demonstrate the results of his activities within a reasonable time frame. In connection with a change in the style of professional and personal activity, a sports trainer with socio-cultural competence will have the ability to change goals, be able to act adequately even in times of emerging difficulties, analyze complex problem situations, empathize with others, and understand the interests of others.

An important condition for the success of the activity of a sports trainer is his readiness and ability – not only professionally but also personally and spiritually – to have socio-cultural competence. The socio-cultural competence of the personality of a trainer in sports is the basis of his successful activities because it provides a sufficient selection of social actions and the effectiveness of the performance of social roles inherent in the individual.

References:

1. Бегимқулов З., Нарзиева Н. Малака ошириш жараёнида спорт турлари бўйича тренер-ўқитувчиларнинг ижтимоий-маданий компетентлигини ривожлантириш. *O'zbekiston milliy universiteti xabarlari*, 2022. № 1-2, с. 82.
2. Бердиева Ҳ. Б. Бўлажак ўқитувчиларда ижтимоий-маданий компетентликни ривожлантиришнинг педагогик имкониятлари. *Oriental renaissance: innovative, educational, natural and social sciences scientific journal*. 2021, № 9, p. 891.
3. Пулатов А. А., Турсуналиев И. А., Расулов З. П. Спорт тренери ва унинг кўп функционал касбий фаолияти. Ўқув қўлланма. Тошкент: Umid Design, 2021, с. 11.
4. Рахимов З. Т. Педагогик компетентлик таълим жараёни ривожланишининг муҳим омили сифатида. *Замонавий таълим журнали*. 2019, № 7 (80), с. 4.
5. Халматова М. Оилавий муносабатлар маданиятини такомиллаштириш ва соғлом авлодни тарбиялаш муаммолари: Фалсафа фанлари д-ри... дис. Тошкент: ТДАУ, 1998. С. 68.

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THE IMPLEMENTATION OF NEW OF MODERN INFORMATION TECHNOLOGIES IN ORIENTEERING

Keywords: *information technology, services, sports orienteering, athletes*

Formulation of the problem. Analysis of recent research and publications. Information technologies (IT) penetrate all spheres of human life, including sports. In recent years, experts have been actively discussing the introduction of new information technologies both in the field of education, in various branches of physical culture, as well as sports training and sports competitions [1, 4-7].

Information technologies are applied:

– as a learning tool to improve the teaching process. In order to model educational and competitive situations, the training process and control over the results of training, the possibilities of software and methodological support of modern computers are being created;

– as a means of automating the processes of processing the results of competitions, scientific research, correcting the results of educational and training activities, computer testing of the mental, functional, physical and psychological states of those involved;

– as a means of organizing intellectual leisure, educational games;

– when organizing monitoring of the physical condition, health of various groups of people involved.

The improvement of the educational process in the institutes of physical culture is carried out in the following directions: the development of teaching, monitoring, and testing systems, and is also used for the selection of applicants and students.

The optimization of the educational process in physical education in non-physical education universities is carried out through programs that allow teaching the subject «physical education», planning, and controlling physical fitness, general motor activity, as well as the psychophysical state of students.

IT is actively used in the development of programs for health-improving physical culture. Programs in this area can be divided into diagnostic, diagnostic-recommendatory and management. In the first case, the program allows the specialist to make a diagnosis faster, in the second case, along with the diagnosis, the user is offered a certain set of recommendations corresponding to the identified level of health and physical activity. In the third case, the computer interacts with the user according to the feedback principle: it issues tasks, controls their execution, and based on the results of new tests, develops appropriate recommendations.

In a few sports today, with the use of the most modern information technologies, the training of professional athletes and qualified specialists does not cause difficulties. One of these types is orienteering, where more and more «tools» for the analysis, viewing and holding of sports are used by both the organizers and the athletes themselves [2].

The purpose of this work was to characterize the most popular services used by athletes in orienteering to obtain objective information and analyze it during competitions and sports training.

The main research material. Orienteering is a complex sport that includes moving as quickly as possible over unfamiliar terrain and navigating it with the help of a map and compass while searching for predetermined checkpoints. Currently, the rapid progress of information technology has led to changes obtaining information about the work of an athlete at a distance. The speed of passing the entire distance and its individual stages made it possible to fully reveal the electronic mark, which was first used at the World Championships in Norway in 1997, and since 2000 has become mandatory at official orienteering competitions.

Let's get acquainted with three popular services that are used by many orienteers, rogainers and multi-athletes. These are services for analyzing and exchanging distance tracks (for example, Route Gadget), GPS tracking and applications for overlaying tracks on maps (Quick Route).

Route Gadget is an online service that has become almost a standard in the field of multi-user distance analysis: splits (cutoffs) and, most importantly, options. The organizer of the start uploads a map of the competition with checkpoints and distances, as well as a database of splits and results. The user receives a map with his distance on his screen, the opportunity to draw his own version, indicate where the mistakes were made and compare his track with the tracks of other users. Anyone can register in the project and start posting their competitions.

The «Route Gadget + head cam» format is gaining more and more popularity. Using GPS navigation, a specially fixed video camera, a map of the competition and the Route Gadget itself, you can get comprehensive materials. For the service to work, the Java virtual machine must be installed in the system. Thus, the following information is displayed: eye-to-eye video from start to finish, view of the current stage, view of the area being run, oriented in the direction of movement, heart rate chart, height difference chart, time on the course, distance to the next checkpoint, speed of movement.

GPS Tracking is currently the most effective tool for information support of orienteering competitions (and not only), which significantly increases the entertainment of races. This service can be used for skiing, sailing and other races. But in orientation its possibilities are fully revealed. Any owner of a computer can become a «spectator» of the competition. On his monitor, he will observe a complete picture of what is happening at a distance. Moreover, both live and recorded. At the highest levels of competition, such as the 2010 World Orienteering Championships in Norway, the use of GPS tracking has made the Championship perhaps the most spectacular ever. Now everyone can watch the work of the masters in the forest, as if they were at a distance with them, evaluate the choice of options, watch the mistakes, especially if these are mistakes for tens of minutes. You also need Java to work [3].

Quick Route is a program created by renowned orienteer Mats Troeng to overlay tracks downloaded from GPS receivers onto sports maps. They take a map file (image), a track file (gpx format) and get a very informative picture of what you did on the course. The track can be cut and «adjusted» to the measurement errors and the map itself. The track line has a gradient fill depending on the speed of movement. Extremely useful for analyzing mistakes for orienteering enthusiasts. With the help of the program, you can create your own database of maps and competitions, as many professionals do. It can also be used by rogainers, hikers, multi-athletes, and other nautical enthusiasts. Works in integration with a free application from Google – Google Earth. The program also supports importing tracks directly from Polar Pro Trainer – an application for Polar heart rate monitors or GARMIN Forerunner. Having unloaded the data from your GPS device, you can immediately proceed to the analysis of tasks.

The analysis of the literature showed that the training of athletes with the use of modern information technologies is becoming more qualitative and effective. It is shown that new information technologies are most effectively used in orienteering. Acquaintance with new services of a larger number of young students will allow them to be interested in this sport, and professionals – to improve the quality of their training.

References:

1. Jayakumar D., Palani D. U., Raghuraman D., Stalin David D. D., Saravanan D., Parthiban R., Usharani S. Certain investigation on monitoring the load of short distance orienteering sports on campus based on embedded system acceleration sensor. *European Journal of Molecular & Clinical Medicine*, 2021. № 7 (9).
2. Mironova Y. N. Geo-information systems applied in competitive orienteering. *Theory and Practice of Physical Culture*, 2018. Vol. 3, pp. 26-36.
3. Norouzi M. Application of GPS in Orienteering Competitions. *International Journal of Mobile Network Communications & Telematics*, 2013. Vol. 3 (4), pp. 7-13.
4. Skrypchenko I. Professional and applied training of students of the University of Internal affairs using orienteering. *Сучасні тенденції та перспективи розвитку фізичної підготовки і спорту у Збройних силах України, правоохоронних органах, рятувальних та інших спеціальних служб на шляху Євроатлантичної інтеграції: матер. III Міжнар. наук.-практ. конф.* Київ: НУОУ, 2019. С. 232-234.
5. Zentai L. Implementation of cartographic and digital techniques in orienteering maps. In *Cartography from Pole to Pole: Selected Contributions to the XXVIth International Conference of the ICA*. Springer Berlin Heidelberg, 2014. Pp. 19-29.
6. Zhang D., Liu R. Application of intelligent orienteering based on Internet of things. EURASIP *Journal on Wireless Communications and Networking*, 2020. Pp. 1-14.
7. Скрипченко І. Т. Особливості професійної підготовки майбутніх спеціалістів з фізичної культури та спорту для сфери дитячо-юнацького туризму з використанням нових інформаційних технологій. *Науковий часопис Національного педагогічного університету імені М. П. Драгоманова.* Серія 15: Науково-педагогічні проблеми фізичної культури (фізична культура і спорт). Київ: Вид-во НПУ ім. М. П.Драгоманова, 2015. Вип. 3 (56), с. 333-336.

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ПІДГОТОВКА ДО ЗМАГАНЬ З ТХЕКВОНДО

Shavyro Yu. I. *Preparation For Taekwondo Competitions*
Keywords: *Martial arts, preparation for competitions, training*

Тхеквондо Корейське бойове мистецтво, олімпійський вид спорту та національний вид спорту в Південній Кореї. Тхеквондо є одним з найбільш систематизованих і науково обгрунтованих бойових мистецтв світу, за допомогою тренувань у якому дозволяє людині зміцнити здоров'я, навчитись самообороні та привчає працювати над саморозвитком духовності й інтелекту [1-3].