

1. Record Nr.	UNINA9910682593703321
Titolo	Statistics for Empowerment and Social Engagement : Teaching Civic Statistics to Develop Informed Citizens // Jim Ridgway, editor
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, Springer Nature Switzerland AG, , [2022] ©2022
ISBN	9783031207488 9783031207471
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (621 pages)
Disciplina	628
Soggetti	Civics - Study and teaching Social sciences - Statistical methods - Study and teaching Ensenyament de les ciències socials Educació cívica Estadística Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- G. Gigerenzer: Democracy Needs Statistical Literacy -- J. Ridgway: Why Engage with Civic Statistics? -- Edited by J. Engel and J. Nicholson: Part I -- J. Engel and J. Ridgway: Back to the Future – Rethinking the Purpose and Nature of Statistics Education -- I. Gal, J. Nicholson, and J. Ridgway: A Conceptual Framework for Civic Statistics and its Educational Applications -- I. Gal, J. Ridgway, J. Nicholson, and J. Engel: Implementing Civic Statistics – An Agenda for Action -- R. Biehler and P. Kovacs: Part II -- J. Ridgway, P. Campos, J. Nicholson, and S. Teixeira: Interactive Data Visualizations for Teaching Civic Statistics -- S. Teixeira, P. Campos, and A. Trostianitser: Data Sets: Examples and Access for Civic Statistics -- A. Trostianitser, S. Teixeira, and P. Campos: Lesson Plan Approaches: Tasks that Motivate Students to Think -- P. Kovacs, K. Kazar, and E. Kuruczleki: Seeing Dynamic Data Visualizations in Action: Gapminder Tools -- D. Frischemeier, S. Podworny, and R. Biehler: Data Visualization Packages for Non-

inferential Civic Statistics in High School Classrooms -- C. J. Wild and J. Ridgway: Civic Statistics and iNZight: Illustrations of Some Design Principles for Educational Software -- N. Guimarães, K. Vehkalahti, P. Campos, and J. Engel: Exploring Climate Change Data with R -- J. Ridgway and R. Ridgway: Covid-19 Shows Why we Need Civic Statistics: Illustrations and Classroom Activities -- Edited by I. Gal and D. Frischemeier: Part III -- I. Gal: Critical Understanding of Civic Statistics: Engaging with Important Contexts, Texts, and Opinion Questions -- P. Kovacs, K. Kazar, and E. Kuruczleki: Implementing Civic Statistics in Business Education: Technology in Small and Large Classrooms -- S. Podworny, D. Frischemeier, and R. Biehler: Civic Statistics for Prospective Teachers: Developing Content and Pedagogical Content Knowledge through Project Work -- A Schiller and J. Engel: Civic Statistics for Prospective Teachers: Developing Critical Questioning of Data-based Statements in the Media -- C. Wassner and A. Proemmel: Civic Statistics at School: Reasoning with Real Data in the Classroom -- J. Engel, J. Louie, and J. Nicholson: Preparing for a Data-rich world: Civic Statistics Across the Curriculum -- L. Martignon, D. Frischemeier, M. McDowell, and C. Till: Dynamic, Interactive Trees and Icon Arrays for Visualizing Risks in Civic Statistics -- Edited by P. Campos and A. Schiller: Part IV -- K. François and C. Monteiro: Reflections on Civic Statistics — A Triangulation of Citizen, State and Statistics: Past, Present and Future -- L. Zejnilovi and P. Campos: Connecting Data Science, Data Movements, and Project-based Learning with a Social Impact -- J. Ridgway, P. Campos and R. Biehler: Data Science, Statistics, and Civic Statistics – Education for a Fast Changing World -- J. Ridgway and R. Ridgway: Civic Statistics in Context: Mapping the Global Evidence Ecosystem.

## Sommario/riassunto

“This book is a remarkable achievement” Gerd Gigerenzer This book offers practical approaches to working in a new field of knowledge - Civic Statistics - which sets out to engage with, and overcome well documented and long-standing problems in teaching quantitative skills. The book includes 23 peer-reviewed chapters, written in coordination by an international group of experts from ten countries. The book aims to support and enhance the work of teachers and lecturers working both at the high school and tertiary (university) levels. It is designed to promote and improve the critical understanding of quantitative evidence relevant to burning social issues – such as epidemics, climate change, poverty, migration, natural disasters, inequality, employment, and racism. Effective citizen engagement with social issues requires active participation and a broad understanding of data and statistics about societal issues. However, many statistics curricula are not designed to teach relevant skills nor to improve learners' statistical literacy. Evidence about social issues is provided to the public via print and digital media, official statistics offices, and other information channels, and a great deal of data is accessible both as aggregated summaries and as individual records. Chapters illustrate the approaches needed to teach and promote the knowledge, skills, dispositions, and enabling processes associated with critical understanding of Civic Statistics presented in many forms. These include: statistical analysis of authentic multivariate data; use of dynamic data visualisations; deconstructing texts about the social and economic well-being of societies and communities. Chapters discuss: the development of curricula and educational resources; use of emerging technologies and visualizations; preparation of teachers and teaching approaches; sources for relevant datasets and rich texts about Civic Statistics; ideas regarding future research, assessment, collaborations between different stakeholders; and other systemic

issues.

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