

## INTRODUCTION OF SPORTS ORIENTEERING INTO THE EDUCATIONAL PROCESS OF SECONDARY SCHOOLS

**Background.** Orienteering is one of the popular sports that contributes to the development of physical, intellectual, and psycho-emotional skills. Due to its unique combination of physical activity and the need for quick decision-making, this sport becomes an important element in the upbringing of the younger generation. In the modern educational process, orienteering has great potential for integration into curricula, as it not only promotes physical development but also cultivates critical thinking skills, teamwork, and adaptability to various conditions. However, there are certain difficulties and challenges that need to be overcome to achieve optimal results. Therefore, it is relevant to identify ways to implement orienteering into the educational process. The aim of this study is to determine effective ways of integrating orienteering into the educational process to popularize this sport and develop students' physical, intellectual, and psycho-emotional skills.

**Methods.** The study analyzed foreign experience and orienteering programs with the potential for integration into the educational process, reviewed existing programs and scientific research on orienteering in Ukraine, and identified a competency-based approach.

**Results.** Orienteering has a significant impact on the development of students' physical and intellectual skills. One of the key challenges in integrating orienteering into the educational process is the need to adapt curricula and train teaching staff. The recommendations proposed in the study demonstrate that with proper implementation, orienteering can become an important element of the educational process, contributing not only to physical education but also to the development of key competencies, critical thinking, leadership qualities, and enhancing students' overall motivation for learning.

**Conclusions.** The experience of many countries shows that incorporating orienteering into educational programs has a positive impact on the development of students and promotes their overall harmonious growth. The conducted research highlights the significant potential of orienteering as an effective means of developing students' physical, intellectual, and psycho-emotional skills. Integrating this sport into the educational process contributes not only to the physical development of young people but also to the formation of essential life competencies, such as critical thinking, teamwork, and adaptability to changing conditions. At the same time, the challenges associated with implementing orienteering can be overcome by developing an adapted teaching methodology and integrating this sport into curricula, particularly in geography.

**Keywords:** orienteering, secondary school, educational and methodological recommendations for orienteering.

### Background

Orienteering plays an underestimated role in the education system, both in physical and intellectual aspects, allowing for well-rounded development. Its inclusion in educational programs will positively impact learning. This sport is based on the combination of mental and physical activities, which demonstrates its uniqueness and comprehensiveness. Firstly, like any other sport, orienteering promotes physical activity and improves health indicators, as it is fundamentally based on running. It is well known that running reduces resting heart rate, which in turn lowers the risk of cardiovascular diseases. Additionally, running boosts overall immunity, improves mood, and builds discipline. Since orienteering is conducted outdoors in most cases, there is an opportunity to be in the fresh air during activities, which will engage educational process participants in learning and enhance their effectiveness. Secondly, orienteering supports intellectual development, primarily through the ability to navigate terrain, analyze maps, plan routes, and make quick decisions, which develop logical thinking. Navigating terrain is important in everyday life, as the lack of basic skills often leads to difficulties in finding destinations, as well as during travels or hikes, making these skills useful for regular tourism. Thus, spatial perception is developed, helping to understand one's

location and further direction of movement in the environment. This sport is accessible and inclusive: people of all ages, physical and physiological characteristics can participate. Orienteering allows for the development of cooperation skills, support, and leadership qualities, which are indispensable in today's society, as it can be not only an individual sport but also a team sport.

Orienteering holds significant importance in military affairs, where a map is an essential tool, without the understanding of which it is impossible to determine one's location and potential directions of movement, effectively reconnoiter the terrain, organize defense or offense in unfamiliar territory, and ensure the safety of personnel and equipment. In Ukraine, in connection with the full-scale invasion of Russian troops on its territory, the issue of terrain navigation has arisen, clearly demonstrating the necessity of this skill, as without it, it is difficult to achieve success in conducting combat operations, which are carried out quickly and dynamically in modern realities.

Orienteering is widespread in many countries, with 78 countries from all continents being members of the International Orienteering Federation. In addition to the global popularity of orienteering, it is also integrated into the school education system, where it serves as an effective tool for the all-around development of students.

In many countries, orienteering is part of the mandatory physical education curriculum. For example, in Sweden, during classes, students learn the basics of map reading, compass use, and techniques for moving through various terrain types. These classes not only strengthen students' physical health but also develop their ability to navigate space, make quick decisions, and work in teams.

