

We have reached the fourth and final issue of *Education and Research* in 2012, which brings thirteen articles that we have sought to group not so much according to their themes but more because of the problematizations they indict. This first block brings works that refer to public education policies in their dimensions of school management, curriculum and broader social participation. In a second set, texts on higher education discuss issues such as academic production, university teaching practice and conceptions of knowledge. Following, we have grouped a set of articles that provide contributions to teaching practices, particularly with regard to special education, by addressing the problems more directly linked to the school and to everyday school life. We close the issue with an article that turns to an experience that is unique and more distanced in time: the anarchist schools of Sao Paulo city in the early twentieth century. In a way, this text serves as a counterpoint to the others because it indicates other school projects at stake then.

The first article in this issue provides an important synthesis and analysis of Sao Paulo state public education policy since 1996. For its writing, Maria José da Silva Fernandes examined broad legal documentation and centered her focus on the reconfigurations of the figure of the teacher pedagogical coordinator, marking a significant difference between old traditions linked to this subject – more related to autonomy and pedagogical articulation – and the new conceptions, subjected to the business logic that has guided the actions of Sao Paulo state government for over twenty years. *The teacher-pedagogical coordinator in Sao Paulo state schools: from the pedagogical articulation to the management of educational reforms* seeks to look into the issue from both the internal point of view, of the school unit, and from broader conjunctures of the advance of a neoliberal education perspective in the West, particularly in Brazil. The article also recovers the view of teacher unions, particularly that of APEOESP (formerly Association of Teachers of Sao Paulo State Public Education and today 'Union of Teachers of Sao Paulo State Public Education) on the guidelines issued by the State Education Department and on the role of pedagogical coordinators. The author's criticism focuses on the ambiguity of official measures, which simultaneously consider old demands of public teachers but offer them new contours. The central hypothesis is that the successive resolutions, from 1996 to 2010, greatly changed the role of the teachers-pedagogical coordinators at school, distancing them from possible and welcome articulations and taking them to the field of oversight, optimization of resources and management of individuals. Finally, we emphasize the fact that, although the author denounces the *managerialist* and *performatic* character of these reforms, she distrusts their full efficiency and points daily school activities as a space for resistance.

The following article, *The participation of the education community in school management*, offers contributions to the reflection on public education policies from an overseas perspective. The authors – Luísa Veloso, Daniela Craveiro and Isabel Rufino – linked

to the *Centro de Investigações e Estudos de Sociologia do Instituto Universitário de Lisboa* (Centre for Research and Studies in Sociology, Lisbon University Institute), begin the text with a sociological discussion about school as an organization and highlight that there is a strong relation between the improvement of this organization and school success. The article was written based on the analysis of external assessment reports of about three hundred Portuguese schools, from 2006 to 2009, grouped into three broad categories: innovative school organizations, traditional school organizations and diffuse school organizations. The later are schools marked by faculty's greater instability and students' material hardship, but with occasional good practices of participation of the educational community in their management. Throughout the text, there is a fundamental question about the not always harmonious relations between the legal measures prescribed by the managers of the school systems and the diversity of school realities to which such measures apply. By analyzing reports and demonstrating assessment results in tables, the authors point to displacements in the relation between the State, teachers, students and their families: if, in the recent past, this equation tended more to the approximation between the first two actors and to the distancing from the *third*, the new policies implemented by the Portuguese Ministry of Education in recent years have tended, in the analysis, to a stronger approximation between the state and the education community, a concept that encompasses both the school actors themselves and those located outside the school. Other controversies permeate the article, such as the privatization of public education through private enterprise participation (not only by supplying resources but also by guiding studies), teachers' resistance to new mechanisms of teaching evaluation, and the different levels of participation that range from the presence of the community in specific school events to the consolidation of instances of representation with decision-making power. For all that, the text helps think about the difficulties we face to build a democratic school.

