MEASURING THE LEVEL OF STATISTICAL LITERACY IN CERTAIN HUNGARIAN SECONDARY SCHOOLS AMONG GRADUATE STUDENTS

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INTRODUCTION

In 2005 the Hungarian system of final exams in secondary schools has radically changed. A new, two-level system was introduced. The changes did not only concern the forms and the methods of the final exam, but in many cases the compulsory curriculum as well. At this point elementary statistical matters were initiated into the mathematical requirements both on normal and higher levels.

RESEARCH

The aim of our research was to answer the following question: were last years' educational reforms able to achieve a really useful knowledge of statistics in the group of secondary school students?

Our research was based on the three-tiered statistics development model composed by Jane M. Watson (Australia). This model examines the development of statistical literacy during the school years, and holds the achievement of "statistically literal adult" desirable. According to this, the effectiveness of statistical education in secondary schools is best examined among graduating students. Our research however does not focus on the process of development throughout the school years, we only analyzed the stage of statistical literacy among last year students. We have driven several kinds of schools into our research. The students were requested to complete a test of 14 exercises in 45 minutes. The test was set up and adapted to Hungarian conditions by Hanna Burján based on the works of J. M. Watson. Burján had this test completed by graduating students of a secondary school, and analyzed the results. This topic was recommended to me by the supervisor of her final thesis, Ödön Vancsó, who is the supervisor of my PhD thesis in didactics of mathematics.

The evaluation contains the results of the statistics related exercises of the final exams completed by the same students. Thus we have the possibility to examine how the statistical literacy correlates to the result of the final exam, namely if the statistical related exercises of the final exam correspond with the level of statistical literacy.

THE FUTURE

In the lack of former researches in this area, we were not in the position to make a comparative analysis, but in the future we aim to extend our research both vertically (examine the statistical literacy in lower grade classes) and horizontally (involve as many different schools as possible): through which the effectiveness of teaching statistics in Hungary could be analysed.

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