In Norway, orienteering was introduced in educational institutions in the 1950s and has since become widely spread. Today, orienteering is a mandatory component of the physical education program for primary and secondary school students.

In New Zealand, orienteering is mainly practiced in secondary schools, with competitions held at regional and national levels. The country has 18 orienteering clubs that encourage students to engage in this sport and participate in competitions.

Orienteering was introduced to Scotland in the 1950s and has since become a popular sport among people of all ages and skill levels. The initial competitions were small and organized by enthusiasts, but gradually, orienteering gained national recognition. The country has become one of the leading nations in the development of this sport, and Scottish educational institutions actively include orienteering in their curricula.

The implementation of orienteering in educational institutions across various countries demonstrates numerous educational and social benefits. International experience indicates that integrating this sport into school programs promotes the comprehensive development of students, including improving physical fitness, developing navigation and terrain orientation skills, and fostering team spirit and responsibility. Involving students in orienteering stimulates their interest in physical education, geography, biology, and ecology, which contributes to a deeper understanding of these subjects. The experience of foreign countries shows that orienteering can become an important component of the educational process, promoting a healthy lifestyle and increasing overall motivation for learning.

The World Health Organization (WHO) has specific recommendations regarding physical activity for people of different ages. Schoolchildren aged 5–17 are recommended to engage in moderate-to-vigorous physical activity for at least one hour per day throughout the week, primarily involving aerobic exercise, and to include high-intensity aerobic activity at least three times a week to improve the musculoskeletal system. It is also necessary to reduce the amount of time spent sitting or lying down, particularly for entertainment in front of a computer or television screen.

**The purpose of this study** is to identify effective ways of integrating orienteering into the educational process to popularize this sport and develop students' physical, intellectual, and psycho-emotional skills.

### Methods

The study analyzed foreign experience and orienteering programs with the potential for integration into the educational process, reviewed existing programs and scientific research on orienteering in Ukraine, and identified a competency-based approach.

### Results

Modern societal trends demand that the education system not only impart knowledge but also develop a set of skills that will enable students to effectively adapt to the challenges of the contemporary world. An important component of this process is the development of spatial thinking and the ability to work with data, including geographic data. In this context, orienteering serves not

only as an engaging sport but also as an effective tool for learning and developing competencies essential for successful life activities.

Orienteering is a sport in which participants use a map and compass to navigate through a series of control points (CP) set out in the terrain as quickly as possible. Results are determined by the time taken to complete the course (sometimes considering penalty time) or by the number of points scored. The integration of orienteering into the learning process is a pedagogical approach that creates a synergistic effect between theoretical knowledge and its practical application. This method not only improves navigation skills but also deepens the understanding of geographical concepts. Applying geographic knowledge in real-world conditions allows students to develop spatial thinking, critically analyze data, and make informed decisions in challenging situations.

The use of orienteering in educational institutions abroad has become widespread as an effective tool for developing students' cognitive and physical skills. In many countries, particularly in Northern and Western Europe, orienteering is integrated into school curricula as part of physical education, as well as through an interdisciplinary approach that combines geography, biology, and other natural sciences.

Orienteering is a popular sport in Sweden, where many educational institutions integrate it into their physical education programs starting from the 1st grade. The curriculum content for the "Physical Education and Health" course for grades 1–3 includes exploring and navigating the local environment, investigating daily movement possibilities in the terrain, studying concepts that describe location, distance, and direction, engaging in outdoor activities throughout the year, and understanding the principles of public access to nature. For grades 4–6, the curriculum includes exploring and navigating the natural and surrounding environment, investigating daily movement possibilities in the terrain, studying the structure of simple maps, including digital ones, spending time in nature in various environments and seasons, understanding public access to nature, and water safety throughout the year. For grades 7–9, it involves exploring and navigating familiar environments using simple maps and digital tools, investigating daily movement possibilities in the local environment, giving and following instructions, engaging in outdoor activities in different environments and seasons, water safety throughout the year, and managing emergencies on and around water bodies using auxiliary equipment (Curriculum for the basic school..., 2023).

Orienteering is often integrated with other subjects such as geography and biology. For example, students may explore local flora and fauna during their training sessions.

