THE MAKING OF SCHOOL ATLAS TARGETED TO CHILDREN IN THE FIRST GRADES OF FUNDAMENTAL LEARNING IN THE SCHOOLS OF BRAZIL

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ABSTRACT

The Instituto Brasileiro de Geografia e Estatística – IBGE (Brazilian Institute of Geography and Statistics) has the mission of portraying Brazil, offering the Brazilian society systematic information about the reality of the country in its territorial, demographic, social, economic and political dimensions. Brazil is very poor in terms of cartographic products for children in the first grades of school. The aim of this paper is to describe the processes used by IBGE for making and spreading an important cartographic product among Brazilian students in the educational field. This product is MEU PRIMEIRO ATLAS (MY FIRST ATLAS) and has as target the children in the first four grades of education, with ages between five and ten years. Using amazing means for learning cartography, and with the help of the modern technology of mapmaking, this atlas aims to contribute for the reduction of cartographic illiteracy in Brazil.

1 – INTRODUCTION

The Brazilian Institute of Geography and Statistical (Instituto Brasileiro de Geografia e Estatística) – IBGE integrated unit of Planning Secretary of Republic Presidency, has a mission itself under the law nº 5878, by 05/11/1973 that to fix such as principal basic: “ to secure studies and informations by statistical, geographic, cartographic, and demographic constitution or nature, needful to knowledge physical, economic and social reality of country, specially searching to economic and social planning...”

We can realize, therefore, the importance and recognize the historical tradition of IBGE such as the source main of informations to decision makers in general, making and giving consistency informations in the cartographic, geographic, demographic, economic-social and environmental resources fields.

So, it is possible to affirm that IBGE is main unit of information in Brazil, considering the comprehensive range of informations presents on the extensive multidisciplinary spectral.

IBGE itself to insert how a portion of Planning National System, in special at National Cartographic System, that to do something again such as a thing mains sources surveyors geographical referenced.

Today, from among several products available to Brazilian society from IBGE, we can found maps and sheets in several scales of systematic mapping in Brazil. The institute produces: maps of country, at geographic scales, 1:2.500.000 until 1:30.000.000; sheets of Brazilian sistematic mapping scales, 1:25.000 until 1:1.000.000; besides municipality maps of Brazil, territorial basis to collect data census of country.

To understand witch is the educational sector of a country is a key sector to development to any nation. The IBGE since some time ago has been investing with weigh on the producing cartographic products of educational stamp, looking for carrying Brazilian students mass substantial, the important notion to understand the land living. So that, we believe that is possible to transform young people on the future citizens’ aware about his social responsibilities, at concomitances, living in manner as gregarious possible.
In this context, the first aim of this paper is to show the institutional effort of IBGE to available the cartographic product to children at grades first of educational system. The objective is to available this fundamental knowledge since younger students, to educate a future citizen aware about the importance to know their territory.

We understand that this cartographic product will improve very much the educational/pedagogical processes about the geographical knowledge, with a sigh in elementary level on the Brazilian learning system. The follow reflections will guide our reasoning:

- Is it possible to use local maps, from the reality lived by students such as auxiliary tool on the Geography learning?
- Is it possible to work thematic how globalization, social exclusion, social shattering, decline of nation states, making blocks economics from critical awareness induction fundamental levels to students by teachers, using cartography how main catalyst?
- Is it possible to foment critical quotations in classroom about new conceptions in reference country and urban spaces to brazilian municipalities from cartographic teaching, that directly, send to regional specifics lived by students and teachers?
- Is it possible to treat the question about non-agricultural activities in country areas, or to discuss the reasons about the presence at agricultural activities in urban areas, discussing in classroom with local maps?
- To think and to reflect with critical spirit in classroom the environmental questions and defensible development to make possible to the citizens to form the persuading and foreseeing aim self-supports possibilities from these reflections. Local, municipal and census sector’s maps with an association to geographical learn method; to attend up how important is on citizen’s formation job?
- To think and to reflect with critical spirit the insert of students-been and teachers-been on the own living space from the association between local maps and teaching geographical method, to help citizens to do a reflection with a critical spirit about the reasons economics-social at being on the local specific to insert in the census sector, district, municipal, region-micro, region-macro, state, country, continent, planet, universe?
- From this critical reflection and the increasing awareness change his behavior aiming the pro-active manner to modify their socio-economical-cultural insertion at local specific, increasing much more the interrelations with other places on the world, which is more “smaller”?

