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“SMALL MEETING WITH ATHLETICS” RECREATIONAL EVENT AS AN INNOVATIVE TOOL PROMOTING PHYSICAL ACTIVITY AND ACTIVE LEISURE TIME AMONGST PRESCHOOLERS

Use of movement as a form of treatment finds increasing justification in various research and practice. Hence the search for more and more attractive forms and means of promoting physical activity and the idea of active leisure, which should contribute to improving the health of children and adolescents. The aim of this paper is to present preparations for the recreational event “A Small Meeting with Athletics” and show how institutional and human resources may be used in an innovative way. The project was given the form of athletic competitions – an event which is usually not available for the general public to participate. The main element of the project was a professional time measurement of a 30-meter run, on a measuring track, using Slandi’s measuring device and slow-motion recordings. 300 measurements were made. Subject group consisted of 46 pre-school children. The project was verified in practice during a closed and an open event. In both cases, it was met with a very positive reception of the participants – both children and their parents. Promoting repeated participation of children and adolescents in events that encourage them to be physically active, as well as the use of outdoor forms, brings – in the long run – profits such as healthier population whose members have established health-related habits and well-developed social competences. With the available institutional and human resources, it is possible to increase the attractiveness of traditional educational and recreational activities. Proper planning of the event is the key that helps prepare any educational project. It is therefore necessary to work with individuals with hands-on experience. The academic environment should support teachers who work at pre-academic levels of education by searching for new solutions together and constantly adapting existing ones to current needs. The cooperation of teachers at various levels of education carries a great potential and, in the light of the diversity of their experiences and perceptions, it brings great benefits to both parties. It also results in useful solutions in the area of practical educational activities.

Keywords: *physical activity, pro-health behaviors, leisure, recreation service, organization of sports events, early childhood education, children*

Introduction

Discussions on the need to amend the law on higher education in Poland often feature a postulate regarding the need for innovations and creativity of academic environments, and their cooperation with economic entities during their implementation (Bauman, 2011; Bartkowiak, 2012; Geryk, 2013). Without denying the necessity of such actions, a certain specificity of the humanities (including studies in the field of pedagogy) is worth noting. Undoubtedly, these studies do not offer such application possibilities as biology studies at technical universities. Specificity of pedagogy – in a very simplified way – is that the subject of interactions is essentially unchanged (psychomotorism is constant at certain stages of development). By using recognized and effective educational and didactic methods, for example on a child in the ‘golden age of motor skills’ (5 years old), the teacher fulfills their task. The new generation of teachers find it natural and easy to enrich their practices with resources that are

not so easily adapted by the older generation of teachers (Wolińska, Bronikowski, 2015). It should be emphasized that competences related to the use of computers in education are a particularly important element of the modern teacher’s workshop (Strykowski, 2005). While creating an appropriate preparation program for physical education teachers to be health educators, it should be emphasized the graduates must become teachers not only of sport, but also of broadly understood physical activity, which includes care for health and counteracting health threats (Huk-Wieliczuk, Marcinkowski, 2009).

As it is not possible to seek innovation in every aspect of pedagogical and didactic impact (or in any case, the development of educational and recreational projects and their implementation does not have to bring direct economic profit under contracts with economic or administrative entities), it is natural that every conscious teacher looks for new ways of influencing the pupil for the sake of pupil’s development and teacher’s self-fulfillment

(satisfaction with the development of the pupil). An effective physical education process should lead to the formation of not only knowledge, skills and fitness that ensure lifelong physical activity, care for one's own fitness, development, health and beauty of the body, but it should also shape long-lasting attitudes in the pupils that allow the above-mentioned actions to be consistently implemented throughout life (Dobosz, 2015). Therefore, higher education institutions should support teachers in their work on educational projects, and all academic developments should take into account the determinants of educators working at pre-academic stages of education and be consulted or developed in direct contact with them.

Bearing this in mind, the employees of the Department of Individual Sports, Tourism and Recreation of the Department of Physical Culture and Health Promotion of the University of Szczecin have prepared a project promoting physical activity and the idea of active leisure.