Educational institutions often have access to specially designated areas for orienteering, such as parks, forests, and local sports club facilities. This allows for outdoor lessons in natural settings, promoting more effective learning and student development.

In Sweden, numerous orienteering competitions are regularly held among students. These include school-wide, regional, and national tournaments. Such events encourage healthy competition and increase motivation for sports among young people. An example is the O-Ringen project, the world's largest orienteering festival, which brings together thousands of participants, including students. This event is a key component in the development of orienteering, providing extensive opportunities for participation and skill improvement among young people.

In Norway, orienteering is not only a popular sport but also plays an important role in children's physical education. Orienteering was introduced in Norwegian schools in the 1950s and has since become widely practiced. Today, orienteering is a mandatory component of the physical education curriculum for primary and secondary school students in Norway.

Orienteering is part of the national physical education curriculum in Norway and plays a key role in developing students' physical and cognitive skills. The organization of orienteering lessons is typically handled by physical education teachers or specialized orienteering coaches. Lessons usually include both theoretical and practical components, providing a comprehensive mastery of the sport. In the theoretical part, students learn the rules of orienteering, map reading, and compass use. The practical part involves active participation in training competitions on open terrain, allowing students to apply their theoretical knowledge in practice (Orienteering association in Norway, 2023).

Government initiatives and support from local sports clubs play a significant role in promoting orienteering. The Norwegian government actively supports the development of orienteering through funding school programs, organizing competitions, and providing training for teachers. Local sports clubs also collaborate closely with schools, offering technical support and organizing events for students. According to public opinion in Norway and sports club members, an important goal is to instill a lasting need for a healthy lifestyle in children and youth and to foster their development as good citizens of their country.

School orienteering competitions are held at local, regional, and national levels, giving students the opportunity to test their skills and compete with other students from across the country.

Scotland is one of the leading countries in the development of orienteering. Scottish educational institutions actively incorporate orienteering into their physical education programs. The Scottish Schools Orienteering Association (SSOA) plays a key role in promoting orienteering among school students. It encourages schools to use orienteering as part of both official and informal programs, highlighting its benefits for students' physical and intellectual development. The SSOA also organizes the annual Schools Festival, where students showcase their orienteering knowledge and skills, and supports teams at the World Schools Orienteering Championships (School orienteering in Scotland, 2023).

Annually, the Scottish Schools Orienteering Festival is held, targeting students who have already been introduced to orienteering in their schools. Schools from across Scotland participate in the competitions, which are organized to allow all participants who have mastered basic orienteering skills to demonstrate their abilities.

Orienteering is a popular sport in New Zealand and is frequently implemented in schools as part of physical activity and skill development. In New Zealand schools, orienteering is typically integrated into the physical education curriculum or conducted as an extracurricular activity. It is primarily practiced in secondary school, particularly in Years 7 and 8. Every two years, the Oceania Championships are held, traditionally featuring only long and relay distances, but now also including sprint and middle distances. The youngest age category for teams is men and women under 16 years old (M16, W16). Additionally, the Orienteering NZ Junior Camp is held annually, rotating among various locations/clubs. This camp usually takes place in December and is highly sought after by young participants (School orienteering in New Zealand, 2023).

Orienteering was introduced to Ukraine in the 1960s, when the first Ukrainian Orienteering Championship was held in the city of Kaniv. The development of orienteering in the country has been closely linked with the tourism sector, which was involved in route planning, map drawing, preparing participants, and organizing competitions. There was a noticeable decline in orienteering during the second half of the 1990s due to the worsening economic crisis and reduced funding for sports organizations. Over time, thanks to the efforts of enthusiasts, international orienteering competitions were held in Ukraine. For example, a World Cup stage took place in July 2000 in Truskavets, and the World Championship was held in August 2007 in Kyiv. Currently, due to the ongoing military actions in Ukraine, a significant part of the country is unsuitable for conducting orienteering activities and competitions. In addition to the temporarily occupied territories, cleared areas in various regions still contain explosive remnants, which will pose a threat and hinder the organization of sporting events for a long time. However, despite these challenges, the orienteering community is quickly adapting to the new conditions.

The current development of societal processes in Ukraine requires new approaches to addressing issues related to ensuring social cohesion, integration, and a healthy population. The "Plich-o-Plich" (Shoulder to Shoulder) project is an important social initiative in Ukraine aimed at strengthening social cohesion and supporting an active lifestyle among different population groups.

