Psychomotor skills and teacher formation: what the production of PDE-PR evidences

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ABSTRACT

This paper presents and analyzes the concepts of Psychomotor skills and Psychomotor Education, which permeate the formation and daily work of teachers, linked to basic education. It is systematized from the following actions: (a) investigation of production about the body and school practices that impact on it from the psychomotor skills and psychomotor education locators, among the articles resulting from the PDE/PR; (b) Analysis of the state of the art of such articles in the light of academic production in the field of education and the area of Psychomotor skills; (c) confrontation of such production with the general and specific assumptions of the National Curriculum Parameters (1997) and the Curriculum Guidelines of Paraná State (2008). Based on the collected and analyzed data in our study, we believe that the summaries provided by articles from the GTRs, which dealt with the themes on psychomotor skills and psychomotor education are liable to the following considerations among others: (1) among the works analyzed it prevails a reduced and functionalist conception of psychomotor skills and psychomotor education, with regard to the common sense; (2) there is a lack of knowledge and/or disregard, both on the part of the PDE teachers and their peers, as well as academic advisors, regarding the historical advances and the concrete possibilities offered by the produced knowledge in this area of knowledge to the educational field.

Key words: Teacher formation. Psychomotor skills. Psychomotor education.

INTRODUCTION

Aligned with the purposes and concerns as explained by CAPES and taking the Basic Education as central object of research for the next ten (10) years, this work aims to apprehend the conceptions of Psychomotor skills and Psychomotor Education that permeate the formation and the work routine of teachers from Paraná State related to basic education. For this, we take articles produced by various Working Groups in Network / GTRs as sources of research, inserted in the Educational Development Program - PDE offered to teachers from the public school system by the Government of the Paraná State in the years 2007 and 2008.

In this case, the process that we propose which is the result of documentary and
bibliographic research must meet the following objectives: a) to do a survey on the production about the body and school practices that impact on it from the psychomotor skills and psychomotor education locators, among the articles resulting from the PDE/PR; (b) to analyze the state of the art of such articles in the light of academic production in the education field as well as the Psychomotor skills area; c) to confront such productions with the general and specific assumptions of the National Curriculum Parameters (1997) and the Curriculum Guidelines of Paraná state (2008).

In order to achieve such goals, we work on the assumption that human relations are constituted by and constitutive of the production modes of existence that have the body as one of their mediator instances. In this sense, it is understood that the processes of school education need to be analyzed as social practices, including those that focus on the body.

Thus, guided by historical and dialectic materialism, the methodology applied to this work has its basis on the selection of articles available on the PDE Notebooks (2007-2008) from the following search engines: psychomotor skills, psychomotor education. Subsequently to the survey and the reading of the articles, we will organize them according to the following concepts of the body approach: Skillful Body, Conscious Body, Significant Body and Historical Body. This classification is based on the theoretical studies by Le Camus (1986) - *The body in discussion* ; and Silva (2003) – *Psychomotor skill as a social practice*. From this systematic approach, we will compare it with authors of the educational field and the historical-cultural psychology. Based on such comparison, we aim at outlining the understanding of the formation and the knowledge of the authors and collaborators of PDE production about the field of psychomotor skills and psychomotor education.

**The educational development program (PDE-PR)**

Designed during the elaboration of the Teaching Career Plan in 2004, the Educational Development Program - PDE/Paraná is part of the public policies of continued education aimed at Basic Education teachers and it focuses on the importance of research in formation and in teaching practice. The program is composed of a set of

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2 In Portuguese: *A psicomotricidade como prática social*
activities organically articulated defined from the needs of Basic Education. It is also sought in Higher Education the solidarity and compatible contribution with the level of quality that is desirable for the public education in Paraná state (PARANÁ, 2007).

In this sense, according to the Complementary Law no. 103/2004, Article 20:

It is established within the Paraná State Education Department, the Educational Development Program (PDE) is intended for the teacher with the objective to improve the quality of Basic Education of the State Public School System in accordance with the educational and sociocultural needs of the School Community. (PARANÁ, 2004)

In addition to the objective previously mentioned, the PDE/PR offers the teacher “differentiated professional qualification to supplement his/her formation, considering academic, didactic-pedagogical and scientific degree, with the enhancement of his/her professional experience” (Id. Ibid.).

