Specialties of teaching track and field athletics to the students of technical university

A Lopuhina  
Department of physical education  
Vologda State University  
Vologda, Russia

V Taratorina  
Department of physical education  
Vologda State University  
Vologda, Russia

E. Peskova  
Institute of Economics and Information technologies  
Kazan State Power Engineering University  
Kazan, Russia

Abstract—The article reveals the peculiarity of selection of scientific-methodical material for the educational benefits of athletics for students at the technical University. It contains information about the organization of training sessions in athletics, an independent form of study of students of this sport. The main characteristics of athletics exercises and the rules of their implementation available for self-mastery of students are presented.

Keywords—track and field sport, terminology of track and field athletics, track and field exercises

I. INTRODUCTION

Currently, the target settings of the system of physical education of students of higher educational institutions are aimed primarily at solving professional problems in accordance with the future professional activities of graduates. Namely, to carry out personal growth of students, to form the needs for the study of various sports fields of knowledge, to use a variety of sports facilities and methods for physical self-education, improving the adaptive reserves of the body of students and strengthen their health. This is due to the fact that modern society requires a new person, which combines spiritual and physical wealth.

The main objective of the educational physical education process in the University is a versatile physical training of students. The process of physical training should include means of physical culture and sports aimed at the development of basic physical qualities and physical abilities of students, in particular, the development of endurance, flexibility, strength and coordination abilities, speed and speed-strength ability.

This problem can be solved by a variety of exercises of athletics. Therefore, the competent organization of the educational process to master the knowledge of students in athletics can be an effective means of preparing students for future professional activities. To do this, it is necessary to develop educational and methodical material for the sport “Athletics”, which can provide students with the willingness to individually study the content of the sport and apply it in practice.

Traditional literary and methodological support of sports discipline in athletics at the University, it is training and teaching AIDS. There is a wide variety of educational and methodical works on athletics, containing theoretical and practical information for students. However, all of them are aimed at the reader who has chosen this sport as the main type of motor activity. Therefore in such literature the emphasis is made on professional training of athletes, in particular, methodological approaches, to studying of types of track and field athletics are deeply considered [1]. Our considered and planned for registration training manual on athletics should include theoretical and practical sections that reveal relevant and really interesting topics for students in this sport.

II. METHODS

We were faced with the task to choose a literary scientific and methodological material for the textbook on athletics, characterized by its originality in the content of educational material for students of technical University [2].

Working on our educational material, we were guided by the fact that in high school, where the profession of students is not associated with a sports career, it is necessary to choose available for their independent development of scientific and methodological material. Namely, to pick up such means of athletics exercises which are easy in independent mastering, to offer test questions for the reader, answering which students will be able to determine the level of their study in this discipline.

III. RESULTS

Here is an example of the content of the textbook on athletics students of technical University [3]:

A. Section 1. Terminology of the sport

Note: in this section, offer students a list of terms most commonly used in athletics. The information can be illustrated with figures on the content of the section.

ATHLETICS is a sport that combines walking, running, jumping, throwing.

RUNNING is one of the natural ways of human movement in space.

RUNNING ENGULFING CALF is entanglement shin back after repulsion.

RUNNING WITH HIGH LIFTING HIPS - lift the thigh up to horizontal.

Multi-JUMPS - jumping exercises performed alternately from one foot to another.

RUNNING a SMOOTH - running around the stadium.

Cross - country RUNNING- running on a rugged terrain.

Copyright © 2019, the Authors. Published by Atlantis Press. 
This is an open access article under the CC BY-NC license (http://creativecommons.org/licenses/by-nc/4.0/).
RUNNING a MARATHON - running super-long distance - 42 km 195 m.

RUNNING LONG DISTANCES - running on a distance of 3000 m and over.

Short DISTANCE RUNNING (sprinting) - running at a distance of 30 m, 60 m, 100 m, 200 m and 400 m.

HIGH START is the starting position of the runner without support on his hands.

LOW START - the starting position of the runner with support on hands and feet, is usually carried out using the starting pads.

PADS STARTING - device for pushing away a runner at the start.

Relay RACE - running as part of the relay team, where the athlete runs one stage and passes in the relay zone a special baton to the representative of his team, who must run his stage as quickly as possible.

SECTOR - a special place in the stadium, where competitions in jumping and throwing.

To complete the section, you can historical background information about interesting facts in athletics:

- In Greece, on the rock was found the inscription: "If you want to be strong - run, if you want to be beautiful - run, if you want to be smart - run." According to scientists, this inscription was carved by ancient Greeks 2.5 thousand years ago.

- Favorite exercise of the ancient Greeks was running, so in the poems of Homer "Iliad" and "Odyssey" tells that the competition in the race was held in honor of the dead heroes or as a sign of any important events.

- Greeks started running with a special threshold - "Balboa", which was pitted for the stop of feet.

- Athletes who started ahead of time, punished with rods or sentenced to a monetary penalty.

B. Section 2. Characteristics of exercises on running, jumping and throwing

Note: in this section to acquaint students with the basic rules of performance of track and field exercises. The information can be illustrated by figures on the content of the section.

- Running speed depends on both the length of the step and the frequency of steps.

- Hands when running bent at the elbow at an angle of 90°.

The torso depends on the speed of running. At short distances at maximum speed the body tilt forward is the greatest, while running at long distances the body tilt is minimal (up to 5°).

- Jump efficiency is determined in the phase of repulsion.

- In all throwing events (small ball grenades), in addition to planning the throwing of projectiles (a disk, a spear) headwind reduces the distance of the throw, and passing its boosts.

