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Reference material to develop the teaching-learning process of the subject basic gymnastics

Material de consulta para desarrollar el proceso de enseñanza-aprendizaje de la asignatura gimnasia básica

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ABSTRACT

Raising the quality of the teaching-learning process is one of the greatest efforts of a teacher. To this end, all the efforts made must be based on the scientific-methodological updating of the contents taught. The students of the 1st year of the Physical Culture career of the Faculty "Nancy Uranga Romagoza" do not have enough and updated bibliography for the subject basic gymnastics and specifically on warming up. This is one of the topics that are taught and is considered among the most important for its functions within a class of any of the manifestations of Physical Culture. Given this expressed situation, it was proposed as an objective in this study, to elaborate a reference material that facilitates the theoretical-methodological knowledge on the warming-up, in which the aspects that are more difficult in their understanding are reflected. Theoretical and empirical methods were used to facilitate the research process. This study was carried out with the four teachers of the specialty of Basic Gymnastics and the 33 students of the Regular Day Course. The material provided facilitates the acquisition of knowledge about warm-up by providing the student with fundamental aspects to take into account for teaching in Physical Education classes.

Keywords: warm up; physical education; combined influence exercises.

RESUMEN

Elevar la calidad del proceso de enseñanza-aprendizaje es uno de los mayores empeños de un profesor. Para ello, todos los esfuerzos que se realicen deben partir de la actualización científico-metodológica de los contenidos que se imparten. Los estudiantes del 1er. año de la carrera Cultura Física de la Facultad "Nancy Uranga Romagoza" no cuentan con la bibliografía suficiente y actualizada para la asignatura gimnasia básica y específicamente sobre el calentamiento. Este es uno de los temas que se imparte y se considera dentro de los más importantes por sus funciones dentro

de una clase de cualquiera de las manifestaciones de la Cultura Física. Dada esta situación expresada, se propuso como objetivo en este estudio, elaborar un material de consulta que facilite los conocimientos teórico-metodológicos sobre el calentamiento, en el cual se reflejen los aspectos que más se dificultan en su comprensión. Para ello, se utilizaron métodos teóricos y empíricos que facilitaron el proceso de investigación. Este estudio fue realizado con los cuatro profesores de la especialidad de gimnasia básica y los 33 estudiantes del curso regular diurno. El material que se brinda facilita la adquisición de conocimientos sobre el calentamiento, pues le aporta al estudiante aspectos fundamentales a tener en cuenta, al ser impartido, en las clases de Educación Física.

Palabras clave: calentamiento; Educación Física; ejercicios de influencia combinada.

INTRODUCTION

The subject Basic Gymnastics belongs to the discipline "Theory and Practice of Physical Education", whose object of study is aimed at studying the organizational, methodological, physical and motor components that make up the Physical Education class, with a psycho-pedagogical, didactic and biological approach, which give foundation to this process.

This subject is of great importance within the curriculum of the Degree in Physical Culture, since the theoretical-practical and methodological knowledge, which provides, give the graduate tools to ensure the quality of the teaching-learning process of Physical Education. It is necessary, in this subject, to deepen the warm up in its most diverse manifestations: games, physical exercise, played forms that must be adapted to physical education, sports and physical culture.

Piloto, G. (2015) refers to the fact that warm up in the integral preparation of the individual is an essential link since the organism achieves great availability to improve performance capacity. That is why it is done at the beginning of any physical activity. Warm up is the fundamental action, since its mission is to prepare the organism for the subsequent activity in three aspects: psychological, physiological and physical.

There are multiple definitions of warm-up: a set of specially related physical exercises that are carried out in order to prepare the organism for a certain job; it allows the excitability and lability of the nerve centres to be increased; in this way, warm-up facilitates new temporary relationships in the excitation process and in the activation of already acquired motor habits in complex conditions of sporting activity. Mayea, (2013).

