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Why Trust Science? - Naomi Oreskes 2021-04-06

Why the social character of scientific knowledge makes it trustworthy Are doctors right when they tell us vaccines are safe? Should we take climate experts at their word when they warn us about the perils of global warming? Why should we trust science when so many of our political leaders don't? Naomi Oreskes offers a bold and compelling defense of science, revealing why the social character of scientific knowledge is its greatest strength—and the greatest reason we can trust it. Tracing the history and philosophy of science from the late nineteenth century to today, this timely and provocative book features a new preface by Oreskes and critical responses by climate experts Ottmar Edenhofer and Martin Kowarsch, political scientist Jon Krosnick, philosopher of science Marc Lange, and science historian Susan Lindee, as well as a foreword by political theorist Stephen Macedo.

Forensic Testimony - C. Michael Bowers 2013-09-07

Forensic Testimony: Science, Law and Expert Evidence—favored with an Honorable Mention in Law & Legal Studies at the Association of American Publishers' 2015 PROSE Awards—provides a clear and intuitive discussion of the legal presentation of expert testimony. The book delves into the effects, processes, and battles that occur in the presentation of opinion and scientific evidence by court-accepted forensic experts. It provides a timely review of the United States Federal Rules of Evidence (FRE) regarding expert testimony, and includes a multi-disciplinary look at the strengths and weaknesses in forensic science courtroom testimony. The statutes and the effects of judicial uses (or non-use) of the FRE, Daubert, Kumho, and the 2009 NAS Report on Forensic Science are also included. The presentation expands to study case law, legal opinions, and studies on the reliability and pitfalls of forensic expertise in the US court system. This book is an essential reference for anyone preparing to give expert testimony of forensic evidence. Honorable Mention in the 2015 PROSE Awards in Law & Legal Studies from the Association of American Publishers A multi-disciplinary forensic reference examining the strengths and weaknesses of forensic science in courtroom testimony Focuses on forensic testimony and judicial decisions in light of the Federal Rules of Evidence, case interpretations, and the NAS report findings Case studies, some from the Innocence Project, assist the reader in distinguishing good testimony from bad

Discerning Experts - Michael Oppenheimer 2019-03-07

Discerning Experts assesses the assessments that many governments rely on to help guide environmental policy and action. Through their close look at environmental assessments involving acid rain, ozone depletion, and sea level rise, the authors explore how experts deliberate and decide on the scientific facts about problems like climate change. They also seek to understand how the scientists involved make the judgments they do, how the organization and management of assessment activities affects those judgments, and how expertise is identified and constructed. Discerning Experts uncovers factors that can generate systematic bias and error, and recommends how the process can be improved. As the first study of the internal workings of large environmental assessments, this book reveals their strengths and weaknesses, and explains what assessments can—and cannot—be expected to contribute to public policy and the common good.

A Critical Assessment of the Intergovernmental Panel on Climate Change - Mike Hulme 2022-12-31

The Intergovernmental Panel on Climate Change (IPCC) has become a hugely influential institution. It is the authoritative voice on the science on climate change, and an exemplar of an intergovernmental science-policy interface. This book introduces the IPCC as an institution, covering its origins, history, processes, participants, products, and influence. Discussing its internal workings and operating principles, it shows how IPCC assessments are produced and how consensus is reached between scientific and policy experts from different institutions,

countries, and social groups. A variety of practices and discourses - epistemic, diplomatic, procedural, communicative - that make the institution function are critically assessed, allowing the reader to learn from its successes and failures. This volume is the go-to reference for researchers studying or active within the IPCC, as well as invaluable for students concerned with global environmental problems and climate governance. This title is also available as Open Access via Cambridge Core.

Expert Laws of War - Anton O. Petrov 2020-06-26

Over recent decades, international humanitarian law has been shaped by the omnipresence of so-called expert manuals. Astute and engaging, this discerning book provides a comprehensive account of these black letter rules and commentaries produced by private expert groups and demonstrates why the general acceptance of these expert manuals is largely unjustified. The author innovatively links interdisciplinary insights to the needs of military lawyers in practice, showing the pitfalls of relying on private manuals as arguable restatements and interpretations of the law 'as it is'.

The Global Practice of Forensic Science - Douglas H. Ubelaker 2015-02-16

The Global Practice of Forensic Science presents histories, issues, patterns, and diversity in the applications of international forensic science. Written by 64 experienced and internationally recognized forensic scientists, the volume documents the practice of forensic science in 28 countries from Africa, the Americas, Asia, Australia and Europe. Each country's chapter explores factors of political history, academic linkages, the influence of individual cases, facility development, types of cases examined, integration within forensic science, recruitment, training, funding, certification, accreditation, quality control, technology, disaster preparedness, legal issues, research and future directions. Aimed at all scholars interested in international forensic science, the volume provides detail on the diverse fields within forensic science and their applications around the world.

Adoption, Paternity And Other Florida Family Practice - LexisNexis Editorial Staff 2019-12-13

Adoption, Paternity, and Other Florida Family Practice covers areas of marital and family law beyond dissolution of marriage, including adoption, paternity, rights and disabilities of minors, temporary custody proceedings, and change of name, and complements the other manuals in The Florida Bar's family law series. Highlights of the Thirteenth Edition include: Discussion regarding recent changes to military requirements concerning support of dependents. Discussion regarding the recent Uniform Deployed Parents And Visitation Act. Highlighting legislative updates affecting to marriage concerns. Updating and discussions of statute references. Highlighting or discussion of recent and current case opinions.

