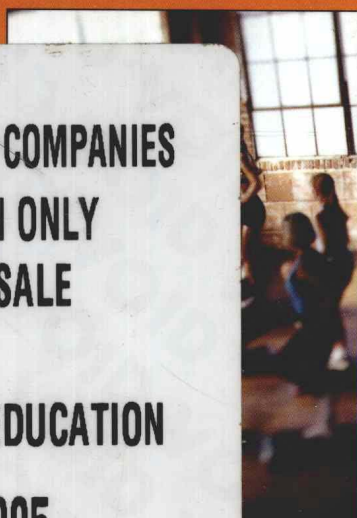
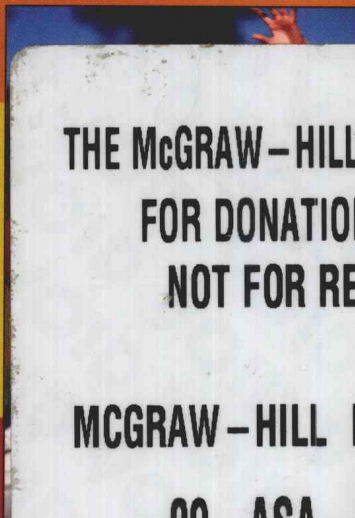
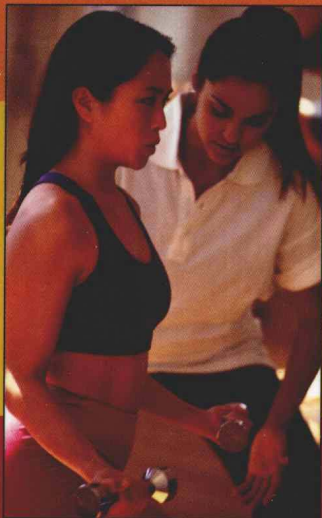
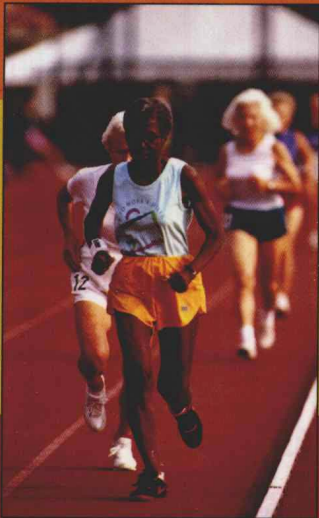


14th Edition

Foundations of Physical Education, Exercise Science, and Sport



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Wuest

14th Edition

FOUNDATIONS OF PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT

Deborah A. Wuest
Ithaca College

Charles A. Bucher
Deceased



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McGraw-Hill Higher Education

A Division of The McGraw-Hill Companies

FOUNDATIONS OF PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT, FOURTEENTH EDITION

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This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 0 DOC/DOC 0 9 8 7 6 5 4 3 2

ISBN 0-07-246224-8

Vice president and editor-in-chief: *Thalia Dorwick*

Publisher: *Jane E. Karpacz*

Executive editor: *Vicki Malinee*

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Production supervisor: *Enboge Chong*

Media technology producer: *Lance Gerhart*

Senior designer: *Jenny El-Shamy*

Cover photos: *Getty Images*

Senior supplement producer: *David A. Welsh*

Compositor: *ElectraGraphics, Inc.*

Typeface: *10/12 Times Roman*

Printer: *R. R. Donnelley/Crawfordsville, IN*

The credits section for this book begins on page 593 and is considered an extension of the copyright page.

Library of Congress Cataloging-in-Publication Data

Wuest, Deborah A.

Foundations of physical education, exercise science, and sport / Deborah A. Wuest.

Charles A. Bucher.—14th ed.

p. cm.

Rev. ed. of: Foundations of physical education and sport. 13th ed. © 1999.

Includes bibliographical references and index.

ISBN 0-07-246224-8 (alk. paper)

1. Physical education and training. 2. Sports. 3. Physical education and training—Vocational guidance. 4. Sports—Vocational guidance. I. Bucher, Charles Augustus, 1912– II. Wuest, Deborah A.. Foundations of physical education and sport. III. Title.

