

## **“STATISTICS EDUCATION RESEARCH FROM A LATIN AMERICAN PERSPECTIVE”**

### **CALL FOR PAPERS**

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### **SPECIAL ISSUE OF STATISTICAL EDUCATION RESEARCH JOURNAL (SERJ)**

Scientific production in Statistics Education in Latin American countries has grown remarkably in the last decades. This can be seen by the increasing participation of Latin American scholars in many international conferences and by their publications in international journals. Research developed in Latin America coincides with the focus of Statistics Education Research Journal (SERJ). In their diversity, scholars seek to examine cognitive, motivational, attitudinal, curricular, philosophical, political, and technological processes that are related to teaching and learning process as well as factors that interfere with the development and understanding of reasoning, probabilistic, and statistical thinking. The call to this special issue is expected to have papers submitted, which reflect the plurality of epistemological and methodological approaches conducted in Latin American communities. It is expected that these papers contrast and compare reflections with the current status and trends in international research.

### **TOPICS TO COVER**

Public policies and private decisions are related with and based on data, and consequently on statistics. Most decisions about a set of issues in society are done taking in consideration what could be understood from collected data and from previous information. Latin American communities have specific needs, which emerge from their culture, historical and language-based influences, social arrangements, and political organisation. This cultural difference and organisation also influences the way in how statistics is done, how it is taught, and, in the educational environment, it influences the way, in which research is done.

Statistics education bears the potential to support people to develop their identities; thus, statistics education brings a particular way of engaging in problems as well as studying and understanding social contexts to Latin American communities. What we are interested in this special issue is to listening how statistics is taught and thought in schools and in the tertiary educational level from a research-lead point of view.

***The special issue covers two central themes***

- Teaching and learning processes in statistics and or probability.
- Pre-service and in-service teacher education.

It is expected that the papers submitted and accepted for publication reflect the diversity of research produced and conducted on statistics education in Latin American countries. It is suggested that one section in the papers elaborates on how the ideas fit into

the English and international discussion and how the Latin Approach differs and why it differs and why it is similar or why it follows a different paradigm.

**The Latin American perspective** The papers may analyse current or innovative practices in teaching or try to elaborate theories about research in Statistics Education, the educational studies may be targeted to any level of schooling including also teacher education at the university. A main goal of the special issue is *to highlight the specific paradigm of the Latin approach as compared to international research*. The papers should contain a separate section that illustrates how this is achieved. Some ideas how to realise that goal are:

#### *Cultural features*

- How the cultural and social background of Latin-American students could be used to improve statistics teaching.
- How language or mother language influences learning and teaching of statistics (e.g., words used daily contrasted to formal use; word significance in different contexts; dialogues into the classroom; the use of natural, mathematical, and statistical language in class).

#### *Curricular considerations*

- The role of games: how they influence the teaching of probability and the connection from games to statistical inference.
- The placement of inferential statistics in the curriculum; considerations of simplifying the complexity by informal ways.
- Position and acknowledgement of statistics in curricula and in large-scale evaluation.
- The placement of statistics and probability within the mathematics curriculum.
- Key developments in the formation and transformation of curricula.

#### *Higher education & professional development*

- Policies for teachers' development.
- Curricula and approaches for teacher development as well as for professionals who use statistics in their labour.

#### *Methods in educational research*

- Hermeneutic discussion of concepts around the philosophical debate on the meaning of key concepts.
- Acknowledgement of empirical research.
- Methods and paradigms of empirical research.
- The role of beliefs and attitudes, or anxiety.

Authors are *encouraged* to highlight features or results of their research that characterise the Latin American perspective as distinct from the English/American perspective, or argue why the results are robust against cultural variation in order to find educational invariants. The special issue should also attract people from other communities to hear more about the peculiarities and the results of the Latin American community.

We welcome and encourage Latin American researchers and their collaborators to submit papers sharing with SERJ readers the specificity of research in statistics education pursued by them.

### SUBMISSION GUIDELINES

- Expression of intent (including abstract of 150-250 words) by 30 June, 2019.
- First version of papers in Portuguese or Spanish by 30 August, 2019. This version will be reviewed twice (in the mother language of the authors).
- Full papers by 30 November, 2019 in both versions (Portuguese or Spanish translated into English).

Manuscripts for this special issue will be limited to a maximum of 6000 words of body text and authors are encouraged to aim for 4000-5000 words of body text (apart from abstract, tables and graphs, references, appendices).

Note particularly that, at the start, manuscripts can be written in Spanish or Portuguese. If the contribution is accepted to be published in Spanish or Portuguese, it must be translated into English and submitted in both languages to be published. Costs of translations must be covered by the authors. The publication of the articles is in English, a file in Spanish or Portuguese (if it exists) will be offered to readers on special request.

Manuscripts should be submitted in accordance with SERJ's standard Author Guidelines using the Template, which can be downloaded from the Journal's website: [iaseweb.org/Publications.php?p=SERJ](http://iaseweb.org/Publications.php?p=SERJ). The general author guidelines for SERJ can be downloaded from [iase-web.org/documents/SERJdocs/authorguide.pdf](http://iase-web.org/documents/SERJdocs/authorguide.pdf).

Interested authors may get a document with a more detailed synopsis of the topic from Leandro de Oliveira Souza to whom all communications and submissions are to be sent: [olilean@gmail.com](mailto:olilean@gmail.com).