Science Outside the Laboratory - Marcel Boumans 2015

The conduct of most of social science occurs outside the laboratory. Such studies in field science explore phenomena that cannot for practical, technical, or ethical reasons be explored under controlled conditions. These phenomena cannot be fully isolated from their environment or investigated by manipulation or intervention. Yet measurement, including rigorous or clinical measurement, does provide analysts with a sound basis for discerning what occurs under field conditions, and why. In *Science Outside the Laboratory*, Marcel Boumans explores the state of measurement theory, its reliability, and the role expert judgment plays in field investigations from the perspective of the philosophy of science. Its discussion of the problems of passive observation, the calculus of observation, the two-model problem, and model-based consensus uses illustrations drawn primarily from economics. Rich in research and discussion, the volume clarifies the extent to which measurement provides valid information about objects and events in field sciences, but also has implications for measurement in the laboratory. Scholars in the

fields of philosophy of science, social science, and economics will find *Science Outside the Laboratory* a compelling and informative read.
Discipline-Based Education Research - National Research Council
2012-08-27

The National Science Foundation funded a synthesis study on the status, contributions, and future direction of discipline-based education research (DBER) in physics, biological sciences, geosciences, and chemistry. DBER combines knowledge of teaching and learning with deep knowledge of discipline-specific science content. It describes the discipline-specific difficulties learners face and the specialized intellectual and instructional resources that can facilitate student understanding. *Discipline-Based Education Research* is based on a 30-month study built on two workshops held in 2008 to explore evidence on promising practices in undergraduate science, technology, engineering, and mathematics (STEM) education. This book asks questions that are essential to advancing DBER and broadening its impact on undergraduate science teaching and learning. The book provides empirical research on undergraduate teaching and learning in the sciences, explores the extent to which this research currently influences undergraduate instruction, and identifies the intellectual and material resources required to further develop DBER. *Discipline-Based Education Research* provides guidance for future DBER research. In addition, the findings and recommendations of this report may invite, if not assist, post-secondary institutions to increase interest and research activity in DBER and improve its quality and usefulness across all natural science disciplines, as well as guide instruction and assessment across natural science courses to improve student learning. The book brings greater focus to issues of student attrition in the natural sciences that are related to the quality of instruction. *Discipline-Based Education Research* will be of interest to educators, policy makers, researchers, scholars, decision makers in universities, government agencies, curriculum developers, research sponsors, and education advocacy groups.

Science Advice and Global Environmental Governance - Pia M. Kohler
2019-11-30

"*Science Advice and Global Environmental Governance*" examines expert committees established to provide advice on science to multilateral environmental agreements. By focusing on how these institutions are sites of coproduction of knowledge and policy, this work brings to light the politics of science advice and details how these committees are contributing to an emerging global environmental constitutionalism. Grounded in participant observation, elite interviews and document analysis, this book uses the lenses of the body of experts, body of knowledge and institutional body to focus on three treaties: the Montreal Protocol on Substances That Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants and the UN Convention to Combat Desertification.

How Learning Works - Susan A. Ambrose 2010-04-16

Praise for *How Learning Works* "How Learning Works is the perfect title for this excellent book. Drawing upon new research in psychology, education, and cognitive science, the authors have demystified a complex topic into clear explanations of seven powerful learning principles. Full of great ideas and practical suggestions, all based on solid research evidence, this book is essential reading for instructors at all levels who wish to improve their students' learning." —Barbara Gross Davis, assistant vice chancellor for educational development, University of California, Berkeley, and author, *Tools for Teaching* "This book is a must-read for every instructor, new or experienced. Although I have been teaching for almost thirty years, as I read this book I found myself resonating with many of its ideas, and I discovered new ways of thinking about teaching." —Eugenia T. Paulus, professor of chemistry, North Hennepin Community College, and 2008 U.S. Community Colleges Professor of the Year from The Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education "Thank you Carnegie Mellon for making accessible what has previously been inaccessible to those of us who are not learning scientists. Your focus on the essence of learning combined with concrete examples of the daily challenges of teaching and clear tactical strategies for faculty to consider is a welcome work. I will recommend this book to all my colleagues." —Catherine M. Casserly, senior partner, The Carnegie Foundation for the Advancement of Teaching "As you read about each of the seven basic learning principles in this book, you will find advice that is grounded in learning theory, based on research evidence, relevant to college teaching, and easy to understand. The authors have extensive knowledge and experience in applying the science of learning to college teaching, and they graciously share it with

you in this organized and readable book." —From the Foreword by Richard E. Mayer, professor of psychology, University of California, Santa Barbara; coauthor, *e-Learning and the Science of Instruction*; and author, *Multimedia Learning*

A Strategy for Assessing Science - National Research Council
2007-02-21

A Strategy for Assessing Science offers strategic advice on the perennial issue of assessing rates of progress in different scientific fields. It considers available knowledge about how science makes progress and examines a range of decision-making strategies for addressing key science policy concerns. These include avoiding undue conservatism that may arise from the influence of established disciplines; achieving rational, high-quality, accountable, and transparent decision processes; and establishing an appropriate balance of influence between scientific communities and agency science managers. *A Strategy for Assessing Science* identifies principles for setting priorities and specific recommendations for the context of behavioral and social research on aging.

