

## **A New Agenda for Higher Education: Shaping a Life of the Mind for Practice**

**By William, M. Sullivan and Matthew S. Rosin; foreword by Lee S. Shulman and Gary D. Fenstermacher, Jossey-Bass, 2008, 242 pages, hardcover, ISBN 978-0-470-25757-9**

In the Preface the authors indicate that the goal is to help our undergraduate students meet the practical and professional challenges that await them with learned insight, technical know-how, and discerning moral commitment. It is hoped to provide inspiration and tools for the renewal of our vocation as teachers and the mission of higher education. The primary emphasis is on teaching for practical reasoning and responsible judgment through critical thinking. Furthermore, this book attempts to describe the experience of a research seminar, *Life of the Mind for Practice*, convened over two years by The Carnegie Foundation for the Advancement of Teaching. The participants of the seminar have joined together from liberal arts disciplines to reflect on their efforts to link intellectual insight to professional engagement and responsibility in their respective fields.

The book begins with an Introduction that explains in more detail the meaning of practical reasoning in relation to the traditions and aims of higher education in America. The Introduction simply reveals that no matter what kind of discipline teachers are engaged in, they share much in common in their efforts to prepare their students for practice. Chapter One (Partners in the Field, Part One) shows how teachers from three different disciplines (rabbinical education, medicine, teacher education) teach practical reasoning to their students. Chapter Two follows the same goal with three diverse disciplines (engineering, law, religious studies) and elaborates on how teachers are committed to the future practical lives of their students, as well as the lives of those for whom their students will become responsible. Overall, Chapters One and Two explains what it takes to teach practical judgment for particular disciplines.

Chapter Three (A Narrative of the Seminar) summarizes a new common language for teaching practical reasoning. The so called "ends of teaching in higher education" is characterized by pedagogical inquiry. The authors make a fine retribution to the work of John Dewey by emphasizing learning from experience which in turn leads to practical reasoning. Chapter Four (Practical Reason as an Educational Agenda) emphasizes how higher education contributes to students' cognitive and moral development. It

does this by elaborating on important limitations and weaknesses in the notion of critical thinking. The last chapter is The Conclusion (Conclusion: Taking Formative Action) offers practical lessons from the seminar experience. The authors make distinctions between learning communities, service learning, and community-based learning to encourage faculty, administrators, and chief academic officers to use these innovative practices already present on their campuses. Two Appendices are also included at the back: Partner Syllabi, and Seminar Assignments. These Appendices provide classroom practices and methods for those interested in bringing practical reasoning into their classroom discourse.

This book could be aided by the introduction of objectives at the beginning of the chapter to help the student to retain information. Furthermore, adding chapter summaries could increase the quality of this book. The strongest points of this book, however, are its appendices. These detailed teaching case studies and professional development practices reveal the value and importance of practical reasoning. The authors have targeted students, faculties, administrators, and chief academic members as their audience. Therefore, it can be an excellent sourcebook for those concerned with the future directions of higher education. I highly recommend this book to academicians whom value practical reasoning that encourage students to think and act responsibly, with integrity, civility, and caring. These three habits- of mind, hand and heart are essential for the formation of today's students.

Kiumars Zarafshani  
Assistant Professor  
Department of Agricultural Extension and Education  
College of Agriculture  
Razi University  
Kermanshah, Iran

## **Environmental Science: Fundamentals and Applications**

**By L. Devere Burton, Cengage Learning, 2009, 421 pages, ISBN: 9781418053543**

There is a growing movement on college campuses across the country to offer courses relating to the environment. These courses and in some cases even programs, run the gamut from introductory environmental science/studies courses to programs dealing with sustainability. As such, there are also many new textbooks that deal with environmental issues, specifically environmental science. One such new entry into this growing field is *Environmental*

## Book Reviews

Science: Fundamentals and Applications by L. Devere Burton.

As indicated in the preface, the textbook wants to make “[a] conscious attempt ... to present both sides of the issues that are discussed in [the] chapters, allowing students to form their own opinions.” However, the preface does not indicate who are the target students. According to the publisher's website, the book “... is an applied science textbook written for a high school audience.” While the intended audience may be high school, this book has potential to be used in a general education introductory college course in environmental science. Much of the basic science needed to understand issues such as ecology, air quality, water quality and soils, among others, is contained within the textbook, making it a good choice for non-science majors.

