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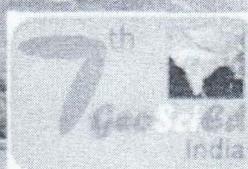
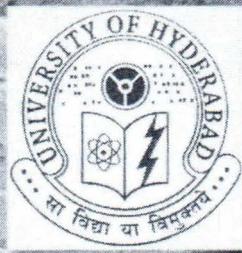
"promoting GeoScience education worldwide"

# 7th International Conference on Geoscience Education

5-9 September, 2014  
Hyderabad, India

## Volume of Abstracts

*Organised by*  
University of Hyderabad



Geosciences for Global Development



"Promoting Geoscience education worldwide"

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## Environment, Education and Social Learning to Sustainability and Geoconservation in the Gold Cycle Geopark – Guarulhos –São Paulo, Brazil

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Relations between Environment, Education and Social Learning focused on sustainability and geoconservation have been experienced in the continuing teacher training program "*Environment, Education and Social Learning: social and educational practices for sustainability and geoconservation*". The course is conducted by the Laboratory of Research and Practice in Education and Sustainability, University of São Paulo, in partnership with the Municipality of Guarulhos; State Department of Education of São Paulo; Institute of Geosciences - USP/GeoHereditas; Geological Institute of São Paulo and Guarulhos University. The course aims to promote the study of geo-environmental and socio-cultural heritage with reference to archaeological gold mining structures from the Brazilian colonial period present in Guarulhos and Mairiporã Municipalities, São Paulo State, southeastern Brazil. These structures are represented by dams, tanks, paved and unpaved channels, water ducts, drains, gold mining fronts and remains of a water-powered iron engine, which have a great archaeological, geological, and historical value (Aguilar et al., 2012). Gold mining archaeological structures are going to be preserved within the scope of the Gold Cycle Geopark that covers an area of 16,900 ha. The Municipality of Guarulhos with 1,400,000 inhabitants faces serious environmental problems in the area of the future Geopark, such as social differences, poverty, lack of water and sanitation, conflicts over land use and land degradation. In this context, social learning, which involves in its concept the place-based education, dialogue and co-responsibility can have a meaningful collaboration. It promotes a (re) thinking of concepts and the construction of new knowledge and values about a place that can contribute to transform the practices and develop skills for environmental problem

management, conflict mediation and preservation of archaeological, geological, and historical values, through processes of co-learning with participatory methodologies. In this sense, teacher training promotes the dialogue between Earth Sciences and Social Sciences for the understanding of environmental issues through schools. It discusses the relationship between teaching in Geosciences and its contribution to (re)cognition of place/environment for citizenship, exercising, thus civic practices, focused on improving the quality of life (Santos, 2011). As a tool of Social Learning the socio-environmental mapping (Santos and Bacci, 2011) is applied to (re)cognition of place that enables the geo-environmental and socio-cultural survey. Other tools such as Word-cafe and Role-play (Jacobi, 2011) are used in the teaching formation to promote local critical analysis. In conclusion, we believe in this project of education for sustainability in developing educational scholar projects guided by social and environmental practices in a collaborative nature. This approach emphasizes the contribution of critical practices at school to establish connections between cognitive processes and the daily life of different social actors: teachers, students and community and public managers. The teacher training in the area of Gold Cycle Geopark will contribute to understanding local problems, environmental conflicts, and to promote a dialogue between different stakeholders capable to influence the implantation of the Geopark and consolidation of public policies to protect the archaeological gold mining structures. Social actors' participation in the development of collaborative projects, related to education and environment, promotes citizen transformative action for both sustainability and geoconservation.