

Geoworld Plate Tectonics Lab 2003 Ann Bykerk

This important book explores alternative strategies in agricultural and rural development to address the impacts of globalization processes on smallholder agriculturalists and marginalized rural people. Its goal is twofold: (1) to identify and assess the key processes by which globalization is affecting the smallholder agricultural and rural sectors; and (2) to identify and propose both micro- and macro-level policies and other strategies to deal with the problems that arise. This volume presents writings of leading scholars and practitioners working in the private and public sectors. Their work focuses on major crosscutting issues in the developing world and on country-specific case studies. Contents:The New Role of the Private Sector in Economic Development:Engaging the Global Enterprise to Promote Economic Development (E M Ehrlich & E Schwartz)Linking Globalization, Economic Growth and Poverty: Impacts of Agribusiness Strategies on Sub-Saharan Africa (D Weatherspoon et al.)Can Markets Matter for the Poor?:Making Markets Work for the Poor (E Gabre-Madhin & N Nagarajan)Global Markets and Rural Poverty: Do the Rural Poor Gain or Lose from Globalization? (C Y Thomas & C G Davis)Markets, Government and Development: Structural Adjustment Programs in a Global Economy (E Mabaya & R D Christy)Financial Market Integration and the Fate of Small and Micro Business Lending in Emerging Economies (M Wenner)Achieving Sustainable Communities:Essential Forms of Capital for Achieving Sustainable Community Development (D V Rainey et al.)Innovative Community Strategies in Sustainable Agriculture and Natural Resource Management: Landcare in South Africa (M L Saloman)"Show Me the Money": Asymmetric Globalization and Relative Deprivation in Sub-Saharan Africa (P Eloundou-Enyegue et al.)Globalization, Agriculture Development and Rural Community Livelihoods (P McMichael) Readership: Scholars, practitioners and students in economics and finance, agricultural policy, international trade, community and rural development. Keywords:Emerging Markets;Market Strategy;Corporate Social Responsibility/Economic Development

Spatial thinkingâ€”a constructive combination of concepts of space, tools of representation, and processes of reasoningâ€”uses space to structure problems, find answers, and express solutions. It is powerful and pervasive in science, the workplace, and everyday life. By visualizing relationships within spatial structures, we can perceive, remember, and analyze the static and dynamic properties of objects and the relationships between objects. Despite its crucial role underpinning the National Standards for Science and Mathematics, spatial thinking is currently not systematically incorporated into the K-12 curriculum. Learning to Think Spatially: GIS as a Support System in the K-12 Curriculum examines how spatial thinking might be incorporated into existing standards-based instruction across the school curriculum. Spatial thinking must be recognized as a fundamental part of K-12 education and as an integrator and a facilitator for problem solving across the curriculum. With advances in computing technologies and the increasing availability of geospatial data, spatial thinking will play a significant role in the information- based economy of the 21st-century. Using appropriately designed support systems tailored to the K-12 context, spatial thinking can be taught formally to all students. A geographic information system (GIS) offers one example of a high-technology support system that can enable students and teachers to practice and apply spatial thinking in many areas of the curriculum.

The purpose of this volume is to provide a review and analysis of the theory, research, and practice related to geospatial technologies in social studies education. In the first section, the history of geospatial technologies in education, the influence of the standards movement, and the growth of an international geospatial education community are explored. The second section consists of examples and discussion of the use of geospatial technologies for teaching and learning history, geography, civics, economics, and environmental science. In the third section, theoretical perspectives are proposed that could guide research and practice in this field. This section also includes reviews and critiques of recent research relevant to geospatial technologies in education. The final section examines the theory, research, and practice associated with teacher preparation for using geospatial technologies in education.

Professionals involved in the planning, design, operation, and construction of water, wastewater, and stormwater systems need to understand the productivity-enhancing applications of GIS. Inspired by an ASCE-sponsored continuing education course taught by the author, GIS Applications for Water, Wastewater, and Stormwater Systems focuses on the practical aspects of software and data tools that enable GIS applications. The book documents and analyzes effective use of GIS, demonstrating how you can apply the technology to make tasks easier to perform, saving time and money for your organization. The book first describes GIS, detailing its importance and explaining how to avoid potential pitfalls via a needs analysis study. It then describes GIS-related technologies that are crucial in applications development: remote sensing; DEM data; GPS; Internet applications; and mobile GIS. The final ten chapters focus on the "Four Ms" of the water industry—Mapping, Monitoring, Modeling, and Maintenance—applications that define the most important activities for efficient management of water, wastewater, and stormwater systems. Promoting a performance- (or outcome-) based style of learning, each chapter first states learning objectives and later concludes with a chapter summary and questions. The text encourages more effective and natural inductive study by first presenting case studies, then explaining procedures. This volume supplements the text with numerous maps, tables, and illustrations.