In *Public policies, youth and social inequalities: a discussion about ProJovem Urbano in the city of Belo Horizonte (Brazil)*, third article of this issue, Geraldo Leão and Symaira Poliana Nonato investigate the expectations of young people marked by social exclusion in relation to school. Through qualitative analysis focused on the experiences of students who participate in that program, the authors recover painful experiences of the youth and a view of the school experience basically linked to final certification. The program analyzed – ProJovem Urbano, National Program of Youth Inclusion: Education, Qualification and Community Action in the city of Belo Horizonte – is a federal government initiative in partnership with states and municipalities and it is intended to young people aged 18 to 29 years who have not completed basic education. It aims to provide professional training, foster community action and help them complete basic education. The article is divided into three phases seeking respectively to draw the socioeconomic profile of these young people, recover their previous experiences of schooling and work and, ultimately, survey and examine their expectations for the future, which are considered essential for the proper forwarding of public education policies designed to tackle social inequalities. The authors state that, although there is a

wide internal range of experiences, young people who seek the program generally belong to the lower classes and are marked by the condition of poverty; as for school, they share unsuccessful trajectories filled with episodes of failure and dropout, although for reasons ranging from the early entry in the labor market to the lack of interest in school and the knowledge produced there. In relation to their expectations for the future, the authors suggest the complexity of an inclusion that takes place less because of the desire for knowledge and more due to the need for certification, exacerbated by the clear contradiction between the promises of schooling and the reality of labor markets. Therefore, the students who participate in the program regard the school in a rather instrumental way, the school being subjected to other broader interests ranging from the responsibility to support their children to the dream of attending university. The article is thus a valuable contribution to the study of public education policies for youth and adults because it adopts a more biographical analysis perspective and advocates the appreciation of these young people's experience to plan and implement educational programs for them.

Written by Luiz Antonio Cunha and Vania Fernandes, the next work discusses the issue of religious education in public schools and the debates about it during the drafting of the *Lei de Diretrizes e Bases da Educação Nacional (Law of Guidelines and Bases of National Education)* – LDB, from 1948 to 1961, date of its promulgation. Resuming the proposed amendments to the legal text, the authors show the clashes between groups of defenders of religious education in public schools – at that time, mostly Catholics – and groups favorable to secular public education. The *Diário do Congresso Nacional (Journal of the National Congress)* was the source chosen to understand the new dimensions of that struggle, especially to study the legal restrictions to religious instruction in public schools. Such limitation consubstantiated in the final wording of the articles of the LDB of 1961, which stated that such instruction should not entail cost to the public purse. In addition to the specific knowledge of the struggles in the period proposed, the text titled *A curious agreement: religious education without cost for the public authorities in the first LDB* offers rich material for diachronic reflection on this theme, which is still on the agenda and which is so striking in the history of the Brazilian education, albeit with new facets and amidst the emergence of other religious groups in the country.

In this first axis of public policies, we have included a text that is tangential to them: *The field of research in ethnomodeling: emic, ethical and dialectical approaches*. This choice was made because, when dealing with cultural aspects of knowledge, the authors ultimately propose curriculum changes, especially in mathematics teaching. Written by Milton Rosa and Daniel Clark Orey, the paper presents an innovative analysis of research in the field of ethnomodeling, valuing the processes and the meanings attributed to knowledge by different cultural groups. The authors seek a possible way for the dialogue between different kinds of knowledge, without subjecting their cultural forms to the academic form, but pointing ways to a fruitful dialogue. The title of the article – *The field of research in ethnomodeling:*

*emic, etic and dialectical approaches* – in fact summarizes the proposal, since it emphasizes the need to think about the production of knowledge and its teaching in three dimensions: the emic one, from within, from an ethnographic perspective; the etic dimension, defined as the view of the other, in this case, the academia; and finally, the dialectical dimension, in a dialogue between the two previous ones in which there is no room for hierarchies. As a matter of background, there is a cultural view of mathematics itself and an effort to understand it beyond the more conventional standards and formulas. Mathematics here is thought of concurrently as a cultural practice and as science, valuing the reciprocal enrichments that the dialectic between these two approaches can offer. In addition to an important discussion of the literature on ethnomathematics and ethnomodeling, the article seeks to demonstrate the relevance of such approach using the study of the construction of the hut Tipi by Sioux Indians in the United States. It highlights the complexity of the calculation which that group had to develop intuitively to produce a type of housing which supported the climate conditions of North American plains. By extension, the work helps to think about the teaching of mathematics, and perhaps about some of the reasons of its failure, stressing the need to value other forms of production of mathematical knowledge as a path to a more fruitful mathematics education.

