



The Contribution of Carto Graphic Workshops in the Social Sciences in Basic Education: Case of the III Cycle (6th And 7th Class) in Primary School of 1st and 2nd Grades 24 July

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Abstract

This article discusses Cartographic workshops as an indispensable didactic experience in learning that enables an educative action through practical work that puts the teacher and student in the search for construction of the knowledge geocartográfica Content Cementific as well as the materials for the graphical representation of the geographic space. For this purpose, we present a theoretical review on the methodologies used to construct the knowledge of the geographic space. By the nature of the objectives and the object of study, we base the qualitative research. The results of the research on the approach of the geocartogr content in the Social sciences discipline reveal a fragility that is related to difficulties in conceptualizing and creativity of this situation Teaching by teachers, and not exactly with the lack of material for operation. The geocartographic contents contained in the programs of the discipline of social sciences should be ministaled in an organized way, where the teacher should resort to literacy and cartographic language as well as the symbology so that the Student to construct in itself a self-knowledge about the geographic space and its representations of the place where he lives.

Keywords: Cartographic Workshops; Geographic Space; Geocartography, Basic Education

Introduction

Geography as a school discipline, its understanding becomes effective and efficient when aided by the didactic materials illustrating the phenomena that occur along the geographic space. This intrinsic relationship geography – cartography, is complemented with the existence and functioning of cartographic workshops, which in the vision of [1], should be seen as a didactic situation of Consolidation of the theoretical-practice and ideal for the construction of knowledge and production of the didactic material necessary for the representation of the geographic space in the EAP with the aim of constructing learning and enhancing the development of attitudes, skills and Think critically with a view to improving the quality of education. It is in this context that the prefeels article analyzes to what extent the cartographic workshops contribute to the construction of knowledge of the geographic space in the PEA of the social sciences. It should be noted that this research was focused on the first and second grades of July 24 in the city of Xai-Xai, and for data collection, a

questionnaire was used for teachers and practical exercises for students, as well as the script for observing classes.

Cartographic Workshops in the Social Sciences Theoretical Approach

Geographic space

Geographic studies, by enabling the comprehension of society-nature relations, induce the notion of citizenship, leading the student to analyze his actions as an active and passive agent of the environment and, therefore, capable of transforming the geographic space. Thus, pedagogical practices should be geared to the problems of the community in which students are inserted, because this is the local spatial scale in which their transformative action can be immediate. For Santos [2], the geographic space is defined by two components: “on the one hand, the set of natural objects and objects resulting from the action of Man, on the other, the whole of the relations that

define society. "The geographic space is appropriate in different ways by different peoples at different historical moments. Besides the natural factors, the occupation and use of a space depend also on the ideological construction and moments. The technological question is also another factor, because it determines or allows different ways of appropriating, occupying, maintaining and transforming this space. The history of the so-called relations between society and nature is, the substitution of a natural environment, by an increasingly artificialized means. In every fraction of the Earth's surface, the path that goes from one situation to another occurs in a particular way and the part of the "natural" and the "artificial" also varies, as well as changes but modalities of its arrangement. The geographic space is understood as the production of society, as a result of the reproduction of the social relations of production in its entirety.

Cartographic offices

The cartographic workshop is a fundamental space for the production of peculiar or specific didactic material in the PEA geography. For Carvalho [3], cartographic workshops are "didactic situations that allow an educative action through practical work or in the execution of activities that seek to build knowledge". They can also be considered as a working condition that is characterized by the responsible participation of each subject in the execution of a collective task. In this practical didactic activity in the production of didactic resources, each participant must do the work with zeal and responsibility considering that the fruit can be individual and or collective all engaged in the pursuit of knowledge construction More Systemed with the teacher's help. "The cartographic notions allow the student to perceive and criticize their everyday reality. This is extremely important in contemporary education [4]. However, it is possible through this work to make students learn to find themselves, and, above all, that they insist on the curiosity of knowing where certain places are located and the dynamics of phenomena, the physical, economic, social and The workshops contribute not only to the knowledge of geographic matters, but are of fundamental importance for students to perceive the aspects of geography at the local level, that is, a teaching from the reality that surrounds them. This allows students to think about their space, the place where they live, realizing the influence of it on the local, regional and global scale. Thus, they allow to construct learning and reinforce the development of attitudes and abilities, besides stimulating the student to create, invent, expanding the capacity of concentration, stimulating the thinking in a critical and strategic way. In order to improve the students' learning performance, the teacher should always be able to change paradigms.