"Plich-o-Plich All-Ukrainian school leagues" are annual competitions for students across Ukraine, running from September to June, featuring five sports: basketball, volleyball, futsal, orienteering, and cheerleading. The orienteering competitions are included in the program with the aim of developing and popularizing orienteering among school students in all regions of Ukraine, as well as fostering lasting traditions and motivation towards physical education and sports as crucial factors in maintaining a healthy lifestyle.

The competitions consist of five stages: Stage 1 (school), Stage 2 (territorial and district in regional cities), Stage 3 (district and city in regional cities), Stage 4 (regional), and Stage 5 (national). Through team competitions and joint training sessions, participants learn to collaborate, overcome challenges together, and support each other, which significantly enhances social cohesion.

"Plich-o-Plich All-Ukrainian school leagues" is an initiative aimed at supporting and developing student competitions in various sports and activities. This initiative involves organizing competitions among schools across Ukraine to engage youth in an active lifestyle, improve physical fitness levels, and foster team spirit.

Orienteering can be incorporated into educational programs at all levels of education, from primary to higher education. In Ukraine, it is currently implemented only in school-based clubs or extracurricular institutions for students and within certain disciplines in higher education institutions. An example is the Center for Tourism and Local History of Student Youth in the Svyatoshyn District of Kyiv. The CTLC is an extracurricular institution specializing in fostering children's and youth's interest in local history and tourism, as well as a love for their homeland. It offers clubs focused on various aspects of tourism and orienteering, local history, and creativity. The first direction is divided into two clubs: sports tourism and orienteering. There are three main age categories for the club: 7–10 years, 10–15 years, and 15–21 years, each of which is further divided into several groups depending on

age and instructor. The clubs operate based on schools in the Svyatoshyn District or at the CTLC, with the number of sessions and their timing depending on the age of the participants. During the 2022–2023 years, numerous events related to orienteering were held, including training at various locations such as indoor facilities, parks, and forested areas in different types of orienteering, as well as competitions, which are often thematic and help to learn more about significant dates and personalities. In training sessions, children not only improve their physical fitness for competitions but also learn to work with maps of various scales, use a compass on the terrain applying knowledge about azimuths, and study relief forms with contour lines, topographic symbols, and other important elements of orienteering (Center of tourism and local..., 2023).

Students from one of the schools participated in the Ukrainian Trail Orienteering Championship, a type of orienteering focused on accurately determining control points on the terrain using a map, without considering the time taken to complete the course, indicating an expansion of their horizons in this sport and new experiences. CTLC participants also regularly compete in bike orienteering events, which involve orienteering by bicycle. Several City of Kyiv Championships in this type of orienteering have already been held. Unconventional competitions included the CTLC Open Championship in Online Orienteering dedicated to Kyiv Day, conducted remotely rather than in person, demonstrating the versatility of this sport, which allows organizing events not only in traditional sprint or long-distance formats but also virtually using information technology.

As orienteering is a sport that integrates physical fitness, navigation skills, and decision-making, it serves as an effective means for students to develop both Soft skills and Hard skills.

Soft skills developed through orienteering include communication skills, decision-making, teamwork, self-control and self-organization, stress resilience, and analytical thinking. Orienteering is often conducted in team competitions, where students must learn to collaborate effectively to succeed, communicate clearly and concisely with their teammates to provide and receive necessary information. Additionally, participants learn to quickly and efficiently solve problems that arise during orienteering and make decisions, such as finding an alternative route or choosing the best path to the next control point.

Hard skills developed through orienteering include map reading, compass use, physical fitness, and terrain navigation. During orienteering, students learn to read and interpret topographic maps to find their way to control points and use a compass to determine direction. To successfully complete the course, participants need to be in good physical condition, which in turn contributes to improving their overall well-being.

The development of these skills not only supports success in academics and work but also prepares young people for the challenges and opportunities they will face in the future. Research shows that Soft skills, such as communication, teamwork, and problem-solving, positively impact students' academic performance. Hard skills, on the other hand, provide the necessary knowledge and abilities for performing specific professional tasks. Soft skills play a crucial role in personal development, helping individuals build strong relationships, resolve conflicts, and achieve their goals. They also contribute to better self-awareness and confidence, which are important components of emotional

intelligence. Hard skills will also remain in demand as technological advancements create new job opportunities.

