IMPACT OF TEACHING APPLIED STATISTICS IN A VIRTUAL SETTING OF A POSTGRADUATE COURSE

Teresita E. Terán and Augusto Nascimbene Universidad Nacional de Rosario, Argentina teresitateran52@gmail.com

INTRODUCTION

In this work, a virtual postgraduate course for professors called "Applied Statistics in Education" is described which is carried out in the Faculty of Humanity and Arts at the National University of Rosario since 2019. This virtual course is intended for graduates from different subjects at the University that wish to acquire a degree such as Doctor of Higher Education. The objective is to identify errors and difficulties in applied statistics in postgraduate courses.

METHODOLOGY

It is necessary to carry out a follow-up of the methodology and the use of quantitative and qualitative statistical techniques used in the postgraduate students' thesis projects. Eighty-six students attended in the 2019 cohort, 154 attended in 2020, and 107 attended in 2021.

RESULTS

Analyzing the methodological results of the students, we observed the following deficiencies. The greatest difficulty observed in the three cohorts was due to the *triangulation of qualitative and quantitative techniques (60, 53 and 42% respectively)* regarding the interpretation of the statistics in their context. For this, Wiske's (2012) teaching guidelines for understanding were followed as a methodological contribution.

The most frequent errors corresponded to the 2019 cohort, with those being *identification of variables and indicators (45%), database design (42%), and interpretation in terms of the project (43%).*

CONCLUSION

Undoubtedly, statistics is an obstacle: it has been observed that 40% of the students do not present their thesis within the expected time frame (three years), so they lose the right to be doctors.

DISCUSSION

We believe that the Teaching for Understanding theory developed by Gardner et al. (2009) is an incentive in our own teaching practice to achieve better understanding of applied statistics that results in significant student learning at any stage of a postgraduate virtual course.

REFERENCES

Gardner, H.; Chen, J.-Q.; Moran, S. (2009). *Multiple intelligences around the world*. San Francisco, CA.

Wiske, M. S. (2012). Enseñar para la comprensión con nuevas tecnologías. España. Ediciones Paidos Iberica.