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Perspective on learning within lesson or training by clepsydra method

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Abstract

This research aims at improving the lesson/training form, so that the instruction process becomes more efficient. The improvement consists of turning the lesson “classical” form into the “clepsydra” form, according to the following scheme: global effective - reduced effective - 1:1 effective - reduced effective - global effective.

The “clepsydra” lesson/training structuring will induce an optimization of the training process and, implicitly, of the performances. The “clepsydra” can include all the lesson themes, respectively all the training components or, selectively, a certain theme (certain themes). We can notice the adversity degree differentiations between both the “clepsydra” halves and their sequences. Thus, if the first half has all the adversity degrees, the second one has semi-active and active adversity degrees, with the active adversity compulsoriness in the “clepsydra” last sequence. The adversity degree is related to the previously mentioned aspects and to the instruction level. Progress rate within the “clepsydra” structures is significantly better (15 to 30%).

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Keywords: efficiency; structure; theme.

1. Introduction

The lesson training structure is made up of three sequences: the introductive, fundamental and final ones (Dragnea and Bota, 1999). The fundamental part is focused on solving the training lesson themes.

2. Purpose

This research aims at improving the lesson/training form so that the instruction process becomes more efficient. The improvement consists of turning the lesson “classical” form into the “clepsydra” form, according to the following scheme: global effective - reduced effective - 1:1 effective - reduced effective - global effective.

3. Hypothesis

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The “clepsydra” lesson/training structuring will induce an optimization of the training process and, implicitly, of the performances.

4. Tasks

- Calendar scheduling;
- Goal settling;
- Determining the priorities;
- Player selection;
- Defining the training strategy;
- Strategic training on stages, accompanied by the afferent evaluations;
- Subject final assessment;
- Conclusions and recommendations;
- Paper editing and submitting.

5. Methods

- Scientific documentation;
- Observation;
- Experiment;
- Measurement;
- Statistical-mathematical method.

6. Conditions of the research

This applicative-type research was conducted over a 4-year period, on a single experimental group (longitudinal study). The participating subjects were represented by the national team rugby VIIIs players and by the pupil-players of the physical education (rugby) special classes within the “Aurel Vlaicu” Theoretical High School of Bucharest. For the research objectification, we used a test battery and control tests, as well as observation and performance sheets.

7. Results

- the collected data processing and statistical-mathematical interpretation show that the used test battery and control tests have led to the motor capacity and the technical-tactical component optimization;
- the technical-tactical sphere improvement is also enabled by the observation sheet processing and analysis;
- “clepsydra” can include all the lesson themes, respectively all the training components or, selectively, a certain theme (certain themes);
- “clepsydra” is constructed by initially using the full effective for the respective theme (themes), by passing through reduced effectives up to the simplest form afferent to the theme (themes) and by recomposing then the full effective, according to the same reason;
- the “clepsydra” first sequences aim at controlling behaviours at the player, couple, line, compartment and team levels, under conditions similar or close to the competitive game, depending on the training lesson theme. In these sequences, we can notice the strengths and weaknesses of the aimed behaviour, which improves our subsequent intervention meant to optimize it. In other words, in these sequences we can accurately determine the objectives (tasks) of the proposed theme (themes);
within the reduced effective sequences, the teacher/coach has the best opportunity of intervention in order to improve the aimed behaviour. The 1:1 effective sequences allow the individual improvement of the behaviour aimed by the lesson theme (themes);

the last sequence - global effective/active adversity - is focused on both the behaviour optimization and its testing under the game conditions;

we can notice the adversity degree differentiations between both the “clepsydra” halves and their sequences. Thus, if the first half has all the adversity degrees, the second one has semi-active and active adversity degrees, with the active adversity compulsoriness in the “clepsydra” last sequence. The adversity degree is related to the previously mentioned aspects and to the instruction level.

8. Conclusions

progress rate within the “clepsydra” structures is significantly better (15 to 30%);

there is an improved integration of the theme-focused behaviour into the game specific general behaviour;

the “clepsydra” optimum formula is: global effective - reduced effective - 1:1 effective - 1:1 effective - reduced effective - global effective, with the previously mentioned particularities;

“clepsydra” allows the behaviour accurate observation and, implicitly, the precise defining of the tasks afferent to the approached theme;

the personal way of expression during the game was significantly more efficient.

The conclusions of our research are also validated on the performance level - our players won the title of National Champions (in the research 2nd a 4th years) and 5 among them were promoted to the national squad, by participating in the Junior World Cup.

mean volume - 90’
mean intensity - 75 to 85%

<table>
<thead>
<tr>
<th>Crt. no.</th>
<th>Sequences</th>
<th>Allotted time</th>
<th>Content</th>
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</table>
| 1       | Group organization              | 2’            | Calling the players’ names  
 Checking the players’ health condition  
 Theme announcing                          |
| 2       | Body preparation for the effort | 10’           | Exercises from different “schools”  
 Analytical and global gymnastic exercises  
 Preparation specific exercises |
| 3       | School-type game                | 10’           | By respecting the lesson theme                                           |
| 4       | Technical-tactical and physical training (lesson themes) | 45’ | Ex. for compartment effective  
 Ex. for reduced effective  
 Ex. for 1:1 effective  
 Ex. for reduced effective  
 Ex. for compartment effective |
| 5       | School-type game                | 15’           | By respecting the lesson theme                                           |
| 6       | Body recovery after the effort  | 5’            | Mild running  
 Relaxation exercises  
 Respiration exercises etc.                     |
| 7       | Conclusions                     | 3’            | Appreciations  
 Recommendations                                 |
Figure 1. "CLEPSYDRA" STRUCTURE
References: