This research aims to create an instruction model for the optimization of teaching football to fifth graders of the sports high-school of Bacău, Romania. Starting with the academic year 1999-2000, a National System for the School Physical Education Assessment was introduced in the primary, middle school, high school, and higher education. Considering these, this research proposes new teaching strategies that would include relay races using the football, the assessment of these strategies being made according to the middle school final performance standards foreseen in the curriculum.

Relay races are increasingly used as action means during the middle school physical education lessons, due to the fact that they are attractive to children, both as play during their leisure time, and as organized games during the physical education lesson. The use of relay races with the football during the physical education lesson has certain tendencies that influence directly the development of the main motor skills and moral-volitional qualities.

Three challenges were selected for the final testing, chosen from the ones established in the National System for the School Physical Education Assessment: 25 m sprint, 5x5 m relay, and standing long jump.

At the end of the research, the initial hypothesis was confirmed: The correct management of the teaching-learning process, by introducing relay races using the football in the content of the sports high-school physical education lesson, leads to the accomplishment of the standards established for certain evaluation challenges by the Ministry of Education, Research, Youth and Sports through its National System for the School Physical Education Assessment.

METHODS

The purpose of this paper is to compare the results recorded by the pupils during the control challenges to the norms imposed by the Ministry of Education, Research, Youth and Sports in its Assessment system for primary schools (guiding norms). Taking all these into consideration, the goal of this paper is to propose new teaching strategies, which will comprise relay races using a football. The assessment of these strategies will be done according to the final performance standards for middle school education foreseen in the school curriculum.

Research Hypothesis

In the case of this research, which studies use of relay races with the football during the physical education lesson, it is necessary for the physical education teachers in the sports high-schools to be actively and creatively involved in the updating of the teaching-learning process for each age group.

Starting from the previously stated ideas that the optimization of the current physical education instruction process needs an active and creative involvement of the specialists, corroborated with the updating of the teaching-learning processes according to the current needs, this research started with the following hypothesis:

1. Presumably, the correct management of the teaching-learning process, by introducing relay races with the football in the content of the middle school physical education lesson, can lead to the accomplishment of the standards established for certain evaluation challenges by the Ministry of Education, Research, Youth and Sports through its National System for the School Physical Education Assessment.

Subjects and conditions of the research

The actual experiment was conducted between May and August, 2016, on 5th grade pupils of the Bacău Sports High School.

Only one testing was conducted over the course of the experiment, the final testing (August 15, 2016). Three challenges were selected for the final testing, chosen from the ones established in the National System for the School Physical Education Assessment. The challenges were the following:

1. 25 m sprint - performed with a standing start, the timer being started at the first movement. Two attempts were allowed, the best one being recorded in the charts. The break between attempts was of 2 minutes. The result was recorded in

2. 5x5 m relay - performed with a standing start, the timer being started at the first movement. Two attempts were allowed, the best one being recorded in the charts. The break between attempts was of 2 minutes. The result was recorded in

3. Standing long jump - the pupil started from a height of 1,80 m. Two attempts were allowed, the best one being recorded in the charts. The break between attempts was of 2 minutes. The result was recorded in
seconds and tenths of a second.

2. 5x5m relay - two 1.50 m poles were set on the track, 5m away from each other. The pupil started from one pole
speeding, and ran 5 times 5m, going around the poles. Standing start, the timer being started at the first movement. The timer
stops when the pupil finishes the entire track, and goes over the line of the starting pole. One attempt was allowed. The result was
recorded in seconds and tenths of a second.

3. Standing long jump - one swing of the arms was permitted for the spring. Two attempts were allowed, the best
one being recorded in the charts. We measured the distance from the tip of the toes (starting position) to the heels (landing
position). The result was recorded in centimeters.

Conducting the experiment
Based on Balint G. (2007), we present a series of relay races using the football that were used in this experiment, as
follows:

a. Relay race with a ball: HIT THE TARGET
   Pupils' age: 10-12 years old;
   Instructional goals: the development of spatial orientation, the development of kicking force, the development of the
ability to kick the ball in a set direction.
   Organization of the game: The pupils are divided equally in two teams (for example, red and white), in two lines, at 10
   meters in front of a goal. Seven meters in front of the goal line, a line is traced on which a number of balls is arranged for a team,
   equal to the number of players of that team. On the transversal bar, at any distance from the middle of it, a shirt is hanged,
   representing the target.
   Development of the game: At the teacher’s signal, the first pupil runs toward the ball (1), hits the ball (2), trying to hit the
   target, runs after the ball (3), gets it back, and by leading the ball with the foot (4), the pupil moves with the ball behind the last
   teammate (5), going forward for a second attempt.

Each team gets two attempts for each of its members. There will be a mandatory left kick and a right kick.

The winner is the team that hits the shirt first, or that manages to hit the target shirt the most times.