- The height of the release of the projectile affects the range of the throw.

- Shell in all the throwing events (except the hammer throw) hold one hand.

- Stopping after the release of the projectile is carried out by the locking movement of the legs, elastically standing on the support, or by jumping from foot to foot.

You can complete the section with information about the records made in athletics exercises on running, jumping and throwing.

C. Section 3. Approximate options for the selection of athletics exercises in the classroom

Note: in this section, offer students options for assignments for athletics. The information can be illustrated by figures on the content of the section.

LESSON 1.

- Running with Shin splashing back 2 x 20 m.

- Running with a high hip lift at a slow pace of 1 x 20 m.

- Mincing run with the transition to run 1 x (10 m + 20 m).

- Mincing run with the transition to run with an acceleration of 1 x (10 m + 40 m).

- Running jumps, pushing forward, with the transition to the run with an acceleration of 1 x (20 m + 30 m).

LESSON 2.

- Running in place for 15 seconds. Repeat 2 times.

- Quick repulsion thigh leg medicine ball forward-up. Repeat on each leg 10 times.

- Run, raising his hips in place and with subsequent forward movement 30 meters. Perform 3 times.

- Running through objects: gymnastic benches, balls, etc. Changing the distance between objects and their height.

LESSON 3.

- Run segments 60 -100 m at the entrance to the turn. Perform the exercise 3 times.

- Running from a low start at a distance of 30-40 m. Repeat 5 times.

- Running segments of 50-60 meters behind the moving leader. Repeat 5 times.

- Running up the stairs.

LESSON 4.

- Jumping from foot to foot, pushing up 1x 20 m.

- Jumping from foot to foot, pushing forward 1 x 20 m.

- Jumps by additional steps right (left) sideways 2 x 10 m.

- Two jumps with right side steps, two jumps with left side steps 1 x 10 m.

LESSON 5.

- Running with weights (belt 2-3 kg), repeat 2-3 times.
- Running on grass. Repeat 3-4 times.
- Running with repulsion on the shock leg on the third and fifth step, followed by landing on the flight leg. Repeat 12-15 times.

LESSON 6.
- 4-6 cross-country moves-long jump with a landing on the flight leg. Repeat 10-20 times.
- Racing on one leg through the bench: a) in place; b) with the progress forward. There are 50 jumps on each leg.
- Jumping on two legs in a row with moving forward. Repeat 8-10 jumps.
- Pull up the two legs. Repeat 15-20 times.

LESSON 7.
- Imitation rabbit on the chest, standing still and moving in a circle. Perform 12 - 18 times, gradually increasing the pace.
- Throw a stuffed ball with one hand from behind the head to the partner, who, catching the ball with both hands, repeats the actions of the partner.
- Pushing the stuffed ball to each other, accentuating the quick straightening of the hands.

LESSON 8.
- Throws a small ball in half vertically, mainly due to trenchant movement of the forearm and hand.
- Throwing a small ball into the wall from a distance of 4 - 6 m to the rebound range.
- Throwing a small ball at a target.
- Throwing a small ball at a given distance on a horizontal target.
- Throwing a small ball through landmarks.

Complete the content of the section can be information about the rules of the complex athletics exercises:
- The complex of exercises needs to log 6-8 exercises, repeat each at a distance of 30-60 m, 1-2 series.
- The most important condition for the successful mastery of technology is the ability of students to see their mistakes. Assess the correctness of the exercise should be the student himself, it increases his activity in the learning process.
- The causes of errors can be:
  (a) state of fatigue;
  (b) poor joint mobility;
  (C) insufficient development of motor qualities;
  (d) an unclear idea of the exercise being performed.
- Practice studies shows that for the purchase of equipment typically require an average of 5 - 8 lessons. Exercises in the future should be repeated many times in order to develop the correct and sustainable skills.

D. Section 4. Self-text questions
Note: in this section, to offer students options for test tasks for self-testing of knowledge in athletics.
1. Physical exercise in athletics are:
   (a) walking
   b) shooting
   in swimming
   d) throwing
   e) running
   (e) all-around
   g) jumping
   h) acrobatics
2. Smooth running is…
   (a) cross-country running
   b) marathon running
   C) running around the stadium
   d) relay race
   e) barrier run
3. Long distance running is called:
   (a) cross-country running
   b) Stayer running
   C) sprinting
   d) smooth
4. Track and field equipment to perform a low start:
   (a) treadmill
   b) stands
   C) plank
   d) pads
   e) bar
5. Start in athletics is:
   (a) low
   b) high
   C) group
   d) combined
6. Method of passing the baton:
   (a) grip
   b) on the side
   C) top
7. The period of flight in the race need to…
   a) speed dial
   b) relaxation of muscles
   C) for coordination of movements of hands and feet
8. Running speed depends…
(a) from the inclination of the torso
b) operation of hands
C) the length of the running stride
9. Hands when running…
a) bent at the elbow joints
b) straightened in the elbow joints
C) how convenient the runner is
10. In throwing grenades, the ball headwind…
a) increases flight range
b) reduces the flight range
C) flight range does not depend on wind.

IV. DISCUSSION

In this article the variant of registration of the manual on track and field athletics to the students of technical University is offered. The content component of the presented material can allow students to independently master the theoretical and practical foundations of athletics, namely, to get acquainted with the common conceptual apparatus of the sport, the ability to independently organize their own individual route to perform athletics.

REFERENCES

[5] A. S. Lopukhin, V. N. Taratorin, the Influence of different exercises of physical culture improving orientation on the level of physical preparedness of students, the Actual education in the field of physical culture and sports, 6 (117 to 121, 2017)