The next group of articles addresses more directly the higher level of education in three areas: academic production, teaching practice and the conceptions of knowledge and nature. From the perspective of general didactics, *An investigation into the teaching practice at the university: epistemological obstacles and alternatives based on the General Constructivist Didactics*, addresses a provocative topic that has occupied a growing place in the education field: university teaching. Two Colombian researchers from Antonio Nariño University, Julio César Tovar-Gálvez and Germán Antonio García Contreras, do the reflection through a theoretical essay that defends that the university teaching action, usually performed by experts without pedagogical training, requires theoretical-didactical grounding to be performed. Such a stance, more easily defended in theory than in practice, points to the need to invest in lifelong education for university professors. The text argues that the constructivist approach would be an effective alternative to promote the construction of knowledge in this area.

In *Are the federal universities of Minas Gerais becoming more unequal? Analysis of the production in scientific research and knowledge (2000-2008)*, Tullio Chiarini and Karina Pereira Vieira present the results of a study in the field of public policies, especially of the evaluation of Brazilian public university in relation to production in science, technology and innovation. The study refers specifically to the federal institutions of higher education in Minas Gerais. It divides them in two groups for purposes of analysis: “a group classified as *relatively more significant in the production of scientific knowledge* (UFMG and UFV) and another ranked as *relatively less significant in the production of scientific knowledge* (other federal institutions of higher education in Minas Gerais, i.e., CEFET/MG, UFJF, UFLA, UFOP, UFSJ, UFTM, UFU, UFVJM, UNIFAL and UNIFEI)”. From this hypothetical division in

two groups, the authors find “the trajectory of approximation/separation between the agents that compose them with regard to some basic indicators of knowledge production: a) research groups per university, b) researchers per university, and c) publications per university. “It is a quantitative study that uses Theil T inequality index, whose theoretical framework originates in the field of economics and statistics, and is more unusual in educational studies. In this sense, the decision to publish this work reveals one of the purposes of our journal: to bring contributions from ways of thinking and producing knowledge of related areas.

In the following article, researchers from the Federal University of Rio de Janeiro investigate the views of *nature* on the part of professionals in the field of biology and physics, relating the differences observed both to training and to other aspects of social life beyond the academia, linked to their different social commitments and worldviews. The authors also unfold their concern with understanding how these different senses of nature cross the training of future teachers and may imply several proposals for environmental education. Through what they call *analysis of the discourse of collective subjects*, Carolina Lima Alves Belo, Eliane Brígida Morais Falcão and Flávio Silva Faria worked with semistructured interviews and with very direct questions ranging from the definition of nature by the subjects interviewed to their possible religious beliefs and practices. The results indicate profound differences in terms of representations of science that unfold aspects of teacher education. In search of a synthesis, the authors find that for physicists there is a philosophical dimension of analysis far more forceful than for biologists; and these, in turn, tend to have a more empirical and less *theorizing* attitude than that of physicists, a condition that could also be related to the fact that the training in biology offers more environmental education. Without making any judgments or valuations about the representations obtained, the article *Life processes, matter processes: the different meanings of nature among biologists and physicists*, also ends up addressing the relations between subject and object of knowledge, the history of scientific thought and teacher education. The article can be read as a *sign of the times* because, having been written by *natural* scientists, it turns not to traditional objects, but to the subjects who produce knowledge in their multiple dimensions of life and, thus, in a perspective of culture and experience.

The third set of articles consists of four papers that offer contributions to reflect on teaching practice. Three of them were written by authors that are directly or indirectly linked to the area of special education, which indicates the commitment of *Education and Research* to provide conceptual and practical elements to researchers and educators who dedicate themselves to an area rapidly expanding and of unchallenged social relevance. Not coincidentally, most researchers of this block have a background in psychology or work in graduate programs in that area.

*Potential downsides and upsides of the education of pupils with intellectual handicap* by Dáisy Cléia Oliveira dos Santos, the first article of this set, stems from extensive literature research on intellectual disability in order to gather relevant conceptual and instrumental information on the theme. The author begins with a careful

terminological review of concepts traditionally used in the area, such as disability and deficit, in order to discuss their implications regarding cognitive, behavioral, emotional and social aspects, in order to guide and “enhance the overall educational work with the student with intellectual disabilities”. The text can become an important tool to enhance the knowledge of special education teachers because it harmonizes the critical analysis of literature on the subject with practical aspects related to inclusion.

