THE CONSTRUCTION OF THE CENTRAL IDEAS OF THE SAMPLING THROUGH TECNOLOGY IN UNIVERSITY STUDENTS

Amable Moreno, University National of Cuyo, Argentina
morenoamable6@gmail.com

In this paper we present an instructional proposal for the understanding of some ideas related to sampling in university students, by applying the R software. These ideas are the sampling representativeness, the sampling variability and the distribution concept in four levels. The students in order to achieve their understanding, must establish differences between samples and populations; recognize differences and similarities between samples of a population. Then, they must distinguish between four levels of the data: distribution of the population (level 1), distribution of a sample (level 2), distribution of the random sample as a random n-dimensional variable(level 3) and distribution of sample statistics (level 4). The use of simulations and visualizations will help students to achieve an understanding of these ideas.

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