Methodical indications: The distance between players and target is increased according to the children’s age and
training level.

b. Relay with leading the ball between poles and multiple dribble during movement
   Pupils’ age: 10-12 years old;
   Instructional goals: the consolidation of the ability to lead the ball with the foot between the poles, of the multiple
running dribble, and the development of the ability to move quickly with a ball.
   Organization of the game: Two teams of 3 pupils each, standing in a line. The first pupil of each team has a ball at his
feet. Other two teams of 3 pupils each are standing in the court, playing the role of passive opponents.
   Development of the game: At the teacher’s signal, the first pupil in each team leads the ball with the foot between four
poles at 1 meter between each other (1) up to a pole 6 meters away from the start line, pole which the pupil goes around with
the ball at his foot (2), he comes back with the ball and during movement he dribbles the three semi-active opponents (3), after which
he stops the ball for the first teammate (4) and goes to the end of the line (5).

The next pupil in the line restarts. After an entire team has finished, the passive opponents change places with the
performers.

The winner is the team that manages to perform correctly and in the least amount of time this course.

Methodical indications: For the pupils who master already the running dribble, the relay can be performed with active
instead of semi-active opponents.

RESULTS
Presentation and analysis of the research data
The data gathered during the experiment was centralized in tables, whereas its analysis was done by calculating the
average result for each testing (males/females) and comparing it to the norms for these control challenges established in the
Assessment system for primary education, which are presented in the following table:

<table>
<thead>
<tr>
<th>Assessment instruments (optional challenges)</th>
<th>Fifth grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>25 m sprint</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>5x5m relay</td>
<td>3.2''</td>
</tr>
<tr>
<td>Standing long jump</td>
<td>1.55m</td>
</tr>
</tbody>
</table>
DISCUSSION
Interpretation of the Results

1. 25m sprint
The values of the statistical-mathematical parameters obtained during the experiment show the following:
- the arithmetical mean of the boys’ results for this challenge is 5.64 seconds. The average values are within the norms in the evaluation system for primary education, between “good” (5.7 seconds) and “very good” (5.6 seconds) parameters.
- the arithmetical mean of the girls’ results for this challenge is 6.83 seconds. The average values are within the norms in the evaluation system for primary education, between “good” (6.9 seconds) and “very good” (6.8 seconds) parameters.
- the standard deviation values show that the x and y variables are well centered around the arithmetical mean for both groups (males/females): the males recorded a value of ±0.13, and the females, of ±0.21.
- there is a high homogenity in both groups (males/females): the males’ variability coefficient has a value of 2.28%, and the females’, of 3.01%.
- The analysis of the results shows that the relay races with the football used during the fifth grade physical education lesson can successfully replace the traditional action means used during the physical education lesson.

![Figure 1 - 25m sprint](image1)

1. 5x5m relay
The values of the statistical-mathematical parameters obtained during the experiment show the following:
- the arithmetical mean of the boys’ results for this challenge is 6.07 seconds. The average values are within the norms in the evaluation system for primary education, between “good” (6.1 seconds) and “very good” (6.0 seconds) parameters.
- the arithmetical mean of the girls’ results for this challenge is 6.50 seconds. The average values are within the norms in the evaluation system for primary education, in the “good” (6.5 seconds) category.
- the standard deviation values show that the x and y variables are well centered around the arithmetical mean for both groups (males/females): both males and females recorded a value of ±0.13.
- there is a high homogenity in both groups (males/females): the males’ variability coefficient has a value of 2.11%, and the females’, of 1.99%.
- The analysis of the results shows that the relay races with the football used during the fifth grade physical education lesson can successfully replace the traditional action means used during the physical education lesson.

![Figure 2 – 5x5m relay](image2)

1. Standing long jump
The values of the statistical-mathematical parameters obtained during the experiment show the following:
- the arithmetical mean of the boys’ results for this challenge is 130.62 cm. The average values are within the norms in the evaluation system for primary education, between “good” (130 cm) and “very good” (135 cm) parameters.
- the arithmetical mean of the girls’ results for this challenge is 125 cm. The average values are within the norms in the evaluation system for primary education, in the “good” (125 cm) category.
- the standard deviation values show that the x and y variables are well centered around the arithmetical mean for both groups (males/females): the males recorded a value of ±2.29, and the females, of ±1.91.
- there is a high homogenity in both groups (males/females): the males’ variability coefficient has a value of 1.75%, and the females’, of 1.53%.
- The analysis of the results shows that the relay races with the football used during the fifth grade physical education lesson can successfully replace the traditional action means used during the physical education lesson.

![Figure 3 - Standing long jump](image3)
CONCLUSIONS
The theoretical conclusions have shown that relay races (using a football) can contribute to the development of the pupils’ basic motor skills in this age group.

At the same time, relay races (using a football) favor the development of such psycho-motor skills as speed, endurance, dexterity, precision of movements, and of such skills as attention, quick reactions, team spirit, getting used to follow the rules, fairness, etc.

At the end of the experiment, the initial hypothesis has been confirmed:

The correct management of the teaching-learning process, by introducing relay races with the football in the content of the middle school physical education lesson, leads to the accomplishment of the standards established for certain evaluation challenges by the Ministry of Education, Research, Youth and Sports through its National System for the School Physical Education Assessment.

REFERENCES
1. Balint, Ghe., 2009, Jocuri dinamice-o alternativă pentru optimizarea lecției de educație fizică cu teme din fotbal în Învățământul gimnazial, Edit. PIM, Iași;