Learning Cartography in basic education

The relevance of teaching cartography has shown great importance in the specific field of school learning, essentially in the capacity of interpretation, analysis of phenomena occurring

on the surface and its representation is related to the Stage of cognitive development of the individual, where author Semielli [5] elaborated a cartography proposal for the initial classes and middle level, having summarized in the following molds: In the initial classes, a cartographic literacy work should be performed, with the initial support of the student's concrete space and the work with the graphic representation, subsequently reaching the cartographic representation. Taking advantage of the children's natural interest in the images, we should offer them visual features such as: drawings, photos, mockups, plants, maps, satellite imagery, figures, tables, games and representations made by other children. At this stage, the primary objective is the development of the notions of oblique vision and vertical vision; Three-dimensional image and two-dimensional image; Cartographic alphabet (point, line, area); Construction of the notion of legend; Proportion and scale and laterality/references, orientation [5].

For the first phase of elementary education in the case of MOçambique, we can frame the 1st to 7th grade of EB in which the proposal for teaching cartography is based on two axes: to work with cartographic products already elaborated (maps, cards, plants) and three-dimensional and two-dimensional images (mockups, sketches and mind maps). On the first axis, the aim is to make the student a critical reader and, in the second, form the conscious mapper student. Other elements that influence the cartographic literacy Process can also be cited, such as: the symbolic function and the process of constructing spatial knowledge by the child. The symbolic function is acquired by the child, in socializing in society, as she perceives a link between signifier and meaning or the use of symbols and signs expressing a meaning. Signs are external marks that help man in tasks that require memory and attention. Examples of signs are speech, writing and the representation of space. The development of symbolic function is considered essential for the understanding and construction of the legend of the Maps [6]. This process of cartographic literacy can be carried out in the projective stage, which manifests from the age of 7 years, on average, the maps drawn by the children remain egocentric and iconic; However, they already present coordination and partial connection between the known places and better structured notions of direction, scale, orientation and perspective.

For Pandim [4], cartographic literacy "constitutes the starting point for students to understand what cartography is, to subsequently leave for a construction where students can do the analysis, localization and correlation of maps". Only with the notion of cartographic literacy that the student seeks tools that enable a conscious observation of the occurrence of phenomena of the real world having a more critical view, nevertheless, later that even can locate, analyse and Interpret various types illustrating the distribution informationIs and how one beds the maps. Silva & Castrogiovanni [7], explain that cartographic language "allows to systate information, express knowledge,

study situations, among other things always involving the idea of the production of space, its organization and Distribution ". The authors show that cartographic language facilitates the organization of spatial data or information obtained in various situations as the result of a study of phenomena showing their knowledge in representation. This language can be difficult to apprehend for students, so it is up to the teacher of CS to make this learning more dynamic and understanding with reality. However, literacy and cartographic language are two fundamental components in the learning of cartography in basic education because of its pertinence in the organization of spatial information, expression of knowledge and the representation that are difficult to apprehend for students in the knowledge structure of geographic space.

The Contribution of the Cartogr a workshops fiCthe

The construction of the geographic space knowledge:

The notion of space in the individual goes through phases related to its evolution, in the construction of knowledge, concretely from the lived to the perceived and this to the conceived. The construction and representation of the space can be made through plants, sketches, maps, mockups and other means that use cartographic language. This has the function of communicating and giving information about geographic space through signs. In the opinion "representation is made through signs. A sign is one that represents something for someone; Assumes that it is, an object that is represented and a receiver to whom the representation is directed"[6]. The signs enable communicative constructions of relationships of diversity, order or proportionality existing between quantitative and qualitative data.