Strengthening Forensic Science in the United States - National Research Council
2009-07-29

Scores of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent application. *Strengthening Forensic Science in the United States: A Path Forward* provides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exoneration. *Strengthening Forensic Science in the United States* gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators.

Discerning Critical Hope in Educational Practices - Vivienne Bozalek
2013-12-04

How can discerning critical hope enable us to develop innovative forms of teaching, learning and social practices that begin to address issues of marginalization, privilege and access across different contexts? At this millennial point in history, questions of cynicism, despair and hope arise at every turn, especially within areas of research into social justice and the struggle for transformation in education. While a sense of fatalism and despair is easily recognizable, establishing compelling bases for hope is more difficult. This book addresses the absence of sustained analyses of hope that simultaneously recognize the hard edges of why we despair. The volume posits the notion of critical hope not only as conceptual and theoretical, but also as an action-oriented response to despair. Our notion of critical hope is used in two ways: it is used firstly as a unitary concept which cannot be disaggregated into either hopefulness or criticality, and secondly, as an analytical concept, where critical hope is engaged and diversely theorized in ways that recognize aspects of individual and collective directions of critical hope. The book is divided into four sub-sections: Critical Hope in Education Critical Hope and a Critique of Neoliberalism Critical Race Theory/Postcolonial Perspectives on Critical Hope Philosophical Overviews of Critical Hope. Education can be a purveyor of critical hope, but it also requires critical hope so that it, as a sector itself, can be transformative. With contributions from international experts in the field, the book will be of value to all academics and practitioners working in the field of education.

Evidence-Based Practice in Exercise Science - William E. Amonette
2016-03-02

Exercise science practitioners have access to mountains of research findings, expert opinions, novel techniques, and program plans via blogs, fitness magazines, conference presentations, and peer-reviewed journals. To facilitate effective practice, practitioners must sift through this information and retain only the best evidence to form a sound base of knowledge. *Evidence-Based Practice in Exercise Science: The Six-Step*

Approach equips readers with the basic skills and competencies for discerning the value of scientific research. Using a methodical approach, students and professionals will learn to identify appropriate evidence to support novel interventions and avoid counterproductive or dangerous information to eliminate ineffective exercise options. The authors, well-known advocates in the study and application of evidence-based practice in the field of exercise science, take the five-step method of evidence-based practice that has been established in medicine, adapt it specifically for exercise science, and expand it to embrace individuality in exercise training. The content is accessible for students in a variety of courses in exercise science curricula; those seeking certification through professional organizations; and practitioners in the fields of exercise, nutrition, sports medicine, and sport science. This text is an instruction manual in understanding and applying evidence-based practice. The process is divided into six steps that begin with asking a question and then finding, evaluating, implementing, confirming, and re-evaluating the evidence. Readers of Evidence-Based Practice in Exercise Science will explore these aspects:

- The philosophy of science and design of scientific studies
- The use of search tools like PubMed and Google Scholar and how to rank or define the strength of the evidence
- Practical suggestions for implementing evidence-based practice in the field to better advise and serve athletes, clients, and patients
- Case studies that demonstrate realistic scenarios of how the evidence-based process may be used in a variety of sport and exercise settings

Each chapter opens with chapter objectives that provide a road map for learning, and a chapter conclusion summarizes main points and ensures understanding. The case studies cover topics including exercise prescription; exercise for special populations; nutrition and supplementation; and exercise devices, equipment, and apparel. Each case presents a realistic scenario that an exercise practitioner may experience, presents background information, formulates a question for investigation, describes a search of the literature, discusses the findings, and provides a recommendation for practice based on the best current evidence. Evidence-Based Practice in Exercise Science is grouped into four sections that assist readers in gaining a better understanding of the evidence-based practice paradigm, learning the step-by-step method, and acquiring experience in the evidence-based approach by working through practical examples using real-world scenarios. Part I offers foundational knowledge of evidence-based practice in exercise sciences. Part II introduces the six-step method of evidence-based practice with chapters that explore each step of the process in depth. Part III presents 16 case studies grouped into chapters by general topics. Part IV concludes the text with chapters on disseminating and sharing knowledge and the future of evidence-based practice in exercise science. By understanding the concepts and process of evidence-based practice, current and future sport, exercise, and health professionals will prescribe individualized programs and treatments that improve athletic performance and lead individuals toward better health. Embracing evidence-based practice will ultimately advance the field and produce optimal outcomes for clients, patients, and athletes.

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Why the social character of scientific knowledge makes it trustworthy. Are doctors right when they tell us vaccines are safe? Should we take climate experts at their word when they warn us about the perils of global warming? Why should we trust science when so many of our political leaders don't? Naomi Oreskes offers a bold and compelling defense of science, revealing why the social character of scientific knowledge is its greatest strength—and the greatest reason we can trust it. Tracing the history and philosophy of science from the late nineteenth century to today, this timely and provocative book features a new preface by Oreskes and critical responses by climate experts Ottmar Edenhofer and Martin Kowarsch, political scientist Jon Krosnick, philosopher of science Marc Lange, and science historian Susan Lindee, as well as a foreword by political theorist Stephen Macedo.