Research Frontiers and Future Challenges

Learning to Think Spatially

Geospatial Technologies and Homeland Security

Geostatistics Valencia 2016

GIS in the Classroom

Alternative Private Strategies and Public Policies

This conference at Rome in December 2006, promoted the use of integrated methodologies in remote sensing archaeology so as to help in the creation of new and sustainable policies in the monitoring, interpretation, fruition and communication of the cultural heritage. Including 67 papers from 10 sessions.

Philosophy for Children (P4C) is an approach to learning and teaching that aims to develop reasoning and judgement. Students learn to listen to and respect their peers' opinions, think creatively and work together to develop a deeper understanding of concepts central to their own lives and the subjects they are studying. With the teacher adopting the role of facilitator, a true community develops in which rich and meaningful dialogue results in enquiry of the highest order. Each chapter is written by a leading P4C expert and provides an introduction to the relationship between P4C and the subject area, lesson stimuli and activities for extending and deepening students' thinking. The book includes:
□ guidance on how to embed P4C in curriculum subjects in a crowded and demanding secondary curriculum timetable
□ troubleshooting advice for the teacher-turned-facilitator
□ a companion website containing useful links, downloadable resources and material to display on your interactive whiteboard. Edited and collated by the UK's leading P4C organisation, this book introduces a rationale for using and adapting P4C in the secondary curriculum.

As research in the geosciences and social sciences becomes increasingly dependent on computers, applications such as geographical information systems are becoming indispensable tools. But the digital representations of phenomena that these systems require are often of poor quality, leading to inaccurate results, uncertainty, error propagation, and This book is a hard copy of the editorial and all the papers in a Special Issue of the peer-reviewed open access journal "Water" on the theme 'Managed Aquifer Recharge for Water Resilience'. Managed aquifer recharge (MAR) is the purposeful recharge of water to aquifers for subsequent recovery or environmental benefit. MAR is increasingly used to make water supplies resilient to drought, climate change and deteriorating water quality, and to protect ecosystems from declining groundwater levels. Global MAR has grown exponentially to 10 cu.km/year and will increase ten-fold within a few decades. Well informed hydrogeologists, engineers and water quality scientists are needed to ensure that this investment is effective in meeting increasingly pressing needs. This compilation contains lessons from many examples of existing projects, including several national and continental summaries. It also addresses the elements essential for identifying and advancing projects such as mapping aquifer suitability and opportunities, policy matters, operational issues, and some innovations in MAR methods and monitoring. This collection exemplifies the state of progress in the science and practice of MAR and is intended to be useful, at least to water managers, water utilities, agricultural water users and urban planners, to facilitate water resilience through new MAR projects.

Mapping for Censuses and Surveys

Achieving Sustainable Communities in a Global Economy

Teaching at Universities

Digital Geography

A Better Planet

The Development of Spatial Representation and Reasoning

Although most mining companies utilise systems for slope monitoring, experience indicates that mining operations continue to be surprised by the occurrence of adverse geotechnical events. A comprehensive and robust performance monitoring system is an essential component of slope management in an open pit mining operation. The development of such a system requires considerable expertise to ensure the monitoring system is effective and reliable. Written by instrumentation experts and geotechnical practitioners, Guidelines for Slope Performance Monitoring is an initiative of the Large Open Pit (LOP) Project and the fifth book in the Guidelines for Open Pit Slope Design series. Its 10 chapters present the process of establishing and operating a slope monitoring system; the fundamentals of pit slope monitoring instrumentation and methods; monitoring system operation; data acquisition, management and analysis; and utilising and communicating monitoring results. The implications of increased automation of mining operations are also discussed, including the future requirements of performance monitoring. Guidelines for Slope Performance Monitoring summarises leading mine industry practice in monitoring system design, implementation, system management, data management and reporting, and provides guidance for engineers, geologists, technicians and others responsible for geotechnical risk management.