Souza [8] It explains that "the construction of knowledge in geography is mainly based on ideas, experiences and discussions, from readings of reality, whose understanding can be greatly facilitated by the wide and adequate use of materials". Knowing the space experienced by the student with the help of the teacher in the reading of the geographic phenomena around them from the instruments produced by them help to enlarge the CCEG, thus, emphasize the use of OC in the EB. In this sense to have mental image of space is to condition you to construct a capacity that allows you to search and organize spatial information. When the categories are thought landscape, place, territory, region, understand how space interferes or influences changes, transformations that this reveals in the landscape, not as fragmented space and inequality, but through a space Constantly built through struggles and achievements.

Strategies for teaching social sciences learning: It should be noted that an approach to the light of the PEB in its description relates to the treatment of the contents within the discipline and the fundamental role that is contributing to the civic training of the citizen, giving him a better insertion in the environment in which he lives , allowing it an active

participation in the social and conomic development of the country. According to INDE [9] It is essential that students can gradually read and understand their reality, position themselves, make choices and act judiciously; That can develop studies that focus on basic questions whose answers should be based on direct experiences and practical activities, for example, what? Where? As? Part of the principle that the student lives and coves in his natural environment where the CS show an interaction that leads to concurrent integration in the integral training of the student, combining the knowledge of the physical and social environment. The work of landscape representation should start with the characteristics that the student touches. This reading occurs directly through the observation of the landscape, or indirectly through photographs, literatures, videos, reports, etc. Thus, the teacher can whenever possible, organize excursions or take the classroom aerial images, common photographs, maps, etc.

From a geographic standpoint, "the search for explanation of the different landscapes as a result of their own combinations that mark their singularities is fundamental, because it allows obtaining solutions for different problems that may exist in each of them, " *ibid*. It is necessary to represent the space, because it is simultaneously, notion the category. Undoubtedly, these are two aspects of the same question, each one guarding its specificities but, at the same time, with its contributions so that students increase their knowledge about space as a notion and as a category. The teacher should consider the ideas that students have about the representation of space, that is, in all classes should be privileged to participate.

Methodology

This section presents the location and history of the study area, the sample, methods and techniques for collecting and analyzing research data.

Study Area Localization: The 1st and 2nd Grade elementary School 24 July, located between the streets Martires of Wirriamo and June 25th, shares N of the same enclosure with the direction of education of the city of Xai-Xai, next to the Provincial Directorate of Agriculture AND Front as TDM In the 2nd communal district of the municipality of Xai-Xai. Founded in 1923, in the colonial era and baptized in the name of Mozinho Albuquerque after colonizing the school was baptized on 24 July in the context of the nationalizations that hold up to our days. The school offers the primary level divided into three (3) Cycles: 1st cycle (1st to 2nd Class); 2nd cycle (3rd to 5th Class) and 3rd cycle (6th to 7th Class), working in 2 shifts. The school has a conventional fence, consisting of 8 classrooms, all filled by wallets in conditions saving some with disabilities. Two bathrooms, a teacher's room, three offices for the Director, Pedagogical Assistant and school secretariat respectively. It has a ballroom soccer field; Has a school production site; A canteen and garden.

Methods, Techniques and instruments: The type of research used is exploratory, which is concerned with identifying and describing the factors that determine or contribute to the occurrence of the phenomenon by supporting observation, allied with the inductive approach, where the generalization Derives from observations of cases of concrete reality, that is, the particular findings lead to the elaboration of generalizations. The data collection was based on the bibliographic research , and it was used to read and interpret the literature concerning books, articles, theses and dissertations that deal with the theme, as well as to document Normative as PEB and PCEB and Direct observation in the context of fieldwork and evaluating the execution of the activity in the classroom and also the collection of information through questionnaires. To represent the data and results of the search used the method description and aggregation that second DAYS “description is to explain through words, and in a way by minorized and orderly. The aggregation can be done with the help of tables, graphs or protocols of interviews. “ In this perspective, in order to treat with specificity and objectivity (to quantify) the information obtained through the forms and questionnaires.

