

The system of sports training for athletes at the university

Abstract

The relevance of research. Physical education and sports are one of the ways to form a healthy lifestyle of student youth, the formation of moral and volitional qualities, the aesthetic education of the younger generation. An accessible form of organization of physical education of students at the university are sports sections, where young people in their free time can successfully realize their individual motor potential, form a sports culture, and improve physical and mental performance.

The purpose of the study is to study the system of sports training of athletes in the conditions of the university.

Results: the organizational and pedagogical conditions for the effectiveness of the construction and implementation of the system of sports training of athletes in the university are: Involvement of highly qualified teachers-trainers to work with student-athletes; Assistance to students-athletes from the administration of the university on the issues of combining sports and study; Availability in the university of modern material and technical base for athletics; Broad development and promotion of athletics at the university; Organization and conduct of training camps in sports camps, as well as in the middle and high mountains.

Keywords: athletes, healthy lifestyle, physical education and sport, physical and mental performance

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Introduction

Athletics sections in the university occupy a leading place in the activities of physical education teams, sports clubs, voluntary sports societies. Athletics is part of the state system of physical education. Athletics exercises are included in the physical education programs for schoolchildren, students of all types of educational institutions, in plans for training work in all sports. The popularity and mass character of athletics are explained by the general availability and wide variety of athletics exercises, the simplicity of the execution technique, the ability to vary the load and conduct classes at any time of the year, not only on sports grounds, but also in natural conditions.¹

To obtain high sports results of an athlete, a well-functioning system of training an athlete is necessary. That is why the issue of taking into account the characteristics of student age for the development of such indicators as muscle strength, speed of reactions, motor agility, speed endurance in order to optimize the process of becoming a holistic, harmonious personality, its effective entry and functioning in the system of social relationships in general and optimization of educational process in particular, including taking into account the sports interest of students. Kostroma State University, for forty years, a system of sports training for student athletes has been created and is being successfully implemented. This experience requires scientific analysis and generalization.

Sports training is the expedient use of knowledge, means, methods and conditions, which makes it possible to directly influence the development of an athlete and ensure the necessary degree of his readiness for sports achievements.

A long-term process of sports training from a beginner to the heights of mastery can be represented as successively alternating large stages, including separate stages of long-term training associated with the age and qualification indicators of athletes.³

During the implementation of sports training, the following stages are established:

- a. Sports and recreation stage;
- b. Stage of initial training;
- c. Training stage (stage of sports specialization);
- d. Stage of improvement of sportsmanship;
- e. Stage of higher sportsmanship.⁵

The improvement of an athlete includes four types of training: physical, technical, tactical and psychological. Each of these types, in turn, has two varieties: general and special training.

In training, and especially in competitive activities, none of the types of sports training is manifested in isolation. They are combined into a complex multifunctional process aimed at achieving the highest results. Each type of sports training depends on other types, is determined by them and, in turn, affects them. For example, an athlete's technique is directly dependent on the level of development of physical qualities, i.e. from strength, speed, flexibility and others. The level of manifestation of physical qualities (for example, endurance) is closely related to the efficiency of technology, special mental resistance to fatigue, the ability to implement a rational tactical scheme of competitive struggle in difficult conditions. At the same time, tactical training cannot be carried out without a high level of technical skill, good functional readiness, development of courage, determination, purposefulness, etc.

In the theory and methodology of physical education, the following main aspects of an athlete's training are distinguished: physical, technical, tactical and mental training.

Physical training is the basis of sports training. It is a purposeful process of formation of physical qualities in an athlete. These qualities

include: strength, endurance, flexibility, agility, speed abilities. Physical training is associated with the performance of large loads that directly affect the morphological and functional properties of the athlete's body.

There are two types of physical training: general (GPP) and special (SFP). The goal of the OFP is to achieve high performance. It is aimed at the versatile development of physical qualities. This type of training is especially important at the first stages of sports improvement, as it allows you to significantly increase the overall level of the body's functional capabilities.

The athlete's SFP is aimed at developing physical abilities that meet the specifics of the chosen sport. At the same time, it is focused on the maximum possible degree of development of abilities.⁶ Its means are special exercises and elements of the chosen sport. The ratio of GPP and SPP in the process of sports training changes with the growth of sportsmanship, the proportion of SPP gradually increases. Depending on the qualifications of athletes, physical training is allocated from 70% (in the initial period of training) to 30% (for athletes of the highest levels) of training time.¹¹

The time allotted for OFP and SFP depends on the sport. For example, runners-stayers have little time for GPP, since running takes up most of the total amount of training (up to 85%), while high jumpers have less time for highly specialized training. Modern jumpers perform up to 2,000 high jumps a year from a full run, spending about 6 hours on them. But they have a huge amount of exercises for jumping, running, with a barbell, for flexibility, for strengthening individual muscle groups, etc.

