

Valuing Historical Cartography in the study of ancient civilizations in basic education using Minecraft

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Keywords: History of Cartography, Minecraft, teaching, Human Sciences

Abstract:

The year 2022 marks the implementation of changes in the curricular structure of high school in Brazil to promote more meaningful learning and stimulate greater protagonism of young people. In this context, the contents of the Human Sciences (History, Geography, Philosophy and Sociology), previously addressed separately by specialist teachers, will now be proposed in "formative itineraries" (itineraries with a theme where students build knowledge by integrating the different areas of the Human Sciences), which are more flexible and require dynamism and integration of the teaching staff. In this sense, the present study aims to present a reflection on the use of Minecraft Education as a facilitator of learning in an interdisciplinary perspective. The popularization and widespread use of mobile devices have allowed them to be incorporated in basic education, and games have become part of teaching methodologies.

Minecraft (free construction game with 3 D blocks) was selected as a tool to address History of Cartography and some ancient civilizations, which served as the main thread for discussions in the area of Human Sciences. The insertion of History of Cartography in High School allows students to understand how societies represented spaces over time and how maps were made, developing spatial thinking by provoking reflection on the permanence and changes, in addition to incorporating the role of technology in the different forms of representation.

The research was based on the application of a didactic sequence (12 classes of 50 minutes) in a school in Ribeirão Preto/SP/Brazil, to 132 students, aged between 14 and 16 years old, in the first year of High School. The students were challenged to reconstruct, in the virtual environment, the spatial organization of different peoples of antiquity (Sumerians, Akkadians, Babylonians, Assyrians, Hebrews and Phoenicians) from the study of ancient maps. After making the 3D model in the game, the transformation of each project into a map was made, reconstructing the elements of the map.

One of the results revealed the integrated and dynamic work with the basic concepts of cartography and its evolution over time. The students, by using the game, became mappers and could, in practice, understand the map as a social construct, apply the concept of scale, explore different points of view, and elaborate legends that could account for the information to be represented with the selection, generalization, and choice of symbols.

In this sense, the strategy of bringing the interaction and immersion to the geography class through a virtual game for the representation of a historical phenomenon was very positive, since this resource provided teachers with the possibility to create situations to explore creative construction, stimulation, curiosity, and development of the student's geographic reasoning. This activity also valued the History of Cartography content in High School, which usually occurs in an isolated manner, with little integration, often underutilized and/or with an illustrative character.