Physical Education in the nursery: covering bodily practices

http://dx.doi.org/10.11606/1807-5509201700010107

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Abstract

The research presented here examined and interpreted teaching physical education experience in kindergarten. The methodological course took advantage of several ethnographic tools (interviews and participant observation) and theoretical frameworks of Cultural Studies. The pedagogical work developed while addressing and discussing the struggles for legitimacy that permeate the bodily practices, contributes to strengthening the voices of children, expanding the opportunities for recognition of the differences and promoting that the social relations be established more democratically.

Keywords: Childhood Education; Physical Education; Culture; Identity.

Introduction

Anyone who walks around the courtyard, classrooms or halls of a Childhood Education institution will probably see groups of children involved in dances, mimics, plays or children's songs. And why does it happen? Well, this bodily practices¹ are ways of expressing the life and the varied reality that children live. As cultural artifacts they communicate values, express feelings, worship subjectivities and meanings, that is, they contribute for the subject's identity constitution.

Despite this, institutions prioritize a way of expression linked to school uses and that serves to the reproduction of certain contents through their transmission, repetition and evaluation. While in free moments children utilize other languages to read and to say things about themselves and about the world, on the school tasks they find themselves surrounded not only by the moorings of a single way, but also, for the predictability of possible senses².

Discovering other languages, establishing undamaged forms of interaction with the children and recreating school environments time and space are the challenges for the childhood education^{3.} For this reason, RICHTER and VAZ³ suggest Physical Education to be responsible

for the debate and reflection about bodily practices, to contribute to the human formation that reveal new bodily and aesthetics approximation motions, others possibilities of action, communication with oneself, with the world and with the other.

Although the consulted literature advocate in favor of the infant Physical Education based on the pedagogical reflection of body culture, rare are the institutions where this happens. That's what brought the interest of describing and analyzing the pedagogical experience carried out with a group of young children, in which the responsible teacher problematized the social occurrence of manifestations produced by the body language.

When body language is recognized as a mode of expression and communication, the pedagogical space of the Physical Education is the locus of appropriation of the variety of ways from which express the ludic culture. That is, the pedagogical activities need to contribute to broadening children's understanding of the reality in which they live and to open ways for a more intense participation in the world.

It is also through body language that people establish a communicative relationship with the society. The

present and characteristic gesture of each bodily practice configures a text that is readable and meaningful. These texts are means of communication with the world, constituents and constructors of culture.

Plays, dances and children's song are part of what is conventionally called children's bodily culture⁴. As cultural product of one particular group and distinctive factor of its people, it is possible to affirm that these bodily practices constitute a factor of cultural identity. Consequently, is through a cultural pedagogy that subjects will have the opportunity to know more deeply their own bodily repertory, expanding and understanding it, as well as to access some communication codes characteristics of other cultures through the variety of bodily practices present on it⁵.

Considering the current status of Physical Education as a curricular component, which values the praxis and is inserted on the Pedagogical Project of an institution committed with the socialization and critical enlargement of the children's cultural universe, it is up to the component contribute with the collective effort of questioning the actual social inequality framework, by forming subjects that recognize, value and dialog with the multiplicity of identities that cohabits society. What is being defended is a Physical Education that guarantees children access to the bodily cultural patrimony socially available through the trial of variable forms which it presents itself; that analyzes the reasons that led certain knowledge about bodily practice to the current privileged condition, as even as, that reflects about the allusive knowledge to the corporeity linked through the mass media communication ways or produced and reproduced for the cultural groups, historically underprivileged.

A pedagogical practice as it is conceived, articulate to the communitarian life context; present conditions for the experimentation and interpretation of the ways in which the body culture is represented in the wider society; reaffirms the bodily practice according the group characteristics and deepens and broadens in every possible manners the children's knowledge in respect to these patrimony. It's about a pedagogy that considers the school community context, and, therefore, the differences existent between children. From them and the cultural knowledge built beyond the school limits, they develop sociocultural equity conditions⁶.