The principles listed above highlight the affirmation of a continued education process that emphasizes the production of knowledge, by prioritizing the combination between theory and practice through a scientific research culture of the school environment. In this sense, the PDE/PR proposes overcoming fragmented and homogeneous policies in terms of teacher formation and recognizes that teachers who are active in the State Educational System are knowledge producers and artisans of their practice.

To ensure that this policy is achieved, the organization of this program must meet two basic requirements, which are: contemplate the real needs of the problems faced in basic education and be integrated with the public institutions of higher education in the Paraná State.

Thus, the PDE teacher designs a work plan together with his/her advisor and will follow a plan of studies structured from three main areas: I. the integration of theoretical-practical activities; ii. theoretical study activities; iii. didactic-pedagogical activities with the use of technological support. (PARANÁ, 2007.)

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This way, "the conception of knowledge proposed by PDE is guided by the ontological principle of work and, therefore, it has as basic concern the analysis of the reality of this category in the capitalist society and in the schools" (PARANÁ, 2007, p. 17). Thus, the teacher is inserted and recognized in this continued education process as an epistemic subject, that is, as the individual is to knowledge as the knowledge is to the individual, as a means of understanding and intervention in the reality in which he/she is inserted.

Since its implementation, covering the 32 Regional Centers of Education in the State Educational System of Paraná, the PDE/PR qualified 7,177 teachers, who systemized and implemented 7,160 projects in their schools of origin and produced 7,160 scientific articles (PARANA, 2010). 2,400 of these articles are available online.

Due to the consistency of its propositions and coverage of its research and interventions, it is understood that the PDE/PR is a relevant source of research to analyze the production related to psychomotor skills and psychomotor education, understand the concepts propagated and adopted by teachers from Paraná in this knowledge area and playing field.

**Analyzed categories**

In view of the objective of this communication, it is necessary to clarify some concepts and categories, which will offer support to our arguments.

With respect to the educational milestone we will use the following concepts:

- **Educational Work:** "the act of directly and intentionally producing in each unique individual the humanity that is produced historical and collectively by all the human beings". (SAVIANI, 1991, p. 14)⁴

- **School Education:** formal process, which must necessarily supply the individuals with conditions to overcome the common sense and implies in "[providing] the necessary means for the students not only assimilate the objective knowledge as a result, but

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⁴ In Portuguese: “o ato de produzir, direta e intencionalmente, em cada indivíduo singular, a humanidade que é produzida histórica e coletivamente pelo conjunto dos homens”.

28
understand the process of their production as well as the trends of their transformation”. (SAVIANI, 1991, p. 17)

From the trends related to the body concepts and bodily practices we outlined in frame 1, two broad approaches, with their corresponding trends: analytical approach (skillful, conscious and significant body) and the synthetic approach (historical-cultural body).

For a better understanding of these approaches and their trends, we introduce their fundamental aspects. The selected trends in the Analytical Approach have their merits based on studies by Le Camus (1986). We can apprehend from these studies that the skillful body holds the bodily practices developed from the end of the 19th century and have their main theoretical basis on neurology with focus on the economy of habits and customs. As fundamental assumption, Le Camus reiterates the emphasis on the link between cerebral and muscular actions, as well as the body conception while culture receptacle. For conscious body, we use the ideas developed from 1950, driven by the studies of the body scheme, which have their basis on the developmental psychology, the impressionism as the organizer and a body conception as the recipient of culture. In relation to the significant body with its beginnings in the mid-1980s, we believe the practices that conceive the body in its semiotic and motor dimensions have subsidized the studies focused on body image, by adopting the psychoanalysis as the main theoretical framework. (Le Camus, 1986)

Linked to the analytical approach, we adopted the psychomotor skill concept propagated by the Brazilian Association of Psychomotor Skills (SBP), which defines it as:

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\text{[...]} \text{the science that has the human being as its object of study through his/her body in movement and in relation to his/her internal and external world. It is related to the maturation process, in which the body is the source of cognitive, affective and organic acquisitions. It is supported by three basic knowledge issues: the movement, the intellect and the affection. Psychomotor skill, therefore, is a term used for a conception of organized and integrated movement, in the light of experiences lived by the subject whose action is the result of his/her individuality, language and socialization. (BRAZILIAN ASSOCIATION OF PSYCHOMOTOR SKILL, 1980, p. 12)\]

5 In Portuguese: “[provimento] dos meios necessários para que os alunos não apenas assimilem o saber objetivo enquanto resultado, mas apreendam o processo de sua produção bem como as tendências de sua transformação”.