The Department's employees have already collaborated on the development of educational projects and their practical application (Dobosz, 2015; Tarnowski et al, 2015, 2016, 2017; Łubkowska et al, 2014; Paczyńska-Jędrycka, Łubkowska, 2016).

Aim and Tasks

This paper aims to present an innovative attempt to use institutional and human resources to develop a recreational product. The project involved a professional time measurement of a 30-meter run, on a measuring track, using Slandi's measuring device and slow-motion recordings. The main goal of this article is to present preparations for a recreational event that promotes physical activity and the idea of active leisure time, and its implementation.

Materials and Research Methods

This paper presents the organizational side of the event, while its description as a potential sports and recreational product is presented in a separate article (Paczyńska-Jędrycka et al, 2015). Two versions of the event were prepared – simplified and main. The simplified form included only a 30-meter run with time measurement. It was verified during a public non-profit mass event: The Great Passion Picnic – 14th Szczecin Meeting of Non-Governmental Organizations 'Pod Platanami' organized by the "Szczecin dla Pokoleń" Association in Jasne Błonia in Szczecin on May 31, 2015. In the main version of the product - the recreation service (a birthday party for a six-year-old child) was given the form of athletics competitions. It was assumed that children and parents would find classes conducted on a real sports facility attractive. One of didactic advantages of the event was a vivid comparison of time measurement methods: an old one and a modern one. It was verified during a birthday party "A little meeting with athletics". The event was held on May 9, 2015 at the facilities of the Municipal Athletic Stadium in Szczecin. 46 pre-school children took part in the event.

The project was based on:

1. Available institutional and human resources including:

- a. Employees of the Faculty of Physical Culture and Health Promotion at the University of Szczecin,
- b. Pole Vault Center in Szczecin with qualified and experienced staff,
- c. A Physical Education teacher working at School and Kindergarten TAK in Szczecin,
- d. An economic entity involved in sport metrology and biomechanics (hereinafter referred to as the Cooperating Entity).

2. Available sports and hardware infrastructure:

a. Wiesław Maniak Municipal Athletics Stadium in Szczecin. On the stadium's pitch, treadmills and a pole vault station were used, while the warm-up room featured a trampoline, a long jump station, a podium and other facilities necessary for proper organization of activities.

The project was given the form of athletic competitions – an event which is usually not available for the general public to participate. The main element of the project was a professional time measurement of a 30-meter run, on a measuring track, using Slandi's measuring device and slow-motion recordings. The measuring track was constructed in accordance with the principles presented by Terczyński (Terczyński et al, 2016). The diagram of the measuring track used in the project is shown in Figure 1. Figure 2 shows the elements of the measuring track used during the open event.

Preparation of each project / event requires proper planning. The workflow plan for the main project included:

- 1) Preparations, including:
 - a) A workflow plan was prepared with tasks assigned to specific persons responsible for their implementation (based on the event organization scheme proposed by Ryba (Terczyński, 2009));
 - b) OSOT Szczecin's cooperation was acquired. As part of the agreement of this club with the city of Szczecin, it was possible to use the infrastructure of the stadium,
 - c) Starter kits were prepared: drinks and snacks, starting numbers (Fig. 4), diplomas, medals, refreshments at the end of the event (drinks and cakes);
 - d) The venue of the event (competition office, measuring track, individual stations) was prepared and the necessary equipment was collected;
 - e) Individual invitations were prepared for all children (Fig. 3).
- 2) Conducting competitions which included (in the chronological order):
 - a) Organization of a competition office, where children were entered on the start list and given a starter kit);
 - b) Warm-up on the stadium's pitch;
 - c) Running in groups of eight on a distance of 30 m, with joint start on the signal of a starting pistol;
 - d) Individual run on a 30 m track with professional time measurement and slow-motion recording (Fig. 5);

- e) Jumping on the trampoline, secured by a sports gymnastics trainer (Fig. 6);
- f) Speed measurement of a kicked ball using the SpeedTrac X Speed Sport Radar (Fig. 7);
- g) Long jump;
- h) Exercises perfecting the technique of jumping over a crossbar, secured by a pole vault trainer (Fig. 8);
- i) Handing out medals, diplomas (Fig. 9) and gifts. Each child climbed the podium to receive these, which was an additional attraction;

- j) Refreshments: cake and drinks.
- 3) Summary of the event for each child, which included:
 - an electronic medium with recorded slow-motion technique of all attempts,
 - a commemorative brochure with a measurement metric (Fig. 10).