Key competencies form the foundation for the comprehensive development of students, preparing them for the challenges of modern society. Their importance lies in their role in fostering skills necessary for successful life and professional activities in the 21st century. Key competencies help students recognize their own strengths and weaknesses, develop self-confidence and independent decision-making abilities, enhance the effectiveness of the learning process, and create a foundation for a fulfilling and successful life. Key competencies include the ability to learn, communicate in state, native, and foreign languages, mathematical and basic scientific and technical competencies, information and communication skills, social and civic competencies, cultural awareness, entrepreneurial skills, and health preservation competencies.

Integrating orienteering into the educational process requires carefully developed teaching and methodological guidelines that consider the specific needs of age groups, curricula, and the capabilities of educational institutions. These guidelines can be implemented during geography lessons and integrated with other school subjects.

The goal of these teaching and methodological guidelines is to increase students' interest in studying geography, develop spatial orientation and map-reading skills, foster teamwork and collaboration skills, encourage a healthy lifestyle, and cultivate a love for their homeland and a respectful attitude towards the environment. The application of teaching and methodological recommendations during geography lessons will contribute to the development of key competencies and transversal skills as outlined in the Model Curriculum for Geography for Grades 6–9 in general secondary education institutions (Fig. 1, 2).

Mathematical competency. Orienteering requires students to navigate using maps and compasses, which promotes spatial thinking, a foundation for understanding mathematical concepts such as angles, distances, ratios, and scale. Many orienteering tasks involve solving mathematical problems, such as calculating the shortest route, determining the optimal start time, or predicting competition outcomes. By solving these problems, students learn to apply mathematical knowledge practically. Working with maps in the field helps students study different landforms and terrain, developing spatial thinking and understanding geometric relationships. Additionally, students develop logical thinking as they analyze information, seek solutions to specific problems, choose the best route considering various factors such as terrain and checkpoint locations, and draw conclusions.

Competencies in natural sciences, technology, and engineering. Students learn to measure distances, navigate using compasses and GPS, and record their routes and results, which enhances their skills in precise measurements and data recording methods. In orienteering, students classify natural objects based on various characteristics (e.g., type of forest or river species), which develops their ability to systematize natural objects. They also learn to explain and describe natural phenomena using scientific terminology, becoming familiar with terms like orienteering, terrain, scale, and geographic coordinates, which helps them communicate more effectively in scientific contexts. Students encounter research problems such as determining the optimal route or analyzing terrain, which aids in learning how to investigate nature. Practical application of geographic knowledge during orienteering enhances their learning experience.

**6 КЛАС**

**Тема: Орієнтування на місцевості**

**Мета:** навчитися визначати сторони горизонту, напрямки, азимут, вимірювати відстані, читати карту та пересуватися по місцевості за допомогою карти та компаса.

**Завдання 1.** Визначення сторін горизонту.

За допомогою компаса визначте сторони горизонту. Запишіть в бланк які видимі об'єкти знаходяться на північ від вас, які на південь, на захід та схід.

Північ	Південь	Захід	Схід

**Завдання 2.** Визначення напрямку.

За допомогою компаса визначте напрямок:

- від вашого класу до шкільної бібліотеки;
- від шкільної бібліотеки до головного входу школи;
- від головного входу школи до спортивного майданчика;
- від спортивного майданчика до найвищого дерева на території школи;
- від найвищого дерева до вашого класу.

На аркуші паперу схематично відобразіть напрямки вашого руху.

Fig. 1. Example of teaching and methodological recommendations for 6th grade students

**9 КЛАС**

**Тема: Міжнародний день туризму**

**Мета:** залучити учнів до активного способу вивчення природи та розвитку навичок орієнтування, сприяти командній співпраці та підтримці.

**Завдання.** Змагання зі спортивного орієнтування.

**Місце:** територія школи та прилегла місцевість або парк.

**Учасники:** учні 9-х класів.

Визначити категорії учасників (дівчата, хлопці). Для кожної категорії розробити окремий маршрут з контрольними пунктами (КП). Перед початком змагань розмістити на місцевості відповідні КП. Розробити регламент змагань, що включає в себе: дату, час та місце проведення змагань, програму змагань, систему нарахування балів, нагородження переможців та призерів.