Therefore, the pedagogical activities contemplate experiences that make viable the bodily practice living belonging to the near and far cultural universe, and the critical reflection about the many ways of cultural representation imparted by plays, dances, mimics, children's song, among others, offering to each child

the opportunity of positioning themselves while bodily culture producer. Thereby, it is stated, through the bodily practices covering, the voice of many infant cultures on time and space - from the family, neighborhood, city, state, country, an international, southern, northern, northeastern, urban, rural, afro, natives, immigrants and so many others that compose the contemporary Brazilian landscape, besides problematizing the power relations present on the genre, ethnic, religion, social class, age, expenditure, living place, time of schooling, professional occupation questions, that define the bodily practices.

When the subject comes into contact with the bodily practices of others individuals or groups, it experiences an interpretative relation driven by the search of comprehension of their meaning. The person who appreciates a cultural product, child or adult, dialogs with it, with its author and with the context that both are referenced. Related to its signs and elaborates a comprehension of its senses, trying to reconstruct and to learn their totality. In this relation, he/she articulates the new experience provoked by what he/she sees (from estrangement, surprise, astonishment, and anxiety), with the personal experience accumulated through the interaction of other cultural products, appropriated knowledge on the social practices experienced on the family spaces, schools, communitarian and so, mobilizing their point of view to complete their interpretation. The contemplation is a creation act, of co-authorship. Those who appreciate something continues the production of the author to take for yourself the reflexing process and comprehension⁷.

On the pedagogic process, the appreciation as a creation act, and not as a passive attitude or resigned look that only reproduces is followed by a redetermination, of an appropriation. In this pedagogy, children are incited to talk about, to move themselves from, build and try the bodily practices, as well as to access and analyze external references, narratives, positioning and cultural artifacts that diverge from the original repertory, but that lead to a certain intimacy with the different.

Intimacy that allows the appropriation of other stories, characteristics, senses and recognizes the pleasure and the meaning of this relationship. Intimacy that builds the look that surpasses the quotidian, putting it on another level, transgressing it, building multiple senses, readings and ways of comprehending life². The pedagogical work culturally oriented with the bodily practices starts from the principle that the child, since little, has infinity possibilities for the development of its sensibility and expression. Because of that, it is

important to experience didactical situations where it sees, feel and imagine the different bodily practices, acting on them. It is fundamental that he knows the productions of different times and social groups, like the ones belonging to popular culture, as well as erudite culture.

A Physical Education pedagogy configured like this ensures pedagogical practices that allow the execution of varied activities: oral and written reports, demonstrations, body experiences, conversation circles, experimentation, videos watching, listening to rhythms, music, interviews, testimonials, image evaluation, photography, visitation where bodily practices happen, etc. children also are encouraged to think, discuss and talk about the bodily practices, what allows them taking

position in relation to their own experiences and from another's. Finally, activities are organized that, starting from the corporal experiences, and hence the cultural legacy allusive to the different circles of knowledge: language, social and natural sciences.

The pedagogical action conduced like this, besides allowing that the knowledge initially available to children be reviewed, increased and deepened by careful and attentive mediation of the teacher, contributes to the formation of the subjects that knows their history, proudly of their own cultural identity, conscious of the importance of establishing a democratic discussion with the many groups that attend the same environment and the recognition of those that, momentarily, could be away.

Methods

The institution that hosted the study, a public daycare on the capital of Sao Paulo, already developed educational practices with the recognition of the child as a historical subject and possesses a history of construction of collective actions. This context allowed the execution of the pedagogical experience performed with a group of children from 2 to 3 years old, in a partnership between teachers, pedagogical coordination and researchers.

The study was performed by using tools of

ethnographical inspiration - prolonged stay in the field and description of the observed reality⁸. For the sake of interpretation, the transcription of the observations was confronted with the theoretical construct of Cultural Studies⁹. It refers to a theoretical field that faces the inequality in a broad way (class, gender, ethnicity, age, etc.), report the power relations embedded in the social practices and claims changes for reaching a pedagogy that promotes complex analyzes of the society, besides proposing democratic formation experiences.

Results and discussion

On the institution that hosted the research, the environment organization encouraged plays and talks between children. Away from the naturalistic conception that this is enough to flourish the infant curiosity, the intention was allowing the leaving expression and the relation between peers, taking into account the uncertain and open character of the playfulness. The rules and the play organization, in term, were negotiated during the activity itself, requiring a time and space for interaction with the availability of objects like toys, closes, props and artistic expression materials that served to support to fantasy and imagination of children.