The book is divided into three sections: introduction to environmental science; ecosystems and natural resources; and the human impact. There are three chapters in the first section, six in the second and eight in the third section. Many current and popular topics within environmental science are covered within the 17 chapters of the book, including a chapter on careers in environmental science (chapter seventeen).

The first section of the book provides a basic introduction to environmental science by introducing students to principles of ecology (chapter one), the science behind environmental science (chapter two) and to managing ecosystems (chapter three). Each chapter contains objectives, terms to know, self-evaluation and learning activities. Also within each chapter are internet key words, to “... guide in-depth internet study”. For instance, someone reading the chapter on grasslands and wetlands (chapter eight) would come across “1973 Endangered Species Act” as one of the internet keywords. Upon entering the above term into a search engine, the reader would be taken to the federal government's website about endangered species. This feature would be especially appealing if the book was available in an electronic format, thus making it easier to further an in-depth study. Nonetheless, it is something that high school students would find to be an interesting activity. There is also a list of important terms at the beginning of each chapter. These words are highlighted within the chapter, have definitions provided in a glossary and for the most part can be found in the index to the book as well.

The second section of the book introduces topics such as air (chapter four); water (chapter five); land and soil (chapter six); forests (chapter seven); grasslands and wetlands (chapter eight); and wildlife biology and management (chapter nine). Within each chapter students are introduced to the science behind each topic, as well as to the regulations of those within the ecosystem. Most of the chapters also contain boxes titled “science connection profile” and a box titled “interest profile”. The 'science connec-

tion profile' discusses on-going science research related to topics discussed within the chapters, such as a box on safe-guarding groundwater in the chapter on improving water quality (chapter five). Whereas boxes titled 'interest profile' provide more information on related topics discussed within a chapter, such as the interest profile box discussing the issue of whether or not to fight forest fires in the forests chapter (chapter seven).

The eight chapters in the third section discuss the impact of humans on the environment. This section covers topics such as agriculture and sustainability (chapter ten), integrated pest management (chapter twelve); population ecology (chapter twelve); waste management (chapter thirteen); fossil fuels (chapter fourteen); energy and alternative fuels (chapter fifteen); as well as toxic and hazardous substances (chapter sixteen).

The coverage afforded to current and relevant topics in this textbook strikes a good balance between providing a scientific background as well as introducing the reader to legislations of the various environmental issues. Ultimately a good environmental science course is a blend of science, policy and management. This book falls under such a category and would be very beneficial as a first introduction to environmental science, whether to a high school senior or to a college freshman.

S. Aaron Hegde,  
California State University, Bakersfield

## Handbook on Agricultural Education in Public Schools, Sixth Edition

**By Lloyd J. Phipps, Edward, W. Osborne, James, E. Dyer, and Anna Ball, Thomson Delmar Learning, 2008, 553 pages, hard cover, \$67.96. ISBN 978-1-4180-3993-6**

This new textbook gives an overview of the main concepts and principles of agricultural education. Although this new edition is intended as the primary source for undergraduate and graduate students in agricultural education who are developing and advancing their expertise as teachers, it provides the knowledge base needed by agriscience teachers, teacher educators, and leaders in the field of agricultural education. In order to meet the ever changing needs of agricultural education, the authors have done an outstanding job in adding several new chapters, from agricultural literacy (chapter 2) to agricultural education in industry and community settings (chapter 4), agricultural education provided through the Cooperative Extension Service (chapter 3), to theoretical foundations and principles of effective teaching (chapter 12). The book also covers popular topics of effective teacher behaviors (chapter 13), teaching agriscience (chapter 20), teaching in laboratory settings (chapter 19) and teacher profes-

sional growth and development (chapter 22). The book ends with a chapter about fundamentals of personal leadership development (chapter 23), followed by the glossary and the index. In addition, a prologue and an epilogue have been added to set the stage for the reader and conclude with reinforcing ideas about being a mentor, problem solver, and consummate professional as agriscience teacher.

