

THE TEACHING OF STATISTICS IN CONTEXT IN TEACHER TRAINING

Gabriela Pilar Cabrera and María Inés Rodríguez
Universidad Nacional De Río Cuarto, Córdoba, Argentina
mrodriguez@exa.unrc.edu.ar

The present paper describes a pedagogical proposal to approach the teaching of statistics in context, implemented since 2006 in several institutes of Córdoba, Argentina, where teachers are trained in Pre-Primary, Primary and Secondary Education. The guidelines proposed by eminent researchers like Batanero (2001), Wild and Pfannkuch (1999, 2006), Garfield (2004, 2006, 2007, 2008), Ben-Zvi (2004, 2007), Harraway (2006), Gal (2006), Berenson (2008), Utts (2008) make up the theoretical framework used. We agree with them on the need to contextualize the teaching of statistics within projects incorporating the statistical treatment of real data, collaborative tasks and technological tools, in order to develop and optimize the students' skills involved in the statistical methods. The fact that the students realize the importance and difficulties of collecting data and the statistical analysis derived from a problem framed in their socio-cultural context and linked with its social practices was crucial and decisive so that "they know", "understand", "experience" and then "assess" this statistical process, recognizing its potentialities and limitations.

REFERENCES

- Batanero, Carmen (2001). *Didáctica de la Estadística*. Grupo de Investigación en Educación Estadística. Departamento de Didáctica de la Matemática. Universidad de Granada. España.
- Berenson M, Utts J y otros (2008). Assessing student retention of essential statistical. *The American Statistician*, VOL. 62, N°1
- Garfield and D. Ben-Zvi (2007) *Thinking and reasoning with data and chance*: Franklin, C., & Garfield, J. (2006).
- Garfield J (2006) Collaboration in statistics education research: stories, reflections, and lessons learned. *Plenary International Conference on Teaching Statistics: "Working Cooperatively in Statistics Education*. University of Minnesota, United States
- Garfield, J., & Ben-Zvi, D. (in press). Developing Students' Statistical Reasoning: Connecting *Research and Teaching Practice*. Emeryville, CA: Key Collage Publishing.
- Gal I (2006). Statistic education and the wider society. *International Conference on Teaching Statistics: "Working Cooperatively in Statistics Education"*. Salvador, Bahia, Brazil.
- Harraway, J (2006). Teaching statistics in context. *International Conference on Teaching Statistics: Topic Statistics education at the post-secondary level. Panel Discussion*. Brazil.
- Maxine Pfannkuch (2006) Informal Inferential Reasoning. *International Conference on Teaching Statistics: "Working Cooperatively in Statistics Education"*. Brazil. On line at http://www.stat.auckland.ac.nz/~iase/publications/17/6A2_PFAN.pdf
- Wild, C. J. & Pfannkuch, M. (1999), "Statistical Thinking in Empirical Enquiry", *International Statistical Review*, 67, pp. 223–265. Traducido al castellano por el Dr. Román Hernández Martínez