This book contains selected contributions presented at the 10th International Geostatistics Congress held in Valencia from 5 to 9 September, 2016. This is a quadrennial congress that serves as the meeting point for any engineer, professional, practitioner or scientist working in geostatistics. The book contains carefully reviewed papers on geostatistical theory and applications in fields such as mining engineering, petroleum engineering, environmental science, hydrology, ecology, and other fields.

The evolving field of emergency medical services (EMS) requires professional educators who are knowledgeable about teaching and learning strategies, classroom management, assessment and evaluation, technology in learning, legal implications in education, program infrastructure design, and administering programs of excellence to meet state and national accreditation guidelines. Foundations of Education: An EMS Approach, Third Edition, provides EMS educators with the tools, ideas, and information necessary to succeed in each of these areas. The content reflects how current educational knowledge and theory uniquely apply to EMS students, educators, and programs. This textbook is used in the NAEMSE Instructor Courses, and is an excellent reference for all EMS educators, as well as educators in allied health professions. Evidence-Based Content In addition to foundational topics such as teaching philosophy and classroom management, the text covers brain-based learning, accreditation and program evaluation, emerging technologies, and assessment strategies. It guides educators to write objectives, prepare lesson plans, and deliver education in engaging ways to maximize student learning. Grounded in this information, EMS educators can promote effective education regardless of the type of course or setting. Highlights -Covers current educational theory and teaching methodologies specific to EMS -Meets and exceeds the latest DOT National Guidelines for Educating EMS Instructors -Offer practical advice and scenarios in the form of Teaching Tips and Case in Points A puzzling tsunami entered Japanese history in January 1700. Samurai, merchants, and villagers wrote of minor flooding and damage. Some noted having felt no earthquake; they wondered what had set off the waves but had no way of knowing that the tsunami was spawned during an earthquake along the coast of northwestern North America. This orphan tsunami would not be linked to its parent earthquake until the mid-twentieth century, through an extraordinary series of discoveries in both North America and Japan. The Orphan Tsunami of 1700, now in its second edition, tells this scientific detective story through its North American and Japanese clues. The story underpins many of today's precautions against earthquake and tsunami hazards in the Cascadia region of northwestern North America. The Japanese tsunami of March 2011 called attention to these hazards as a mirror image of the transpacific waves of January 1700. Hear Brian Atwater on NPR with Renee Montagne http://www.npr.org/templates/story/story.php?storyId=4629401

Crowdsourcing Geographic Knowledge

Community Geography

The Orphan Tsunami of 1700

Geospatial Technologies in the Social Studies Classroom

Philosophy for Children Through the Secondary Curriculum

The Patterns of Architecture

Geology and Health is an integrated collection of papers from earth scientists, biologists, and medical specialists on health issues of concern to people worldwide, demonstrating how human health and well-being now and in the future can benefit through coordinated scientific efforts. The book demonstrates the virtues of cooperation between the earth, life and health sciences, as a practical and effective approach to better publichealth worldwide.

"Designed to facilitate an understanding of local places using geographic information system (GIS) technology to effect change, this text encourages everyone from students to active citizens to seek out and study important issues and problems facing their own communities. Detailed are the uses of GIS in such endeavors as mapping crime, analyzing landfill hazards, tracking river water quality, taking inventory of trees, and planning school transportation. Each study module contains a case study, a companion GIS exercise, and an exercise for independent study that can be detailed to users' own communities."

The NACTO Urban Street Design Guide shows how streets of every size can be reimagined and reoriented to prioritize safe driving and transit, biking, walking, and public activity. Unlike older, more conservative engineering manuals, this design guide emphasizes the core principle that urban streets are public places and have a larger role to play in communities than solely being conduits for traffic. The well-illustrated guide offers blueprints of street design from multiple perspectives, from the bird’s eye view to granular details. Case studies from around the country clearly show how to implement best practices, as well as provide guidance for customizing design applications to a city’s unique needs. Urban Street Design Guide outlines five goals and tenets of world-class street design:
• Streets are public spaces. Streets play a much larger role in the public life of cities and communities than just thoroughfares for traffic.
• Great streets are great for business. Well-designed streets generate higher revenues for businesses and higher values for homeowners.
• Design for safety. Traffic engineers can and should design streets where people walking, parking, shopping, bicycling, working, and driving can cross paths safely.
• Streets can be changed. Transportation engineers can work flexibly within the building envelope of a street. Many city streets were created in a different era and need to be reconfigured to meet new needs.
• Act now! Implement projects quickly using temporary materials to help inform public decision making. Elaborating on these fundamental principles, the guide offers substantive direction for cities seeking to improve street design to create more inclusive, multi-modal urban environments. It is an exceptional resource for redesigning streets to serve the needs of 21st century cities, whose residents and visitors demand a variety of transportation options, safer streets, and vibrant community life.

