

Teaching Practices between Geography and Arts Using Relief and Soil¹

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Abstract

The account aims to show a practice between the teaching between geography and art, associated to relief and soil, developed in an elective school subject (to students from 6th and 7th grades) named “geoart”: relief and soil. The practice was carried out at Joaquim Francisco de Sousa Filho School, a full-time school located in Presidente Kennedy, a neighborhood in Fortaleza, Ceará, Brazil. For this purpose, art was adopted as expression, where it is possible to expand students’ intelligence and perceptive skills throughout different forms and languages. As for geography, the function is to analyze the integrating action of natural and social events, which encourages criticality. By associating both school subjects, it is promoted a consistence in meanings beyond knowledge. The approaches focused unusual natural forms of relief and soil, listing the connection of nature components and the importance in preserve them. After a geographical knowledge which covers the highlighted areas (*Pedra Furada* (The Holed Stone) in Jericoacoara, *Pedra do Frade e da Freira* (The Friar and Nun’s stone) and *Dedo de Deus* (The Finger of God)), such rocky formations would be represented by modeling clay and soil pigments, linking theory to practice through the art of reinvention.

1. Introduction

The account has as objective to expose practices of an elective subject, which incorporated geography and art, developed at Joaquim Francisco de Sousa Filho School, a municipal full-time school in Fortaleza, Ceará, Brazil. Such educational model pursues the construction of autonomous, competent and solidary students, hence, besides mandatory subjects, there are a couple of others which assist in students’ personal formation, according to Freire’s social constructivism (1996), who defends the use of constructive practices, in case, of elective subjects that contemplate discussions regarding different others expressed in a ludic manner, based in Costa Falcão (2014).

In this context, “geoart” was introduced as an elective subject, in the morning period, listing the connection of nature elements and the importance of protecting them. It has been considered only three areas, namely: *Pedra Furada* (The Holed Stone) in Jericoacoara, *Pedra do Frade e da Freira* (The Friar and Nun’s stone) and *Dedo de Deus* (The Finger of God), which are some of them the most visited tourist spots in Ceará every year. The employed methodology connected theory and practice, and for that, after a video exhibition, students utilized modeling clay and clay to recreate these three tourist spots emphasizing the connection to art, in which manual skills were encouraged and enhanced, that is, hands serve both to receive information and deliver answers. Manual skill interacts along cognitive functions making up a complex system of integrated moves, motor coordination, discipline and teamwork, where problems can be solved, and goals reached in different forms. Therefore, it is essential to professionals of education a solid and continued qualification, what works as a support to form his professional education considering that only with a deep study and new knowledge it can be pointed fundamental issues in the process of students’

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formation, and only the proposition of teaching and learning overcomes work challenges providing a meaningful instruction. In this point, it is worth mentioning that LDB – *Lei de Diretrizes e Bases da Educação* (Law of Directives and Bases of National Education), in chapter II, clause states: § 2nd *The Teaching of art, especially in its regional expressions, must compose the mandatory curriculum component of basic education* (Law n. 13.415, 2017), in its early version it was not alluded regional particularities (BRAZIL, 1996).

What stands out is that the target public comes from a community which faces poor situations regarding to economy and infrastructure, consequently, it is necessary to use various teaching strategies as a form to encourage them to pursuit better life conditions through knowledge and abilities acquired in school. In the course of classes, there has been a notorious students' excitement besides the comprehension of topics and knowledge offered by such practices.

2. Methodology

For Libâneo (2001, p.123), to obtain success in activities is essential the elaboration of a planning that consists in an activity of prediction with respect to the action to be implemented, requiring necessity meanings to meet possible planned objectives, procedures and resources to be employed, time of implementation and ways of evaluating. Thus, the planning process and exercise refer to an advance of the practice as a form to predict and plan intended actions and results, being an important and required activity to make decisions.

From these premises, it was sought through the creation of an elective subject, to show the purpose of teaching art and geography, considering that the last one leads students to an understanding of the world where they live by means of a methodological practice which integrates competence and ability applied to spaces where they live. It is emphasized that the practice here adopted by art has not as objective the creation of artist, but create knowers, observers-leading and decoder of masterpieces. By associating these knowledges, the teaching becomes holistic and attractive.

Under Barbosa's proposal (1991), the essential is to develop abilities which allow students to construct their citizenships and capacity of perceive and reflect on various artistic phenomena. As a support for this, Fusari and Ferraz (1999) highlight that teachers influence in the process of students' training when they have clarity of their proposals and definition of methodologies to be used in classrooms. Therefore, to impact on the formation of citizens who knows art and to improve the quality of aesthetic and artistic school education, it was vital the organization of proposals in a way art was present in classes proving itself useful in students' lives.

