

## **STUDENTS' CONCEPTIONS ON URBAN ENVIRONMENT AND THEIR DIDACTIC IMPLICATIONS. A STUDY IN BOGOTÁ**

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In this paper the framework, methodology and the main results of the thesis “The urban environment as school knowledge. Analysis and proposals from a study of conceptions of students in Bogotá” is presented. The research is primarily a study of ideas or conceptions of students about the city, which is performed according to four basic categories considered especially relevant to understanding the urban environment: urban issues, public space, civic participation and quality of life.

It is an educational research that seeks to use the findings of conceptions, made with high school students in Bogotá, as an important reference for teaching city in the school. It aims to contribute to the improvement of education, for better understandings of urban phenomena enable pupils to better analyse the social and environmental problems of our world and deal with them as engaged citizens.

The thesis is developed under the IRES (Research and School Renewal) project, an educational research project which aims to promote the transformation of education from a refreshing perspective. This project uses a learning model called “Model for Research in School”, which applies both to the training of students and the training of teachers. This model is based on three theoretical and ideological perspectives: constructivism and evolutionary perspective of knowledge and human development, systemic and complex view of reality and the critical perspective of society and education. The idea of “research” is a basic educational principle.

In the context of this model the central problems of the research undertaken are defined: a) What are the ideas or conceptions of the students in the sample studied, about categories or dimensions of knowledge that structure urban areas, such as: urban issues,

public space, civic participation and quality of life?; b) How evolve ideas or conceptions of the students on urban environment?; c) What are the obstacles or resistance that could hinder the evolution of ideas or conceptions of students towards a desirable school knowledge on the urban environment?

The methodological research design assumes a qualitative approach in order to describe and understand the ideas or conceptions of pupils (type, origin, relationship to the context, evolution, etc.) and possible obstacles they pose for learning as well as get didactic implications for teaching contents proposals on the urban environment.

Four basic categories were established –in turn, in various subcategories– for understanding the urban environment as a system. These categories are: urban issues, public space, civic participation and quality of life. These categories have served as reference for the design of tools for collecting data using –carried open questionnaire and semi-structured interview–, applied to a sample of secondary school students of the District School “Gustavo Restrepo”, of Bogota and as categories of analysis for the processing of data using content analysis techniques, using the Atlas-ti program.

The results show an overview of the conceptions of urban students in the sample, and the possible evolution of these conceptions from simpler to more complex formulations, noting the obstacles that may interfere with this progression.

These conceptions become richer through the establishment of simple causal relationships, but in any case, students do not quite understand the urban environment as a complex system. In general, one can also say that understanding the urban environment is more complex in the scale of the neighbourhood in which students in the general scale of the city, appreciate a positive assessment of institutions and neighbourhood groups. In fact, the affective component in relation to life in the neighbourhood facilitates understanding of the “lived” in the immediate environment, but difficult to understand phenomena in the more general phenomena of the city; This confirms findings from other research about “living space.”

For the category “urban problems”, notes the reference to insecurity and pollution. We found a trend toward greater complexity in understanding urban problems when trying to establish relationships between these problems and citizen participation. In the “public space” are particularly valued civic activities related to the care and protection of public spaces, appearing in some cases, a vision of public space as a common good and as responsible citizens. The “citizen participation” is considered a duty and a right that requires collective action of citizens, not only of the rulers of the city, and has implications for the quality of life in the neighbourhood and the city. As for the “quality of life”, the students appreciate certain constituent social factors of quality of life, such as security and employment, and also the location of the neighbourhood in the city and the possibilities of access to different facilities.

The diversity of ideas found in the students of the sample can be ordered in different levels, according to a hypothetical progression from simpler to more complex formulations. Several levels are detected: level "preliminary", in which the urban environment is practically not taken into consideration; a level 1, the urban environment is perceived homogeneous and undifferentiated way, with a simplistic vision; level 2, which conceives the urban environment as a result of mechanical causality and linearity; Level 3 already tends towards a more complex vision of the urban environment, incorporating relevant concepts such as coexistence, participation, governance, solidarity, civic culture and evaluative judgments of character and committed to urban life.

In this evolving conceptions students are given some constant: the evolution from the merely perceptive towards more operational approaches, from rigid and static to more flexible and dynamic visions, from purely individualistic approaches towards more collective and cooperative approaches in relation the urban environment in which they live. On the other hand, is also seen a trend towards greater internal consistency of the systems of ideas described. This progression of concepts is due mainly to the significant experiences that students living in the most everyday urban environment, but also other factors from school and the media.

But there are also obstacles that may hinder the evolution of ideas or conceptions of pupils to complex formulations. This occurs when there is a vision of the medium too focused on the near and obvious, and excessive weight of experiential and emotional component that prevents evaluate critically and objectively phenomena. Also, the inability to group and organize the various elements of the urban environment is a difficulty progression of concepts. And the inability to use the phenomena analysed appropriate spatial and temporal scales.

Taking as reference the results and conclusions obtained about the views of students on the urban environment, we can develop a proposal for more adequate learning opportunities for these students educational content, graduating complexity depending on the possible progression these conceptions. Thus the possible obstacles to progress from one level to the next could be overcome with proper design of specific learning activities. In that sense, the design of the sequence of activities and the inclusion of progressively more complex contents follow parallel paths and interrelated throughout the process of teaching and learning.

In short, taking into account the views of students on the urban environment, an educational intervention to better prepare these students to face the problems of the world as active and engaged citizens can be developed.