The environment and contested notions of sustainability are increasingly topics of public interest, political debate, and legislation across the world. Environmental education journals now publish research from a wide variety of methodological traditions that show linkages between the environment, health, development, and education. The growth in scholarship makes this an opportune time to review and synthesize the knowledge base of the environmental education (EE) field. The purpose of this 51-chapter handbook is not only to illuminate the most important concepts, findings and theories that have been developed by EE research, but also to critically examine the historical progression of the field, its current debates and controversies, what is still missing from the EE research agenda, and where that agenda might be headed. Published for the American Educational Research Association (AERA).

Digital Mapping Techniques '00, Workshop Proceedings

Closing the Gap

The Femicide Machine

Polygeneration Systems

Making Space

State Plane Coordinate System of 1983

Crazy Mayonnaisy Mum is packed with all sorts of poems and rhymes including a sequence of number rhymes, action rhymes, noisy rhymes and more thoughtful pieces too. If tigerlilies and dandelions growled, And cowslips mooed, and dogroses howled, And snapdragons roared and catmint miaowed, My garden would be extremely loud.

Crazy Mayonnaisy Mum is a fantastic collection of funny, silly and entertaining poems for the very young from acknowledged master of rhyme and author of The Gruffalo, Julia Donaldson.

This issue explores the creation, materialisation and theorisation of some of the world's most significant and spectacularly patterned spaces. It investigates how interiors, buildings, cities and landscapes are patterned through design, production and manufacturing, use, time, accident and perception. It also brings into focus how contemporary advanced spatial practices and CAD/CAM are now pushing patterns to encompass a greater range of structural, programmatic, aesthetic and material effects and properties.

The phenomenon of volunteered geographic information is part of a profound transformation in how geographic data, information, and knowledge are produced and circulated. By situating volunteered geographic information (VGI) in the context of big-data deluge and the data-intensive inquiry, the 20 chapters in this book explore both the theories and applications of crowdsourcing for geographic knowledge production with three sections focusing on 1). VGI, Public Participation, and Citizen Science; 2). Geographic Knowledge Production and Place Inference; and 3). Emerging Applications and New Challenges. This book argues that future progress in VGI research depends in large part on building strong linkages with diverse geographic scholarship. Contributors of this volume situate VGI research in geography's core concerns with space and place, and offer several ways of addressing persistent challenges of quality assurance in VGI. This book positions VGI as part of a shift toward hybrid epistemologies, and potentially a fourth paradigm of data-intensive inquiry across the sciences. It also considers the implications of VGI and the exaflood for further time-space compression and new forms, degrees of digital inequality, the renewed importance of geography, and the role of crowdsourcing for geographic knowledge production.

Marsha Alibrandi takes us to the cutting edge of teaching social studies and environmental education using Geographic Information Systems (GIS). Learn a new tool alongside your students. Introduce them to a technology that works equally well in other classes.

Rhetoric And Realities In International Schools

Japanese Clues to a Parent Earthquake in North America

**Handbook on Geospatial Infrastructure in Support of Census Activities
Managed Aquifer Recharge for Water Resilience
GIS in Action**

Guidelines for Slope Performance Monitoring

The support for polygeneration lies in the possibility of integrating different technologies into a single energy system, to maximize the utilization of both fossil and renewable fuels. A system that delivers multiple forms of energy to users, maximizing the overall efficiency makes polygeneration an emerging and viable option for energy consuming industries. Polygeneration Systems: Design, Processes and Technologies provides simple and advanced calculation techniques to evaluate energy, environmental and economic performance of polygeneration systems under analysis. With specific design guidelines for each type of polygeneration system and experimental performance data, referred both to single components and overall systems, this title covers all aspects of polygeneration from design to operation, optimization and practical implementation. Giving different aspects of both fossil and non-fossil fuel based polygeneration and the wider area of polygeneration processes, this book helps readers learn general principles to specific system design and development through analysis of case studies, examples, simulation characteristics and thermodynamic and economic data. Detailed economic data for technology to assist developing feasibility studies regarding the possible application of polygeneration technologies Offers a comprehensive list of all current numerical and experimental results of polygeneration available Includes simulation models, cost figures, demonstration projects and test standards for designers and researchers to validate their own models and/or to test the reliability of their results