The prepared materials were delivered to the kindergarten or - in individual cases - personally to the parents.

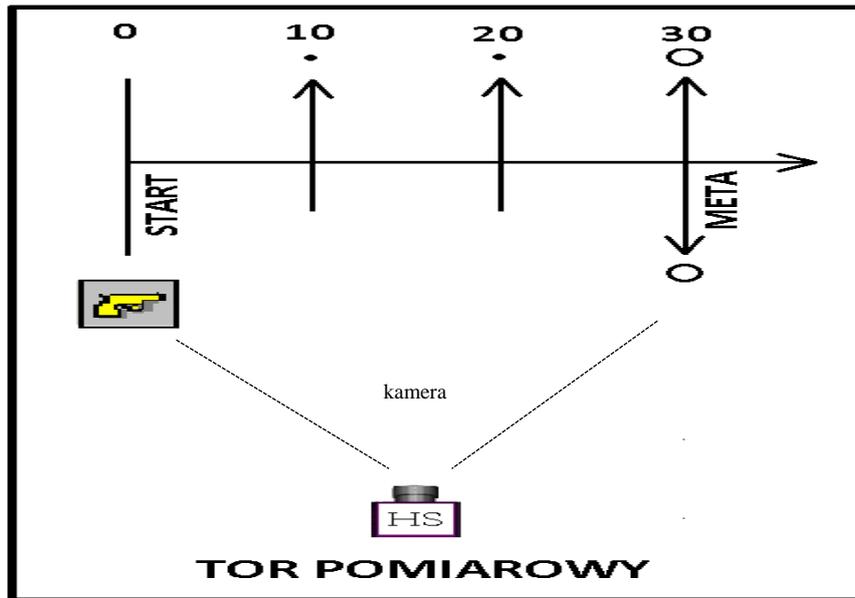


Fig. 1. Diagram of the 30-Meter Measuring Track Used in the Project

Source: authors' own design and work.



Fig. 2. Elements of the Measuring Track Used in the Project

Photo A – start (starter kit, starting block – for children from the 4th grade of primary school. Photo B – finish line (set of photocells, measuring clock and display).

Source: authors' own design and work. Photo by M. Tarnowski.



Fig. 3. An Individual Invitation to the Event

Source: authors' own design and work.



Fig. 4. Starting number for a t-shirt and shorts

Source: authors' own design and work.