Warm up, from a physiological perspective, concentrating on the characteristics of volleyball, directed specifically for the trainers of this sport, at the beginning and during the development of physical activity, is defined in this way by Perez (2013):

"Warm up is the practice that precedes another main task, with the objective of facilitating the correct transition from the state of rest to that of maximum performance. Sánchez, (2016) refers that it has multiple benefits because it increases performance and prevents the

organism from injuries, since a large part of the improvements achieved with warm-up are due to the increase in body temperature".

They are previous muscular actions, carried out to support high muscular demands, normally associated to sport actions of competition. Pardeiro (2016) states that the main objectives of warm-up are, on the one hand, to improve performance in the early stages of competition and, on the other hand, to avoid the risk of injury. To this end, coaches and physical trainers seek to increase body temperature, reduce viscous muscle resistance or increase the speed of transmission of nerve impulses.

Warm up is the performance of preparatory exercises for the whole body or specific to the sports modality. Hartz, (2018) states that it is an important means to prevent injury, particularly in the musculoskeletal system and, at the same time, it is a priority to improve performance. They are series of physical exercises that are made before a more intense effort, their purpose is to improve the performance in this effort and to preserve the health during the same one and later. Galera (2018) states that when this preparation is acquired during warm-up, the main objectives are met, such as reducing the risk of injuries, especially those of the locomotor system (bones, joints, ligaments, muscles), improving neuromuscular coordination, increasing organic disposition (breathing, blood circulation, etc.) and favouring mental disposition.

If we analyse each of these definitions, we find, as a fundamental and common element, the idea that warm-up is an essential component in the preparation of the individual for any physical activity that requires greater intensity.

It should be noted that the time available to develop the Physical Education class is limited (45 minutes) so combined movements must be performed to allow the interrelation of joint mobility exercises and exercises to raise the pulse, essential components in the practice of warm-up. These exercises contribute to promote the culture of movement in the students.

Bearing in mind what has been described above, the authors of this research define warm-up as a set of exercises in which two or more body segments participate in the same movement, which are carried out both by the joints and by all the muscles that make up the body, influencing the coordination and variability of movements, with the purpose of preparing the body in the psychological, physiological and physical aspects for the subsequent-superior activity, minimizing the risk of injury.

In the pedagogical process and directly in the teaching-learning process of Physical Education, the basic aspects of warm-up reveal results on the types of warm-up, the components, considerations to be taken into account to motivate it, alluding within them: to the inclusion of combined influence exercises. Mirabal, N. and et., (2011)

It is considered that this literature lacks examples of combined exercises, so it is difficult for the students who receive the course to acquire theoretical-methodological knowledge of warm up. It is in this aspect, that reference is made, where the greater difficulties are presented in the students, especially at the time of elaborating exercises of combined influence in two, four and eight times and to take them to the practice, in addition, the bibliography that is used does not offer this information.

Below there is a description of the bibliography available to develop the teaching-learning process in the subject basic gymnastics.

Aranguren's basic literature, "Gymnastics and Rhythmic Education" (2003), refers to aspects of other themes of general and basic contents of Physical Education that do not specify the use of warm-up. The complementary literatures, which are available to students, are by different authors, Menéndez, "Un enfoque productivo en la clase de Educación Física (2008), and "Teoría y metodología de la Educación Física para las EPEF (2011), de Mirabal, y los estudiantes para precisar en la tematica Calentamiento: variante de influencia combinada. The contents are shared in both literatures, which hinders the correct search, comprehension and assimilation of the information, in addition, these authors make reference to the contents of the heating, without leaving clear exercises of combined influence, with different times of executions, so that the student can use it.

Considering the above, it can be deduced that the bibliography considered as basic and complementary is not fully functional for the study and independent work on the contents of this subject.

In this study, the objective is to elaborate a reference material that facilitates the theoretical-methodological knowledge on the contents of the warming, in the subject Basic Gymnastics.

MATERIALS AND METHODS

In this research, the 33 students of the 1st year regular day course of Physical Culture Faculty "Nancy Uranga Romagoza" were considered as population.

Theoretical methods were used such as the historical-logical method for the determination and analysis of the antecedents of the teaching-learning process of warming and, in particular, in Basic Gymnastics.

The analysis-synthesis method was used to break down the teaching-learning process of warming, to determine the essential aspects, types of heating, forms of annotation and planning.