Sample: The VTE research and the randomly considering 25 students, being the representative part of each class of about 5 students of both sexes which corresponds to approximately 11% of each class, which served as a sample in the present study, with Age ranging from 11 to 14 years, being 12 males and 13 females. The school has 2 teachers of CS being teacher 1 (Pf1) of 6th class and teacher 2 (PF2) of the 7th class.

Results and Discussion

Look of the beloved students

The results presented here and analyzed emerged from the application of the survey to the students who were selected for this work, in order to understand the capacities in the act of the representation of the geographic space in the flat map, of the places of its living and the elements it observes.

Mental Map application in social sciences classes

The mind map as a didactic instrument offers a global view of extreme value so that we can move more easily through the information. He doesn't tell you all the information, but he has the most important ones.

Mind Map (home to school route)

We applied the workshop, the mental map, in which we requested that the students draw the route from their homes to the school on a flat surface It started with the distribution of the material (A4 paper, ruler, charcoal pencil and crayons) then an explanation chaired by the researcher, in order that “from the universe of the child to teach her to observe means to give her conditions to verify All important points of reality, which must be recorded through writing or even drawing. “ This activity was aimed at verifying the degree of comprehension and analysis

of space, in addition to some basic notions of cartography and working with the concept of place, space and location of the points or aspects most relevant in their opinion. In this sense, Silvia (2006:94) focuses that “the category place does not underestimate the real, the lived and opens the way for the student to establish relationships with other places and with the world”. One can consider the mental map a good tool to propel students to demonstrate their notions of place starting from their perspectives on the space closest to their reality, and with this it can establish diverse relationships between the local and the global Starting from a geographic concept as the place. They reflect the perception of the student's space. Mental maps are effective instruments to understand the values that individuals attribute to different places. The living space is the set of places of life of an individual. The house, the place of work, the itinerary from one to another place form the components of the living space [10].

It was verified from these drawings, a notion the capacity representative of the space of their daily experience mainly the streets of the city in the trajectory of home to school as well as other places that are relatively known, this can allow to give Address to whom you seek to locate a particular point in the city. In the first drawing according to the graph (2), (P4) about 48% summing (good and enough) of the students is that they managed to make an acceptable representation of this space, perhaps because it is the first experience more the indications of execution promises that with more work Using this tool students can build knowledge of the geographic space, and we think it is applicable in the approach of the CS classes [11].

Mental Map representation of the classroom

In the second mental map of the classroom (Figure 1) in which we request that the students draw the interior of the room by identifying the existing objects, windows and doors, portfolio, teacher's secretariat and the picture. The design made in order to highlight its position in relation to the colleagues and the picture the notion of laterality and position and finally symbolize all elements represented by themselves. Pontuschka [10] emphasizes that the student's design “is for the teacher, an element of analysis on the cognitive development of a certain reality represented by the student.” And so, these drawings end up offering teachers a series of information related to the reality experienced by the students. It was evidenced in this exercise, the student's delivery in flexion over the known space and that carries out activities in his daily life, thus seeks to bring some aspects that call it attention. However, with this order of idea, it is perceived that the mental maps constitute a powerful technique of visual and conceptual registration of information and can be elaborated by anyone, in Practicamente any age. Abdullah highlights that “the importance of consolidating the right-left and above relations-below, among the children to establish in the future the notions of orientation East-west and north-south”. This learning of position and laterality is, in principle,

the spatial orientation, which begins with the exploitation of the body itself by the child must be an important moment of cartographic literacy, which subsequently, at around 12 years of age, will follow For abstractions on cartographic language, which

includes symbols and signs through visual variables, which include points, lines and areas, and qualitative, quantitative and ordered information [12].