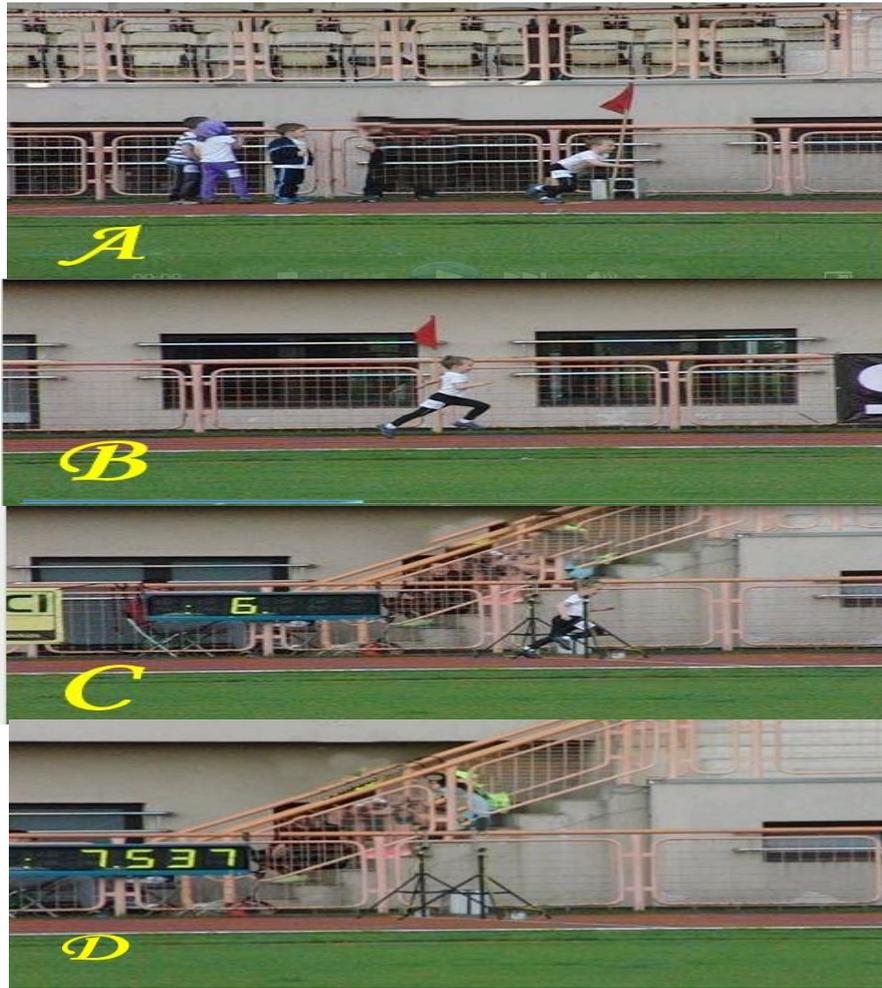


Fig. 5. Snapshots of the recording showing the runner at the moment of take-off (Photo A), in the middle of the distance (marker – banner) (Photo B), and at the moment of finishing the run and stopping the measurement clock (Photo C and Photo D).



*Fig. 6. A snapshot from the recording showing the trampoline exercises
Source: authors' own design and work. Photo M. Tarnowski.*



Fig. 7. A snapshot from the recording showing the kick of the ball in order to measure its speed, and the device to measure the flight speed

Source: authors' own design and work. Photo M. Tarnowski.



Fig. 8. A snapshot from the recording showing improving the technique of jumping over the crossbar (position of the body when passing over the crossbar)

Source: authors' own design and work. Photo M. Tarnowski.



Fig. 9. A diploma and a medal from the event

Source: authors' own design and work.

SPORT SCI KIDS		Małe spotkanie z lekkoatletyką z okazji urodzin Jasia Tarnowskiego Szczecin, 9 maja 2015 roku	
		Jaś Tarnowski	
czynność		wynik	
Bieg na 30 m		7.537	
Skok w dal		112 cm	
Skok o tyczce		zaliczony	
Prędkość lecącej piłki – kopnięcie		40 km/h	

Fig. 10. A brochure with measurements handed to parents after competition

Source: authors' own design and work.

Due to different possibilities for the organization of similar events (the use of available institutional and human resources depends on many factors, for example, the material contribution of individual people or institutions may differ), it was decided not to present actual costs. Instead, Table 1 presents elements that were taken into account to calculate the costs of the event described in this article.

Table 1.

Cost summary	
Category	
	Rental of the stadium / facility
	Instructors
	Invitations
	Diplomas

Category
Starter packs (drink, snack, start number)
Medals
Gifts
Refreshments for children / catering
Medical care
Equipment rental
Cost of the competition office
Electronic media with recordings
Other

Source: authors' own design and work.

Discussion

Because the recipients of innovative projects developed by teachers of academic pedagogical schools most often are educational institutions (far more frequently than economic entities), it is important to be open to cooperation with teachers who work on a daily basis with children and adolescents at pre-academic stages of education. These teachers know best the specifics of working with pupils at specific developmental stages and are able to solve problems that may be difficult for teachers who do not work on a daily basis with children and young people.