When the boys played house, for example, they shared household with the girls; they made food, swept the house, carried on babies etc. It can be inferred that the new household configurations with

higher male participation was represented by the children. Play by "household" or "mom and son" were named by the group as "play of husband". The play expanded beyond the domestic environment, and could have a scenery of the office or the car and implicated in the partnership boy and girl. Sometimes, when someone was left out, negotiated to be the son or daughter. Considered as a common characteristic of make believe play, the negotiation of roles happened easily during the play¹⁰.

During the period of data collection for the research, the organization and development of proposals that explored the many experiences of the children in relation to the body culture were followed closely. The observation and the registering of these moments of free expression and relation between the children of different ages worked as sources to

the organization and planning of the pedagogical work of Physical Education.

In the elaboration of the proposal some important steps were followed. The first of them was the distance of adultcentrism, since, although the adults were responsible for the planning, they can listen and respect children as citizens subjects to rights and not as someone waiting to be an adult one day. Understanding that the play is a way of expression, a language was the second step. Playing is not something natural or innate. Children learn to play among the culture, collectively with other children or with adults. The educational institution of childhood is also a place to play and, for this to happen, it is necessary that the pedagogical proposal contemplate space and time adequate to the play. In the context of the research we could observe that the play was listened and interpreted by the pedagogical team, in fact as a manifestation of language, since from the observation of the place one could have the tips from the children to re-plan pedagogical actions.

In reason of the anticipation of the entrance of the children on the elementary and middle school that has now nine years, the kindergarten groups were reorganized. The group that took part of the research, called G3, was made of children coming from nursery and G2. The age heterogeneity made that infant relations were marked by conflicts based on the superiority of the others and the contempt of the youngers, called pejoratively as babies by their colleagues.

From the observation of oppressing situations of the youngers by the olders, pedagogical interventions were planned that had by objective to problematize what is being an adult, child, baby or what is being older or younger. These situations didn't go unnoticed by teachers that always helped children to express their feelings and mediated conflicts, but that also noticed the needs of an educational proposition planned to problematize the power relations that passed through the relations between different ages.

Facing this problem, the teacher that collaborated with the study organized, together with the families, a board with pictures of the children of the group, since their born. As she informed, the object was building in a time line. Since all of them have being babies, there was no need to establish a hierarch of values, but recognizing the existence of differences. From the references presented in the pictures, the children played crawling, siting or "laying" down in the lap of others or putting pillows in their bellies, pretending to be pregnant.

Those games reflected and shared with the group the configuration of the body, of how they were taken care, how was the feeding/breast-feeding and the meanings and configurations of each family group were shared by the group.

The Foulcaltian theory¹¹⁻¹² offers interesting elements to analyze the ways of constitution of childhood and the process of elaboration of a speech that groups a set of knowledge about the infant subject building a hegemonic meaning of being a child. The concepts of desire of knowledge and desire of power explain how the relations of power and knowledge permeates also the infant subject and work in the constitutions of the speech of what is being a child. Foucault¹¹ highlights the mechanisms of classification, ordination and hierarch of individuals and how power materializes:

When I think in the mechanics of the power, I think in its capillary way to exist, in the point were the power finds the level of the individuals, reach their bodies, and inserts in their gesture, their actions, their learning, their quotidian life (p. 131).

The relations of power and the existence of a link between knowledge and power is what, according to Foucault¹², establishes the "truth" about what is normal and what is correct. In this way, the exclusion and the search of homogeneity were justified in the school organization that resulted in the growing institutionalization and confinement of childhood. On the author's view, since century XVIII, the school assumed a role of regulating children's bodies and minds, by the means of not only effective disciplinary devices like, for instance, the examination, but also through a set of well articulated norms and regulations consubstantiated in the establishment of schedules, the distribution of bodies in the space, the determinations of adequate posture etc.

The classification and hierarch pointed by Foucault like an element of control and power appear in many representations enunciated by the children of G3, like: "having all the teeth is not being a baby"; "brushings is being a child and flossing is being an adult"; "using diapers is being a baby"; "using diapers only to sleep is being a child"; "not using anymore is being a big child and don't peeing on the bed is being an adult". The infant literature was a resource used to problematize the classification with a history were the character/ child leaved the conflict of being considered big when it is needed to leave the pacifier and small when wanted to play on the street. Then, in front of the complexity of the relations presented, the

children noticed that their wasn't a single truth and expressed their points of view in many of the activities executed in the daycare every day. Being during the meals in which they observed who served by themselves and used forks, took bottles, drank the milk on a glass, or when they draw babies playing in the climber.