I have always considered the Handbook to be the bible for agricultural educators. Each chapter of the sixth edition of the Handbook follows the same organization that gives the reader learning objectives and plenty of TNL activities which encourages readers to take their knowledge and understanding of agricultural education to The Next Level through independent, mini-investigations about effective agriscience teachers and programs in their states. There are numerous photos throughout the book that make it more attractive to high school students. The diagrams and tables used also help the reader understand the basic concepts and facts better. The end of chapter summary will undoubtedly force the students to review the chapter and help them learn better. The further discussion and inquiry will stimulate the students to think harder and gain a higher level of understanding of the topics.

The current edition of the Handbook addresses all components of effective middle school and high school agricultural education programs within the context of national educational policies and trends in schooling. Sound philosophical perspectives, research-based practices, and application scenarios are offered throughout. This text emphasizes contemporary approaches for developing and delivering agricultural education programs, with detailed focus on strategies for enhancing learning in the core subjects, experiential learning, laboratory instructions, and problem solving. It is designed as the perfect reference for university students who are preparing to become agriculture educators in public schools, and emphasizes inquiry-based, problem-solving, and experiential learning strategies for teaching and learning in agricultural education. In fact, I would suggest the Handbook as a "must read" to those involved in agricultural education in general and those who are willing to put their heart in teaching agriscience in particular.

As an international reviewer, I learned a lot from reading the Handbook, and was lead to examine issues from new perspectives. The individual chapters are so well-written that they can be applied in international settings. I am convinced that most international readers who are in the business of teaching and learning agricultural education will find the sixth edition of the Handbook invaluable, easy to read and relevant in non-western settings. Sincere thanks must be extended to Dr. Phipps and his colleagues for successfully providing an excellent choice for undergraduate students in agricultural education discipline.

Kiumars Zarafshani  
Assistant Professor  
Department of Agricultural Extension and Education  
College of Agriculture  
Razi University  
Kermanshah, Iran

### **Teaching the Large College Class, a Guidebook for Instructors with Multitudes**

**By Frank Heppner, 2008, Jossey-Bass, soft-cover, 190 pages, ISBN-13:978-0-470-18084-6**

The target audience for this book is first-time educators of large college/university introductory classes of 100 or more students taught in lecture halls. However, if one is a new instructor at any post-secondary institution there many relevant ideas illustrating core, solid teaching practices.

The book covers everything from preparing for the first day of your course through the grading process at semester end. Valuable insights are provided for those who wish to hone their teaching practices and truly engage students in their own learning. Chapters that are particularly helpful include: The Teacher as Actor, Using Media Effectively, and Assessment and Testing.

The author states that, "Sooner or later; everything that can happen, will happen, and you need to think about it and be ready for it." Adopting some of the techniques discussed will help perfect the art and science of your teaching. It should be required reading for first-year teachers and is an excellent reference for handling the dynamics encountered in teaching.

Deb Klopp  
AgrowKnowledge

### **Managing Natural Resources, Fifth Edition**

**By William G. Camp and Betty Heath-Camp, 2009, Delmar Cengage Learning, Clifton Park, NY, 528 pages, hardcover, ISBN - 13:978-1-4283-1868-7, ISBN -10:1-4283-1868-2**

This textbook contains 36 chapters on a wide range of topics divided into eight units; Introduction, Soil and Land resources, Water and Air Resources, Forest Resources, Fish and Wildlife Resources, Outdoor Recreation Resources, Energy, Minerals, and Metal Resources, and Advanced Concepts in Natural Resources Management. Each unit has case study providing current issues on flora, fauna, biofuels, and environmental problems. There are twelve case studies in this book.

At the end of each unit, the authors provides information on careers as related to the field of



## Book Reviews

natural resources management, such as careers in soil management, careers in water and air management, careers in forestry, careers in outdoor recreation, and careers in energy, minerals, and metal resources. This information is important to guide students for internships and future careers.

All chapters describe what are currently known about natural resources with excellent information on websites dealing with natural resources and environmental management. All the chapters have plenty of relevant up-to-date references. Educators and extension specialists will find this book useful for teaching courses focused on introductory of natural resources, introductory of soil science and environmental management.

Various topics covered in this book should allow instructors to choose selected chapters that fit specific courses. One of the strengths of this book is the chapters were well written to stand alone. As I read through this book, I found it is interesting how the chapters were presented and how the authors combined the chapters into one particular unit according to the specific topic. This gives unique perspective on the topics.

