained data show that the pedagogues have indicated positive and significant trends – sports activities have improved the work ethic. At the same time, there is an improvement in learning achievements.

However, another correlation indicates the opposite trend. The obtained correlation between the statements "I believe that additional sports activities have a positive effect on student success" and "Students who study "Sports for everyone in the class" have better results compared to their peers." The  $p$ -value obtained between the two statements has a moderately high confidence of 0.057 and a correlation of 0.221, which cannot be defined as very high.

Table 2. Obtained correlations from teachers responses to the statements

Correlations		Students studying “Sports for the whole class” have better results compared to their peers	I believe that additional sports activities have a positive effect on the success of students	I believe that additional sports activities have a positive effect on the work ethic of students (for example, ability to concentrate, etc.)
Students studying “Sports for the whole class” have better results compared to their peers	Pearson Correlation	1	.221	.147
	Sig. (2-tailed)		.057	.207
	N	75	75	75
I believe that additional sports activities have a positive effect on the success of students	Pearson Correlation	.221	1	.628**
	Sig. (2-tailed)	.057		.000
	N	75	75	75
I believe that additional sports activities have a positive effect on the work ethic of students (for example, ability to concentrate, etc.)	Pearson Correlation	.147	.628**	1
	Sig. (2-tailed)	.207	.000	
	N	75	75	75

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Considering the content of the relevant statements and the previously discussed correlation analysis, attention should be paid to essential aspects. Suppose the sports integration process could meaningfully improve the students’ work ethic while also improving the learning outcomes. In that case, the obtained correlation should have been higher, according to the study’s author.

Ensuring the project’s integration into daily learning requires a significant management role. It is necessary to provide the sports lessons planned within the project, which require delegation and attraction skills. The study’s author wanted to understand how the school directors evaluate the relevant process related to integrating additional sports lessons.

The answers given by the school management establish higher-level correlations with each other. For example, among the statements that mention the impact of information on student achievements and the integration of sports on the overall development of the school.



Table 4. Obtained correlations from schools' management responses to the statements

Correlations		I believe that the integration of sports has helped the school to develop	I think that the integration of sports has allowed students to improve their learning outcomes	I think that the integration of sports has allowed students to improve their work ethic
I believe that the integration of sports has helped the school to develop	Pearson Correlation	1	.871**	.606**
	Sig. (2-tailed)		.000	.001
	N	28	28	28
I think that the integration of sports has allowed students to improve their learning outcomes	Pearson Correlation	.871**	1	.661**
	Sig. (2-tailed)	.000		.000
	N	28	28	28
I think that the integration of sports has allowed students to improve their work ethic	Pearson Correlation	.606**	.661**	1
	Sig. (2-tailed)	.001	.000	
	N	28	28	28

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Obtained correlation with high reliability (p-value 0.00), correlation – 0.871. It can be concluded that based on the sports integration process, students' performance improves, which in turn contributes to the overall development of the school. A slightly lower level of correlation was formed between the statements about the school's development and the student's work ethic. The obtained correlation is 0.606.

## Conclusion

The author of the study states that both in the analysis of the theory and in the empirical part, it can be observed that sports activities are evaluated as good. Sports scientists have indicated that regular sports activities improve physical fitness and reduce other risks – for example, psychological disorders, including anxiety or depression. It can be a vital deciding factor in the teenage years, so regular sports activities should be included in children's daily life at the beginning of school.

- Evaluating the empirical part of the study, it can be concluded that school principals indicated a more pronounced positive influence. Higher correlations than correlations between statements are observed;
- From the students' point of view, it can be concluded that sports have a positive effect on two interrelated processes – work ethic and ability to concentrate, which intertwine together with the improvement of academic achievements;
- The change in students' eating habits is also positively evaluated;
- The teacher respondents do not observe such a pronounced positive trend in connection with the existence of additional sports activities. Although there is a high correlation concerning the overall development of students, theoretically compared to peers, the assessment is not so pronounced and specific.

Although the study reported only a few of the correlations made, the number of respondents is large enough to make verified claims. By implementing additional sports lessons in their daily learning process, schools ensure the recommendations mentioned by the WHO, as well as promote the development of the school and the students in various forms.

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