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and to take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities. The designations used and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. The term "country" as used in this publication also refers, as appropriate, to territories or areas. The designations "developed regions" and "developing regions" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

Handbook on Geospatial Infrastructure in Support of Census ActivitiesUnited Nations Publications

"As one of the World Bank's contributions to the Habitat II process in Istanbul, this publication first tells the story of nearly a quarter century of the Bank's program of urban assistance for developing countries. It then turns to the future to draw att

Crazy Mayonnaisy Mum

Process Oriented Guided Inquiry Learning (POGIL)

Using Geographic Information Systems in Social Studies and Environmental Science

Geology and Health

Urban Street Design Guide

An account and analysis of the systematic murder of women and girls in the Mexican border town of Ciudad Juárez. In Ciudad Juarez, a territorial power normalized barbarism. This anomalous ecology mutated into a femicide machine: an apparatus that didn't just create the conditions for the murders of dozens of women and little girls, but developed the institutions that guarantee impunity for those crimes and even legalize them. A lawless city sponsored by a State in crisis. The facts speak for themselves. —from The Femicide Machine Best known to American readers for his cameo appearances as The Journalist in Roberto Bolano's 2666 and as a literary detective in Javier Marias's novel Dark Back of Time, Sergio González Rodríguez is one of Mexico's most important contemporary writers. He is the author of Bones in the Desert, the most definitive work on the murders of women and girls in Juárez, Mexico, as well as The Headless Man, a sharp meditation on the recurrent uses of symbolic violence: Infectious, a novel; and Original Evil, a long essay. The Femicide Machine is the first book by González Rodríguez to appear in English translation. Written especially for Semiotext(e) Intervention series, The Femicide Machine synthesizes González Rodríguez's documentation of the Juárez crimes, his analysis of the unique urban conditions in which they take place, and a discussion of the terror techniques of narco-warfare that have spread to both sides of the border. The result is a gripping polemic. The Femicide Machine probes the anarchic confluence of global capital with corrupt national politics and displaced, transient labor, and introduces the work of one of Mexico's most eminent writers to American readers.

Reflections of a Technocrat is an autobiography that ends as a biography. John McClucas died on the first of December 2002, at the age of 82, with all but the last chapter remaining to be started. He had been preparing to do a memoir, on and off, for many years, but only in the late 1990s, as declining health caused him to cut back on other commitments, did he devote a large part of his energies to getting the job done. To help complete this project, he engaged me—Ken Alnwick—a retired Air Force pilot and defense analyst, and my associate, Larry Benson, a recently retired Air Force historian. We are both grateful for the opportunity of getting to know John and his gracious wife, Harriet, as well as to research and help write about the many people, institutions, technical achievements, and national security issues with which he was associated. Chief among his numerous affiliations was the US Air Force. He began his civilian career with the Army Air Forces right after World War II and continued to advance the Air Force mission as a reserve officer, defense contractor, government executive, and valued consultant for the rest of the century. Not long before John died, he and Harriet decided the time had come to move out of their spacious home in Alexandria, Virginia, to a more manageable apartment in The Fairfax, a pleasant retirement community at nearby Fort Belvoir. In anticipation of the move, John decided to donate the bulk of his papers, professional library, and much of his memorabilia to two schools he admired: the Air Force Academy and Embry- Riddle Aeronautical University, with additional papers offered to the Comsat Alumni Association. His files helped shed light on every phase of his career up to and including recent activities as a director at Orbital Sciences Corporation, chairman of the Arthur C. Clarke Foundation, trustee of the Air Force Historical Foundation, and contributing member of several other public service organizations. The process was not easy. Each dusty box released a flood of memories as we went through the agonizing process of deciding what to keep, what to send to the repositories, what to give away, and what to relegate to recycling bins or the county landfill.

Argues for an interactionist approach to spatial development that incorporates and integrates essential insights of the Piaget, Nativist, and Vygotskyan approaches.

