Radical Statistics: Teachers and Students on the Highwire

Bruno de Sousa*

Faculdade de Psicologia e Ciências da Educação, Universidade de Coimbra, Portugal <u>bruno.desousa@fpce.uc.pt</u>

Dulce Gomes Departamento de Matemática, Universidade de Évora, Portugal <u>dmog@uevora.pt</u>

> Regina Bispo ISPA - Instituto Universitário, Portugal <u>rbispo@ispa.pt</u>

Elisa Duarte Universidade de Santiago de Compostela, Espanha <u>duarte.elisa@gmail.com</u>

Radical Statistics is a hands-on project promoted by the Portuguese Statistical Society (SPE) geared towards high school students and teachers. It aims to advance statistics through various activities which students can relate to, emphasizing the importance of dealing with real data in the learning process as well as raising awareness of the importance of statistics in daily life. Over 60 students and teachers from different regions of Portugal participated in all three phases of Radical Statistics, namely the Online Competition, the Adventure Camp and the Teachers Training Session. Several statistics-based activities for each of the different phases of the project and how they can be incorporated in a Mathematics curricular program will be shown. By presenting Radical Statistics as an activity for both students and teachers, we hope to attain an excellent symbiosis between theoretical concepts and how they can be applied in real life situations. This is accomplished by dealing and working with real data sets in conjunction with smaller activities that entice students to reflect upon the wide range of concepts involved.

Key Words: Students, Teaching Practices, Statistics Education, Real Data