From the work with the theoretical and methodological referents on the warm up, going from the general to the particular and vice versa, during the research, the method induction and deduction admitted to arrive at generalizations on the process of teaching-learning of the same one.

The systemic-structural approach was used as an orientation for the knowledge of the structure of the methods, approaches and trends used in the teaching-learning process of warming and in the elaboration of the reference material offered.

Documentary analysis was used as empirical methods: for the analysis of documents such as the Basic Gymnastics programs, programs of the discipline Theory and practice of Physical Education, programs of Physical Education of secondary education and other bibliographies that are used in the subject, within the career.

The aim of the survey was to determine the level of satisfaction with the literature available for the study and in-depth study of the contents related to the subject of warm up.

The interview to professors of the subject serve to obtain information and considerations on the bibliography of the subject Basic Gymnastics, in the students of the first year of the Career of Physical Culture.

Critical appraisal by specialists where a group selected by the authors of the research, considered by her as specialists, make a critical analysis of the proposed reference material.

As a mathematical-statistical method, descriptive statistics with their respective percentage distributions and graphical representations were used; in addition, descriptive statistics procedures were used to organize, present, summarize, analyze, interpret and present the information obtained from the application of empirical methods by means of frequency distribution analysis.

It was considered appropriate to carry out the analysis of the contents of the basic and complementary literature regarding the particularities of the warming, within the Basic Gymnastics.

The results obtained from the basic literature show that no reference is made to the contents related to warming, in Physical Education, a subject taught within the subject of Basic Gymnastics; in the complementary literature, reference is made to the essential aspects of warming, including some exercises of combined influence, but not enough examples are reflected, in order to make these contents more understandable for students; therefore, the current demands of warming are not met, which is consistent with the theories put forward by the different authors consulted.

From all this analysis, it is inferred the need to elaborate a reference material to guide the students in the study and independent work of the contents of the warming, in the subject of Basic Gymnastics.

The results obtained, with the application of the survey to the students, reflect that 100 % responded that the basic bibliography does not have contents on heating, making it difficult to study.

Of 33 students, 28 responded that they do not easily find the contents for the study of the subject of warming, which corresponds to 85%, arguing with the following reasons:

- In the basic bibliography, aspects on this subject are not specified and, in the complementary one, the dispersed contents appear.
- Only in a complementary literature do practical examples appear, but for the most part they do not correspond to the current demands of heating.
- Of the total number of students, only three replied affirmatively that the complementary bibliography has the necessary contents for the study of the subject, which represents 9 % and two replied that, sometimes, the contents related to the subject of warming are easily found, which represents 6 %.

The 100 % of the students replied that they do not have a digitized or printed reference material with the most current contents of the heating that facilitates the theoretical-methodological knowledge on the subject.

In response to the last question, the interviewees consider it important to have a digitalized or printed reference material, with the most current contents of the warming that facilitates the theoretical-methodological knowledge; they argue that the material facilitates the understanding of the content related to the heating and facilitates the study and independent work.

With the results obtained in the diagnosis on the current situation of the teaching-learning process of warming in the subject Basic Gymnastics, it is determined, then, the need to elaborate a reference material that facilitates the theoretical-methodological knowledge on the contents of warming in the subject Basic Gymnastics, directed to the students of the Faculty of Physical Culture.

The following results were obtained in the interview with the teachers of Basic Gymnastics of the Faculty of Physical Culture, with the aim of corroborating the problem that exists with the bibliography of the subject Basic Gymnastics.

The 100 % of the teachers have more than 12 years of experience in the subject. The teachers state that they have worked with the Basic Gymnastics programme in different curricula (D and E). The 100% consider that the most complex contents for the students, in the study and independent work of the warm-up, are those related to the elaboration and the practice of the combined influence warm-up, since the bibliography lacks exercises with different times of executions, being the most current of the thematic.

They also suggest that the basic bibliography does not include theoretical-methodological aspects related to the subject; the contents are scattered in the complementary bibliography and these are not updated.

