

THE SOCIAL TRANSFORMATION AS OBJECT OF STUDIES AND PRACTICES

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A “nation’s narrative” (Hall, 2003, p. 52) represents common experiences that provide sense and consolidate a nation. The members of a community share this narrative, linking their daily lives with a national fate. In Brazilian narrative, the presence of some socio-cultural groups was weakened, as well its importance. An integrative discourse of assimilation of races and knowledge was constructed that helps, too, to dissimulate facts, to obtain/handle a social peace through an adequacy of roles played along the History. However, due to the action of some groups connected to the minorities fighting[1], a nation’s counter-narrative has been engendered that allows the perception that, after some centuries, psychological, political and economical Brazilian miscegenation did not occur, only biological one.

The Group of Studies and Researches in Ethnomathematics[2] at the University of São Paulo, GEPEM, has produced some researches that contribute for the constitution of this counter-narrative, when we point that there is not recognition and respect to the particularities of learning and ways of being of diverse Brazilian socio-cultural segments. Our production make clear that, in scholarship space, some groups are segregated by means of discourses and attitudes able to hurt their dignity – by comparing historical, aesthetic, familiar and social knowledge and values which take as referees the dominant culture of European matrix imposed to them by curriculum. So, the GEPEM searches not only to contribute to the constitution, establishment and strengthen of discursive practices, but too of no discursive practices that may lead to the acceptance and reinforcement of different ways of being, thinking, educating and do mathematics. In fact, acting together with indigenous people, afro-descendents, young and older people included later in scholar system, together with rural population and the urban marginalized one, GEPEM members turned itself to: a) situations of knowledge production, b) situations of learning and teaching, c) teacher education, d) curriculum, and e) evaluation. In this playing, GEPEM puts problems over power questions, citizenship, tension between universal and particular knowledge, ethnic-racial interactions, among others. Such a wide actuation, at the side of so diverse socio-cultural groups, has demanded the adoption of theoretical contributions coming from various areas – such as education, sociology, anthropology, linguistics, philosophy, history and studies of imaginary. So, GEPEM’s members have taken support at some authors/thinkers as Foucault, Hall, Spengler, Durand, D’Ambrosio, Freire and others.

From this situation, GEPEM’s production not only elevate, acknowledge and enrich diverse socio-cultural groups as well their knowledge, remarkably the ones that

identify with measurements, counting, temporal and spatial localization, among others. Our works also try to insert these groups and knowledge within a net of strategic discourses, not letting that may play dispersive roles in a network, but applying to the accentuation of their particularities and adequacy. In this sense, we try to reinforce the self-esteem of marginalized groups, strength cultural roots, give value to daily knowledge, to focus different ways of being, thinking and educating, but, overall, to utilize the teaching of Mathematics to come to the reinforcement of “minorities” strategies to fight for what they consider as important. In order to make known the group work, we prepared a “mosaic” based on works that have been developed by some of its members and that we intend to present at MES 5. Some of them are mentioned below.

SILVA (Vanisio L.) questions the relationship between educators and afro-descendents students. He makes a retrospective of Brazilian history under a perspective that may reveal the existence and the origins of the tensions that take place in socio-cultural and fighting relations by conquering power in Brazilian scholar and extra-scholar environments. From this situation, as well as the interest of afro-descendents movements in the sense that the specificities of slaves descendents acquire respect in scholar environment, Silva asks: Which are the feelings, the rationality and the logic present at the acting of the mathematics teacher faced with the necessity of consideration of the afro-descendent culture in scholar environment? His objective is to question present postures and practices and to contribute to its modification in order that they come to enrich the historical and political knowledge and trajectories of Brazilian afro-descendents.

FANTINATTO (Maria Cecilia C. B.) has pretended to understand the relations between mathematical knowledge constructed by young and mature workers in a low earning community, in their daily life and mathematical scholar knowledge. The research made accentuated the preeminence of socioeconomic aspects in processes of construction/representation/utilization of mathematical knowledge in an urban context, pointing this aspect as a significant factor of identity, transcending cultural factors exclusively.

SANTANA (Ivanilde C.) directs herself to teachers that act next to young and mature people having as objective to apprehend the methods they use in searching for the development of geometrical thinking of their pupils. Together with this, she analyses the relation between teachers and students along the learning process trying to detect some moments in which are created pedagogical situations that permit to the eleven the applying of his previous knowledge.

JESUS (Claudio L.) noted that etnomathematics present in practices of indigenous professionals education at Xingu – place where live together seventeen Brazilian indigenous nations. In this case, focusing the acquisition and (re)creation of mathematical knowledge – specially of quantitative, special and temporal relations –

he suggested the assumption of actions and positions to be adopted by the educators involved with multicultural teaching.

