

Elementary school teachers' comprehension of graphical representations of data

Ioannis Michalis *

Head teacher, 105th Primary School of Thessaloniki, Greece jonious@otenet.gr

Evanthis Chatzivasileiou

Head of Educational Affairs of Primary Schools of Thessaloniki, Greece

evanthys@otenet.gr

The results of an empirical research (n 150) on teachers' comprehension of graphical representations of data are presented. A questionnaire consisted of 11 graphical representations with three questions each (in multiple choice format) was used in order to reveal what teachers comprehend of various formats of graphs and diagrams that represent data collected by small statistical surveys and projects. In most of the displays, teachers exhibited major difficulties predicting from the graph ("reading beyond and behind the data") while they were proficient at extracting specific values ("reading the data") and computation types of questions ("reading between the data"). Findings of a similar research on pupils' understanding of graphs are used in comparison with the results. Implications for teacher preparation are discussed.

Key Words: graphs, data displays, primary school, teacher