The authors did not limit themselves when describing the various aspects of natural resources management. Educators may find the case studies enrich the students' knowledge and the websites are useful for the readers.

The book has several limitations. Unit two in the book is about Soil and Land Resources, but there is no explanation on soil management or tillage practices

and the aspect of soil quality or soil fertility. In addition, grassland or rangeland management may be put into unit instead of chapter to provide more detail information on the topics as seen in unit four (Forest Resources). On unit four about Forest Resources, topics on deforestation should be addressed in addition to fire. The only other suggestion would be that chapter 36 about Advance Concepts in Natural Resources Management should have information on carbon sequestration that leads to carbon trading. The case study accompanied for this topic will be carbon sequestration in grassland, agriculture fields (pasture, no-till, conventional tillage) and forests.

In conclusion, this textbook covers rich topic on natural resources and provides important principles in managing ecosystems in the United States. For courses where details in natural resources management are important, this is a good textbook. The text contains a great deal of detail information on all aspects of natural resources, such as soil, air, water, forest, grassland, wetland, mineral, metal, fish, and wildlife. However, if the instructor's main emphasis in Natural Resources Management course is to teach global/international issues to the students and require them to apply the principles in specific situations, the text may need to be supplemented with relevant articles.

In Handayani  
Department of Agricultural Sciences  
Murray State University

1. Publication Title		2. Publication Number	3. Filing Date
NACTA Journal		0149-4910	15 Oct 2008
4. Issue Frequency		5. Number of Issues Published Annually	6. Annual Subscription Price
Quarterly - Mar, Jun, Sep, Dec		4	475
7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®)			Contact Person
NACTA, 151 W 100 South Rupert, Minidoka Cnty, Idaho 83350			Marilyn Parker Telephone (include area code) 208-436-0692
8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)			
NACTA sec-treasurer 151 West 100 South Rupert Id 83350			
9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)			
Publisher (Name and complete mailing address) North American Colleges & Teachers of Agriculture 151 W 100 South, Rupert Id 83350			
Editor (Name and complete mailing address) Dr Rick Parker 151 W 100 South, Rupert Id 83350			
Managing Editor (Name and complete mailing address) NA			
10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)			
Full Name		Complete Mailing Address	
North American Colleges & Teachers of Agriculture		151 W 100 South, Rupert, Id 83350	
11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box <input checked="" type="checkbox"/> None			
Full Name		Complete Mailing Address	
12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)			
<input type="checkbox"/> Has Not Changed During Preceding 12 Months <input type="checkbox"/> Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)			

13. Publication Title		14. Issue Date for Circulation Data Below	
NACTA		June 08	
15. Extent and Nature of Circulation		Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Total Number of Copies (Net press run)		1000	1000
(1)	Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (includes paid distribution above nominal rate, advertiser's proof copies, and exchange copies)	906	899
b. Paid Circulation (By Mail and Outside the Mail)	(2) Mailed In-County Paid Subscriptions Stated on PS Form 3541 (includes paid distribution above nominal rate, advertiser's proof copies, and exchange copies)		
(3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®	(4) Paid Distribution by Other Classes of Mail Through the USPS (e.g. First-Class Mail®)	41	36
c. Total Paid Circulation (Sum of 15b (1), (2), (3), and (4))		947	935
c. Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3) and (4))		0	0
(1) Free or Nominal Rate Outside-County Copies Included on PS Form 3541	(2) Free or Nominal Rate In-County Copies Included on PS Form 3541	0	0
(3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g. First-Class Mail)	(4) Free or Nominal Rate Distribution Outside the Mail (Carriers or other means)	41	34
e. Total Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3) and (4))		41	34
f. Total Distribution (Sum of 15c and 15e)		988	969
g. Copies not Distributed (See Instructions to Publishers #4 (page #3))		2	21
h. Total (Sum of 15f and g)		1000	1000
i. Percent Paid (15c divided by 15f times 100)		95%	96%
16. Publication of Statement of Ownership			
<input type="checkbox"/> If the publication is a general publication, publication of this statement is required. Will be printed in the Dec 08 issue of this publication. <input type="checkbox"/> Publication not required.			
17. Signature and Title of Editor, Publisher, Business Manager, or Owner			Date
Marilyn B. Parker			10-15-08
I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).			