Learning Through Citizen Science - National Academies of Sciences, Engineering, and Medicine 2019-01-28

In the last twenty years, citizen science has blossomed as a way to engage a broad range of individuals in doing science. Citizen science projects focus on, but are not limited to, nonscientists participating in the processes of scientific research, with the intended goal of advancing and using scientific knowledge. A rich range of projects extend this focus in myriad directions, and the boundaries of citizen science as a field are not clearly delineated. Citizen science involves a growing community of professional practitioners, participants, and stakeholders, and a thriving collection of projects. While citizen science is often recognized for its

potential to engage the public in science, it is also uniquely positioned to support and extend participants' learning in science. Contemporary understandings of science learning continue to advance. Indeed, modern theories of learning recognize that science learning is complex and multifaceted. Learning is affected by factors that are individual, social, cultural, and institutional, and learning occurs in virtually any context and at every age. Current understandings of science learning also suggest that science learning extends well beyond content knowledge in a domain to include understanding of the nature and methods of science. Learning Through Citizen Science: Enhancing Opportunities by Design discusses the potential of citizen science to support science learning and identifies promising practices and programs that exemplify the promising practices. This report also lays out a research agenda that can fill gaps in the current understanding of how citizen science can support science learning and enhance science education.

Politics and Expertise - Zeynep Pamuk 2021-12-21

A new model for the relationship between science and democracy that spans policymaking, the funding and conduct of research, and our approach to new technologies. Our ability to act on some of the most pressing issues of our time, from pandemics and climate change to artificial intelligence and nuclear weapons, depends on knowledge provided by scientists and other experts. Meanwhile, contemporary political life is increasingly characterized by problematic responses to expertise, with denials of science on the one hand and complaints about the ignorance of the citizenry on the other. Politics and Expertise offers a new model for the relationship between science and democracy, rooted in the ways in which scientific knowledge and the political context of its use are imperfect. Zeynep Pamuk starts from the fact that science is uncertain, incomplete, and contested, and shows how scientists' judgments about what is significant and useful shape the agenda and framing of political decisions. The challenge, Pamuk argues, is to ensure that democracies can expose and contest the assumptions and omissions of scientists, instead of choosing between wholesale acceptance or rejection of expertise. To this end, she argues for institutions that support scientific dissent, proposes an adversarial "science court" to facilitate the public scrutiny of science, reimagines structures for funding scientific research, and provocatively suggests restricting research into dangerous new technologies. Through rigorous philosophical analysis and fascinating examples, Politics and Expertise moves the conversation beyond the dichotomy between technocracy and populism and develops a better answer for how to govern and use science democratically.

Science and Technology in the Global Cold War - Naomi Oreskes 2014-10-31

Investigations of how the global Cold War shaped national scientific and technological practices in fields from biomedicine to rocket science. The Cold War period saw a dramatic expansion of state-funded science and technology research. Government and military patronage shaped Cold War technoscientific practices, imposing methods that were project oriented, team based, and subject to national-security restrictions. These changes affected not just the arms race and the space race but also research in agriculture, biomedicine, computer science, ecology, meteorology, and other fields. This volume examines science and technology in the context of the Cold War, considering whether the new institutions and institutional arrangements that emerged globally constrained technoscientific inquiry or offered greater opportunities for it. The contributors find that whatever the particular science, and whatever the political system in which that science was operating, the knowledge that was produced bore some relation to the goals of the nation-state. These goals varied from nation to nation; weapons research was emphasized in the United States and the Soviet Union, for example, but in France and China scientific independence and self-reliance dominated. The contributors also consider to what extent the changes to science and technology practices in this era were produced by the specific politics, anxieties, and aspirations of the Cold War. Contributors Elena Aronova, Erik M. Conway, Angela N. H. Creager, David Kaiser, John Krige, Naomi Oreskes, George Reisch, Sigrid Schmalzer, Sonja D. Schmid, Matthew Shindell, Asif A. Siddiqi, Zuoyue Wang, Benjamin Wilson

The Craft and Science of Coffee - Britta Folmer 2016-12-16

The Craft and Science of Coffee follows the coffee plant from its origins in East Africa to its current role as a global product that influences millions of lives through sustainable development, economics, and consumer desire. For most, coffee is a beloved beverage. However, for some it is also an object of scientific study, and for others it is approached as a craft, both building on skills and experience. By

combining the research and insights of the scientific community and expertise of the crafts people, this unique book brings readers into a sustained and inclusive conversation, one where academic and industrial thought leaders, coffee farmers, and baristas are quoted, each informing and enriching each other. This unusual approach guides the reader on a journey from coffee farmer to roaster, market analyst to barista, in a style that is both rigorous and experience based, universally relevant and personally engaging. From on-farming processes to consumer benefits, the reader is given a deeper appreciation and understanding of coffee's complexity and is invited to form their own educated opinions on the ever changing situation, including potential routes to further shape the coffee future in a responsible manner. Presents a novel synthesis of coffee research and real-world experience that aids understanding, appreciation, and potential action. Includes contributions from a multitude of experts who address complex subjects with a conversational approach. Provides expert discourse on the coffee value chain, from agricultural and production practices, sustainability, post-harvest processing, and quality aspects to the economic analysis of the consumer value proposition. Engages with the key challenges of future coffee production and potential solutions.

