

# **Outline of scholastic programming: Individual sports - athletics in the secondary school**

## **Introduction**

### **Why and how working in the school by using the technique of athletics?**

#### **Why?**

- to improve the general coordination capabilities
- to learn, regulate and adapt movements, by training the capability of connection and combination of the movements, space-time orientation, balance and quick reflexes
- to create stimulating situations and increase motivation while working on strength, speed and endurance
- to acquire specific skills
- to start students off on sports practise

Don't forget the deep relation between physical capabilities and coordination.

The sport technique is the ideal model of movement reported to a sport discipline, that is the final process through which you can face the problem that such discipline represents to you.

#### **How to work at school?**

- consider the subject like a pure mean, and the scholastic competition like a stimulus and an opportunity for evaluation
- look for a basic and general technique, using the ideal model in a flexible way
- use adequate didactic progressions, starting from basic exercises which can train to running, jumping and shot put through simple movements
- plan the lessons in order to reduce the free time and try not to privilege better students
- vary the activities as much as possible (rhythm, speed, use of force, direction and condition of the movement, use of the opposite arm and leg, etc.)

The educational perspective is more important than the effective results from a technical point of view. This does not mean to be rough, on the contrary it requires a lot of attention and expertise.

#### **Considerations on the current situation: weaknesses and problems**

- lack of a proper training base during the elementary school
- too little time
- the official sports offer in Italy is very poor

# How to include the start off on athletics in the secondary school curriculum

## When?

As for **endurance** (cross-country race and 1000m), the best period is the beginning of the school year

## Problems

- How to introduce
- How to motivate
- What to do
- The school cross-country race and the medical examination (this is an Italian problem only)

As for the other athletics specialities:

- in year one of secondary school, the best period is March-April because the sports games are in the second part of May
- in year two and three things are more complicated, because sports games are too early during the school year. You need to work in September and October.

## Planning the training for athletics specialities at school

<b>Running: speed and endurance</b>
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### Part 1: Acceleration and sprint from the starting blocks

- Warming up (slow running and variations of the rhythm now and then, slalom etc.)
- Stretching
- Running in the circles, skip, running at different rhythms
- Exercises for the feet
- Exercises with ropes (before using this tool, be sure that the students know how to use it properly)

#### **Didactics of acceleration**

##### **General skills:**

- Acceleration from different positions (lying on one's back, lying face downwards, etc.)
- Slow running + acceleration
- Running backwards + acceleration
- Walking + acceleration
- Throwing + acceleration
- Acceleration with unconventional signs and having to select them

##### **Specific skills**

- Acceleration from a standing position
- Acceleration while losing the balance
- Acceleration while the body is stretched out backwards
- Acceleration and loss of balance
- Start from an upright position

##### **Use of starting blocks**

- Position and inclination
- Position "at your place"

- Position "ready"
- Start from the blocks

## **Part 2: Relay race**

The work referring to the front change and the simple execution of a manual change is taken as granted (this is enough for a scholastic level).

Why to work on a more evolved change? Because you can improve coordination and make students reflect on the meaning of the sport technique and its function.

**Progression** (you can do this with one class in one lesson)

- Slow running and passage of the baton, using two batons, a cross change and in other different ways
- Then in groups of four and a passage from a still position
- Then in slow running
- Then faster and faster
- Races with the change
- Group races (in pair or in groups of three or four)
- 100 m race (on football pitch) with three or four changes

## **Part 3: Endurance at school**

Problems:

- How to introduce it
- How to motivate
- What to do
- Which students involve
- The school cross-country race and the medical examination (this is an Italian problem only)

**Progression**

- Slow running (from 3' 5" to 15' 20")
- Running with increasing rhythm (from 3' 5" to 15' 20")
- This activity will lead you to the Cooper Test (12' running with evaluation of the aerobic system power reached by each student)
- You will need first to work in group and with an imposed rhythm and then make students able to choose their own rhythm in relation to the race length
- Evaluation of the aerobic system power (e.g.  $3'/2'/3'/2'/3'/2'+2'/2'+1'$ ) based on the running time
- Evaluation of aerobic system power based on the running distance
- Endurance circuit training (1000 m., 800 m., 600 m., 400 m.)