From these reflections, we can realize that is very important to share the knowledge cartographic to the younger ages, and it is possible such as make up at cartographic product that is very apportion called “MY FIRST ATLAS” seeing that our main objective will be to introduce cartographic thematic on frolic and enjoy manner to brazilian students, searching to take their attention to work with eminent on these models fanciful live reality which are maps. After this, we will explain about a little historical of the geographical learning in our country.

2 – A LITTLE HISTORICAL OF THE GEOGRAPHICAL LEARNING IN BRAZIL

Now is very important to explain synthetic considerations, thematic no stress, about evolution of geographical learning on the elementary and high school level in Brazil.

According Rua (1999), the influences occurring in Geography teaching in level at high school came from three instances and with three sources.

At first from Europe, through French Geography and Germany in punctual manner. These first influences occurred from forties years ago, during Vargas government, nationalistic, and that this time, he gave priority to the expansion of economic boundaries to inner of Brazil. The Geography gave priority to make inventories and begun the organization of a big mass of information about the country, with characteristic that had given priority to the geographical space description.
The IBGE was created at this time, on May 29 1937, from join of Statistical National Council and Geographical National Council under signed and great man’s vision from Mr. Teixeira de Freitas.

On second time, occurred at seventies, during militaries governments, when gave priority planning strategic, such as interference tool. The Geography, at this time, guided by north-americans influences through studies of Quantitative Geography, brought the priority bias more technical, to put on high correlation with statistical, trying to approach these sciences in logical sciences, when by influences of the classic positivism, only the science of scientific thematic, which to approach to physical and mathematics.

These changes also to attained high school level with detach the 5692/71 law that had stronger influence to Geography, when incorporated histories studies under the possibility to join called Socials Studies, which during twenty years at elementary school of the country. This change just showed devolution of the Geography scholar branch of knowledge.

On the other hand, it was to increase the figure of searching geographer far away from professionals of teaching in professionals that working with the main purpose has been to search a center of Geography, the IBGE. The methods used by Quantitative Geography, didn’t work really to the high and elementary schools when traditional descriptive focus proponed rated. When the teacher’s formation in History, the Geography was ignored totally.

It actually provocateur a huge hole between vanguard’s production and mass formation of Socials Studies teachers. These one didn’t to give consistency neither both History and Geography studies.

It is important to cause to stand out which until begin seventies the IBGE supported a professional to bring out to date program tiled Holidays Courses for Geographical Teachers. It was interesting tempting to execute IBGE’s vocation to spreading institutional studies in this field, just as concept dissemination.

A third time, occurred at Geography’s Congress in Fortaleza city at 1978, when was incorpora toll’s Marx on geographical speech, sate knew how Critical Geography. In this phase several disciplines how Philosophy, History and Sociology are to raise the value at Geography teacher’s formation.

Some information in this epistemology phase of geographical study came to high schools teachers, but still predominated with frequency considerable the Geography of description and remembrance. Some projects aiming to work Geography’s contents, with emphasis in social questions, from the local realities lived by students, was an important tempting to awaken the citizenship in this level, but only by punctual focus. We can understand in this point, some punctual projects in Rio de Janeiro City.

The examples of Holiday’s Course to Teachers and the tempting to citizenship’s awaken made by UFRJ at eighties, showed that both University and IBGE can do it much more than was made by Geography’s learning in high school level.

As integrate the capacity high of IBGE to make products which exhibition geographical’s space, and capillarity high to penetration in national territory, with searching make today by University, as much concepts as technologies, are making optimum conditions to students on XXI century, it can transform selves in aware citizens about the mission to be fulfill by each one at the society, convince oneself to performance how aware actors in territory transformation. Actors according Gomes (1995) “social self which put on biological relation at values and in what these constructions to become his “environmental middle” true”.

In this context, the IBGE through the Documentation and Dissemination of Information Coordination of Special Projects managed the Atlas Project, that had the collaboration of several professionals, education’s advisers, that were the authors of publication, to make over all copyright to IBGE. It accounted with IBGE professional’s too, through Geosciencies Directory across Cartography, Natural Resources and Geography’s Coordinations, that propitiated scientific-technical basis of book. In this sense the product “ MY FIRST ATLAS” pursuit privileged educational-pedagogical focus, that encourage the knowledge lived by students, aiming approach them of the best possibility form of the cartographic science.

3 – THE PRODUCT – METHODOLOGY AND APLICATION
According to National Curricular Parameters at Brazil (PCN) since the first cycle it is important that the students know some procedures which take part of the methods to build geographic knowledge. To observe, to describe, to represent and to build explanations are procedures that they can learn to utilize, even though do it yet with little autonomy, needing of teacher’s orientation and presence.