The regimes of truth operate by controlling the speech, erasing the power relations that constituted them historically and naturalizing the positioning. For this reason, the concept of childhood seems many times "natural", that is, it is represented as a biological determinant on which little can be done¹¹.

The circus practices were the central theme of the pedagogical work from the Cirque du Soleil video, presented by the teacher. The circus was already part of the group's cultural repertoire. At the time, the influence of the spectacle was perceived by the presence of a large number of children playing with diabolo^a, that passed from an almost unknown toy to a fad.

From watching the film, ideas of circus play arose. A trapeze and a zipline^b were made. These plays allowed the exploration of the various corporal possibilities. The children had the help of the adults to play on the zipline although the height did not offer great danger, because they used previous experiences of climbing the trees and resorted to plastic boxes available to make a ladder and hang on the trapeze, toy in which they also created a "new way" to play before hanging. It consisted of twisting the whole rope, which, when unrolling, made them spin in the air.

It was not all the children in the group who ventured. Those who did not want to try, participated in activities in the ground as rolling and tumbling, since the teacher also organized the room with mattresses and foam rolls to facilitate the movements. Fabrics tied to the walls also made it possible to play acrobatics like a circus show.

But can free play in day care be considered a work of Physical Education? Neira and Nunes¹³ argue that the occurrence of bodily practices alone is not enough, since they are present in several other social contexts (in the family, club, churches). In the school, corporal practice has to be thematized, since, as an element of culture, it is not neutral or exempt and also constitutes a space for the struggle for meaning validation. For this reason, the teacher worried about problematizing the meanings attributed to the circus.

Another representation was shared with the

group by a child who after having attended with his family to the children's show titled "O Circo do Seu Lé" brought leaflets and reported the experience in the conversation. The presentation made some criticism and proposed the reflection on the asepsis and aesthetic excellence almost unattainable of the globalized circus groups, which have as maximum representative the Canadian Cirque du Soleil. A folder of the show was posted at the door of the room, which provoked many dialogues with and between the parents, who knew the theme of the project developed by the group.

The children from G3 and their families socialized their knowledge, exchanged information and extended what they knew about the circus. Canen and Oliveira¹⁴ call this exchange of discursive hybridization and attribute to this practice the possibility of recognition of the plurality and provisionality of discourses that cross borders and promote creative intercultural syntheses.

In the process of hybridization, the dominant and colonialist discursive frameworks themselves can be reappropriated, 'translated' into new cultural references, based on contact with plural cultures (p. 64)¹⁴.

By providing the contact with various representations, the developed proposal avoided cultural daltonism¹⁵, that is, not seeing the many cultural possibilities present in the groups with which we live. The actions developed brought the perspective that all social groups are producers of culture and all cultures are equivalent, including children's cultures with the recreation and resignification of circus activities. In investigating the origin of certain postures and the emergence of the concepts and prejudices of cultural manifestations, the work developed provided the social anchorage to the knowledge¹⁶.

The planning of the pedagogical activities was recreated from the 'tips' or answers given by the children, without pre-established didactic sequences. Interwoven with several voices, the teacher resisted the homogenizing tradition to build new practices and new knowledge. Making room for the new possibilities recreated by children, circus practices have been resignified and transformed into circus plays. Re-signification, according to Cultural Studies, is the process of attribution of new meanings. In the study of a certain corporal practice different interpretations can appear and, consequently, new meanings can be incorporated; new experiences can be realized from the point of view of children and the possibilities of the school space.

Valuing experiences and exchanges between different groups is one way of recognizing children's cultures. The children establish negotiations and relationships that end up being expressed in the games. Both the deconstruction of biased views on various bodily practices and reflection and questioning, make it possible to understand the socio-historical construction of bodily practices, as well as to bring up the different meanings and power relations they represent. An important moment in this process is the critical reading of body language. Criticism constructed from the constant exercise of questioning the unique truths.

