

AN ATLAS: THE PERFECT TOOL TO LEARN GEOGRAPHY

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Introduction

In Brazil, official programs in Geography recommend the study of the space surrounding a child. However, primary level teachers do not receive specific training in Geography. In addition, the discipline itself is oriented towards Portuguese and Mathematics. Furthermore, only one or two hours are dedicated to the study of Geography on a weekly basis. Most of the time, the study of the surrounding space or the "commune" is limited to a simple enumeration of the mayor's name and principal roads. In the best cases, models are made, but they lack basic indications such as scale, orientation or topologic reference. In addition, a map legend rarely appears, making its interpretation difficult.

A team of Brazilian researchers have been working on several themes related to the psycho-genetic processes of cartographic literacy. Their main goal is to improve the teaching of Geography through the contribution of Cartography. This team meets on a regular basis through workshops and symposiums.

Pedagogical possibilities

The following section outlines numerous skills and activities that pertain not only to cartographic literacy, but also student learning in all areas; the suggested skills are followed by pedagogical suggestions:

- the abilities to observe, register, represent, construct diagrams, analyze, interpret and write descriptive and analytic text:
This involves lessons in which children observe the weather and the temperature, and register the data on a daily, monthly and annual basis. At the end of each of these time frames, students will be asked to organize and represent the data on a diagram. At the end of the year, students will be required to analyze all of the diagrams, interpret the data, and finally, explain the concept of climate in a short text;
- the abilities to observe, devise a plan, choose a legend, develop the notion of scale from the observation of real space, and to understand orientation and to use a compass:
Lessons will promote students' understanding of urban planning and its forms. Through observation, the student will develop a sense of urban planning and identify the elements that form the immediate and regional contexts. The concept of scale will be studied through the comparison of a particular distance covered in reality and its subsequent cartographic representation. Afterwards, students will be required to orient themselves and adjust their mapmaking in accordance with the help of a compass;
- the ability to read, analyze statistical data, formulate conclusions and questions, do research on simple questions, register answers, classify, analyze and interpret meaning:
Lessons will enable students to develop skills in basic concepts of the geography of a population. The child will be encouraged to conduct surveys within his or her community to discover the difference between population and active population, and growth and internal-external migration, for example. In class exercises will reinforce the skills learned through these activities;
- the abilities to construct a table with data from a descriptive text, and then to analyze, understand, choose a legend to represent different kinds of data (quantitative or ordered), complete and interpret a map, and to draw conclusions:
Activities will develop students' abilities to construct maps using quantitative data. To accomplish this goal, students will be guided to build a map legend and to draw a map with data retrieved from a text and from a table. Students must then formulate conclusions on the map's theme and on the distribution of the school population in their municipality;
- the abilities to question, research, register, think, classify, understand and interpret cartographic and administrative materials:
The student will obtain an understanding of the local administration operation. The student will analyze material through reading and understanding the functions of each component of this local administrative organization. The administrative structure of the municipality serves as a first step toward the comprehension of the following

concepts: territory appropriation by population, activity organization, and citizen responsibilities.

References:

LeSann, J. and Ferreira, S. (1995). Atlas escolar de Contagem. Belo Horizonte: Perform Editora, 43 pranchas.

LeSann, J., Silva, M. and Moura, A. C. (1997). Atlas escolar de Gouveia. Diamantina: Prefeitura de Gouveia, 34 pranchas.

LeSann, J., Moura, A. C. and Alexandra, J. (1998). Atlas escolar de Sao Gonçalo do Rio Preto. 31 pranchas.

LeSann, J., Moura, A. C. and Oliveira, M. (1999). Atlas escolar de Santo Antônio do Itambé. 31 pranchas.