Authentic Voices, Discerning Hearts - Thomas Knieps-Port le Roi 2016

One may argue that the Second Vatican Council simply came too early to address the questions that swept over Christianity and Catholicism with the sexual revolution. There is little doubt, however, that although the popes in the post-conciliar era made marriage and family issues a matter of decision at the highest level, they did not succeed in thwarting the growing discrepancy between the church's moral teaching in these matters and the moral insights of a large portion of the Catholic faithful. The two Synods of Bishops, which Pope Francis called in 2014 and 2015, can be regarded as a new attempt of the magisterium to come to terms with the problems that appeared on the horizon in the 1960's. The present volume addresses some of the major theological and ethical questions at stake and provides perspectives and resources for a renewed discourse of the church on marriage and family. (Series: INTAMS Studies on Marriage and Family / INTAMS-Studien zu Ehe und Familie, Vol. 1) [Subject: Religious Studies]

How to Get the Most Out of Clinical Pastoral Education - Gordon J. Hilsman, D.Min 2018-05-01

This accessible primer sets out the core elements and methods of Clinical Pastoral Education (CPE), and shows how to use it most effectively to improve clinicians' capacity for spiritual care. The guide explains how to learn best from verbatim sessions, open agenda groups and writing projects. It shows how the primary learning modalities of CPE add competence to a spiritual caregiver's practice, suggesting helpful ways to reflect on spiritual care encounters from varying perspectives. It recommends ways to collaborate with a peer group, enhance frameworks of understanding people, improve self-awareness and broaden one's scope of caring while also deepening it. Written by an experienced supervisor of the Association for Clinical Pastoral Education, this guide is an essential introduction for anyone seeking to foster positive attitudes and practice of spiritual care in hospitals, hospices and other clinical settings.

Reproducibility and Replicability in Science - National Academies of Sciences, Engineering, and Medicine 2019-10-20

One of the pathways by which the scientific community confirms the validity of a new scientific discovery is by repeating the research that produced it. When a scientific effort fails to independently confirm the computations or results of a previous study, some fear that it may be a symptom of a lack of rigor in science, while others argue that such an observed inconsistency can be an important precursor to new discovery. Concerns about reproducibility and replicability have been expressed in both scientific and popular media. As these concerns came to light, Congress requested that the National Academies of Sciences, Engineering, and Medicine conduct a study to assess the extent of issues related to reproducibility and replicability and to offer recommendations for improving rigor and transparency in scientific research. *Reproducibility and Replicability in Science* defines reproducibility and replicability and examines the factors that may lead to non-reproducibility and non-replicability in research. Unlike the typical expectation of reproducibility between two computations, expectations about replicability are more nuanced, and in some cases a lack of replicability can aid the process of scientific discovery. This report provides recommendations to researchers, academic institutions, journals, and funders on steps they can take to improve reproducibility

and replicability in science.

The Cambridge Handbook of Expertise and Expert Performance - K. Anders Ericsson 2018-05-17

In this book, some of the world's foremost 'experts on expertise' provide scientific knowledge on expertise and expert performance.

Public Value and Public Administration - John M. Bryson 2015-08-28
Governments and nonprofits exist to create public value. Yet what does that mean in theory and practice? This new volume brings together key experts in the field to offer unique, wide-ranging answers. From the United States, Europe, and Australia, the contributors focus on the creation, meaning, measurement, and assessment of public value in a world where government, nonprofit organizations, business, and citizens all have roles in the public sphere. In so doing, they demonstrate the intimate link between ideas of public value and public values and the ways scholars theorize and measure them. They also add to ongoing debates over what public value might mean, the nature of the most important public values, and how we can practically apply these values. The collection concludes with an extensive research and practice agenda conceived to further the field and mainstream its ideas. Aimed at scholars, students, and stakeholders ranging from business and government to nonprofits and activist groups, *Public Value and Public Administration* is an essential blueprint for those interested in creating public value to advance the common good.

Anxious Times - Amelia Bonea 2019-04-09

Much like the Information Age of the twenty-first century, the Industrial Age was a period of great social changes brought about by rapid industrialization and urbanization, speed of travel, and global communications. The literature, medicine, science, and popular journalism of the nineteenth century attempted to diagnose problems of the mind and body that such drastic transformations were thought to generate: a range of conditions or "diseases of modernity" resulting from specific changes in the social and physical environment. The alarmist rhetoric of newspapers and popular periodicals, advertising various "neurotic remedies," in turn inspired a new class of physicians and quack medical practices devoted to the treatment and perpetuation of such conditions. *Anxious Times* examines perceptions of the pressures of modern life and their impact on bodily and mental health in nineteenth-century Britain. The authors explore anxieties stemming from the potentially harmful impact of new technologies, changing work and leisure practices, and evolving cultural pressures and expectations within rapidly changing external environments. Their work reveals how an earlier age confronted the challenges of seemingly unprecedented change, and diagnosed transformations in both the culture of the era and the life of the mind.

