Developing a Questionnaire to Assess Prior Knowledge of Basic Statistical Concepts in Students Following a Statistics Course as Part of an Engineering Degree At an Online University

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Published in: Proceeding DATA'18 Proceedings of the First International Conference on Data Science, E-learning and Information Systems. Article Nº 6

Madrid, Spain — October 01 - 02, 2018 ACM New York, NY, USA ©2018 table of contents

ISBN: 978-1-4503-6536-9 doi: 10.1145/3279996.3280002

ABSTRACT

This study aims to build a questionnaire to assess initial statistical competence in university students doing Engineering degrees at an online University (Degrees in Industrial Organization Engineering, Computer Engineering and Engineering of Telecommunications Technologies and Services). The Statistics Concept Inventory (SCI), a multiple-choice questionnaire which assesses understanding of basic statistical concepts, was used to design this questionnaire. Ten of the 38 questions which make up the questionnaire were chosen, those which fit the prior studies of the students and the content of the course to be studied. Applying this questionnaire will allow the prior knowledge of the students to be identified, in order to design didactic methods that will improve understanding of statistical concepts.