Globalization has a profound effect on the mission and goals of education worldwide. One of its most visible manifestations is the worldwide endorsement of the idea of "education for global citizenship," which has been enthusiastically supported by national governments, politicians, and policy-makers across different nations. Increasingly, the educational institutions feel under pressure to respond to globalization forces by preparing students to engage competitively and successfully with this new realm, lest their nations be left in the dust. What is the role of international schools in implementing the idea of "education for global citizenship"? How do these schools create a culturally unbiased global curriculum when the adopted models have been developed by Western societies and at the very least are replete with (Western) cultural values, traditions, and biases? This collection of essays attempts to grapple with these complex issues, while highlighting that culture and politics closely intertwine with schooling and curriculum as parents, administrators, teachers, and students of different backgrounds and interests negotiate definitions of self and each other to construct knowledge in particular contexts. The goal is to examine the complexity of factors that drive the global demand for "education for global citizenship" and de-construct the contested nature of "global citizenship" by examining how the phenomenon is understood, interpreted, and modified in different cultural settings. The authors provide not only a thick description of their cases, but also a critical assessment of various attempts to initiate and implement educational reforms aimed at the development of globally-minded citizens in various national settings.

Geo-Congress 2019

Livable Cities for the 21st Century

Wings and Webs

The Irrigation Sector

Digital Mapping Techniques '99

Workshop Proceedings

Geomatics is a neologism, the use of which is becoming increasingly widespread, even if it is not still universally accepted. It includes several disciplines and te- niques for the study of the Earth's surface and its environments, and computer science plays a decisive role. A more meaningful and appropriate expression is G- spatial Information or GeoInformation. Geo-spatial Information embeds topography in its more modern forms (measurements with electronic instrumentation, sophisticated techniques of data analysis and network compensation, global satellite positioning techniques, laser scanning, etc.), analytical and digital photogrammetry, satellite and airborne remote sensing, numerical cartography, geographical information systems, decision support systems, WebGIS, etc. These specialized elds are intimately interrelated in terms of both the basic science and the results pursued: rigid separation does not allow us to discover several common aspects and the fundamental importance assumed in a search for solutions in the complex survey context. The objective pursued by Mario A. Gomarasca, one that is only apparently modest, is to publish an integrated text on the surveying theme, containing simple and comprehensible concepts relevant to experts in Geo-spatial Information and/or speci cally in one of the disciplines that compose it. At the same time, the book is rigorous and synthetic, describing with precision the main instruments and methods connected to the multiple techniques available today.

A practical, bipartisan call to action from the world's leading thinkers on the environment and sustainability Sustainability has emerged as a global priority over the past several years. The 2015 Paris Agreement on climate change and the adoption of the seventeen Sustainable Development Goals through the United Nations have highlighted the need to address critical challenges such as the buildup of greenhouse gases in the atmosphere, water shortages, and air pollution. But in the United States, partisan divides, regional disputes, and deep disagreements over core principles have made it nearly impossible to chart a course toward a sustainable future. This timely new book, edited by celebrated scholar Daniel C. Esty, offers fresh thinking and forward-looking solutions from environmental thought leaders across the political spectrum. The book's forty essays cover such subjects as ecology, environmental justice, Big Data, public health, and climate change, all with an emphasis on sustainability. The book focuses on moving toward sustainability through actionable, bipartisan approaches based on rigorous analytical research.

India's irrigated agriculture sector has been basic to India's economic development and poverty alleviation. One of India's major achievements is its rapid expansion of irrigation and drainage infrastructure. However, the major emphasis on development has been achieved at a cost. The importance put on new construction has diverted attention away from the need to ensure the quality, productivity, and sustainability of the services. Further, a governmental subsidy based approach has been used and this has resulted in irrigation and drainage services which, while enabling significantly higher productivity than from non-irrigated lands, are well below their potential. 'The Irrigation Sector' discusses directions for future growth, the framework for reform, and the reform agenda.

Homeland security and context In the Geographical Dimensions of Terrorism (GDOT) (Cutter et al. 2003), the first book after 9/11 to address homeland security and geography, we developed several thematic research agendas and explored intersections between geographic research and the importance of context, both geographical and political, in relationship to the concepts of terrorism and security. It is good to see that a great deal of new thought and research continues to flow from that initial research agenda, as illustrated by many of the papers of this new book, entitled Geospatial Technologies and Homeland Security: Research Frontiers and Future Challenges. Context is relevant not only to understanding homeland security issues broadly, but also to the conduct of research on geospatial technologies. It is impossible to understand the implications of a homeland security strategy, let alone hope to make predictions, conduct meaningful modeling and research, or assess the value and dangers of geospatial technologies, without consideration of overarching political, social, economic, and geographic contexts within which these questions are posed.