The ABCs of How We Learn: 26 Scientifically Proven Approaches, How They Work, and When to Use Them - Daniel L. Schwartz 2016-07-26

Selected as one of NPR's Best Books of 2016, this book offers superior learning tools for teachers and students, from A to Z. An explosive growth in research on how people learn has revealed many ways to improve teaching and catalyze learning at all ages. The purpose of this book is to present this new science of learning so that educators can creatively translate the science into exceptional practice. The book is highly appropriate for the preparation and professional development of teachers and college faculty, but also parents, trainers, instructional designers, psychology students, and simply curious folks interested in improving their own learning. Based on a popular Stanford University course, *The ABCs of How We Learn* uses a novel format that is suitable as both a textbook and a popular read. With everyday language, engaging examples, a sense of humor, and solid evidence, it describes 26 unique ways that students learn. Each chapter offers a concise and approachable breakdown of one way people learn, how it works, how we know it works, how and when to use it, and what mistakes to avoid. The book presents learning research in a way that educators can creatively translate into exceptional lessons and classroom practice. The book covers field-defining learning theories ranging from behaviorism (R is for Reward) to cognitive psychology (S is for Self-Explanation) to social psychology (O is for Observation). The chapters also introduce lesser-known theories exceptionally relevant to practice, such as arousal theory (X is for eXcitement). Together the theories, evidence, and strategies from each chapter can be combined endlessly to create original and effective learning plans and the means to know if they succeed.

Greening the Alliance - Simone Turchetti 2018-12-17

Following the launch of Sputnik, the North Atlantic Treaty Organization became a prominent sponsor of scientific research in its member

countries, a role it retained until the end of the Cold War. As NATO marks sixty years since the establishment of its Science Committee, the main organizational force promoting its science programs, *Greening the Alliance* is the first book to chart NATO's scientific patronage—and the motivations behind it—from the organization's early days to the dawn of the twenty-first century. Drawing on previously unseen documents from NATO's own archives, Simone Turchetti reveals how its investments were rooted in the alliance's defense and surveillance needs, needs that led it to establish a program prioritizing environmental studies. A long-overlooked and effective diplomacy exercise, NATO's "greening" at one point constituted the organization's chief conduit for negotiating problematic relations between allies. But while *Greening the Alliance* explores this surprising coevolution of environmental monitoring and surveillance, tales of science advisers issuing instructions to bomb oil spills with napalm or Dr. Strangelove-like experts eager to divert the path of hurricanes with atomic weapons make it clear: the coexistence of these forces has not always been harmonious. Reflecting on this rich, complicated legacy in light of contemporary global challenges like climate change, Turchetti offers both an eye-opening history of international politics and environmental studies and a thoughtful assessment of NATO's future.

Revealing Nursing Expertise Through Practitioner Inquiry - Sally Hardy 2009-07-31

Revealing Nursing Expertise Through Practitioner Inquiry explores and reveals the often hidden workings of 'expert practitioners'. It provides valuable insights into developing practice expertise and how expert nursing practice is a key influence on health care practice. The authors present evidence around the interconnected components needed to facilitate, support and enable nurses in their practice settings through a transformational framework used to further develop and refine nursing practice expertise. Part 1 explores the current context of practice expertise and the process of practitioner inquiry. Part 2 examines the evidence for practice expertise, using exemplars from the extensive 'Expertise in Practice Project'. This includes perspectives of practitioners developing their expertise in diverse areas of clinical practice as well as of those who facilitate practitioners to develop and articulate their practice expertise. Part 3 explores the development of portfolios of evidence that demonstrate expertise, examines models and approaches to facilitation and provides a toolkit of resources. *Revealing Nursing Expertise Through Practitioner Inquiry* provides important evidence to support the claim that expert nurses change patients' worlds as well as transforming practice, workplace performance and organisational wide service developments. Provides a framework for exploring and developing nursing expertise Enables nurses to articulate their expertise and examine their own practice Offers practical guidance on facilitating inquiry based practitioners Draws on results of the RCN Expertise in Practice project Written collaboratively by practitioners, practice developers and nurse academics

Science on a Mission - Naomi Oreskes 2021-04-19

A vivid portrait of how Naval oversight shaped American oceanography, revealing what difference it makes who pays for science. What difference does it make who pays for science? Some might say none. If scientists seek to discover fundamental truths about the world, and they do so in an objective manner using well-established methods, then how could it matter who's footing the bill? History, however, suggests otherwise. In science, as elsewhere, money is power. Tracing the recent history of oceanography, Naomi Oreskes discloses dramatic changes in American ocean science since the Cold War, uncovering how and why it changed. Much of it has to do with who pays. After World War II, the US military turned to a new, uncharted theater of warfare: the deep sea. The earth sciences—particularly physical oceanography and marine geophysics—became essential to the US Navy, which poured unprecedented money and logistical support into their study. *Science on a Mission* brings to light how this influx of military funding was both enabling and constricting: it resulted in the creation of important domains of knowledge but also significant, lasting, and consequential domains of ignorance. As Oreskes delves into the role of patronage in the history of science, what emerges is a vivid portrait of how naval oversight transformed what we know about the sea. It is a detailed, sweeping history that illuminates the ways funding shapes the subject, scope, and tenor of scientific work, and it raises profound questions about the purpose and character of American science. What difference does it make who pays? The short answer is: a lot.

Using Social Theory - Michael Pryke 2003-09-03

The chapters in this innovative guide share a common belief that

thinking alongside ideas is an integral part of the research process. This book encourages the researcher to think through three key moments of the research process: the production of a research question; fieldwork; and analysis and writing.

How People Learn - National Research Council 2000-08-11

First released in the Spring of 1999, *How People Learn* has been expanded to show how the theories and insights from the original book can translate into actions and practice, now making a real connection between classroom activities and learning behavior. This edition includes far-reaching suggestions for research that could increase the impact that classroom teaching has on actual learning. Like the original edition, this book offers exciting new research about the mind and the brain that provides answers to a number of compelling questions. When do infants begin to learn? How do experts learn and how is this different from non-experts? What can teachers and schools do—with curricula, classroom settings, and teaching methods—to help children learn most effectively? New evidence from many branches of science has significantly added to our understanding of what it means to know, from the neural processes that occur during learning to the influence of culture on what people see and absorb. *How People Learn* examines these findings and their implications for what we teach, how we teach it, and how we assess what our children learn. The book uses exemplary teaching to illustrate how approaches based on what we now know result in in-depth learning. This new knowledge calls into question concepts and practices firmly entrenched in our current education system. Topics include: How learning actually changes the physical structure of the brain. How existing knowledge affects what people notice and how they learn. What the thought processes of experts tell us about how to teach. The amazing learning potential of infants. The relationship of classroom learning and everyday settings of community and workplace. Learning needs and opportunities for teachers. A realistic look at the role of technology in education.

Rethinking Expertise - Harry Collins 2008-09-15

What does it mean to be an expert? In *Rethinking Expertise*, Harry Collins and Robert Evans offer a radical new perspective on the role of expertise in the practice of science and the public evaluation of technology. Collins and Evans present a Periodic Table of Expertises based on the idea of tacit knowledge—knowledge that we have but cannot explain. They then look at how some expertises are used to judge others, how laypeople judge between experts, and how credentials are used to evaluate them. Throughout, Collins and Evans ask an important question: how can the public make use of science and technology before there is consensus in the scientific community? This book has wide implications for public policy and for those who seek to understand science and benefit from it. "Starts to lay the groundwork for solving a critical problem—how to restore the force of technical scientific information in public controversies, without importing disguised political agendas."—*Nature* "A rich and detailed 'periodic table' of expertise . . . full of case studies, anecdotes and intriguing experiments."—*Times Higher Education Supplement* (UK)

A Framework for K-12 Science Education - National Research Council 2012-02-28

Science, engineering, and technology permeate nearly every facet of modern life and hold the key to solving many of humanity's most pressing current and future challenges. The United States' position in the global economy is declining, in part because U.S. workers lack fundamental knowledge in these fields. To address the critical issues of U.S. competitiveness and to better prepare the workforce, *A Framework for K-12 Science Education* proposes a new approach to K-12 science education that will capture students' interest and provide them with the necessary foundational knowledge in the field. *A Framework for K-12 Science Education* outlines a broad set of expectations for students in science and engineering in grades K-12. These expectations will inform the development of new standards for K-12 science education and, subsequently, revisions to curriculum, instruction, assessment, and professional development for educators. This book identifies three dimensions that convey the core ideas and practices around which science and engineering education in these grades should be built. These three dimensions are: crosscutting concepts that unify the study of science through their common application across science and engineering; scientific and engineering practices; and disciplinary core ideas in the physical sciences, life sciences, and earth and space sciences and for engineering, technology, and the applications of science. The overarching goal is for all high school graduates to have sufficient knowledge of science and engineering to engage in public discussions on

science-related issues, be careful consumers of scientific and technical information, and enter the careers of their choice. A Framework for K-12 Science Education is the first step in a process that can inform state-level decisions and achieve a research-grounded basis for improving science instruction and learning across the country. The book will guide standards developers, teachers, curriculum designers, assessment developers, state and district science administrators, and educators who teach science in informal environments.

Ice humanities - Klaus Dodds 2022-08-02

Ice humanities is a pioneering collection of essays that tackles the existential crisis posed by the planet's diminishing ice reserves. By the end of this century, we will likely be facing a world where sea ice no longer reliably forms in large areas of the Arctic Ocean, where glaciers have not just retreated but disappeared, where ice sheets collapse, and where permafrost is far from permanent. The ramifications of such change are not simply geophysical and biochemical. They are societal and cultural, and they are about value and loss. Where does this change leave our inherited ideas, knowledge and experiences of ice, snow, frost and frozen ground? How will human, animal and plant communities superbly adapted to cold and high places cope with less ice, or even none at all? The ecological services provided by ice are breath-taking, providing mobility, water and food security for hundreds of millions of people around the world, often Indigenous and vulnerable communities. The stakes could not be higher. Drawing on sources ranging from oral testimony to technical scientific expertise, this path-breaking collection sets out a highly compelling claim for the emerging field of ice humanities, convincingly demonstrating that the centrality of ice in human and non-human life is now impossible to ignore.