Учням буде запропоновано карту зі спортивним орієнтувальним маршрутом на базі шкільного двору та прилеглої місцевості або парку, та картки учасника змагань<sup>4</sup>. На маршруті буде розміщено КП. Перед початком маршруту кожен учень отримає карту маршруту з позначеннями КП. Учні повинні знайти та відвідати кожну контрольну точку відповідно до маршруту, використовуючи карту та компас, та поставити позначку у картку<sup>4</sup>.

Переможці та призери в кожній категорії визначаються за найкращим часом проходження дистанції. Переможці та призери нагороджуються грамотами та призами, а усі учасники – дипломами за участь у змаганнях. Після проведення змагань необхідно проаналізувати їх проведення, щоб виявити недоліки та внести пропозиції щодо їх усунення.

<sup>4</sup>Картка учасника змагань

1	2	3	4	5	6	7
6	9	10	11	12	R	R
Прізвище						
Ім'я						
Категорія						

Fig. 2. Example of teaching and methodological recommendations for 9th grade students

Innovation. By incorporating elements of orienteering into geography lessons, students can apply their ideas in practical projects, such as developing routes, creating new navigation methods, or improving existing orienteering techniques. This fosters project-based thinking and the implementation of innovative ideas. Students can invent and test various strategies to achieve goals, which enhance their

creativity and innovative potential. Teamwork during tasks promotes collective creativity and the adoption of innovative approaches.

Environmental competency. Since lessons incorporating elements of orienteering are often conducted in natural environments, they provide students with opportunities to explore various ecosystems and familiarize themselves with

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their characteristics, which promote an understanding of the importance of preserving the natural environment and adopting responsible attitudes toward it. Orienteering can help students learn to anticipate the environmental consequences of human actions. While moving through natural settings, students are taught to respect nature, avoid littering, and adhere to principles of environmental protection. Students learn to analyze the impact of different types of orienteering on ecosystems, choose routes that minimize this impact, and suggest ways to preserve the environment.

Information and communication competency. During orienteering, students process information about routes, distances, and territorial features, learning to identify and analyze key information necessary for successful navigation and overcoming obstacles. They develop skills in searching for, processing, storing, and transforming scientific information using modern information and communication technologies.

Lifelong learning. Incorporating elements of orienteering into lessons sets clear and understandable goals for students, such as finding all checkpoints in the shortest time or with the fewest mistakes, which fosters the ability to set goals, plan their achievement, and evaluate results. Students learn different strategies, methods, and tools that help them achieve their goals, and develop the ability to choose the most effective approach to solving problems or reaching objectives. They learn to plan their actions, organize time and resources, and develop skills in systematic problem-solving and planning in unfamiliar or challenging conditions. Based on this experience, students acquire the ability to independently gain knowledge, improve their skills and abilities, and cultivate a desire and capability for continuous learning.

Civic and social competencies. Lessons and competitions are often held in scenic locations, allowing students to explore their local area and become familiar with its features. This can motivate students to share information about the beauty and uniqueness of their environment with friends and family. Students may also engage in addressing local issues. Conducting lessons outdoors can give students the opportunity to see environmental problems in their region, such as pollution, deforestation, or soil degradation, which can motivate them to participate in beautification and conservation projects, as well as collaborate with local authorities and community organizations. Students develop collaboration and teamwork skills during orienteering. They learn to discuss ideas, make joint decisions, and implement projects while considering the opinions and support of other participants. Additionally, orienteering is an active sport that requires physical fitness, endurance, and coordination, promoting the development and spread of a healthy lifestyle among youth.

Cultural competency. Through engaging in orienteering, students use knowledge from geography, cartography, meteorology, and other natural sciences to navigate effectively in natural environments. They learn to apply this knowledge practically, which broadens their understanding of natural processes and phenomena. Students explore different natural landscapes, cultural features of various regions, and the relationships between humans and their environments, thereby developing a cultural worldview and understanding the importance of preserving and respecting diverse natural and cultural values.

Entrepreneurial skills. Solving tasks, planning routes, and managing time and resources are elements that develop planning and decision-making skills. Orienteering can motivate students to seek new opportunities and use their knowledge and skills to achieve success, which fosters entrepreneurial spirit and the ability to find innovative solutions.