The introduction to this paper mentioned a simplified form of the project, which was used to promote the Department of Physical Culture and Health Promotion at the University of Szczecin during The Great Passion Picnic – 14th Szczecin Meeting of Non-Governmental Organizations ‘Pod Platanami’ organized by the ‘‘Szczecin dla Pokoleń’’ Association in Jasne Błonia in Szczecin on May 31, 2015. During the event, one of the stations organized by the employees of Department, measured the time of a 30-meter run, which was available for all those who wanted to take part. The event was undoubtedly attractive and has a potential of a commercial product. For 4 hours, nearly 500 measurements were carried out; runners often participated in measurement multiple times (it is estimated that there were in fact about 300 participants).

It should be noted that the presented project used the available human and institutional resources in specific conditions. Every time, depending on the possibilities and needs, the program may be modified by adding new elements or emphasizing various items. In this project, the key was to use a professional measuring track, which was available through collaboration with the Cooperating Entity. However, it would also be attractive enough just to get to know the topography of a sports facility, which would have a high cognitive value. The use of local sports tradition – well-known athletes, traditional events or well-known facilities (both of local and national importance) may also be useful in this respect. In the discussed project, this option was provided as an alternative program. The implemented didactic value included:

- a) signatures of Sport Champions on diplomas;
- b) presenting the children with start and timing methods of the 30-meter run:

- the traditional one – joint start in the race tracks with the use of a starting pistol and with time measured by a stopwatch,

- the professional one – time measurement on a prepared measuring track, where the start signal was given by means of an electronic start device (replacing a traditional starter pistol), which triggered the measuring device; running through the photodiode gate at the finish line finished the time measurement.

When developing the project and during its implementation, flexibility is advised. In the discussed project, individual stations were located at various places of the facility:

- 30 m track with a traditional start, a track with professional time measurement and a pole vault station on the stadium's pitch,
- trampoline, long jump station and a zone for measuring the speed of the kicked ball in the warm-up room.

The program had to be modified as a result of brief rainfall. Thanks to communication through *walkie-talkie* between instructors, efficient communication and modification of the event was possible.

The final analyses of the event should indicate potential weak links in its organization or implementation. One of the conclusions drawn was the need to find out about possible allergies of the children and – if possible – take them into account in order to individualize starter kits.

Analyzing the role of the key element – which was a professional time measurement and a video recording – it should be stated that the method itself has great potential. It allows for evaluation of the running technique or making an initial selection. Such analysis of the event participants was carried out. However, the biomechanical description was not passed on to parents: signaling possible dysfunctions of a child or suggesting possible modification of errors could create discomfort, whereas the main goal of the event was fun. However, the obtained data require a separate analysis and has a high cognitive value, therefore it is being prepared for publication.

To sum up, with a creative use of institutional and human resources, it is possible to increase the attractiveness of traditional educational and recreational activities. However, innovation in projects does not have to be translated into direct profit and quick implementation. Promot-

ing repeated participation of children and adolescents in local events (e.g. at local facilities, institutions, with local sportspeople) that encourage them to be physically active, as well as the use of outdoor forms, brings – in the long run – profits such as healthier population whose members have established health-related habits and well-developed social competences.

Conclusions

The implementation of the project and observations made during the project allowed for formulation of the following conclusions:

1. With the available institutional and human resources, it is possible to increase the attractiveness of traditional educational and recreational activities.
2. All attempts at innovative use of institutional and human resources require proper recognition and analysis of opportunities in this area.

