1. Record Nr. UNINA9910299503503321 Autore Ganem Joseph Titolo The Robot Factory: Pseudoscience in Education and Its Threat to American Democracy / / by Joseph Ganem Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 9783319778600 3319778609 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (273 pages) Disciplina 379.73 Education Soggetti Mathematics—Study and teaching Education and state Assessment Popular Science in Education Mathematics Education **Education Policy** Assessment, Testing and Evaluation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Why I Would Fail Third Grade Math: A Multitude of Nota di contenuto Problems in One Brief Lesson -- Data-Driven Education Reform: A New Pseudo-science -- Science: Motivation, Measurement, and Meaning --The Scientific Method Misapplied to Education -- The "Mathematical Intimidation" of Teachers -- The Statistical Impossibility of Adequate Yearly Progress in Schools -- The SAT: Promoting equal opportunity or perpetuating a hierarchy? -- The Accountability Hoax -- Facts versus

Stories -- Why Our Kids Don't Get Math -- The Widening Gap Between High School and College Math -- The Disconnect Between the Math Curriculum and Professional Practitioners -- Making Math Relevant: Assessing reading comprehension or math? -- The "Chinese Room" -- Misunderstanding Science Education -- Why Science is Hard -- Science as a Noun -- Science as a Question -- Science as a Conversation -- Science as a Guide -- Science as a Verb -- The Limits of Science --

Having It Both Ways -- Teachers are Real Human Beings (Not Idealized Fantasy People) -- The Teacher-Student Relationship -- The Opposite of Science: Elevating Complexity -- Impossible Expectations -- Across Time and Space: The complex web of human relatedness -- Do Adults Model the Educational Values They Espouse? -- False Choice: The dark side of storytelling -- Schools are not Cultural Islands --Dismembering Literature to Avoid its Truths -- The Fallacy of Marketbased Education Reforms -- Markets: Meaning and Morality --Education Markets: The Higher-Ed debacle -- The Charter School Movement -- The Logical Fallacies Embedded in the "Business Model" -- The Paradox of Wealth: Towards an Expanded Understanding of Self-Interest -- Rethinking Education -- Back to the Future: The "Deficit Model" of Education -- Transformative Education -- Beyond the Business Model -- Rethinking College: Preparing for the Unimagined --The Expectations Trap -- The Limits of Education -- The Overlooked Role of Questions and Reflection -- Being Educated -- Knowing and Understanding -- Do Computers Understand? -- Relatedness -- The Real Crisis -- A Call to Action.

Sommario/riassunto

Fake Science Is Killing Our Schools—and Our Republic Science is both a method for understanding and a guide for decision-making. It can and should be the foundation for citizenship: logic, reasoning, challenging claims, making choices based on verifiable fact. Authentic science education is key to producing informed, engaged citizens. It can't be separated from the culture in which it operates. Instead, we're in the most vicious cycle imaginable for a democracy—but perfect for a corporatist kleptocracy. With agenda-driven leaders using pseudoscience to justify bad educational policy, education has become a dehumanizing tool for mass producing compliant workers who accept what they're told and do what they're asked. Physicist and educator Dr. Joseph Ganem rips the lid off of this neatly-packaged scam. He exposes the dangers of pseudoscience in the hands of decisionmakers, educators, and students. In nothing less than a compelling new vision for 21st century education, he calls us to reject pseudoscience in all forms, engage in a collective search for truth, and commit to an authentic education for every child. "Dr. Ganem nails it! He brings a scientist's eye and a crusader's passion to explaining how "reformers" are killing an education system that once was-and still could be-the envy of the world." -- John Owens, author, Confessions of a Bad Teacher: The Shocking Truth from the Front Lines of American Public Education "Empowering and enlightening. Sparks will fly when people read this book - so policymakers be forewarned (or better be ready)! There will be a revolution - a powerful call for change." -- CJ Westerberg, Founder & Editor, The Daily Riff: Be Smarter. About Education.