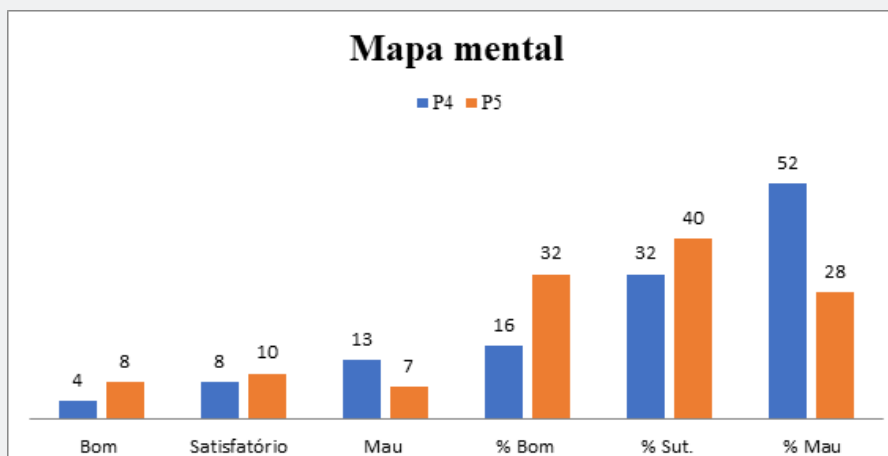


Figure 1: Survey results with students (P4 and P5). Source: author based on appendix.

The mind map explores the fact that our brain “does not work in a linear way, but jumps from one idea to another, randomly, following the associations it discovers”. The production of the mind map presupposes a non-sequently oriented orientation of the subjects to be represented, so you can jump to a subject or phenomena to represent in this way you have the opportunity to re-enter the graphic representation. The students were very happy to represent the classroom with the existing objects and showing the ability of laterality in knowing how to represent the quantity and position of portfolios exist on both sides and where it sits on the other hand the position what exists its FRONT and back. The symbology stands out in this work as one can observe in the legend in each object has its color that distinguishes from the other for better interpretation of the reader. “The symbolic function is acquired by the child, in socializing in society, as she perceives a link between signifier and meaning or the use of symbols and signs expressing a meaning” [6]. The development of the symbolic function is considered essential for the understanding and construction of the legend of the maps. Of the students approached according to the graph (2), (P5) about 72% represented positively when added (good and satisfactory) with the caption the existing objects, (see table Appendix 4).

Conclusion

When we portrayed the contribution of the cartographic workshops in the EAP of the social sciences in the 3rd cycle (6th and 7th Class), we interpreted several approaches to the content of the hypotheses raised throughout the present study, which contributed to the affirmation of the application of cartographic workshops as a fundamental didactic situation in the EAP for the construction of knowledge of the geographic space. It was from this study that it was verified the importance of the use

of cartographic resources in the teaching of geography contents, obviously verified from the exercises that we guided during the research in the cartographic workshop, and students have the Ability to graphically represent phenomena that observe their back building, a capacity, reflective attitude and critical thinking where creativity and rigor are associated with the geographic and cartographic reading of maps. Evidently, we can ascertain that the view and performance of teachers who teach the discipline of social sciences about the cartographic workshops or, the geocartografic contents, which the prior, constitutes a difficulty in addressing the contents, in many Cases are related to teacher education, which nevertheless has a strong relationship between teaching quality and teacher education, that this is the responsibility of the guardians who tutor the educational system, in order to condition a teacher education that Respond to the needs required in acting as a skill and quality in the creativity of the production of didactic media to facilitate their work.

Suggestions

The cartographic workshops are of great importance in the teaching-learning process, in the analysis of cartographic representations in the understanding and construction of the concept of geographic space in the classroom and that enables the teacher to work with Various geocartografic themes. Thus, the production of cartographic resources useful map, mockup, gaping, poster, from the knowledge antecedents of the students, thus starting the quick understanding of the geographic space having concepts on the Laterality and position and that in all classes of social sciences, the teacher should take with him the map as a didactic means to concreter the connection of theory and practice. We suggest to the teacher a cartographic literacy that tends to develop competencies related to reading, interpreting

and using cartographic resources in the social context and not just the school. The continuous training of teachers in matters of production and use of cartographic resources is of paramount importance for the improvement of the quality of the teaching of social sciences.

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