ARZU SARDARLI, First Nations University of Canada

Use of Indigenous elements in teaching introductory Statistics courses

Introductory level Statistics courses, "Elementary Statistics for Applications" (STAT 100) and "Introductory Statistics" (STAT 160) have been taught within a large number of programs offered by University of Regina and First Nations University of Canada. These courses cover the introductory topics of Statistics, such as The Empirical Rule, basics of probability, correlation and simple linear regression. Within the presented project, we have developed Indigenous knowledge-based examples for the following topics of Statistics, (i) Empirical Research, (ii) Correlation and Linear Regression Analysis, (iii) Probability. The project has been carried out in three phases: Phase I. Work with Elders. Phase II. Data analysis Phase III. Developing examples Within the Phase I, we interviewed two Elders. They told us about the Indigenous way of observation of environmental processes and making forecasts. The Knowledge Keepers were interviewed about the Indigenous Games. They provided materials about the Indigenous Games and demonstrated some elements of games. Within the Phase III, we analyzed the interviews and developed the list of examples, which could be used in Statistics classes. Within the Phase III, we developed examples on empirical studies, correlation and probability containing Indigenous elements. Two undergraduate students were trained and participated in this project. The project was supported by University of Regina within the President's Teaching and Learning Scholars grant.