

1. Record Nr.	UNINA9910502616403321
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Titolo	Big Data in Education: Pedagogy and Research // edited by Theodosia Prodromou
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-76841-4
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (249 pages)
Collana	Policy Implications of Research in Education, , 2543-0297 ; ; 13
Disciplina	371.334
Soggetti	Educational tests and measurements Education—Curricula Education, Higher Continuing education Assessment and Testing Curriculum Studies Higher Education Lifelong Learning Educació Processament de dades Dades massives Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: Theoretical and ethical concerns -- 1 Big Data in academic research—Challenges, pitfalls, and opportunities -- Part 2: Teaching people to use Big Data effectively -- 2 Big Data for Early Learners -- 3 Using Big Data in a Master of Applied Statistics unit -- 4 Statistical education as part of the digital transformation of statistical offices -- Part 3: Using Big Data to improve teaching -- 5 Big data, analytics and education: Challenges, opportunities and an example from a large university unit -- 6 Enhancing learning outcomes with 'big data' from pedagogy for conceptual thinking with meaning equivalence reusable learning objects (MERLO) and interactive concept discovery (INCOD) --

7 Employing Authentic Analytics for More Authentic Tasks -- 8 Learning from Learning Analytics: How much do we know about patterns of student engagement? -- Part 4: Educational systems that use Big Data -- 9 Museum Big Data: Perceptions and practices -- 10 Analysing aspects of Brazilian curricula for teaching statistics involving Big Data -- Part 5: Concluding Comments.

Sommario/riassunto

This book discusses how Big Data could be implemented in educational settings and research, using empirical data and suggesting both best practices and areas in which to invest future research and development. It also explores: 1) the use of learning analytics to improve learning and teaching; 2) the opportunities and challenges of learning analytics in education. As Big Data becomes a common part of the fabric of our world, education and research are challenged to use this data to improve educational and research systems, and also are tasked with teaching coming generations to deal with Big Data both effectively and ethically. The Big Data era is changing the data landscape for statistical analysis, the ways in which data is captured and presented, and the necessary level of statistical literacy to analyse and interpret data for future decision making. The advent of Big Data accentuates the need to enable citizens to develop statistical skills, thinking and reasoning needed for representing, integrating and exploring complex information. This book offers guidance to researchers who are seeking suitable topics to explore. It presents research into the skills needed by data practitioners (data analysts, data managers, statisticians, and data consumers, academics), and provides insights into the statistical skills, thinking and reasoning needed by educators and researchers in the future to work with Big Data. This book serves as a concise reference for policymakers, who must make critical decisions regarding funding and applications. .
