

CHERNOFF FACES AS AN ALTERNATIVE METHOD OF REPRESENTATION IN SCHOOLS: AUSTRIAN-HUNGARIAN SURVEY

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During 2008 and 2009 was developed an international research project on Chernoff faces, with the participation of Argentine and Hungarian researchers. Chernoff faces are a method to represent multivariate data, using a human face as a multivariate symbol, on which its features (eyes, ear, nose, mouth etc.) can represent different variables. After a theoretical research to study the possibilities of this method in School Cartography, researchers made two questionnaires to examine different aspects of the use of Chernoff faces that were filled by Argentine and Hungarian pupils. After the analysis of the results, they were resumed in general proposals, but some questions still remained without a clear answer.

This situation motivated Hungarian colleagues to organize a new project with a new participant country (Austria) in 2010 and 2011. The results of the Austrian survey were compared with the results previously obtained by Argentine and Hungarian pupils in 2009, finding answers that helped us to clarify the previous contradictory results. At same time, a new Hungarian questionnaire was applied in early grades (grades 3 to 5) of an Elementary School in Budapest. This test filled the gap left during the 2009 survey, studying how younger children can read the data represented using Chernoff faces and pictograms modified according to the Chernoff principle, comparing them with a traditional method of thematic representation. This Hungarian survey was a first step to determine the grade of acceptance between the younger pupils, as well as the practical usability of these alternative methods in School Cartography. All the databases, results of analysis, conclusions, etc. can be downloaded on the project website.

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