They express the need to update the bibliography or to elaborate one that understands the necessary aspects to develop a process of teaching learning with quality. Given the current situation regarding the object of study, the essential aspects to be taken into account for the elaboration of the reference material are determined.

RESULTS AND DISCUSSION

The reference material is a valuable tool that complements and dynamizes the basic text, with self-learning. It is an educational material to promote autonomous learning, evaluation and improvement of its quality. It refers to the substitution of the texts elaborated by the teachers of each subject (compilations) by conventional books, which can be updated, choosing the best that exists in the market, designed for teaching learning, enhancing its benefits and compensating the limitations of the texts.

The reference material complies with the following structure:

Introduction

The material favors the teaching-learning process, as it shows the structured, organized contents related to the warm up in Physical Education and with an affordable language, attending to the characteristics of the students of the Physical Culture career, contributing with it to the independent study and to the quality of the classes.

It aims to deepen the subject of warm-up, emphasizing the exercises of combined influence and Physical Education for a better understanding of these contents. The contents included in the material related to the warm up respond to the program of the subject Basic Gymnastics; they are organized in a way accessible to the students, from the definition, objectives, types, components, forms of accomplishment and variants of the warm up, as well as methodological recommendations and exercises of combined influence in two, four and eight times, taking into account the rules and forms of annotation of the exercises.

The exercises are recorded in a concrete way, which allows the practical and didactic character of them and provides a greater understanding.

Development

Contents of the material

Theme: Warming in Physical Education

Warm up. Basic aspects

1. Exercises of general physical development of moderate intensity where the energy that is released is dissipated in the form of heat, which causes an elevation of body temperature and muscle, allowing obtaining an optimal state of psychophysical and physiological readiness for performance.
2. Games or exercises played, carried out before the main part of the Physical Education and Sport class, in order for the organism to move from a state of relative rest to a certain state of activity.
3. People who warm up prior to higher intensity physical activities have less chance of injury, so the prevention of injury is achieved with the practice of warm-up.
4. The objective of this is to prepare the body to receive a greater load in the main part of the class, raise body temperature, activate the cardiovascular system, the synovial fluid of all joints, the circulatory system and prevent injuries.
5. During the warm-up, the optimal pulsations should range between 110 and 130 pulsations per minute; the ideal is 120 pulsations per minute and have an ascending wave character, as it depends on the type of exercises you are performing at the time of the pulse taking. The body temperature should fluctuate between 38 and 39 degrees.
6. Do not rebound or pull muscle exercises.
7. Its duration depends on the duration of the class, age of the participants, emotional state, level of preparation, time of day, climate and the physical activity you want to practice.

8. Exercises where different body segments participate simultaneously (combined influence in two, four and eight beats), so they do not have to be done in a logical order (from bottom to top or vice versa).

Methodological recommendations for the work on warm up

1. It is convenient to start the warm-up on the fly as a large number of muscles and joints are put into function, enabling greater coordination in the execution of the exercises, as well as greater motivation of the exercises.
2. The runs and jumps performed in the general warm-up should be preceded by exercises aimed at preparing the joints, muscles, ligaments and tendons, so they are usually performed at the end point.
3. Change the common front and vary the initial positions.
4. The duration of the warm-up exercises should be between seven and ten minutes.
5. No relaxation or recovery exercises should be carried out, nor there a great take-off of strength.
6. Stretching exercises should be performed when the musculature is warmer, as they are thus more pliable (easy to bend and less viscous, resistant and hard).
7. Each teacher will be in charge of selecting the exercises, in correspondence with the degree they teach.
8. There should be between 8 and 12 repetitions per exercise.

Types of warm up

Active: it is divided into two parts: general, which is carried out by means of physical exercises, aimed at preparing the different systems of the organism and the specific one, which is carried out according to the sport discipline; the exercises are aimed at those (muscles and joints) that are required to reach the proposed objective.

Passive: are those that are performed in showers, hot baths, massage, infrared diathermy, rubbing with products that activate blood circulation and mental concentration. This type of passive heating will only be a complement to active warm-up.