6 In Portuguese: “[...] a ciência que tem como objeto de estudo o homem através do seu corpo em movimento e em relação ao seu mundo interno e externo. Está relacionada ao processo de maturação,
Frame 1: The approaches of the body - founding aspects

<table>
<thead>
<tr>
<th>Name</th>
<th>Skillful Body</th>
<th>Conscious Body</th>
<th>Significant body</th>
<th>Historical-cultural body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominant Period</td>
<td>End of the 19th century</td>
<td>1950</td>
<td>1985</td>
<td>1978</td>
</tr>
<tr>
<td>Organizer</td>
<td>PARALLELISM</td>
<td>IMPRESSIONISM</td>
<td>EXPRESSIONISM</td>
<td>SOCIALISM</td>
</tr>
<tr>
<td>Body Concept</td>
<td>Receptacle Body</td>
<td>Receiver Body</td>
<td>Emitter Body</td>
<td>Transformer body</td>
</tr>
<tr>
<td>Theoretical Bases</td>
<td>Neurology</td>
<td>Developmental Psychology</td>
<td>Psychoanalysis</td>
<td>Historical Dialectical Materialism Materialistic Marxist Psychology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Objective</td>
<td>DISCIPLINE</td>
<td>BODY SCHEME</td>
<td>BODY IMAGE</td>
<td>CONDUCT</td>
</tr>
<tr>
<td></td>
<td>Economy of habits and customs</td>
<td>Economy of Movement</td>
<td>Economy of Desire</td>
<td>SELF-CONTROL Economy of Upper Psychological Functions</td>
</tr>
<tr>
<td>Type of Approach</td>
<td>ANALYTICAL</td>
<td></td>
<td></td>
<td>SYNTETIC</td>
</tr>
</tbody>
</table>


In relation to what we call synthetic approach, we highlight a trend which has been named as Historic-Cultural Body in this study. Systematized in Brazil from the mid-1970s, this trend has the socialism as organizer and adopts the principle of transforming activity as the motto of the body conception, once it is structured from the knowledge of Historical and Cultural Psychology and Historical and Critical Pedagogy. This perspective is focused on the studies about the upper psychological functions. Highlighting the concept of psychomotor skill from a synthetic approach, we can understand it as the "knowledge area that has as its object the body and the human movement in its social relations and production". (SILVA, 2002, p. 22)⁷

⁷In Portuguese: “área do conhecimento que tem por objeto o corpo e o movimento humano em suas relações sociais e de produção”.

onde o corpo é a origem das aquisições cognitivas, afetivas e orgânicas. É sustentada por três conhecimentos básicos: o movimento, o intelecto e o afeto. Psicomotricidade, portanto, é um termo empregado para uma concepção de movimento organizado e integrado, em função das experiências vividas pelo sujeito cuja ação é resultante e sua individualidade, sua linguagem e sua socialização”.

In this sense, the latter conceptualization is not opposed to the one proposed by SBP, but surpasses it by incorporation. This in so far as the modes of acting, thinking and feeling of the subject, his/her personality, language and socialization are understood from the questions listed by formulators of historical-cultural psychology, as it follows: a) How are the vital relations of the human being formed under certain historical conditions and what is the particular structure that engendered such relations? How is the structure of consciousness transformed with the structure of the human activity?

The remarks made about the objectives and methodology of this study, as well as the process of the PDE-PR formation, we will now move on to the analysis of quantitative and qualitative aspects of the teachers PDE production, concerning the *Psychomotor Skill and Psychomotor Education*.

### The Psychomotor Skill and Psychomotor Education in the PDE-PR

From the quantitative data, we found 29 articles in correspondence to the used search indices – Psychomotor Skill and Psychomotor Education - as it is shown in table 1.

<table>
<thead>
<tr>
<th>GTRs / Articles</th>
<th>Year of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>2007 13</td>
</tr>
<tr>
<td>Geography</td>
<td>2008 16</td>
</tr>
<tr>
<td>Foreing Language</td>
<td>2</td>
</tr>
<tr>
<td>Math</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>16</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

**Source:** 2007 and 2008 PDE Notebooks

As the table above shows, from 29 articles, 5 were produced by professionals inserted in the Special Education GTR, 2 in Geography GTR, 2 in Foreign Language Modern GTR, 1 in Mathematics, 16 produced by teachers in the Physical Education GTR and 3 by Pedagogy.
Based on these preliminary data, we can observe the lack of occurrences (29 - 0.40% among 7,160 articles), which correspond to the used search indices. These numbers seem to indicate a lack of knowledge and/or the lack of recognition, on the part of the PDE teachers in relation to this area.