Along with the growth of sportsmanship, physical fitness funds are increasingly being directed to maintaining, and in some cases to strengthening the components of physical fitness. To increase functional capabilities, long running, cross-country skiing, skiing, swimming, etc. should be widely used, which will improve the body's regenerative abilities and increase the volume of special training.⁴

Achieving high results in sports is possible only with persistent and properly organized training for many years. Sports training in various sports is directly related to the exact establishment of the optimal age. This is necessary for more rational planning of the entire training process, knowledge of the individual characteristics of an athlete, systematization of training (selection and distribution of funds, volumes, etc.), the most accurate determination of the period of intense training aimed at gradually achieving the highest results, etc. Such an approach qualitatively will affect the professional activities of athletes, starting from youth, junior age and beyond.

Based on the foregoing, we can conclude that the optimal age zone for achieving the highest sports results falls precisely on the student age.

In the system of sports training of athletes, this corresponds to the stage of sports improvement. The stage of sports improvement provides for the achievement of maximum results in those types of athletics that are indicated for in-depth specialization. The stage starts at about 18-20 years old. Duration is about 8-10 years. The main task at this stage is the use of training means in the maximum mode, which can cause a rapid course of adaptation processes. In connection with this, the share of works is also mandatory competitive practice. The general values of the volume and intensity of the load in training reach a maximum, the volume of special tactical, psychological and integral training increases sharply.

The proportion of special physical, technical and tactical training is significantly increasing due to an increase in the time allotted for special training, due to an increase in the number of selective classes. Classes of an integrated orientation are widely used at the beginning of the preparatory period. The average percentage ratio of complex and selective classes is approximately 40-60 and the proportion of classes with large and significant loads at this stage reaches 50-60% of the total training funds.

The time of classes can reach 15-20 hours or more per week, depending on the specialization of the athlete. The number of competitions per year for athletes of different qualifications varies from 10-15 in all-around, to 25-30 in jumps, sprints and throws, from 5-10 for walkers and marathon runners, to 30-40 for middle-distance runners.

At the stage of sports improvement, an important factor is the provision of conditions in which the period of maximum disposition of an athlete to achieve the highest results coincides with the period of the most intense and coordinationaly difficult training loads. With such a coincidence, the athlete manages to achieve the maximum possible results at the optimal time; otherwise they turn out to be much lower.

The duration and characteristics of preparation for external achievements largely depend on the specifics of the formation of sportsmanship in one or another form of athletics for men and women. So, men who specialize in sprinting will need at least 3-4 years of intense training to go from master of sports to the first victories in the international arena, and women - 2-3 years. Specialists in jumping achieve success on the world stage at the age of 22-24 years, and runners and hammer throwers at the age of 27-30 years. The path to the highest sportsmanship is especially long for all-rounders and marathon runners, although there are exceptions.⁵

The structure of the annual training cycle at the stage of sports improvement remains the same as in the preparation of athletes at the training stage. The main principle of educational and training work at this stage is specialized training, which is based on taking into account individual characteristics. The annual cycle is built taking into account the calendar of the main competitions. Against the background of a general increase in the number of hours, the volume of special running loads and competitions both at the main and adjacent distances is significantly increasing.

When preparing athletes in sports improvement groups, the time allotted for rehabilitation measures increases. Along with pedagogical means of restoring the working capacity of runners, it is necessary to use medical and physiotherapeutic means: manual and vibration massage, baromassage, Russian and Finnish baths.⁶

Student sports clubs, with the active participation of physical education departments, create sports sections and teams at the university, work to replenish the ranks of sportsmen-rated athletes, hold mass recreational, physical culture and sports events, organize and conduct training camps for athletes on the basis of the university.

Student health-improving and sports camps are created in universities in order to provide conditions for organizing active recreation, improving health, improving physical fitness and sports skills of students, and involving them in socially useful work. The camp makes it possible to widely use the training sessions of student athletes during the holidays. Sports camps contribute to the effective organization of the daily routine and nutrition, morning exercises, two workouts a day, control tests and, at the end of the training camp, mandatory performances in competitions.

Student competitions in athletics are held on the basis of the university. These include competitions between faculties and institutes, individual championships, such as athletics cross-country races, runs and relay races, faculty and institute sports days. Competitions are also held between the universities of the city. Students can take part in city, regional, regional and all-Russian competitions, representing their university.

In the system of sports training of athletes, student age corresponds to the stage of sports improvement.

At this stage, the training of athletes is based on individual plans.

The main goal of training is to improve sportsmanship.

The main tasks of the stage:

- a. Further improvement of special physical and technical training;
- b. Gradual preparation of the body of athletes for maximum loads, typical for the stage of improvement of sportsmanship;
- c. Improvement of competitive experience;
- d. Further improvement of technical and tactical readiness;
- e. Development of speed, endurance, strength, speed-strength qualities, improvement of agility and flexibility.

Basic training tools:

- a. General developmental exercises;
- b. Special exercises of the chosen type of athletics;
- c. Strength exercises with weights;
- d. Sports games;
- e. Exercises of other sports.

Exercise methods: uniform, variable, repeated, circular, interval, control, competitive. The main directions of training: improvement of basic technical and tactical actions and the formation of individual technique in the chosen form of athletics, taking into account individual characteristics; high volume and intensity of training loads.

Participation in competitions depends on the level of preparedness of the athlete and the competition calendar.

The means of teaching technical and tactical actions at this stage include:

- a. Repeated repetition of special running exercises;
- b. Running in a straight line at a slow and medium pace on segments of 40-120 m, focusing on the placement of the foot and maintaining the correct posture;
- c. Running in a straight line with access to a turn on segments up to 150 m;
- d. Running from a high start on segments up to 60 m under the command and independently;
- e. Running on segments of 60-120 m with switching to finishing acceleration.
- f. Relay race;
- g. Repeated running on average and long segments;
- h. Uniform cross up to 1 hour;

- i. Tempo run;
- j. Fartlek;
- k. Variable run, uphill run, control run;
- l. Repeated running on segments up to 1500 m in the athletics arena;
- m. Repeated running on segments up to 300 m with a change in the rhythm and speed of running;
- n. Variable running on segments around the stadium with a given pace;
- o. Interval running on segments from 200 to 1200 m;
- p. Running in difficult conditions (running on snow, on sand, behind the leader, on rough terrain);
- q. Starting exercises.⁷

In order to generalize and analyze the experience of sports training of athletes at the Kostroma State University (hereinafter - KSU), we organized and carried out experimental research work.

The study was conducted on the basis of KSU. The choice of study base was determined as follows:

1. KSU has a tradition of organizing the process of sports training of track and field students, which has been going on for more than 40 years, which requires analysis and generalization;
2. The author of the study has his own experience of participation in the system of sports training of track and field students at KSU for four years.

Sports training of student athletes in the conditions of the university is determined by the age limits, the mode of training and the use of specific training means. In universities, the contingent of students belongs to the youth ages (17-23).⁸

In the system of sports training of athletes, this corresponds to the stage of sports improvement. The main goal of training at this stage is to improve sportsmanship.

The specificity of the organization of the system of training loads in the group of sports improvement in the university is due to the need to take into account the "cross mode" of educational and training activities.

The organized construction of the training process, taking into account the mode of full-time studies in a higher educational institution, is manifested in the following:

- a. Training sessions are usually held in the afternoon;
- b. Impossibility of using two-time workouts;
- c. Performance at competitions specific to the system of student competitions;
- d. Organization of athletics classes in the conditions of the section of the sports club;
- e. Organization and holding of summer training camps on the basis of the university.

The main areas of training are: improvement of basic technical and tactical actions and the formation of individual technique in the chosen form of athletics, taking into account individual characteristics; high volume and intensity of training loads.⁹

The analysis of the scientific and methodological literature indicates that sports training is the expedient use of knowledge, means, methods and conditions, which makes it possible to directly influence the development of an athlete and ensure the necessary degree of his readiness for sports achievements. The goal of sports training is to achieve the highest possible results in competitive activity.¹⁰

The system of long-term sports training is a single organizational system that ensures the continuity of tasks, means, methods, forms of training for athletes of all age groups, which is based on purposeful motor activity: the optimal ratio of training processes, the development of physical qualities and the formation of motor skills, skills and various aspects of preparedness; growth in the volume of general and special physical training, the ratio between which is constantly changing; strict observance of gradualness in the process of increasing loads; simultaneous development of individual qualities in the age periods most favorable for this.¹¹

The improvement of an athlete includes four types of training: physical, technical, tactical and psychological.

During the implementation of sports training, the following stages are established: sports and health-improving stage; stage of initial training; training stage (stage of sports specialization); stage of improvement of sportsmanship; stage of higher sportsmanship.³

Platonov N.V. notes that the modern system of training athletes is a complex, multifactorial phenomenon, including goals, objectives, means, methods, organizational forms, material and technical conditions, etc., providing the organizational and pedagogical process of preparing an athlete for competitions and achieving the highest sports performance.⁷

Conclusion

As a result of the research work, we can say that the hypothesis of this study was confirmed. Namely, the organizational and pedagogical conditions for the effectiveness of the construction and implementation of the system of sports training of athletes in the university are:

1. Involvement of highly qualified teachers-trainers to work with student-athletes;
2. Assistance to students-athletes from the administration of the university on the issues of combining sports and study;
3. Availability in the university of modern material and technical base for athletics;
4. Broad development and promotion of athletics at the university;
5. Organization and conduct of training camps in sports camps, as well as in the middle and high mountains.

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Conflicts of interest

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