The following article, *The social perception of people with Down syndrome: the EPSD-1 scale*, is collaboration between three European researchers of the Universities of Murcia, Spain, and Oporto, Portugal. Jesus Molina Saorin and Mónica Vallejo Ruiz, from the University of Murcia, and Rui Manuel Nunes Corredeira, from the University of Oporto, present the academic community a unique scale to approach the social perception that undergraduate students of physical education have of people with Down syndrome. The article offers the reader the opportunity to follow all the theoretical analysis underlying the process of constructing this new scale and intends to influence both the training of future graduates in physical education and their views about people with mental disabilities.

The third article of the block was produced within the Graduate Program in Special Education, Federal University of São Carlos. With *Student motivation in fundamental education: relations between academic performance, self-image, attributions of causality and goals*, the researchers Melissa Picchi Zambon and Tania Maria Santana de Rose propose to take the issue of motivation in its always complex relations with academic performance, the latter a subject matter widely discussed by school psychology. This text is the result of quantitative research supported by the application of three instruments translated and adapted to the Brazilian population, by means of which the authors intend to characterize the motivation of a group of students in terms of what they consider the three major cognitive aspects related to motivation, namely: self-concept, causal attributions and achievement goals. The work also aims to identify relations between self-concept, causal attributions, achievement goals, and achieving high, medium or low performance in Portuguese. The authors were responsible for the translation and adaptation of the self-description instrument. The complexity of the issues involved in understanding the phenomena in focus – interpersonal relationships, academic achievement, self-concept or self-image – takes us back to the classic essay of the master Dante Moreira Leite, who shows us how literary description can teach us fertile ways, distinct from those that we have traditionally used to understand society and life in contemporaneity.

The last article of this block, *Hitting does not educate! Parental education practices and their repercussions in the school context*, as clearly stated in its title, deals with the important issue of domestic violence very timely because of the *Lei da palmada* (Law of spanking). Naiana Dapieve Patias, Aline Cardoso Siqueira and Ana Cristina Garcia Dias aim to address the “effects of coercive educational practices for the development of children and adolescents, seeking to understand their influence

on behavior and learning in the school environment”. This essay is based on a literature review that leads the authors to state: “coercive strategies that use physical force to educate are associated with negative outcomes in the human development of children and adolescents, such as aggressive behavior and low self-esteem, constituting a risk to healthy development”. However, it is known that such practices are still very common, since they are socially shared and usually considered natural by families. Thus, this article intends to provide “ways to equip education professionals to identify the cases of use of coercive strategies and physical violence in children’s education, as well as preventive actions with students and the community.” It includes discussion on the importance of school psychologists’ work in partnership with the school in such a process.

This issue concludes with an article by Carmen Sylvia Vidigal Moraes, Tatiana Calsavara and Ana Paula Martins titled *Libertarian teaching and the relationship between labor and education: some reflections*. The authors recover the figure of Professor João Penteadó and his libertarian schools in São Paulo city from 1912 to 1923 by referring to another time – the early decades of the twentieth century –, to other schooling experiences and other social and educational projects. Using a set of primary sources comprising internal school documents – such as *Boletim da Escola Moderna* – and periodicals of the anarchist press, they provide a view of aspects of the libertarian presence in São Paulo, better known for its actions with the labor movement. The study of *Escola Moderna No 1* from 1912 to 1919, and of *Escola Nova*, from 1920 to 1923, allows knowing the effort of a heterogeneous group of activists to implement a more egalitarian educational project. The existence of these libertarian schools for over ten years, their proposal of integral, rational and scientific education, as well as their political orientation, present questions that go beyond the limited time of their actual existence: certainly it is not possible to repeat the past, nor replace it at the present time, but knowing other pedagogical projects helps think the meaning of our own experience. One must also consider the importance of the study of educational institutions which were somehow on the margins of official initiatives, although they dialogued with them. Introducing other possibilities of school and education, the article recovers a dimension of the utopia in gloomy times.

We have started this issue with an article that critically analyzes the measures taken by São Paulo State Government to build a public education policy guided by values and prescriptions that are much more corporate than educational; we close it with a text that recovers the experience of a school guided by principles of self-management and thought of as fair. Between them are texts that point to new didactic practices and forms of knowledge conception, to the reality of higher education in the country today and the multiple modalities of educational and social inclusion. Not bad for a journal whose major goals are to disseminate scientific production in the field of education and to improve teaching and schools simultaneously and in an intertwined way.

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