Taking as an example of the Physical Education GTR, a working group formed by professionals, who have predominantly dealt with the body in the school environment and that have the highest incidence of articles raised, we could verify that approximately 80 articles available online, 36.2% of them responded to search indicators of this study, i.e., they highlight some approximation with the terms Psychomotor Skill and/or Psychomotor Education.

With regard to the qualitative aspects, we can see the following data from table 2: 1) there is a prevalence of the linked conception to Conscious Body named by Le Camus; 2) the absence of occurrences relating to historical-cultural trend is highlighted; 3) the analytical approaches on that of synthetic orientation is prevailed; 4) In three of the studies analyzed (other) we found Psychomotor Skill just as bibliographic reference, and the text/article does not present any positioning in respect of this issue.

Table 2 – Psychomotor approaches: trends and occurrences

<table>
<thead>
<tr>
<th>PSYCHOMOTOR APPROACHES</th>
<th>OCCURRENCES (N)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skillful Body</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>Conscious Body</td>
<td>20</td>
<td>68.9</td>
</tr>
<tr>
<td>Significant Body</td>
<td>3</td>
<td>10.3</td>
</tr>
<tr>
<td>Historical-Cultural Body</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Source: 2007 e 2008 PDE Notebooks

In addition, we found in the works the Psychomotor Skill and Psychomotor Education as: a) a synonym for playful approach; b) the area of knowledge; c) a new discourse in the physical education field, in comparison to sports content; d) differentiated form of students’ evaluation; e) form of intervention on the motor aspects understood as decoupled from the cognitive, affective and social dimensions of the human being; f) field of the study of psychology, which subsidizes the practices of physical education in early childhood.
In relation to the qualitative dimension of the production, inconsistencies between the arguments of theoretical texts and those about the conception of psychomotor skill present in them are revealed. For example, among the analyzed texts, we find those: a) articulated to the view of the dialectic historical materialism supposedly guided by a perspective of social transformation, in which the vision of psychomotor skill is deprived of its historical dimension and reduced to a purely functional one; b) guided from the perspective of the corporal culture, according to which the body is seen as objectivation of the culture and as source of language and expression in which the psychomotor skill and/or the psychomotor education is referred as a technique of motor assessment. Such dimension is understood as inseparable from the cognitive, affective and social dimensions of the human being; c) based on a social and interactionist perspective, in which the psychomotor skill is understood as an area of knowledge that provides the means of evaluation and development of pre-requisites for learning school.

**Final considerations**

In its conception, the Educational Development Program (PDE-PR) is a process of continued education, full of collaborative possibilities to overcome the poor conditions in the national basic education. This is evident because it is a program that has as a principle the link between the teaching practice and the knowledge produced within the universities from the use of new technologies in networking communities with a view to: 1) establish a critical view on the school practices; 2) promote the construction of knowledge capable of overcoming the forms already designed on the part of the teacher, and to intervene in their workplace; 3) provide the intellectual, professional, political and personal emancipation of the teachers in Paraná state, by giving better conditions to the basic education for the development of students and, consequently, of society.

From the collected and analyzed data in our study, we believe that the summaries provided by the articles from the GTRs that dealt with the theme chosen by us – psychomotor skill and psychomotor education - are liable to the following considerations: 1) among the works analyzed, it prevail a reduced and functionalist conception of psychomotor skill and psychomotor education, which covers the common sense; 2) in
most cases, the use of the networked communities and the promotion of the debate between peers as well as with the academic community did not create sufficient possibilities of mediation so that the teachers appropriate the new concepts and practices that overcome this conception; 3) this leads us to believe that there is a lack of knowledge and/or disregard, both on the part of the PDE teachers and their peers, as well as their academic advisors, in relation to the historical advances and the concrete possibilities offered by the knowledge produced in this area to the educational field; 4) it is also evident a dichotomy between theory and practice to the extent that several studies present critical educational concepts, but they conceive psychomotor intervention outside of its historical constituents, and even by decoupling the motor skill of its cognitive, affective and social aspects.

So, we believe that educators and researchers in the education field need, among other things, greater ownership of production concerning the psychomotor skill and psychomotor education. Thus, we believe that the professionals and researchers who are dealing with in this area need to think of developing conditions that may increase the production, dissemination and appreciation of the knowledge produced, as well as its insertion in the school space and in the universities.

REFERENCES


