

## **GEOGRAPHIC THINKING DEVELOPMENT IN STUDENTS OF THE GRADUATE PROGRAM IN GEOGRAPHY OF THE UNIVERSIDAD FEDERAL DE GOIAS (U.F.G.)**

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Geography promotes forms of spatial reasoning that allow human beings to develop their geographic thinking. Some of these forms may include geographic concepts or categories of spatial analysis. Both concepts and categories contribute to the development of high-level thinking skills that gradually allow us to acquire a specific way of observing and interpreting the social-spatial reality and internalizing a specific type of geographic knowledge. Geographic thinking is a series of social and natural relations that help students integrate acquired information into a knowledge structure that is relevant to them.

In geography education, one of the specific processes that teachers can now work on with their students is geographic thinking development. To promote reasoning and geographic thinking skills among students, it is worth considering the link between geographical concepts (contents) and the way of teaching these concepts (pedagogical knowledge).

According to Cavalcanti, geographic thinking helps students to spatially contextualize phenomena as well as understand the world they live in at a local, regional, national, and international scale, and situates them as citizens of the world. In this respect, geographic knowledge is essential for educating social individuals insofar as it promotes an understanding of the geographical space and its role in social practices. As Cavalcanti (2014: 11) puts it, there is an element of spatiality in every social practice and a social element in spatiality.

However, according to the specialized literature, geography education has failed to fully develop geographic thinking in students as well as the high-level thinking skills necessary to fully understand the geographic space and the relations between nature

and society. In this paper, we report the results of a study conducted on students of the Graduate Program in Geography of the Universidad Federal de Goiás (UFG), Brazil, where we attempt to understand, through the student's own work, some categories that evidence their geographic thinking development process.

The research question was as follows: What are the categories that evidence the geographic thinking development process in the works and reports of students on the teaching practicum of the Graduate Program in Geography of the Universidad Federal de Goiás (UFG)? The objective of this work was to identify categories that may evidence the geographic thinking development process in the works and reports of students on the teaching practicum of UFG's Graduate Program in Geography.

For this research, an intentional non-probabilistic sample was analyzed, consisting of a group of 45 students (29 males and 16 females) in UFG's Graduate Program in Geography. These are students on the Estágio Supervisionado em Geografia II course. Since this a third-year course, the students already have theoretical-methodological experience in their specialty subjects as well as practical experience from the in-class observations and lessons developed for elementary education.

Our results show that the teaching strategies developed contain activities that, according to Vygotsky, may favor concept acquisition and high-level thinking development, with an emphasis on spatial and geographic thinking processes. Most teaching strategies identified reflect a socio-constructivist notion of geographic learning and are focused on spatial concept observation and understanding, as well as spatial interrelation, representation and reasoning skills. In the works analyzed, the preference for observation and comprehension skills seems, in turn, to guide the prospective teachers' willingness to conduct activities outside the classroom.

These results encourage us to continue researching geographic thinking development skills in the current context of geography education. Only with geographically informed citizens will we have the hope of taking the right decisions and acting correctly in an increasingly globalized and interdependent world.

## **REFERENCE**

Cavalcanti, L. 2014. *Geografia, escola e construção de conhecimentos*. 18th edition. Second reprint. Campinas: Papirus Editora.