Motor and sports skills workshop as primary school teachers’ training process

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Introduction

In Italy the new curriculum for will-be teachers of kindergarten and primary schools highlighted the importance of methodology in teaching, in order to offer students a key to get to know reality through a wide range of didactic experiences, which contain the essence of knowledge itself (Gardner, 2001).

As motor and sporting activities in primary school are not led by P.E. teachers but by Primary Formation Science teachers, it turned out interesting for our research group to investigate the importance of motor and sports activities training connected with the university course of future primary school teachers. Hence the starting point of our research that, supported by bio-pedagogical knowledge, analyses the impact of university training activities connected with a workshop titled “Didactic of body, movement, sport and communication through our body” organized by the University “Suor Orsola Benincasa” in Naples (Italy).

Objectives

A workshop about the body offers a chance to future teachers to understand the communicative abilities of the body, the importance of its universal language and its role in the training process. The language of the body is a natural code adopted by man, together with other ways of communication, to express plainly intentions, uneasiness and needs (Dewey, 1966).

Teachers often use this language without being aware of the messages they unconsciously send to their students, and the ones they receive back. The body is something more than machinery, not distinguished from artificial objects in the world. It is also the place of self-consciousness, feelings and intimate desire.

The workshop is a sort of three-stage travel: Analysis; Planning; Simulation. Analysis is the scientific research and the evaluation of experiences leading to a critical judgment. Planning allows methodological practice" experimentation. Simulation means the reproduction of situations and their impact on real problems. It is carried out by experimenting different roles and techniques, such as role-playing or circle-time (Sibilio, 2002).

The research aims at evaluating if the use of motor skills workshops give didactics an innovative capacity of transfer. The research in fact wants to study if a university course that uses motor skills and sports activity workshops could make students more aware of a methodological culture giving value to the cognised transfer.

Method

To be able to carry out the research using a scientific method we could not help taking into account an area of research (Henry & Kemmis, 1985), which includes:

- P.E. teachers as leaders and observers of the suggested motor and sporting activities including the following exercises:
  1. Simulation of geometrical figures with body (triangle, square and circle) varying the dimension of the figure according to the numbers of the students involved;
  2. Simulation with the body (representation of figures taking the shape of numbers) to acquire a physical relationship with logic;
  3. Simulation and positioning of the body, to form and compare algebrical figures to realize the value of the number according to its possible different position.
- Students who will act as the receivers of the stimuli and by whom we expect a change;
- A specific project identifying the learning objectives (knowledge of the professional methodology abilities in the use of spaces, abilities in the use of materials);
An empiric research methodology, such because it takes into account the difficulties we always face when the protagonists of the research are people; In fact, as we cannot isolate some variables, we have to decodify the answers of the given phenomenon, more than to confirm the ended hypotheses.

An evaluation system able to verify the reaching of the sought-after objectives in a social and environmental context conditioning the origin, the carrying out and the results; the system adopts an entry test to register the starting situation; open observation grids structured to monitor the carrying out of the activity; an exit test to verify the output of the didactic intervention.

The phases of the experience have been carried out as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Experimental group</td>
<td>- Entry test: 1 week before the 1st meeting</td>
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<td></td>
<td>- Workshops: 4 dates one per week, each lasting 4 hours</td>
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<td></td>
<td>- Exit test: 1 week after the last meeting</td>
</tr>
<tr>
<td>Control group</td>
<td>- Entry test: on the same day as the experimental group</td>
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<tr>
<td></td>
<td>- Didactics: regular activity</td>
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<tr>
<td></td>
<td>- Exit test: on the same day as the experimental group</td>
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</tbody>
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The entry test, the same as the exit test, has been structured on the basis of the evaluation of the processes about the adopted methodology, places and material used to explain primary school pupils (aged 6-7) the concept of size, in particular major, minor and equal. The question was: “To teach your pupils the concept of greater, smaller and equal......”

The test is a multiple choice a questionnaire.

The other instrument of the research is the observation. The object of observation was the behaviour of the student, in particular in the body and motor skills manifestations. They have contributed to the interpretation of the results of the tests. Through a process of “crossing” the data (test and observations), in fact, it was possible to give a value to the numerical results.

Results

The results are shown in the tables over page.

Discussion

Even though the research follows an experimental protocol, the group of research considers more reasonable to recognize its empiricist valence, worthy of tangible results promoting new horizons to the training of the primary school teachers. The experimental group has revealed an exponential increase of answers n°3 (workshop) to the first question between the entry tests (54 students) and the exit tests (81 students). This demonstrates how much living motor experiences foster the desire to use personal background as future methodology to adopt with children of primary school. Moreover the results of the control group were 53 (entry tests) and 65 (exit tests), therefore demonstrating, less improvement.

The answers to question n° 2 is another interesting point. 24 students belonging to the experimental group answered the entry tests, while 47 students answered the exit ones. In the control group the data to estimate are 28 (in entry) and 35 (in exit). It is highlighted, therefore, how much a participative intervention, involving body and movement, makes students aware of the value of the context and the setting in the delivery of the activity. We think that, in a pedagogical culture, it is not worth giving statistical value to data, as science of education considers more valuable the reflection and the ideas coming from the reflection itself.

Apart from the numbers, the intention of the group of research is to spread, through practical experiences, the culture of the motor activity and sport as a motivational instrument for teachers’ training. The result of the present research must be read along with those about the same topic. It is an attempt to apply to didactics Hebb’s theory about “download and connect”: “...when the strong and the weak input towards a nervous cell are active in the same moment, the weak way results reinforced thanks to its association with the strong way” (LeDoux, 2002 p. 202). So learning is consolidated when a weak stimulus (pure information of content) is associated with a strong stimulus (motor and sport experiences). Boncinelli’s studies and, in general, the neuroscientific studies (Oliveiro, 2000), have revalued the cognitive root of movement, its ability as cognitive transfer, its role in the construction of plasticity involving other mechanisms of human formation and, above all, the relationship between motor activity and human learning (Boncinelli, 2002).
North meets South: East meets West

Table n. 1 Control Group

Table n. 1 Experimental Group

Table n. 2 Control Group

Table n. 2 Experimental Group

Table n. 3 Control Group

Table n. 3 Experimental Group

References


Geelong, Vic.: Deakin University.

