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Active Learning

In this volume the authors take a second look at the use of active learning in higher education. The chapters describe the concept of the active learning continuum and tie various practical examples of active learning to that concept. They illustrate how important it is to consider context in the design of active learning to get maximum benefit. This is the 67th issue of the journal New Directions for Teaching and Learning.

Our Social World

This book offers a practical guide to successful strategies for active learning. Presenting a wide range of teaching tools- including problem-solving exercises, cooperative student projects informal group work, simulations, case studies, role playing, and similar activities that ask students to apply what they are learning - Promoting Active Learning draws on the classroom experiences and tips of teachers from a variety of disciplines.

A Guide to Teaching in the Active Learning Classroom

A generation of research has provided a new understanding of how the brain works and how students learn. David Gooblar offers scholars at all levels a practical guide to the state of the art in teaching and learning. His insights about active learning and the student-centered classroom will be

valuable to instructors in any discipline, right away.

College Physics

This book is a compilation of approximately 40 strategies that serve as blueprints for instructional design. The first chapter describes in depth the research and foundations that support these strategies. Chapter Two provides information for the reader in terms of how to use this book, and how to choose and use strategies to fit both the content and the needs of the learners. Chapter Three presents and describes several strategies. The book is a user-friendly resource that is directly applicable to practice. All of the book's strategies support teachers in their efforts to engage and motivate diverse learners as they meet academic and social objectives. Each strategy is presented with an explanation, directions for use, sample applications and classroom vignettes. Applications for different ages, abilities, and learning needs of the students, and for a variety of content areas, are suggested. The book is focused on the primary school age level.

Exam Prep Flash Cards for Active Learning Guide for College

Learner-Centered Teaching

Rethink traditional teaching methods to improve student learning and retention in STEM Educational research has repeatedly shown that compared to

traditional teacher-centered instruction, certain learner-centered methods lead to improved learning outcomes, greater development of critical high-level skills, and increased retention in science, technology, engineering, and mathematics (STEM) disciplines. Teaching and Learning STEM presents a trove of practical research-based strategies for designing and teaching STEM courses at the university, community college, and high school levels. The book draws on the authors' extensive backgrounds and decades of experience in STEM education and faculty development. Its engaging and well-illustrated descriptions will equip you to implement the strategies in your courses and to deal effectively with problems (including student resistance) that might occur in the implementation. The book will help you: Plan and conduct class sessions in which students are actively engaged, no matter how large the class is Make good use of technology in face-to-face, online, and hybrid courses and flipped classrooms Assess how well students are acquiring the knowledge, skills, and conceptual understanding the course is designed to teach Help students develop expert problem-solving skills and skills in communication, creative thinking, critical thinking, high-performance teamwork, and self-directed learning Meet the learning needs of STEM students with a broad diversity of attributes and backgrounds The strategies presented in Teaching and Learning STEM don't require revolutionary time-intensive changes in your teaching, but rather a gradual integration of traditional and new methods. The result will be continual improvement in your teaching and your students' learning. More information about Teaching

and Learning STEM can be found at http://educationdesignsinc.com/book including its preface, foreword, table of contents, first chapter, a reading guide, and reviews in 10 prominent STEM education journals.

High School English Teacher's Guide to Active Learning

Science Teaching Essentials: Short Guides to Good Practice serves as a reference manual for science faculty as they set up a new course, consider how to teach the course, figure out how to assess their students fairly and efficiently, and review and revise course materials. This book consists of a series of short chapters that instructors can use as resources to address common teaching problems and adopt evidence-based pedagogies. By providing individual chapters that can be used independently as needed, this book provides faculty with a just-in-time teaching resource they can use to draft a new syllabus. This is a must-have resource for science, health science and engineering faculty, as well as graduate students and post-docs preparing for future faculty careers. Provides easily digested, practical, research-based information on how to teach Allows faculty to efficiently get up-to-speed on a given pedagogy or assessment method Addresses the full range of faculty experiences as they being to teach for the first time or want to reinvent how they teach

Student Engagement Techniques

"Robert DiYanni and Anton Borst's Classroom Confidential provides a clear, compact guide to the basics of college teaching. Grounded in the authors' classroom experience, their pedagogical coaching at NYU's Center for the Advancement of Teaching, and their examination of the latest learning science research, it explains how to teach in the college classroom from a learner's perspective-what methods, principles, and activities achieve the best learning outcomes. Chapters address major topics from course and syllabus design to discussion-based teaching, critical reading, and assessment, while brief "interludes" cover various pedagogical elements and applications-including what to do on the first and last days of class and how to incorporate service and experiential learning into curricula. Throughout, the authors provide practical suggestions and strategies, while explaining the underlying pedagogical principles. They also address recent topics that promise to remain fixtures of the educational landscape, such as teaching with technology and teaching in a global context. They steer a middle course on technology, suggesting ways to maximize its benefits while minimizing its distractions. The book coheres around a philosophy of active learning and student engagement. DiYanni and Borst argue that teaching practices should challenge students to think and learn, requiring them to do things with newly acquired knowledge-create models, conduct experiments, debate issues, and more. The authors enlist reliable scholarly research to demonstrate that active learning, of the kind they advocate, achieves results: students learn more and better, and their learning is deeper and longer lasting. The authors'

pedagogy echoes their epistemology, as they demonstrate how learning and teaching are inextricably intertwined, organic rather than mechanical activities"--

Social Media for Active Learning

"College textbook for intro to physics courses"--

Exam Prep Flash Cards for College Physics and Active

Active Learning Strategies in Higher Education

While many educators acknowledge the challenges of a curriculum shaped by test preparation, implementing meaningful new teaching strategies can be difficult. Active Learning presents an examination of innovative, interactive teaching strategies that were successful in engaging urban students who struggled with classroom learning. Drawing on rich ethnographic data, the book proposes participatory action research as a viable approach to teaching and learning that supports the development of multiple literacies in writing, reading, research and oral communication. As Wright argues, in connecting learning to authentic purposes and real world consequences, participatory action research can serve as a model for meaningful urban school reform. After an introduction to the history and demographics of the working-class West Coast neighborhood in

which the described PAR project took place, the book discusses the "pedagogy of praxis" method and the project's successful development of student voice, sociopolitical analysis capacities, leadership skills, empowerment and agency. Topics addressed include an analysis and discussion of the youth-driven PAR process, the reactions of student researchers, and the challenges for adults in maintaining youth and adult partnerships. A thought-provoking response to current educational challenges, Active Learning offers both timely implications for educational reform and recommendations to improve school policies and practices.

A Guide to Teaching in the Active Learning Classroom

Learn to design interest-provoking writing and critical thinking activities and incorporate them into your courses in a way that encourages inquiry, exploration, discussion, and debate, with Engaging Ideas, a practical nuts-and-bolts guide for teachers from any discipline. Integrating critical thinking with writing-across-the-curriculum approaches, the book shows how teachers from any discipline can incorporate these activities into their courses. This edition features new material dealing with genre and discourse community theory, quantitative/scientific literacy, blended and online learning, and other current issues.

Inspiring Active Learning

Discovery-based activities reinforce physics concepts by allowing students to apply physics phenomena to everyday observations in the world around them. It's organized in parallel with the textbook's chapters.

Active Learning

There is a need in the higher education arena for a book that responds to the need for using technology in a classroom of tech-savvy students. This book is filled with illustrative examples of questions and teaching activities that use classroom response systems from a variety of disciplines (with a discipline index). The book also incorporates results from research on the effectiveness of the technology for teaching. Written for instructional designers and re-designers as well as faculty across disciplines. A must-read for anyone interested in interactive teaching and the use of clickers. This book draws on the experiences of countless instructors across a wide range of disciplines to provide both novice and experienced teachers with practical advice on how to make classes more fun and more effective."--Eric Mazur, Balkanski Professor of Physics and Applied Physics, Harvard University, and author, Peer Instruction: A User's Manual "Those who come to this book needing practical advice on using 'clickers' in the classroom will be richly rewarded: with case studies, a refreshing historical perspective, and much pedagogical ingenuity. Those who seek a deep, thoughtful examination of strategies for active learning will find that here as well—in abundance. Dr. Bruff achieves a marvelous synthesis of the pragmatic

and the philosophical that will be useful far beyond the life span of any single technology." --Gardner Campbell, Director, Academy for Teaching and Learning, and Associate Professor of Literature, Media, and Learning, Honors College, Baylor University

Promoting Active Learning

These books show you how you can: - foster reflective, independent thinking in your class - boost the number of students who actively participate - prevent the discussions from falling flat or degenerating into bull sessions This volume features 18 student-centered lesson plans and include answer keys for teachers. Each lesson plan engages students in active learning.

Small Teaching Online

Based on mutual respect, collaboration, and dignity, offers practical strategies to help students work more willingly, diligently, and intelligently.

The World Language Teacher's Guide to Active Learning

This book explores evidence-based practice in college science teaching. It is grounded in disciplinary education research by practicing scientists who have chosen to take Wieman's (2014) challenge seriously, and to investigate claims about the efficacy of alternative strategies in college science teaching. In

editing this book, we have chosen to showcase outstanding cases of exemplary practice supported by solid evidence, and to include practitioners who offer models of teaching and learning that meet the high standards of the scientific disciplines. Our intention is to let these distinguished scientists speak for themselves and to offer authentic guidance to those who seek models of excellence. Our primary audience consists of the thousands of dedicated faculty and graduate students who teach undergraduate science at community and technical colleges, 4-year liberal arts institutions, comprehensive regional campuses, and flagship research universities. In keeping with Wieman's challenge, our primary focus has been on identifying classroom practices that encourage and support meaningful learning and conceptual understanding in the natural sciences. The content is structured as follows: after an Introduction based on Constructivist Learning Theory (Section I), the practices we explore are Eliciting Ideas and Encouraging Reflection (Section II); Using Clickers to Engage Students (Section III); Supporting Peer Interaction through Small Group Activities (Section IV); Restructuring Curriculum and Instruction (Section V); Rethinking the Physical Environment (Section VI); Enhancing Understanding with Technology (Section VII), and Assessing Understanding (Section VIII). The book's final section (IX) is devoted to Professional Issues facing college and university faculty who choose to adopt active learning in their courses. The common feature underlying all of the strategies described in this book is their emphasis on actively engaging students who seek to make sense of natural objects and events. Many of the strategies we

highlight emerge from a constructivist view of learning that has gained widespread acceptance in recent years. In this view, learners make sense of the world by forging connections between new ideas and those that are part of their existing knowledge base. For most students, that knowledge base is riddled with a host of naïve notions, misconceptions and alternative conceptions they have acquired throughout their lives. To a considerable extent, the job of the teacher is to coax out these ideas; to help students understand how their ideas differ from the scientifically accepted view; to assist as students restructure and reconcile their newly acquired knowledge; and to provide opportunities for students to evaluate what they have learned and apply it in novel circumstances. Clearly, this prescription demands far more than most college and university scientists have been prepared for.

Active Learning

The goal of this book is to introduce a reader to a new philosophy of teaching and learning physics - Investigative Science Learning Environment, or ISLE (pronounced as a small island). ISLE is an example of an "intentional" approach to curriculum design and learning activities (MacMillan and Garrison 1988 A Logical Theory of Teaching: Erotetics and Intentionality). Intentionality means that the process through which the learning occurs is as crucial for learning as the final outcome or learned content. In ISLE, the process through which students learn mirrors the practice of physics.

Active Learning in Secondary and College Science Classrooms

Active Learning

How can social media help transform a student's learning experience and promote active engagement with learning content and peers? Social Media for Active Learninghelps instructors achieve this goal. Many people use social media in their everyday lives, seeking information and informal learning opportunities via their online networks. However, harnessing the power and harvesting the breadth of social media tools and networks for formal learning purposes can be challenging. The sheer number of options is easily overwhelming, and social media use often requires a shift from teacher-centered activities to learner-centered ones, and from teacher-selected and created resources to class-selected, peer evaluated, and perhaps even learner-created learning resources. This book helps instructors approach social media integration in an organized and well planned fashion, with tips to help both complete novices and social media mavens succeed. This book provides: * Expert guidance written by a leader in social media-based instruction and research * A social media knowledge activity framework to help instructors identify ways to align social media activities and tools with desired learning outcomes. * Examples of social media learning activities, course policies, and assessments. * Approaches for content creation, adoption, adaptation, and ownership in a social media

context. * A comprehensive overview of the role social media-based communities and networks play in supporting learners, both in and out of the classroom. * Rich discussion of ethical concerns when social media is used in formal instruction. * Suggestions for supporting lifelong learning via individual learning networks. This volume serves as a guide for individuals teaching in higher education, continuing education, and those who wish to learn about social media-based pedagogy. It is appropriate for instructors who teach wholly online as well as those who are seeking the latest and most effective ways to enhance the traditional classroom experience.

Active Learning in College Science

How can we structure class time efficiently? How can we explain and lecture effectively? How can we help students master content? How can we make learning more real and lasting? In this revised and greatly expanded 2nd edition of Inspiring Active Learning, educators Merrill Harmin and Melanie Toth provide answers to our fundamental teaching questions and show us how to transform our classrooms into communities of active, responsible learners. The authors present an array of research-based, teacher-tested strategies for managing our everyday responsibilities--from beginning a class to grading homework, from instructing large groups to promoting diligent seatwork, from motivating slackers to handling disrupters. These strategies focus on mutual respect, not bossiness; collaboration, not isolation; commitment to learning, not fear of failure; and the

dignity of all, not praise or rewards for a few. Regardless of our level of experience or the grade or subject we teach, the active-learning approach helps us * Perform routine teaching tasks more easily. * Discover a higher level of teaching success and personal satisfaction. * Establish a class climate of full participation and cooperation. * Prepare engaging lessons that keep students productively involved. * Encourage students to work energetically, willingly, and intelligently each day. * Inspire all students, even the most challenging, to strive for excellence. With its detailed classroom examples and more than 250 practical strategies, Inspiring Active Learning is a comprehensive reference for solving almost any teaching problem.

Science Teaching Essentials

Active Learning: A practical Guide for College Faculty offers everyday guidance for implementing and improving active learning in the college classroom. This collection of articles is appropriate for both the complete novice as well as the instructor who may have used active learning techniques before.

What the Best College Teachers Do

This book focuses on selected best practices for effective active learning in Higher Education. Contributors present the epistemology of active learning along with specific case studies from different disciplines and countries. Discussing issues around ICTs, collaborative learning, experiential

learning and other active learning strategies.

Active Learning Guide for College Physics

Enhance your students' success and improve the likelihood of retention with the easy-to-implement activities and strategies in this book! Bestselling author Deborah Blaz shows how to create a classroom in which students can actively experience, experiment with and discover a world language. The new edition features updated strategies based on brain-based research and new ideas for using technology and personalized learning. In addition, the book has been reorganized to help you easily find and pull activities you want to use in your classroom the very next day. You'll learn how to mix up your repertoire of activities, games, and exercises to keep students engaged; introduce students to the culture of the language you teach by hosting parties and celebrations; overcome some of the biggest obstacles in the path to fluency, including verb conjugation, using object pronouns, and the subjunctive mood; customize your teaching strategies to accommodate a broader range of talents, skills, and intelligences; implement new assessment strategies to improve verbal skills and reading comprehension; and more! Bonus: Downloadable versions of some of the resources in this book are available on the Routledge website at www.routledge.com/9781138049574, so you can print and distribute them for immediate classroom use.

Engaging Ideas

The working model for "helping the learner to learn" presented in this book is relevant to any teaching context, but the focus here is on teaching in secondary and college science classrooms. Specifically, the goals of the text are to: *help secondary- and college-level science faculty examine and redefine their roles in the classroom; *define for science teachers a framework for thinking about active learning and the creation of an active learning environment; and *provide them with the assistance they need to begin building successful active learning environments in their classrooms. Active Learning in Secondary and College Science Classrooms: A Working Model for Helping the Learner to Learn is motivated by fundamental changes in education in response to perceptions that students are not adequately acquiring the knowledge and skills necessary to meet current educational and economic goals. The premise of this book is that active learning offers a highly effective approach to meeting the mandate for increased student knowledge, skills, and performance. It is a valuable resource for all teacher trainers in science education and high school and college science teachers.

41 Active Learning Strategies for the Inclusive Classroom, Grades 6–12

While Active Learning Classrooms, or ALCs, offer rich new environments for learning, they present many new challenges to faculty because, among other

things, they eliminate the room's central focal point and disrupt the conventional seating plan to which faculty and students have become accustomed. The importance of learning how to use these classrooms well and to capitalize on their special features is paramount. The potential they represent can be realized only when they facilitate improved learning outcomes and engage students in the learning process in a manner different from traditional classrooms and lecture halls. This book provides an introduction to ALCs, briefly covering their history and then synthesizing the research on these spaces to provide faculty with empirically based, practical guidance on how to use these unfamiliar spaces effectively. Among the questions this book addresses are: • How can instructors mitigate the apparent lack of a central focal point in the space? • What types of learning activities work well in the ALCs and take advantage of the affordances of the room? • How can teachers address familiar classroom-management challenges in these unfamiliar spaces? • If assessment and rapid feedback are critical in active learning, how do they work in a room filled with circular tables and no central focus point? • How do instructors balance group learning with the needs of the larger class? • How can students be held accountable when many will necessarily have their backs facing the instructor? • How can instructors evaluate the effectiveness of their teaching in these spaces? This book is intended for faculty preparing to teach in or already working in this new classroom environment; for administrators planning to create ALCs or experimenting with provisionally designed rooms; and for faculty developers helping teachers

transition to using these new spaces.

Teaching College

Keeping students involved, motivated, and actively learning is challenging educators across the country,yet good advice on how to accomplish this has not been readily available. Student Engagement Techniques is a comprehensive resource that offers college teachers a dynamic model for engaging students and includes over one hundred tips, strategies, and techniques that have been proven to help teachers from a wide variety of disciplines and institutions motivate and connect with their students. The ready-to-use format shows how to apply each of the book's techniques in the classroom and includes purpose, preparation, procedures, examples, online implementation, variations and extensions, observations and advice, and key resources. "Given the current and welcome surge of interest in improving student learning and success, this guide is a timely and important tool, sharply focused on practical strategies that can really matter." ?Kay McClenney, director, Center for Community College Student Engagement, Community College Leadership Program, the University of Texas at Austin "This book is a 'must' for every new faculty orientation program; it not only emphasizes the importance of concentrating on what students learn but provides clear steps to prepare and execute an engagement technique. Faculty looking for ideas to heighten student engagement in their courses will find usefultechniques that can be adopted, adapted,

extended, or modified." ?Bob Smallwood, cocreator of CLASSE (Classroom Survey of Student Engagement) and assistant to the provost for assessment, Office of Institutional Effectiveness, University of Alabama "Elizabeth Barkley's encyclopedia of active learning techniques (here called SETs) combines both a solid discussion of the research on learning that supports the concept of engagement and real-life examples of these approaches to teaching in action." ?James Rhem, executive editor, The National Teaching & Learning Forum

Teaching with Classroom Response Systems

Discovery-based activities reinforce physics concepts by allowing students to apply physics phenomena to everyday observations in the world around them. It's organized in parallel with the textbook's chapters.

Using Active Learning in College Classes: A Range of Options for Faculty

The text is designed for use in study skills or strategies courses in which instructors want a strong focus on helping students become active, independent learners. Active Learning is unique because it teaches students about how their characteristics as a learner, their knowledge of the task, the materials to be learned, and their strategies for learning interact to influence academic success in college. Text topics include: motivation, time management, finding and using campus resources,

dealing with professors, active learning strategies, test taking strategies, and rehearsal strategies. It takes a hands-on approach to learning new strategies for academic success. Each chapter contains a Research into Practice section, which translates studying and learning research into practices that will benefit the college student. Scenarios in each chapter present students with situations they can identify with and asks them to recognize and solve study problems. Students have ample opportunity for self-evaluation, critical thinking, and practice.

Active Learning

Find out how to apply learning science in online classes The concept of small teaching is simple: small and strategic changes have enormous power to improve student learning. Instructors face unique and specific challenges when teaching an online course. This book offers small teaching strategies that will positively impact the online classroom. This book outlines practical and feasible applications of theoretical principles to help your online students learn. It includes current best practices around educational technologies, strategies to build community and collaboration, and minor changes you can make in your online teaching practice, small but impactful adjustments that result in significant learning gains. • Explains how you can support your online students • Helps your students find success in this non-traditional learning environment • Covers online and blended learning • Addresses specific challenges that online instructors face in higher

education Small Teaching Online presents research-based teaching techniques from an online instructional design expert and the bestselling author of Small Teaching.

Teaching and Learning STEM

Keys to engaging secondary students Research shows that all students—regardless of learning style, disability category, or language difference—learn more effectively when they are engaged in active learning. This book shows teachers how to help all students achieve positive learning outcomes. The authors provide a compilation of strategies that serve as blueprints for instructional design and directions for using them across a variety of content areas. The many benefits of active learning include: A more engaged and interactive classroom Increased self-directed learning Development of higher-order thinking skills such as analysis, synthesis, evaluation Improved reading, discussion, and writing competencies

Active Learning

Winner of the Virginia and Warren Stone Prize awarded annually by Harvard University Press for an outstanding book on education and society What makes a great teacher great? Who are the professors students remember long after graduation? This book, the conclusion of a fifteen-year study of nearly one hundred college teachers in a wide variety of fields and universities, offers valuable answers for all

educators. The short answer is—it's not what teachers do, it's what they understand. Lesson plans and lecture notes matter less than the special way teachers comprehend the subject and value human learning. Whether historians or physicists, in El Paso or St. Paul, the best teachers know their subjects inside and out—but they also know how to engage and challenge students and to provoke impassioned responses. Most of all, they believe two things fervently: that teaching matters and that students can learn.

College Physics

College Physics is the first text to use an investigative learning approach to teach introductory physics. This approach encourages you to take an active role in learning physics, to practice scientific skills such as observing, analyzing, and testing, and to build scientific habits of mind. The authors believe students learn physics best by doing physics.

The Missing Course

Presents learning activities for the beginning and middle of a teaching session in a middle or secondary classroom, and features concluding exercises to encourage reflection, retention, and application.

The Craft of College Teaching

In this much needed resource, Maryellen Weimer-one of the nation's most highly regarded authorities on

effective college teaching-offers a comprehensive work on the topic of learner-centered teaching in the college and university classroom. As the author explains, learner-centered teaching focuses attention on what the student is learning, how the student is learning, the conditions under which the student is learning, whether the student is retaining and applying the learning, and how current learning positions the student for future learning. To help educators accomplish the goals of learner-centered teaching, this important book presents the meaning, practice, and ramifications of the learner-centered approach, and how this approach transforms the college classroom environment. Learner-Centered Teaching shows how to tie teaching and curriculum to the process and objectives of learning rather than to the content delivery alone.

Inspiring Active Learning

The text is designed for use in study skills or strategies courses in which instructors want a strong focus on helping students become active, independent learners. Active Learning is unique because it teaches students about how their characteristics as a learner, their knowledge of the task, the materials to be learned, and their strategies for learning interact to influence academic success in college. Text topics include: motivation, time management, finding and using campus resources, dealing with professors, active learning strategies, test taking strategies, and rehearsal strategies. It takes a hands-on approach to learning new strategies

for academic success. Each chapter contains a Research into Practice section, which translates studying and learning research into practices that will benefit the college student. Scenarios in each chapter present students with situations they can identify with and asks them to recognize and solve study problems. Students have ample opportunity for self-evaluation, critical thinking, and practice.

40 Active Learning Strategies for the Inclusive Classroom, Grades K□5

This monograph examines the nature of active learning at the higher education level, the empirical research on its use, the common obstacles and barriers that give rise to faculty resistance, and how faculty and staff can implement active learning techniques. A preliminary section defines active learning and looks at the current climate surrounding the concept. A second section, entitled "The Modified Lecture" offers ways that teachers can incorporate active learning into their most frequently used format: the lecture. The following section on classroom discussion explains the conditions and techniques needed for the most useful type of exchange. Other ways to promote active learning are also described including: visual learning, writing in class, problem solving, computer-based instruction, cooperative learning, debates, drama, role playing, simulations, games, and peer teaching. A section on obstacles to implementing active learning techniques leads naturally to the final section, "Conclusions and Recommendations," which outlines the roles that

each group within the university can play in order to encourage the implementation of active learning strategies. The text includes over 200 references and an index. (JB)

Active Learning Guide for College Physics, Vol. 1 (Chs. 1-13)

While Active Learning Classrooms, or ALCs, offer rich new environments for learning, they present many new challenges to faculty because, among other things, they eliminate the room's central focal point and disrupt the conventional seating plan to which faculty and students have become accustomed. The importance of learning how to use these classrooms well and to capitalize on their special features is paramount. The potential they represent can be realized only when they facilitate improved learning outcomes and engage students in the learning process in a manner different from traditional classrooms and lecture halls. This book provides an introduction to ALCs, briefly covering their history and then synthesizing the research on these spaces to provide faculty with empirically based, practical guidance on how to use these unfamiliar spaces effectively. Among the questions this book addresses are: * How can instructors mitigate the apparent lack of a central focal point in the space? * What types of learning activities work well in the ALCs and take advantage of the affordances of the room? * How can teachers address familiar classroom-management challenges in these unfamiliar spaces? * If assessment and rapid feedback are critical in active

learning, how do they work in a room filled with circular tables and no central focus point? * How do instructors balance group learning with the needs of the larger class? * How can students be held accountable when many will necessarily have their backs facing the instructor? * How can instructors evaluate the effectiveness of their teaching in these spaces? This book is intended for faculty preparing to teach in or already working in this new classroom environment; for administrators planning to create ALCs or experimenting with provisionally designed rooms; and for faculty developers helping teachers transition to using these new spaces.

Investigative Science Learning Environment

The Third Edition of Our Social World: Introduction to Sociology is truly a coherent textbook that inspires students to develop their sociological imaginations, to see the world and personal events from a new perspective, and to confront sociological issues on a day-to-day basis. Key Features: * Offers a strong global focus: A global perspective is integrated into each chapter to encourage students to think of global society as a logical extension of their own micro world. * Illustrates the practical side of sociology: Boxes highlight careers and volunteer opportunities for those with a background in sociology as well as policy issues that sociologists influence. * Encourages critical thinking: Provides various research strategies and illustrates concrete examples of the method being used to help students develop a more

sophisticated epistemology. * Presents "The Social World Model" in each chapter: This visually-compelling organizing framework opens each chapter and helps students understand the interrelatedness of core concepts. New to the Third Edition: * Thirty new boxed features, including the innovative 'Engaging Sociology' and 'Applied Sociologists at Work' features * Three substantially reorganised chapters (2. Examining the Social World, 3. Society and Culture, and 13. Politics and Economics) * 315 entirely new references and 120 new photos.

Active Learning

The key idea behind active learning is that a machine learning algorithm can perform better with less training if it is allowed to choose the data from which it learns. An active learner may pose "queries," usually in the form of unlabeled data instances to be labeled by an "oracle" (e.g., a human annotator) that already understands the nature of the problem. This sort of approach is well-motivated in many modern machine learning and data mining applications, where unlabeled data may be abundant or easy to come by, but training labels are difficult, time-consuming, or expensive to obtain. This book is a general introduction to active learning. It outlines several scenarios in which queries might be formulated, and details many query selection algorithms which have been organized into four broad categories, or "query selection frameworks." We also touch on some of the theoretical foundations of active learning, and conclude with an overview of the strengths and

weaknesses of these approaches in practice, including a summary of ongoing work to address these open challenges and opportunities. Table of Contents: Automating Inquiry / Uncertainty Sampling / Searching Through the Hypothesis Space / Minimizing Expected Error and Variance / Exploiting Structure in Data / Theory / Practical Considerations