The Playbook - Jennifer Jacquet 2022-07-12

From an astute observer of business behavior and expert in climate denial comes a thought-provoking explanation of how corporations delay, distract, and deflect blame and spread disinformation surrounding health issues, pollution, and climate change. "Brilliantly subversive and witty. If you want to be a vile, greedy capitalist, this how-to book will be a great help. And if you want to identify vile, greedy capitalists, it will show you how to recognize them. A landmark book." —Brian Eno Are you a corporation out to make your fortune at any cost? Are you worried about "facts" and "experts" getting in the way of your profits? Do you wish you could make scientists, journalists, and anyone who asks questions about your suspect business practices disappear? Now you can. Whether you are selling tobacco, dealing in oil, or pushing pharmaceuticals, denying climate change or exploiting workers, The Playbook is here to help you obfuscate your way to what you want. Including how to: Massage the statistics to suit your needs. Or, even better, fund studies to make up some new ones Attract and cultivate university professors who have an axe to grind and are short of cash Make your problem somebody else's problem—ideally the government's Remember: Tame journalists, PR firms, think tanks, lawyers, and threats of physical violence are your friends! Follow these rules and you are guaranteed to make a killing. It's economic sense, after all.

Research in Applied Linguistics - Fred L. Perry, Jr. 2011-05-16

Newly updated and revised, this popular text provides a solid introduction to the foundations of research methods, with the goal of enabling students and professionals in the field of applied linguistics to become not just casual consumers of research who passively read bits and pieces of a research article, but discerning consumers able to effectively use published research for practical purposes in educational settings. All issues important for understanding and using published research for these purposes are covered. Key principles are illustrated with research studies published in refereed journals across a wide spectrum of applied linguistics. Exercises throughout the text encourage readers to engage interactively with what they are reading at the point when the information is fresh in their minds. Changes in the second edition: new examples in chapter two reflecting formatting changes made by ERIC major reordering in chapter four to better represent the sample types reorganization of chapters six and seven to enhance cohesion of the themes being discussed updated references and recommended reading lists in all chapters.

Dead Heat - Michael F Oppenheimer 1990-04-29

Lockdown Drills - Jaclyn Schildkraut 2022-09-06

A comprehensive resource on what lockdown drills are, why they are necessary, and how best to conduct them. The first book to offer a comprehensive examination of lockdown drills in K-12 schools, Lockdown Drills balances research findings with practical applications and implications. Schildkraut and Nickerson, school safety experts with complementary backgrounds in criminology and school psychology, review the historical precedents for lockdown drills, distinguish school lockdowns from other emergency procedures (such as active shooter drills), explain why they are conducted, present evidence-based research on their effectiveness, and describe how to conduct them according to best practices. Proponents of lockdown drills as a life-saving necessity, the authors help to bring much-needed standardization to how these drills are studied and conducted. The authors present common arguments for and against the inclusion of lockdown drills in emergency preparedness efforts, balancing their discussion of the perceptions and psychological impacts of lockdown drills with scholarly research on the extent to which lockdown drills improve how effectively individuals respond to a potential threat. Placing lockdown drills in the larger context of school safety and preparedness, they examine the broader implications for policymakers. Finally, they emphasize that drills, of which lockdowns are only one type, are just a part of the complex school safety puzzle. Ensuring that schools are safe places for students and educators begins long before a crisis occurs and continues through the days, weeks, and years of recovery following a crisis.

Advances in Geoethics and Groundwater Management : Theory and Practice for a Sustainable Development - Manuel Abrunhosa 2021-03-30

This book gathers the peer-reviewed proceedings of the 1st congress on Geoethics & Groundwater Management (GEOETH&GWM'20), held in Porto, Portugal, in an online format on 18-22 May 2020. Hosted in School of Engineering (ISEP), Polytechnic of Porto based on Porto city (a UNESCO World Heritage Site), the international conference focused on what has now been dubbed "hydrogeoethics", a novel transdisciplinary, scientific field integrating all dimensions of geoethics in groundwater science and practice. Given its scope, the book is of interest to all researchers and practitioners in the geosciences, hydrology, water resources, hydrogeology, natural resources management, environment, engineering, law, sociology, education, philosophy, culture, among others. This joint congress is the result of a collaborative agreement between the IAH (International Association of Hydrogeologists) and IAPG (International Association for Promoting Geoethics) and reflects the need for concerted actions to achieve sustainable development. The diversity, scale, significance and increasing magnitude of anthropogenic interactions with aquifers and groundwater, which often involve conflicting values or interests, call for analysis, discussions and decisions on the part of the agents involved, e.g. groundwater scientists, policymakers, managers, organisations, professionals and citizens. This approach calls for a responsible, sustainable and human approach to groundwater use and management. The groundwater community involved in the exploration and exploitation, use and management of this increasingly vital natural resource is becoming more and more aware that ethical issues pervade all our attitudes from concept to action and need to be addressed. Diverse values and cultures, science and education, law and policies, human and natural environments and the public and the economic sectors view groundwater and its value and/or role differently. The authors believe that in a globalised and interconnected world, common ground must be found in the interest of peace, human development and sustainability. The main topics covered here include: 1. Fundamentals of hydrogeoethics: cultures, principles and geoethical values on groundwater science and engineering 2. Lessons for a resilient and sustainable future with hydrogeoethics: case studies of geoethics in groundwater science-engineering, profession, and management 3. Scientific and humanistic components of hydrogeoethics in groundwater education and professional training 4. Socio-hydrogeology and ethical groundwater management 5. Geoethics of decision making under uncertainty and ethical issues in neglecting groundwater functioning 6. Groundwater: geological, legal, social, and ethical challenges of a unique natural resource