2nd International Conference on Remote Sensing in Archaeology : Proceedings of the 2nd International Workshop, CNR, Rome, Italy, December 4-7, 2006

Reflections of a Technocrat - Managing Defense, Air, and Space Programs During the Cold War

Forty Big Ideas for a Sustainable Future

Foundations of Education: An EMS Approach

Globalizing Minds

Basics of Geomatics

Focusing on geoscience, this book applies a uniquely cross-disciplinary perspective to its examination of the relationship between scientific research and teaching at universities. Contributions show how the use of technology and innovative pedagogical design allows students at different stages of their university studies to develop skills and experience in geoscience research. The book offers wide-ranging insight from academics in geoscience, science education and higher education policy and pedagogy, as well as from students and industry experts. The opening section sets the context, with a chapter on teaching and research in the contemporary university by a world-leading academic in higher education, and an essay by the editor on the case of moving from research-implicit to research-enhanced teaching. Part Two addresses the research-teaching nexus in geoscience, offering chapters entitled The Challenge of Combining Research and Teaching: A Young Geoscientist's Perspective; Teaching on the High Seas: How Field Research Enhances Teaching at All Levels; Curricula and Departmental Strategies to Link Teaching and Geoscience Research; and Geoscience Internships in the Oil and Gas Industry, among others. In Part Three, the use of technology is discussed in chapters such as Using Interactive Virtual Field Guides and Linked Data in Geoscience Teaching and Learning; and Towards Technology- and Research-enhanced Education (TREE): Electronic Feedback as a Teaching Tool in Geoscience. The Program Design section includes chapters on Introducing University Students to Authentic, Hands-on Undergraduate Geoscience Research, and the opportunity to link research and teaching in students' final projects and more. Geoscience Research and Education: Teaching at Universities is a useful resource for understanding the research-teaching nexus and how it has been implemented in different types of universities and in different countries. Science academics seeking to integrate research into teaching will find the book highly relevant to their work. The emphasis on using technology as a means to link research and teaching will be of great interest and practical benefit to learning technologists, science educators and university policymakers. Together with the companion volume Geoscience Research and Outreach: Schools and Public Engagement, this book showcases the key role that geoscience research plays in a wide spectrum of educational settings. The volume begins with an overview of POGIL and a discussion of the science education reform context in which it was developed. Next, cognitive models that serve as the basis for POGIL are presented, including Johnstone's Information Processing Model and a novel extension of it. Adoption, facilitation and implementation of POGIL are addressed next. Faculty who have made the transformation from a traditional approach to a POGIL student-centered approach discuss their motivations and implementation processes. Issues related to implementing POGIL in large classes are discussed and possible solutions are provided. Behaviors of a quality facilitator are presented and steps to create a facilitation plan are outlined. Succeeding chapters describe how POGIL has been successfully implemented in diverse academic settings, including high school and college classrooms, with both science and non-science majors. The challenges for implementation of POGIL are presented, classroom practice is described, and topic selection is addressed. Successful POGIL instruction can incorporate a variety of instructional techniques. Tablet PC's have been used in a POGIL classroom to allow extensive communication between students and instructor. In a POGIL laboratory section, students work in groups to carry out experiments rather than merely verifying previously taught principles. Instructors need to know if students are benefiting from POGIL practices. In the final chapters, assessment of student performance is discussed. The concept of a feedback loop, which can consist of self-analysis, student and peer assessments, and input from other instructors, and its importance in assessment is detailed. Data is provided on POGIL instruction in organic and general chemistry courses at several institutions. POGIL is shown to reduce attrition, improve student learning, and enhance process skills.

From Space to Place

GIS Applications for Water, Wastewater, and Stormwater Systems

Design, Processes and Technologies

Data, Software, Education, and a Tribute to Ralph Peck : Selected Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, March 24-27, 2019, Philadelphia, Pennsylvania

Geoscience Research and Education

Unveiling Active Faults: Multiscale Perspectives and Alternative Approaches Addressing the Seismic Hazard Challenge