REFERENCES

1. Bauman, T. (2011). Dydaktyka akademicka, a innowacje. *Przegląd Pedagogiczny*, 1(1): 267-276 [in Polish].
2. Bartkowiak, G. (2012). O potrzebie kształtowania kreatywnego myślenia w środowisku akademickim [In:] *Kapitał intelektualny w szkołach wyższych*. Warszawa: Akademia Finansów i Biznesu Vistula [in Polish].
3. Geryk, M. (2013). Zmiany w zakresie zarządzania uczelniami w obliczu istotnych przeobrażeń systemu szkolnictwa wyższego oraz otoczenia uczelni. *Prace Naukowe Wyższej Szkoły Bankowej w Gdańsku*, 22 (1): 95-110 [in Polish].
4. Wolińska, M. & Bronikowski, M. (2015). Środki dydaktyczne wykorzystywane przez nauczycieli wychowania fizycznego [In:] *Wychowanie fizyczne a nowoczesne technologie*. Poznań: Wydawnictwo AWF Poznań [in Polish].
5. Strykowski, W. (2005). Kompetencje współczesnego nauczyciela. *Neodidagmata* 27/28: 15-28 [in Polish].
6. Huk-Wieliczuk, E. & Marcinkowski, J.T. (2009). Uczelnie wyższe wychowania fizycznego wobec aktualnych potrzeb edukacji zdrowotnej. *Problemy Higieny i Epidemiologii*, 90 (4): 470-476 [in Polish].
7. Dobosz, J. (2015). Wykorzystanie technologii informatycznych w procesie edukacji fizycznej [In:] *Wychowanie fizyczne a nowoczesne technologie*. Poznań: Wydawnictwo AWF Poznań [in Polish].
8. Tarnowski, M., Kolbowicz, M., Łubkowska, W. & Biżek-Tarnowska J. (2017). Promocja idei olimpijskiej, zasady fair play oraz przygotowania do całonocnej troski o aktywność fizyczną na przykładzie Spotkania z Mistrzem w Szkole Podstawowej TAK w Szczecinie [In:] *Studia z teorii i praktyki sportu i ruchu olimpijskiego*. Szczecin: Polskie Towarzystwo Naukowe Kultury Fizycznej Sekcji Historii [in Polish].
9. Tarnowski, M., Paczyńska-Jędrycka, M. & Łubkowska, W. (2016). Propedeutyka survivalu –

3. Proper planning of the event is the key that helps prepare any educational project. It is therefore necessary to work with people with hands-on experience (i.e. identification and selection of human resources).

4. The project discussed in this article was verified in practice during closed and open events. In both cases, it was met with a very positive reception of the participants (both children and parents).

5. The academic environment should support teachers who work at pre-academic levels of education by searching for new solutions together or constantly adapting existing ones to current needs. The cooperation of teachers at various levels of education carries a great potential and, in the light of the diversity of their experiences and perceptions, it brings great benefits to both parties. It also results in useful solutions in the area of practical educational activities.

propozycja podstawowych tematów dla zajęć z dziećmi i młodzieżą w zakresie samoasekuracji w turystyce i krajoznawstwie szkolnym [In:] *Edukacja dla bezpieczeństwa. Szkoła Turystyka i Rekreacja – Sport*. Poznań: Wydawnictwo Wyższej Szkoły Handlu i Usług [in Polish].

10. Tarnowski, M., Paczyńska-Jędrycka, M., Łubkowska, W. & Biżek-Tarnowska J. (2015). Zajęcia „Podstawowe zasady orientacji w terenie i bezpieczeństwa podczas wycieczek turystycznych” jako propozycja propedeutyki turystyki i krajoznawstwa dzieci w wieku przedszkolnym i młodszym szkolnym [In:] *Polskie Stowarzyszenie Naukowe Animacji Rekreacji i Turystyki 2000–2015 jego dorobek naukowy i popularyzatorski*. Poznań: Wydawnictwo Akademii Wychowania Fizycznego w Poznaniu [in Polish].

11. Łubkowska, W., Paczyńska-Jędrycka, M. & Jońca M. (2014). 'Outdoor Education' w procesie kształtowania pozytywnych postaw młodzieży wykluczonej [In:] *Próby i Szkice Humanistyczne. Resocjalizacja – Edukacja – Polityka społeczna. Współczesne konteksty teorii i praktyki resocjalizacyjnej*. Środa Wielkopolska: Wydawnictwo Wielkopolskiej Wyższej Szkoły Społeczno-Ekonomicznej [in Polish].