In this logic, education is had as reference, that is, the path that leads to the construction of society and its values, due to assume a way to process and build knowledge, and with that, be capable of reshape social organizations, though, what is noticed goes against the purpose of what is education, in special, the manner to mediate the respective knowledge. About it, what is realized is that education is an important tool, which is expressed in students' paper and development, promoting the creation of conscious citizens through the binding of knowledge and abilities delivered by geography and art.

Thereby, it has been used structures based in relief modeling, stressing tourist spots in Ceará along with implementation of soil pigments, based on ink, to illustrate the colors of the shapes. Before applying the proposal, it had been held theoretical classes about environments previously discussed, debating its formation and dynamics in the context of landscapes.

3. Results and discussion

To contextualize, figures 01, 02, 03 and 04 shows the initial exhibition where a video about *Pedra Furada* (The Holed Stone), located in Jericoacoara (Ceará), was presented and denotes the importance of students to maintain the focus and observe details in the area, encouraging them to develop a different view, once each natural element plays a particular role in nature constitution and human action in this dynamic keeps building them.



Figure 01: expository class about *Pedra Furada* (The Holed Stone) (Jericoacoara- Ceará)
 Figures: 02, 03 and 04: drawing up *Pedra Furada* (The Holed Stone) (Jericoacoara- Ceará)
 Photo by the authors.

It is also worth mentioning that modeling clays were made by students using wheat flour, water, oil, salt and dye (exposed in figures 05 and 06), associating them to soil pigments, what for Costa Falcão (2014), stress the connection with the subject of art, in which many manual skills were encouraged and enhanced, that is, hands serves both to receive information and deliver answers.



Figures: 05 and 06: preparing work material (modeling clay)
 Photo by the authors.

The first exhibition was about *Pedra Furada* (The Holed Stone) located in the municipality of Jijoca de Jericoacoara, in the west coast of Ceará, about 300 km from Fortaleza. It is an enormous stone which projects itself in the sea, being that in its lower part, the water probably dug a considerable big passage in a weaker part. The action of the climate, the eolic system and the marine erosion, structurally and lithologically dependents among themselves, shaped this part of the passive continental margin of the South American Plate. Ponta de Jericoacoara has been created throughout these interactions. The greater resistance of the rocky point in relation to the surrounding units promotes its prominence in topography.

Regarding to the stones in the local, there are both mobile and stationary dunes due to the vegetation, mostly of the type 'barchan', what edify the extended dunes field of Jericoacoara, evidencing the great amount of sedimentary load and the action of a strong eolic system implemented in this region. The relief comprehension does not allude only the origin structure and shape, but when interpreted by means of human action, that is, decisions which may take place over the planning of the use of soil, tends to its models become important mechanisms to its own organization model of occupation of such areas. Based on this, Ross (2006) states:

Relief forms must be seen and understood as one more amongst many other nature components and, from a human perspective, as a natural resource since the variations in the types of forms facilitate or complicate the uses which human societies do regarding reliefs [...]. It is not the soil conditions and climate the only inducer factors in the process of production of spaces by human societies. In fact, it is a set of factors which can be distinguished in two big groups: natural and cultural-economic factors. (ROSS, 2006, p.62). It becomes appropriate, from the author's colocations, emphasize the human influence over the relief, since through productive activity, in which is portrayed its action in nature, has been boosted geological and geomorphological effects that are diversified along temporal process characterizing truly anthropogenic modellings.

In this case, it is visible the integrative function that reliefs establish to environmental studies based in Ross' conceptions (1995), geological uprisings assist in the comprehension of pedological typologies, and with textual, structural and chemical information provided by soil analysis and by climatology contributions one can understand relief dynamics and its fragility level. In this respect, it is wild known that natural mean holds structural organizations evident in different settings of relief and its comprehension, exceeds its origin and shape structure, alluding human action, in particular, in decisions regarding the planning of soil uses, since they are important mechanisms concerning the organization and occupation of such spaces.

In relation to the intensity of impacts caused by men to geological geomorphological layer, Peloggia (1998, p.74) considers such effects in three levels:

“1 –The relief modification and landscapes physiographic changes (for instance, corrections in river channels, earthwork, emergence of eroded areas, mining areas, etc.); 2 – Alteration in landscapes physiology by creation, induction, intensification or modification in the part of the behavior in process of external geological dynamic [...]; 3 – The creation of correlatives deposits comparable to quaternary (or technogenic deposits), which will be constituted in “stratigraphic milestones”.

It is noticeable that such effects in relief has been giving different characteristics to landscapes appearance and changing natural dynamics, and in each level human action is more intense, leading some areas to an extreme case, that is, delivering a high content of degradation.