The forms of warm up that are known are: separately, when there is a pause between the execution of one exercise and another; continuous or in chain, when the exercises are carried out uninterruptedly; on the other hand, when separate exercises are given and are linked little by little until forming a complex of several octaves.

Warm up forms: in the place, when there is no displacement; on the move, when there is displacement; combining both.

Components of the warm-up: exercises of articular mobility, they allow to mobilize the articulations, they prepare them for a later activity more intense than usual; general exercises that raise the pulsations, it is possible to finish preparing the muscular planes and to the organism, in general, for the later activity; exercises of muscular stretching, a stretching of the muscles must be carried out so that they have greater elasticity, exercises that are carried out from the position of foot.

Generally, they are performed in the final phase of warm-up, as the cold muscles should not be stretched as this can cause injuries.

Variants of warm-up in Physical Education class: guided discovery; narration; divergent; convergent; traditional; and combined influence.

Combined influence exercises in two, four and eight beats.

The exercises are annotated in a concrete way since the exact designation of each exercise is foreseen, in relation to the rules of terminology.

In the annotation and reading of the terminology, the following order must be observed:

Initial position (I.P.) (from where the exercise begins); name of the exercise (main term); direction of the exercise (complementary term); final position (where the exercise ended) I.P.

Exercises of head

Exercise #1. Starting position: Standing, legs joined, hands to waist, with leg movements, perform:

1. Movements from head to front.
2. Head back movements.

Exercise # 2. P.I. Standing, legs together, hands at the waist with leg movements, perform:

1. Movements from head to front.
2. Head back movements.
3. Right lateral flexion.
4. Left lateral flexion.

Exercise # 3. I.P. Standing, legs together, arms down, perform:

1. Head to front, arms to front.
2. Head back, arms up.

Exercise # 4. I.P. Standing, legs joined, arms down, perform:

1. Head to front, arms to front.
2. Head back, arms back.
3. Right lateral flexion, hands at waist.
4. Left lateral flexion, hands at the waist.

Exercise # 5. I.P. Standing, legs joined, arms down, perform:

1. Head to front movement, lateral arms.
2. Head backward movement, lateral arms, flexed to chest.

Exercise # 6. I.P. Standing, legs joined, arms down, with leg movements, perform:

1. Head to front, arms to front.
2. Head back, arms back.
3. Right lateral flexion, hands at waist.
4. Left lateral flexion, hands at the waist.

Exercise # 7. I.P. Standing, legs joined, hands at waist, with leg movements, perform:

1. Right torsion.
2. Left torsion.

Exercise # 8. I.P. Standing, legs joined, hands to waist, with leg movements, perform:

1. Head to front movement.
2. Head back movement.
3. Right torsion.
4. Left torsion.

Exercises of arms

Exercise #1. I.P. Standing, legs together, arms side, flexed to shoulders, with leg movements, perform:

1. Join elbows in front.
2. Bring the elbows back.

Exercise # 2. I.P. Standing, legs joined, lateral arms, bent at the nape of the neck, with movements of the legs, perform:

1. Right lateral arm, left lateral arm, flexed to the nape of the neck.
2. Right lateral arm, flexed to the nape of the neck, left lateral.

Exercise # 3. I.P. Standing, legs joined, arms in front, flexed to the shoulders, with movement of the legs, perform:

1. Right arm to the front and left to the front, flexed to the shoulder.
2. Left arm to the front, right to the front, flexed to the shoulder.

Exercise # 4. I.P. Standing, legs joined, arms in front, with leg movements, perform:

1. Arms crossed in front, right up and left down.
2. Alternating the position of the arms, right down and left up.
3. Push arms up.
4. Push arms back.

Exercise # 5. I.P. Standing, legs joined, arms down, with leg movement, perform:

1. Arms in front, flexed to shoulders.
2. Arms in front.
3. Arms at front down, flexed to shoulders.
4. Arms up.

Exercise # 6. I.P. Standing, legs joined, arms down, with leg movements performed.

1. Arms forward and down, flexed to shoulders.
2. Arms in front.
3. Arms at the sides and below, flexed to the shoulders.
4. Lateral arms.
5. Arms in front, flexed to shoulders.
6. Arms up.
7. Arms down, shoulders flexed.
8. Arms down.