To draw is a good express manner in first cycle of elementary school level and a register’s procedure utility by Geography. Besides, is an interesting manner to propose that students begin to utilize by objective manner the notions of proportion, distance and direction, foundations basic to understand and useful cartographic language.

The work with cartographic language construction, in return, may realize considering the references already itself utility by students to localize and to orient at the space. From the situations in that split and explain knowledge, the teacher can build others situations when the students can plan and amplify their ideas about distance, direction and orientation.

The begin of build’s process of cartographic language occurs by working of production and lectures of simple maps, in significant situations of learning that what the students has questions to resolve themselves to communicate, to obtain or to explain informations. And, how in the build of other languages just the same at first, doesn’t may characteristic, neither the production nor lectures. In this phase is important to child works with types unlike of maps, atlas, global, etc with good quality and updated, by situations that students can interactive with them and to make each time with more accuracy and fit.

The PCN guide that the study of environmental middle, working with images and place’s representation are didactic resources interesting through the students can build and rebuild, structure and comprehensives manner, the images and perceptions that have about landscape local, awareness about effective entailed states and identify with the living places.

The cartographic product “MY FIRST ATLAS” aiming to attain the goal defined by PCN easing the perceive of territory informations through understanding about what is the maps, its concepts’ main and geographical question’s perceive from manipulations by themselves.

The product was organized how the follow:

At first split the Atlas in two parts: Part I – Building and understand the maps and Part II – Maps. In the first part we objective to adapt the child at cartographic environment, to assign the main elements that involving at map’s construction, by simple and concise form. At second, when the children were beginners, are presented then the maps to lecture, interpretation and discussion. Of course to better progress is necessary educator’s company. Afterwards we’ll describe belief manner the parts constituted of the product.

### 3.1 PART I – BUILDING AND UNDERSTAND THE MAPS

In this first part, we introduce the child to cartography through mental maps that allow the students represent by free form of a geographic space mentally disregard for them and from this introduce, step by step, other questions linked to making maps and geographic knowledge. See the Illustration 1 in the next page, an example of mental map built at child of elementary school:
The introduction of mental maps at activities development in classroom consent that can discuss geographic space by collective manner, then the first step is the exposition of the knowledge geographic space in each individual where is inserted, through produced draw, and from this, to discuss the space represented with other individuals. The results that aim with introducing mental maps is that an attractive manner for students, the teacher can prepares activities by easy and enjoy manner other maps elements how legend, coordinates, scale, orientation from among other elements, until that the draws built by students can be complements and transformed in maps by gradual manner, at the same time that will boarding Atlas themes. See the Illustration 2, an example of mental map displayed at precedent figure, with legend.
We understand that use of mental maps at activities in classroom are fundamentals to learning of systematic and thematic cartography, because only at this manner, the teachers can clarify to perceive the notions of each individual has about orientation, localization and knowledge of the daily and work this collective manner, from individual vision of each student. This way informally and practice will be introduce other important elements to build maps what coordinates system, scale and modern techniques of information’s searching. See some examples bellow at figures 3, 4 and 5.

Illustration 3: Wing’s Rose  
**Source:** My First Atlas, page 51.  
**Illustrated:** Martha Werneck

Illustration 4: Reference Lines  
**Source:** My First Atlas, page 54.  
**Illustrated:** Martha Werneck

Illustration 5: Reference’s Lines over Earth  
**Source:** My First Atlas, page 56.  
**Illustrated:** Martha Werneck
3.2 – PART II - MAPS

This part that more alike with conventional Atlas, is presented only that after worked with children all construction and understanding a map.

Illustration 7: Map of fauna threat Extinction
4 – FINAL CONSIDERATIONS

The study’s object of Geography is geographic space, of that establish for a social relations texture, economical, politics and culturals, becoming the results of a no equal relations between humans beings and nature along side of time. The geographic space’s study will duty therefore, embodiment in own analysis the produced’s dynamics. Nevertheless with frightening frequency, the representation of geographic space at learning’s process, disregard systematically this dynamic’s incorporation, so results in no contexts studies of historical perspective of build’s territory from humans’ interferences. The technologies, mainly of remote sensing and digital cartography, can include to contribute to change this scene, to make easy the making of products how “MY FIRST ATLAS”.

With a help of good pedagogical basis, products how presented here, establish educational scenes news, renewers had been the entrance’s door to searches and experiences at cartographic science learning.

5 – BIBLIOGRAPHY


6. BIOGRAPHY OF AUTHORS

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