<b>Shot put</b>
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School goals: to know how to put the shot (respecting the rules) starting from a still position with a lateral shift.

During the warming-up, use the medical ball and perform general shots in pairs or in groups.

### **Year 1 of secondary school**

Use 1 and 2 kg balls (3 kg ball only for physically suitable students). The heavy ball allows to focus on the leg work.

General exercises:

- frontal throw with two hands
- throw from between your legs with two hands
- overhead throw
- stand up from a seated or knelt down position, and throw with two hands from the chest

- pick up the ball and throw with two hands from the chest

Specific exercises:

- frontal throw with a spin of the chest and conclusion with one hand
- throw from a still position
- throw with a lateral shift

### **Year 2 of secondary school**

- repetition of exercises of year one
- specific work on special throws
- handgrip and position of the weight (2 or 3 kg)
- simple throws upwards and ahead
- throw from a still position
- throw with a lateral shift
- the same in the throwing area

### **Year 3 of secondary school**

- repetition of the previous exercises
- use the standard weight (4 kg for boys, 3 kg for girls) - *Attention! Do not use it if the weight is too much considering the student's strength*
- specific exercises on throws from a still position
- specific exercises on throws with lateral shift
- O'Brien technique

<b>Vortex (or little javelin)</b>
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The activities with vortex will be mostly carried out in year one, even though they mustn't be totally abandoned in year 2 and 3. I suggest to insert them in the school sports games of your institute even if they are not included in the official curriculum.

#### **A) Using the medical ball**

For the general throws, refer to the exercises mentioned in the Shot Put section.

The specific throws might be the following:

- Throw with two hands over the head (1 kg. ball)
- The same exercise with right or left hand
- The same exercise from a standing position, then moving forward with right or left foot
- 1 or 2 impulses and throw from over your head with the right-left, right-left rhythm

#### **B) Using the tennis ball**

- running with the ball in the hand, with two balls, with small throws
- throws against the wall and catching
- throws in couple, the partner seizes the ball
- throwing game: pentagon
- throwing game: to pull down the cone
- throws from a still position
- throws with run-up and lateral skip
- lateral skip + impulse and throw
- standard run-up, impulse and throw

#### **C) Using of the vortex**

- how to handle the tool
- throwing and catching games
- target and precision games

- walk, cross and throw
- lateral skip and throw
- lateral skip + impulse and throw
- run-up, stop and throw
- run-up like javelin and throw

For the discussion:

Which kind of warming up before using the vortex?

How to organise the lesson?

How to use the vortex in the gym?

## Long jump

Aspects of the activity planning for three years of secondary school.

The goal is the following:

**To be able to execute a simple jump with a short and progressive run-up, on one foot in the proper way, maintaining the balance and landing in a safe way (simple flight technique).**

Suggested exercises:

- long jump from a still position
- long jump from a still position from one foot
- make standing jumps and then jump into a hole
- bounce on one foot and jump into a hole
- jump with a progressive run-up: 4-6-8- steps
- jump with a 10-12 steps run-up and take-off from a square metre area (larger than usual)

It is possible to play a team game: the point is given to the team when the target is reached or passed.

### **Year 1 of secondary school (educational and introductory phase)**

- jump downwards
- bounces
- hopped step
- sequence of extension jumps
- specific sequence
- Jumps with take-off from a square metre area and 10-12 steps run-up

### **Year 2 of secondary school (focus on take-off and body control during flight phase)**

- repetition of the year 1 activities
- improve the take-off phase using the spring-board
- exercises for the control of the body during the flight phase and landing from a higher level
- jump with take-off and 12 steps run-up

### **Year 3 of secondary school (specializing the movement)**

- repetition of the previous exercises
- standing jump and jump on alternate feet
- progression of exercises to improve the simple flight technique
- jumps with 14 steps run-up and take-off from springboard

## High jump

The goal is the following:

**To be able to execute jumps in the frontal and "scissors" way. To know the Fosbury-flop technique and to use it in a safe way.**

- A) execution of a sequence of frontal jumps, "scissors" and ventral jumps using elastic and improvised poles
- B) At the mattress: frontal jumps, scissors from the right and left side with diagonal and curved run-up (ventral jumps are also possible). While training, it is interesting to remind students the history of the suggested exercises. Use the "scissors" with curved run-up to make the run-up trajectory more precise and to find the correct position of the take-off and choose one's own take-off foot.
- C) Exercises sequence in order to learn the flop:
  - Run-up and jump on one foot the mattresses
  - Run-up and jump on both feet with spin
  - Run-up, jump on both feet, rotation and fall on the back
  - Run-up and arrive seated on the mattress
  - The same exercise, passing over the elastic
  - The same exercise, passing over the crossbar

Aspects of the activity planning for three years of secondary school.

### Year 1 of secondary school

General introduction to high jump technique ("scissors" jump is more important than flop)

- Exercises for frontal and "scissors" jump
- Optional exercises for ventral jump
- Sequence of exercises to learn the basic flop jump

### Year 2 of secondary school

Focus on the run-up ("curved" run-up) and on a precise take-off phase

- Exercises concerning curved run-up (with various speed and curve range)
- Take off and sequence of take-offs and jumps along a curved line
- Focus on the jump precision and on the jump parabola
- Introduction to the ventral jump

### Year 3 of secondary school

Focus on the crossbar overpassing

- Repetition of year 1 and 2 exercises
- Exercises for the crossbar overpassing on the ground
- Exercises for the crossbar overpassing, copying the overpassing position on the ground, one the mattress, etc.
- Standing jumps and with 1-2 steps run-up to improve the overpassing phase starting from a higher position

## Hurdle-race

### Year 1 of secondary school

Warming up and mobility exercises on the ground and near a wall.

Then:

- Run and spurt passing over the high jump crossbar placed on the ground

- The same exercise positioning the tools in a higher position on Baumann supports
- Run at the rhythm of 4 steps between one crossbar and the other
- Prepare small contests  
*Note: in this phase, focus on the instruction: “run, do not jump”*
- Now introduce the obstacle, possibly not too high (30-40 cm), and ask students to pass it over maintaining the running constant and regular; the obstacle must not interrupt the running. You can also consider the difference between normal running and running the same distance with 3-4 obstacles. It may also be interesting to make students try various distances and situations asking them to maintain the running regular and constant.

### **Year 1 of secondary school**

The goal is to be able to run without interrupting the action between not too high obstacles (40 cm).

During the school sports games the obstacles could be a little lower and nearer, if necessary. Otherwise it will be enough to train the students use the standards obstacles (standard height and distance) at least once before the sports games take place.

### **Year 2 of secondary school**

You can introduce the technique of the obstacle surpassing, focusing on the different movement of the first and second leg.

You can deal with the following aspects:

- Exercises concerning the central overpassing, while walking
- The same exercise, focusing on the position and role of first and second leg
- The same exercise, focusing on the rhythm and movement
- The same exercise, focusing on the role of the arms
- Exercises concerning the central overpassing, with a sprung pace
- Exercises concerning the central overpassing, with fast skip
- Running and overpassing with 60 cm high obstacles, at the distance of 6 m. (generally)
- Relay race

The goal for the second year is to learn the technique of overpassing the obstacle, that is to be able to differentiate the different role of first and second leg.

### **Year 3 of secondary school**

Focus on the technical aspect of the overpassing, especially considering the role of the second leg. You can also explain the lateral overpassing.

- lateral passage, walking (with facilitating tool)
- lateral passage with skip (with facilitating tool)
- lateral passage, running (with facilitating tool)
- same exercises without facilitations
- synthesis with complete passage and three steps rhythm. You can also use the 4 and 5 steps rhythm for not so good students.

In the year three, focus on the technique using also analytical exercises us. Find also the best rhythm solution for every student, teaching him/her to be aware of it.