OLIVEIRA (Cristiane C.) investigates the adequacy of Durand' Theory of Imaginary (1996) as a theoretic-methodological proposal for mathematical Education. As Durand argues, myths exist to “explain, know, understand, and treat with social, cultural and imagistic environment “. So understood, myths appear in the primal triangle person-nature-other obeying to the human pulsation of transcendence, as says D'Ambrosio. He also argues that myth situates itself in the matema, inside the etymology of the word itself mathematics. Based in such authors, as well as in approximations between the mitemas and the matemas, Oliveira makes use of the proposal of Myth Critics to throw a new sight to the history of Brazilian mathematical education. In doing this, she exposes original considerations over a character of this history and shows that the scenery of researches in Mathematical Education gets wider with the approach of the studies of imaginary.

COSTA (Wanderleya N.G.) also approaches herself of imaginary studies by means of the subsequent question: How mathematical knowlege of indigenous people relate to their myths? She observes that foundational myths develop their senses under the form of knowledge, laws, values, rites, and so on, transferring part of the significance of their pattern inclusively to their mathematical creations. Having these observations as basis, she analyses comparatively the mythical cosmology of the A'uwe-xavante - an indigenous brazilian people - with that of greek people and occidental/Christian ones, bringing to light not only different (ethno)mathematics, but too identities, subjection forms, disciplinary methods, discursive practices as no-discursive ones, among others.

MESQUITA (Mônica M. B.) follows her production by recognizing the complex interactions and cultural and multicultural interpenetrations occurring in the learning process. Based on this, and also on empirical data that emphazise spatial notions, she points to the importance of the other in the contemporaneous discourse, as well as the needing for researchers of evincing the links among theory, practices, power of corporification and ethic of identification.

SANTANA (Diana P. F.) questions the relations between universal and particular knowledge, in order to understand how a specially type of production, thinking and/or mathematical activity, intimately linked to a cultural and social practice, determined and internal in a group, break with the borders of this grouping and comes to be an “universal” patrimony. FREITAS (Regina S. A.) takes as object of investigation/reflection her own playing with children of 5th grade of basic school in urban environment. She investigates the possibilities that are generated when the docent develops his classes on the basis of a dialogue with students, trying to construct a wider comprehension about these individuals and their previous knowledge. On her turn, BEZERRA (Keli M.) investigates the mathematical teachers representations about the primordial knowledge of the pupil – built up in his daily

making/ knowing – searching to identify how this knowledge is conceived, and how it has been taken into account in the mathematics teaching, and, facing it, she discuss the role of mathematical educator in the relationship teaching-learning.

SANTOS (Eliane Costa) examines the rationality presented in geometrical constructions that appear in Kente tissues (or textiles), a culture of people of Ghana, as well the possible interactions with Etnomathematics. She searches, with this, significant ways for the teaching/learning of afro-descendants at public schools in Salvador, Bahia.

SOUZA (Régis L.L.) intents to answer to the coming question: Is it possible to understand the implications of Continuously Teacher Education courses over the transformations of docent practices? His aim is to institute a reflexive discussion about these courses, in order to observe its interrelations, intentions and significations as spaces of experiences changing amidst professionals of the education area. To come to this, he puts his grounds on Etnomathematics as a proposition that tries to give voice and place to the different socio-cultural groups on the basis of appreciation of knowledge that teachers and students create in their daily tasks. A similar work is that one of SILVA (Paulo S. P.), that has as locus a poor and isolated place in Brazil, with a political trajectory plenty of troubles, where it has gained priority give more power and control to the eleven over his own apprenticeship.

Finally, DOMITE (Maria do Carmo S.) has actuated at the coordination of teacher education courses for indigenous teachers of five different ethnic groups, as well as at the coordination of GEPEM itself. Further, she undertakes researches about mathematical teacher education. Domite detaches the focus of formative process of teachers as unique social and intellectual individuals to a perspective in which they ally to other individuals, the students, respecting the culture they bring considering their socio-cultural proveniences. In this sense, Domite research tries to become a medium for the generation of a structural change in the ambit of teacher education, denouncing that if pupils are not totally aside of the proposals of teacher education, ation, they are not understood as protagonists in this process. She, then, suggests that the socio-cultural knowledge of eleven be contemplated in teacher education, processes.

NOTES

1. Minorities not in quantitative sense but in terms of power and representation.
2. ABREU, Rodrigo – BEZERRA, Keli – CHIEUS JÚNIOR, Gilberto – COELHO, Sonia – CONRADO, Andréia – COSTA, Wanderleya – CREVATIN Rita de Cássia – D'AMBROSIO, Ubiratan – DOMINGUES, Kátia – DOMITE, Maria do Carmo – FANTINATO, Maria Cecília – FERREIRA, Rogério – FREITAS, Regina – JESUS, Cláudio – KUMAYAMA, Hideo – MARTINS, Adriano – MESQUITA, Mônica – OLIVEIRA, Cristiane – RIBEIRO, Esmeralda – RIBEIRO, José – RIBEIRO, Uilson – SABBA, Cláudia – SANTANA, Diana – SANTOS, Benerval – SANTOS, Eliane – SILVA, Paulo – SILVA, Vanisio – SOUZA, Clécio – SOUZA, Régis.