Figure: 07: drawing up *Dedo de Deus* (The finger of God) (Rio de Janeiro)
By the authors.

In physical geography, relief assumes in Casseti's view (1991), a global dimension which corresponds to an environmental issue, since the geographical layer provides all topics which involves the relation between man and natural mean. Therefore, it is appropriate an analysis in an integrated and systematic view.

The second relief used has a shape that reminds an index finger pointing to the skies (figure 07), and the rest of the fingers bent by its side. For this reason, comes its names – *Dedo de Deus* (The Finger or God), a 1.692 meters rocky block situated in Rio de Janeiro. It is inserted in Serra dos Orgãos, which is characterized by a rugged topography and great unevenness, which varies from 100 meters to its summit, *Pedra do Sino* (The Bell's Mountain) having an elevation of 2.263 meters.

This mountain is found in the highest areas in Serra do Mar and it is made up of old rocks, which have been suffered some recent movements creating a big wall that goes from the coastal plain to the state where it is located. The third natural form taken into consideration is made up of quartzite – rocks quite resistant to erosive processes. It is 680 meters height and is in the boundaries of Cachoeiro de Itapemirim, Itapemirim and Vargem Alta do Espírito Santo, all of them municipalities from the state of Espírito Santo. As said in legends, a friar and a nun met each other while working together to catechize the natives. This way, a forbidden love was born, which became stronger and stronger and more and more impossible. They withstood, tried to choke their feelings for each other and therefore they have been rewarded by God with the transformation of this passion in a stone, immortalized, and now an object of admiration by the ones who pass by this region.



Figures: 08 and 09: drawing up *Pedra do Frade e da Freira*
(The Friar and Nun's stone) (Espírito Santo)
Photo by the authors.

It is important to highlight that during classes it has been notorious the personal and intellectual growth on the part of students, once the stages of theoretical, material construction and performing processes were respected considering they understood that in everything they do is necessary preparation, focus, experience exchanges and ask for support whenever necessary. Besides being said by students that it has been easier to learn the topics since they felt themselves more actives, the methodology employed is attractive. Additionally, as a form to reinforce one of the legacies left by the elective subject, a play was presented recreating the legend involving the formation history of *Pedra do Frade e da Freira* (The Friar and Nun's stone) (Figures 08 and 09), moment this when knowledges were blended in a productive and fruitful manner.

From that assumption, both manual and cognitive skills interacted along each other creating a complex system of integrated movements, motor coordination, discipline and teamwork where problems can be solved, and goals reached in different forms. The activity has also encouraged children to put in practice new ideas and take risks. In addition, students involved have learned to express themselves better, that is, art delivered an opportunity to turn abstract ideas into something concrete and visual, essential factors in the current teaching (figure 10).



Figure: 10: projects exhibition
Photo by the authors

To reinforce, the objective of geography is to take students to an understand of the world where they live and the geographical space in a local and global scale. In this perspective, according to PCNs, the approach of geography topics is part of the perspective of landscapes reading, what serve as an apparatus to students in all school periods to

know the construction processes of geographical spaces, from the recognition of its social, cultural and natural elements and the existent interaction between them and the comprehension of its transformations, placing them in different space-time scales. Therefore, understand how these natural components relate themselves to each other and how the man acts consequently changing them, is to perceive how the spatial and landscape transformation process happens.

For that reason, Karcher (2007) states that teacher need modellings to guide their trajectory. The comprehension of teaching goes beyond rationality and technique, it consists of a bond among emotion, authorship, ideas exposition and its perception before the noticeable which is inherent to subjectivity, that is, by analyzing landscapes and understand its influence in the daily life, what implies geography must have endorsement in school due to be constituted in a pretext to think of our existence while nature.

4. Considerations

From these approaches, it is noticeable the importance in the relation of those subjects previously discussed, in which was emphasized the importance of students focus and observe details in each area, fact this that stimulated the development of a different perception, once each natural element plays a particular and integrated role in the constitution of nature as well as human action in this dynamic.

In this case, it has been started a new elaboration of teaching which meets social purposes of its own, and yet, one of the basic conditions that can enable a didactic renewed to services of problematization of knowledge and the construction of meaningful and functional learnings and in addition useful to the ones involved.

Based on this thinking, the insertion of this methodology covers both theory and practice bringing benefits to the learning process, besides working as a teaching conductor agent, delivering different manners to pass on the same content, also stressing that each student has a unique form to learn and interpret geographical space, and this is what makes this profession a singular and special one, and is surrounded by competences and abilities which empower teachers in the art of teaching.

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