Exercise # 7. I.P. Standing, legs joined, arms down, with leg movement, perform:

1. Arms in front, flexed to shoulders.
2. Arms in front.
3. Lateral arms, flexed to the shoulders.
4. Lateral arms.
5. Arms at front down, flexed to shoulders.
6. Arms up.
7. Arms down, flexed to shoulders.
8. I.P.

Exercise # 8. I.P. Standing, legs joined, arms down, with leg movements, perform:

1. Lateral arms, flexed to chest, shoulder thrust and elbows back.
2. Lateral arms, push back.
3. Right arm up and left arm down, push back.
4. Right arm down and left arm up, push back.

Exercises of trunk

Exercise #1. I.P. Standing, legs joined semiflexed, arms down, perform:

1. Flexion of the trunk to the front, arms up.
2. Bow, hands at waist.

Exercise # 2. I.P. Standing legs apart, arms down, perform:

1. Bending the trunk in front and below, to touch the ground.
2. Bow arms back, flexed to the back.

Exercise # 3. I.P. Standing, legs apart, arms down, perform:

1. Right lateral flexion, lateral arms, flexionados to the shoulders.
2. I.P.
3. Left lateral flexion, lateral arms, flexionados to the shoulders.
4. I.P.

Exercise # 4. I.P. Standing, legs apart, arms down, perform:

1. Bending the trunk forward and down, touching the left foot with the right hand.
2. Flexion of the trunk in front and below, touching the right foot with the left hand.
3. Bow, arms up.
4. I.P. with slap.

Exercise # 5. I.P. Standing, legs apart, arms down, with leg movements, perform:

1. Flexion of the trunk in front and below, touching the left foot with the right hand.
2. Flexion of the trunk in front and below, touching the right foot with the left hand.
3. Left lateral flexion, left arm down, right up.
4. Right lateral flexion, right arm down and left up.

Exercise # 6. I.P. Standing, legs apart, arms down, with leg movements, perform:

1. Flexion of the trunk to the left leg, arms to the front down, flexionado to the shoulders, right leg back flexionada.
I.P.
2. Flexion of the trunk to the right leg, arms to the front down, flexionado to the shoulders, left leg back flexionada.
I.P.

Exercise # 7. I.P. Standing, legs apart, arms down, perform:

1. Flex the trunk forward and down to the left foot.

2. Flexion of the trunk to the front and down to the center.
3. Flexion of the trunk to the front and down to the right foot.
4. I.P. Right lateral flexion, arms up.
5. Left lateral flexion, arms up.
6. Right torsion lateral arms, bent at the nape of the neck.
7. Right torsion lateral arms, bent at the nape of the neck.

Exercise # 8. I.P. standing, legs together, arms down, acting:

1. Displacement to the right side, with legs apart, lateral arms.
2. Standing, legs together, arms up.
3. Bending of the trunk forward, hands towards the waist.
4. I.P.
5. Moving to the left side with legs apart, lateral arms.
6. Standing, legs joined, arms raised.
7. Hands arched at the waist.
8. I.P.

Exercises of legs

Exercise #1. I.P. Standing, legs joined, arms down, perform:

1. Right leg forward and downward flexed, arms forward flexed
I.P.
2. Left leg in front and down flexed, arms in front, arms in front flexed.
I.P.

Exercise # 2. I.P. Standing, legs together, arms down, perform:

1. Right leg in front and down flexed, arms in front and down flexed.
I.P.
2. Left leg in front and down bent, arms in front and down bent
I.P.
3. Right leg forward and down, arms forward and down
4. I.P.
5. Left leg forward and down, arms forward and down.
6. I.P.

Exercise #3. I.P. Standing, legs joined, arms down, perform:

1. Assault right in front, arms in front.
2. Moving the trunk to the right side assault position, side arms.
3. Right assault to the front, arms up.
4. I.P.
5. Left assault in front, arms in front.
6. Trunk movement to left side assault position, side arms.
7. Left assault in front, arms up.
8. I.P.