The activities proposed for the group of children also had as a concern to elucidate the meanings of the corporal practices for the group to which they belonged, to interpret them in the school context, to re-signify them according to the characteristics of the group, to deepen the knowledge initially available and to promote a dialogue with other sources.

In this sense, the pedagogical work included theoretical research, which in the case of the young children was carried out mainly by the teacher, besides the experiences and experiments whose objective was to discover new information about the body culture, to exchange experiences and to expand the initial knowledge.

As the project progressed, children were questioned about what set them apart from adults. Such questions were an attempt to know the meanings shared by the group. For, as BUJES¹⁷ points out,

cultural practices are meaning-giving practices because, in establishing codes that are shared, they allow communication between a particular group for which such meanings make sense (p. 4).

The symbolic marks that make the difference between adults and children (tattoos, using money, etc.) were mentioned and identified by children. And in the face of a girl's statement that "only adults wear piercings," the teacher fostered critical thinking with images of indigenous children bearing body piercings and brought new elements that demonstrated the relativity of discourses enunciated as "truths" and sought to uncover the power relations, questioning the social hierarchy reproduced by children, assuming the recognition of differences and non-acceptance of discrimination.

In analyzing the course of the pedagogical work carried out, one observes the articulation and integration of different knowledges, breaking with the habit of an exclusively motor Physical Education. The sensitivity of the teacher to see, to hear, and finally listen to the various representations transmitted by the children was important for the planning of the activities, giving the work an artistic character, which makes unique each pedagogical experience, without copying or attempted reproduction¹⁸. In addition, directing the look at the relations of power that permeated children's relations, made possible their questioning, as well as glimpsing the transformation, since the submission of the different ones is not in line with the democratic principles proposed for the current public school.

Finally, the pedagogical experience investigated recognized and respected children's corporal cultures, pointed to the recognition of the teacher as an intellectual capable of managing the whole educational process and constructing didactic situations that provided opportunities for reflection on the new social configurations, without conforming or adapting to the existing scenarios. On the contrary, the educator sought transformative alternatives from a critical eye.

There is no way to become a critical teacher, if one does not access a plurality of references, with sufficient freedom to express opinions, create relationships, construct meanings and knowledge. The expansion of the pedagogical experiences by which culture is produced and reproduced, circulating different knowledge about corporal practices, is a fundamental base to the creation process, since it widens the body of knowledge related to the characteristics and functioning of each bodily practice, as well as it enlarges the network of meanings and differentiated modes of communicability and comprehension through body language.

When planning the pedagogical work with young children takes as a starting point the culture, the teacher has to use the theoretical knowledge combined with the experience and the sensibility to elaborate proposals based on the children's answers, recreating and planning the each step of the curriculum.

With regard to the methodological course of the research, we learned from Becht¹⁹ that in studies with children it is necessary to: "abandon a technique of the acculturating word in which childhood is entangled" (p. 83) and allow the answer not only through the word, but be attentive to gesture, signs and different languages. To listen to children only ears and tape recorders are not enough.

It is important to construct "expressive competences" and possibilities of communication between adults and non-adults so that the research register "is not that of surveillance and capture", but so that one can actually hear the voices of childhood¹⁹.

Children's cultures presented themselves as fundamental elements for the planning of educational interventions. As we observed, listening to children, giving them time and space to play, respecting their many expressive possibilities and trusting in their abilities, were key positions in the training of children. If the objective is a pedagogical work focused on the democratization of knowledge and social relations, this can be a path.

The critical analysis of the experience shows that one of the fundamental characteristics of the work developed was the recognition of children as historical subjects, owners and producers of culture. It is, therefore, the assumption of a political and pedagogical position on the part of the professionals who work in Childhood Education.

Resumo

A Educação Física na creche: tematizando as práticas corporais

A investigação aqui apresentada analisou e interpretou uma experiência pedagógica de Educação Física na creche. No percurso metodológico valeu-se de diversas ferramentas de base etnográfica (observação participante e registros em caderno de campo) e nos referenciais teóricos dos Estudos Culturais. O trabalho pedagógico desenvolvido, ao abordar e problematizar as lutas por legitimidade que permeiam as práticas corporais, contribuiu para potencializar as vozes das crianças, ampliando as oportunidades de reconhecimento das diferenças e promovendo o estabelecimento de relações sociais mais democráticas.

