TEACHING SAMPLING TO NON-STATISTICIANS: A DIDACTIC EXPERIENCE

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Some graduate courses directed to non-statisticians include an introductory sampling course in their curriculum. Most of the students who attend these courses have previously taken one or two semesters of basic statistics, and strongly believe that the only possible method of probabilistic sampling is Simple Random Sampling. They are not used to the idea of analyzing the sampling frame and incorporating additional qualitative or quantitative information to improve the sampling design.

In order to present these students with the basic sampling plans and some special estimators, we have been using a fictional city, divided in districts, with sampling tracts, households and personal information. For every topic to be taught, we present a different frame and a quantity to be estimated. We first ask the students to use their common sense in selecting the sample. This procedure aims to clarify to the student the problem to be solved and the parameter to be estimated. After that, the students have to solve the same problem following a step-by-step, technical learning script, which focuses on the topic.

In the poster presentation we will discuss the city data structure and provide examples of how some topics are taught.