12. Paczyńska-Jędrycka, M. & Łubkowska, W. (2016). Non-formal Education in the Animation of Leisure and Recreation versus the Development of Social Competence. *Central European Journal of Sport Sciences and Medicine*, 13 (1): 109-115. DOI: 10.18276/cej.2016.1-11.

13. Paczyńska-Jędrycka, M. & Łubkowska, W. (2016). The educational role and significance of „Sports Day” in work with socially maladjusted youth [In:] *Selected areas of social exclusion in the countries of Central-Eastern Europe*. Hradec Kralove-Gniezno: University of Hradec Kralove.

14. Paczyńska-Jędrycka, M., Łubkowska, W. & Jońca, M. (2015). Shaping social competences and social capital in children and adolescents by means of non-

formal education methods and techniques. *Scientific Journal of University of Szczecin 'Service Management'*, 15 (1): 67-75. DOI: 10.18276/smt.2015.15-08.

15. Terczyński, R., Tarnowski, M. & Łubkowska, W. (2016). Wykorzystanie infrastruktury sportowej ze szczególnym uwzględnieniem metod pomiarowych w sporcie dla zwiększenia atrakcyjności tradycyjnych form rekreacyjnych. *Handel Wewnętrzny*, 6 (365): 4220-428 [in Polish].

16. Terczyński, R. (2009). *Rozkład prędkości biegu na 100 metrów na różnym poziomie sportowym*, Sport and Tourism in Modern Lifestyle. Poznań: Monografie AWF Poznań [in Polish].

17. Ryba, B. (2000). *Podstawy i organizacji i zarządzania instytucjami sportowymi*. Warszawa: Polska Korporacja Menadżerów Sportu [in Polish].

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РЕКРЕАЦІЙНИЙ ЗАХІД «ЗНАЙОМСТВО З АТЛЕТИКОЮ» ЯК ІННОВАЦІЙНИЙ ІНСТРУМЕНТ ПОПУЛЯРІЗАЦІЇ ФІЗИЧНОЇ АКТИВНОСТІ СЕРЕД ДОШКІЛЬНИКІВ

Використання рухової активності як способу рекреаційного впливу знаходить все більшого підтвердження у наукових дослідженнях і практиці. Звідси і пошук форм і засобів популяризації фізичної активності та активного проведення вільного часу, які повинні сприяти поліпшенню здоров'я дітей і молоді. Мета статті – представити схему підготовки до рекреаційного заходу «Знайомство з атлетикою» і показати хід його проведення з використанням інноваційного способу наявних інституційних та кадрових ресурсів. Проект проводиться у формі змагань з легкої атлетики, де основним елементом є вимірювання часу бігу на дистанцію 30 метрів з використанням вимірювального набору Slandi та його запис з використанням техніки slow-motion (уповільнений рух). У результаті дослідження було виконано 300 вимірювань у 46 дітей. Описаний проект був перевірений практичним способом під час закритих і відкритих заходів. Як діти, так і батьки сприйняли його дуже позитивно. Регулярна участь дітей і молоді в заходах, що пропагують фізичну активність на свіжому повітрі, приносить в довгостроковій перспективі користь, як результат – більш здорове населення. Ґрунтуючись на наявних інституційних та кадрових ресурсах, можна підвищити привабливість традиційних освітніх або рекреаційних форм для дітей та молоді. Правильне планування заходу є основою для підготовки будь-якого освітнього проекту – теоретикам слід співпрацювати з практиками. Академічне середовище повинне підтримувати викладачів, які працюють на дошкільному рівні освіти, шляхом спільного пошуку нових рішень або адаптації вже наявних до поточних потреб. Співпраця вчителів різних рівнів освіти має великий потенціал і в світлі різноманіття їхнього досвіду вона приносить велику користь обом сторонам і сприяє прийняттю корисних рішень у сфері практичної навчальної діяльності.

Ключові слова: фізична активність, здоровий спосіб життя, вільний час, рекреаційний захід, організація спортивних заходів, дошкільне виховання, діти.

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