Palavras-chave: Educação Infantil; Educação Física; Cultura; Identidade.

Notes

- a. Old Chinese toy composed of two hemispheres joined and inverted (the two cavities are externally positioned), fixed by a small cylindrical axis. The object slides spinning at high speed by a string whose ends are fixed in two small rods, where it is held to move it. The play consists of juggling, for example, throwing the diabolo and supporting him in the fall.
- b. Trapeze and Zipline are suspended devices (by rope, steel cable, pulleys, tracks, winches, among other resources). The trapeze is a traditional circus apparatus and allows aerial acrobatics. In the zipline there is the slip of a pulley by a rope or steel cable, which allows carrying out routes by air.

References

- 1. Lazzarotti Filho A, Silva AM, Antunes PC, Silva APS, Leite JO. O termo práticas corporais na literatura científica brasileira e sua repercussão no campo da Educação Física. Movimento. 2010;16(1):11-39.
- Borba AM, Goulart C. As diversas expressões e o desenvolvimento da criança na escola. In: Ensino fundamental de nove anos: orientações para a inclusão da criança de seis anos de idade. Brasília: Ministério da Educação, Secretaria de Educação Básica; 2007.
- 3. Richter, AC, Vaz AF. Corpos, saberes e infância: um inventário para estudos sobre a educação do corpo em ambientes educacionais de 0 a 6 anos. Rev Bras Ciênc Esporte, 2005;26(3):79-93.
- Wiggers ID. Cultura corporal infantil: mediações da escola, da mídia e da arte. Rev Bras Ciênc Esporte. 2005;26(3):59-78.
- 5. Neira MG. Educação Física na perspectiva cultural: proposições a partir do debate em torno do currículo e da expansão do Ensino Fundamental. Horizontes. 2009;27(2):79-89.
- 6. Macedo EE. Educação Física na perspectiva cultural: análise de uma experiência na creche [dissertação]. São Paulo(SP): Universidade de São Paulo, Faculdade de Educação; 2010.
- 7. Corsino P. As crianças de seis anos e as áreas do conhecimento. In: Ensino fundamental de nove anos: orientações para a inclusão da criança de seis anos de idade. Brasília: Ministério da Educação, Secretaria de Educação Básica; 2007.
- 8. André ME. Etnografia da prática escolar. Campinas: Papirus; 2000.
- 9. Frow J, Morris M. Estudos Culturais. In: Denzin NK, Lincoln, YS organizadores. O planejamento da pesquisa qualitativa. Porto Alegre: Artmed; 2008.
- 10. Brougère G. Brinquedo e cultura. São Paulo: Cortez; 2006.
- 11. Foucault M. Microfísica do poder. Rio de Janeiro: Graal; 1979.
- 12. Foucault M. Vigiar e punir: O nascimento da prisão. Petrópolis: Vozes; 1987.
- 13. Neira MG, Nunes MLF. Praticando Estudos Culturais na Educação Física. São Paulo: Yendis; 2009.
- 14. Canen A, Oliveira AMA. Multiculturalismo e currículo em ação: um estudo de caso. Rev Bras Educ. 2002;21:61-74.
- 15. Stoer SR, Cortesão L. Levantando a pedra: da pedagogia inter/multicultural às políticas educativas numa época de transnacionalização. Porto: Afrontamento; 1999.
- 16. Grant CA, Wieczorek K. Teacher Education and Knowledge in the "Knowledge Society": the need for social moorings in our multicultural schools, Teachers Coll Rec. 2010;102(5):913-935.
- 17. Bujes MIE. Que infância é esta? XXIII Reunião Anual da Associação Nacional de Pós-Graduação e Pesquisa em Educação; Programa e resumos; 2000. p.1-15.
- 18. Corazza SM. Planejamento de ensino como estratégia de política cultural. In: MOREIRA AF. Currículo: questões atuais. Campinas: Papirus; 1997.
- 19. Becchi E. Retórica de infância. Tradução Ana Gomes. Perspectiva, Florianópolis: Editora da UFSC; 1994. p. 63-95.

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Submitted: 21/09/2014 Revised: 01/05/2015

Accepted: 06/01/2016