Exercise # 4. I.P. Standing, legs joined, arms down, perform:

1. Right leg in front, flexed, arms in front.
2. I.P.
3. Left leg to forehead flexed, arms to front.
4. I.P.
5. Right lateral assault, lateral arms.
6. I.P.
7. Left side assault, side arms.
8. I.P.

Exercise # 5. I.P. Standing, legs joined, arms down, perform:

1. Right assault to the front, lateral arms.
2. I.P.
3. Left assault to the front, lateral arms.
4. I.P.
5. Right lateral assault, arms forward.
6. I.P.
7. Left side assault, arms forward.
8. I.P.

Exercise # 6. I.P. Standing, legs joined, arms down, perform:

1. Left leg lateral down flexed, arms lateral, flexed to chest.
2. I.P.
3. Right lower lateral leg bent, lateral arms bent to chest.
4. I.P.
5. Left lateral assault, lateral arms.
6. I.P.
7. Right side assault, side arms.
8. I.P.

Exercise # 7. I.P. Standing, legs joined arms down, perform:

1. Lateral right leg down, lateral arms.
2. I.P.
3. Left leg lateral below, lateral arms.
4. I.P.
5. Right lateral assault, lateral arms flexed to the shoulders.
6. I.P.
7. Left lateral assault, lateral arms flexed to the shoulders.
8. I.P.

Exercise # 8. I.P. Standing, legs joined, arms down, perform:

1. Right leg back, arms in front.
2. I.P.
3. Left leg back, arms in front.
4. I.P.
5. Right assault back, arms hands to waist.
6. I.P.
7. Left assault back, arms in front.
8. I.P.

Exercises of runs and jumps

Exercise# 1. I.P. Standing, legs joined, arms down, perform races in different directions: front, back, right side and left.

Exercise # 2. I.P. Standing, legs together, arms down, perform runs to the front, the sound of the whistle, perform a jump with legs together and arms up, runs back and repeat the same action to the sound of the whistle.

Exercise # 3. I.P. Standing, legs joined, arms down, perform:

1. Jump, legs apart, lateral arms.
2. I.P.

Exercise # 4. I.P. Standing, legs joined, arms down, perform:

1. Jump right foot to front supported, left back supported (scissors) arms to front.
2. Alternating the position of the feet and arms behind.

Exercise # 5. I.P. Standing, legs together, arms down, perform:

1. Jump legs apart, lateral arms.
2. I.P.
3. Jump, right foot to front supported, left back supported (scissors), arms to front.
4. Alternating the position of the feet and arms behind.

Exercise # 6. I.P. Standing, legs joined, arms down, perform:

1. Jump with right leg forward, flexed, left arm forward and down, flexed, right arm lateral and up, flexed.
2. I.P.
3. Alternate the movement with the left leg and the position of the arms.
4. I.P.

Exercise # 7. I.P. Standing, legs joined, arms down, perform:

1. Jump with right leg forward, flexed, left arm forward and down, flexed, right arm lateral and down, flexed.
2. I.P.
3. Alternate the movement with the left leg and the position of the arms.
4. I.P.
5. Jump with right leg forward and down, arms forward and down.
6. I.P.
7. Jump with left leg forward and down, arms forward and down.
8. I.P.

Exercise # 8. I.P. Standing, legs joined, arms down, perform:

1. Jump with feet crossed, arms in front, arms crossed.
2. I.P.
3. Alternate the movement of the feet and arms.
4. I.P.
5. Jump with the right leg to the forehead, flexed, arms to the front.
6. I.P.
7. Jump with left leg to forehead, flexed, arms to front.
8. I.P.

The theoretical and referential antecedents studied on the contents of the warm-up for the Physical Education, in the process of teaching learning of the warm-up, in the subject of Basic Gymnastics, allow to base the elaboration of the material of consultation to facilitate the theoretical-methodological knowledge of the students that were object of research. The reference material is a compilation of the contents of the subject, which appear in the complementary and auxiliary bibliography, to facilitate the theoretical-methodological knowledge on the contents of the warming for Physical Education, in the subject Basic Gymnastics, directed to the students of the career of Physical Culture.

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