Therefore, applying these educational and methodological recommendations will make geography lessons more engaging and dynamic, increase student motivation, and develop essential competencies, useful skills, and abilities. It will also help students improve their physical fitness and intellectual capabilities.

### Discussion and conclusions

Orienteering is widely practiced in many countries, and in Scandinavian countries, the UK, and New Zealand, it has been integrated into secondary education. Orienteering combines physical and intellectual abilities, allowing students to develop comprehensively and establish a connection between physical activity and navigation skills. In Ukraine, orienteering is well-developed in almost all regions but typically at the club level or in extracurricular institutions. However, it is worth noting that orienteering has been gaining popularity in secondary education institutions since last year, thanks to the "Plich-o-Plich" (Side by Side) project. Integrating orienteering into the educational process has positive benefits: it promotes an active lifestyle, increases motivation for learning, enhances decision-making skills, fosters teamwork, and helps achieve common goals while developing key competencies. The educational and methodological recommendations for incorporating orienteering into the school curriculum enhance students' interest in natural sciences, develop map-reading skills, encourage mutual support, foster a love for their homeland, and stimulate engagement in sports and a healthy lifestyle.

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## ВПРОВАДЖЕННЯ СПОРТИВНОГО ОРІЄНТУВАННЯ В НАВЧАЛЬНИЙ ПРОЦЕС ЗАКЛАДІВ СЕРЕДНЬОЇ ОСВІТИ

**В с т у п .** Спортивне орієнтування є одним із популярних видів спорту, що сприяє розвитку фізичних, інтелектуальних та психо-емоційних навичок. Завдяки унікальній комбінації фізичної активності й необхідності прийняття швидких рішень, цей вид спорту стає важливим елементом виховання молодого покоління. У сучасному освітньому процесі спортивне орієнтування має великий потенціал для інтеграції в навчальні плани, оскільки воно не лише сприяє фізичному розвитку, але й формує навички критичного мислення, командної роботи та адаптації до різних умов. Однак існують певні труднощі та виклики, які необхідно подолати для досягнення оптимальних результатів. Саме тому актуальним є визначення шляхів реалізації способів упровадження спортивного орієнтування в навчальний процес. Мета цього дослідження – визначення ефективних шляхів інтеграції спортивного орієнтування в навчальний процес для популяризації цього виду спорту, розвитку фізичних, інтелектуальних та психоемоційних навичок учнів.

**М е т о д и .** Під час дослідження було проаналізовано іноземний досвід і програми спортивного орієнтування з можливістю інтеграції в навчальний процес, огляді існуючих програм та наукових досліджень, присвячених спортивному орієнтуванню в Україні та визначені компетентнісного підходу.

**Р е з у л ь т а т и .** Спортивне орієнтування має значний вплив на формування фізичних і інтелектуальних навичок учнів. Одним із ключових викликів упровадження спортивного орієнтування в навчальний процес є необхідність адаптації навчальних програм і підготовки педагогічних кадрів. Запропоновані в дослідженні рекомендації демонструють, що за умови належного упровадження, спортивне орієнтування може стати важливим елементом освітнього процесу, який сприяє не лише фізичному вихованню, але й розвитку ключових компетентностей, критичного мислення, лідерських якостей і підвищенню загальної мотивації учнів до навчання.

**В и с н о в к и .** Досвід багатьох країн показує, що включення спортивного орієнтування в освітні програми позитивно впливає на розвиток учнів і студентів, сприяє їхньому загальному гармонійному розвитку. Проведене дослідження показує значний потенціал спортивного орієнтування як ефективного засобу розвитку фізичних, інтелектуальних та психоемоційних навичок учнів. Інтеграція цього виду спорту в навчальний процес сприяє не лише фізичному розвитку молоді, але й формуванню таких важливих життєвих компетенцій, як критичне мислення, командна робота й адаптація до змінних умов. Водночас виявлені виклики, пов'язані із упровадженням спортивного орієнтування, можуть бути подолані завдяки розробці адаптованої методики навчання та інтеграції цього виду спорту в навчальні програми, зокрема з географії.

**К л ю ч о в і с л о в а :** спортивне орієнтування, заклади освіти, навчально-методичні рекомендації зі спортивного орієнтування.

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