GV341 .W85 2003

796'.07—dc21

2002025506

The Internet addresses listed in the text were accurate at the time of publication. The inclusion of a website does not indicate an endorsement by the authors or McGraw-Hill, and McGraw-Hill does not guarantee the accuracy of the information presented at these sites.

PREFACE

The fourteenth edition of *Foundations of Physical Education, Exercise Science, and Sport* reflects the dynamic nature of these fields. This contemporary text is designed to provide students enrolled in introductory and foundation courses with an overview of the rapidly expanding fields of physical education, exercise science, and sport, including both foundational knowledge and career opportunities. The knowledge base of all three areas has increased tremendously during the past three decades, and space limitations and increasing specialization preclude a comprehensive approach. In addition, career opportunities for students interested in physical education, exercise science, and sport have never been greater.

Numerous exciting career opportunities in physical education, exercise science, and sport await qualified professionals. The traditional career of teaching physical education in the school setting has expanded to nonschool settings, such as sports clubs and recreation centers, and to the instruction of people of all ages in physical activity. Coaching opportunities, once predominantly available in schools and colleges, are now available in nonschool settings, such as private clubs, and currently involve working with athletes of all

abilities and ages. Today, many young physical education, exercise science, and sport professionals aspire to careers in fitness, cardiac rehabilitation, exercise science, sport management, athletic training, and sport communication.

This text encourages students from the beginning of their career to contribute to the fields of physical education, exercise science, and sport and to be active participants in shaping the nature of these dynamic fields. Students are challenged to fully develop themselves as professionals and make a commitment to excellence. As young leaders, they will work collaboratively with other dedicated professionals to address the issues facing us and confront the challenges that lie ahead.

CHANGES IN THE FOURTEENTH EDITION

This edition has been revised to reflect the current status of physical education, exercise science, and sport. The revised title reflects continued expansion of the fields and emerging developments and growth of subdisciplines. This revision strengthens the previous edition's emphasis on career preparation and helps students explore the increas-

ingly diverse opportunities for professionals in these fields. It calls on students to pursue excellence and to display a high level of professionalism in their endeavors. Moreover, it asks students to take an active leadership role in addressing the problems confronting the fields and in accomplishing the mission of lifespan involvement in physical activity for all people.

Extensively revised to reflect the continuing growth and diversification of the field, this edition features the latest information on the following important topics:

- The landmark document *Physical Activity and Health: A Report of the Surgeon General*
- The Centers for Disease Control and Prevention (CDC) guidelines for schools and communities to promote physically active life-styles among children and youth
- Influence of physical activity and sport on the lives of girls
- *Healthy People 2010* document outlining the United States public health goals and specific objectives for physical activity
- The National Blueprint for increasing physical activity among adults 50 years of age and older.
- The National Association for Sport and Physical Education (NASPE) standards for physical education, beginning teachers, and coaches
- Understanding changing demographics, working with diverse population groups, and meeting the needs of all people, including those with disabilities and information on cultural competency.
- Critical issues confronting physical education, exercise science, and sport, such as creating opportunities for diverse populations and advocacy on behalf of our programs
- Technology, including addresses for Web sites, self-assessment activities based on chapter topics, and information available on the Internet
- Career preparation, including the development of transferable skills, and a four-year timetable for professional preparation
- Activism and the importance of professionals

addressing inequities in physical activity and sport opportunities

This textbook challenges the reader to play a significant role in shaping the future of our dynamic fields.

Organization

The 15 chapters of this book are organized into four parts. Part One provides students with an orientation to physical education, exercise science, and sport. Chapter 1 introduces students to these fields, defines selected terms used throughout the text, discusses various philosophies, introduces sport philosophy, and presents guidelines to help students develop a professional philosophy. In Chapter 2, the objectives of physical education, exercise science, and sport programs are identified and the assessment of objectives is presented. Chapter 3 examines the role of physical education, exercise science, and sport in society and in education as well as the educational reform, fitness, and wellness movements. Part One concludes with Chapter 4, which presents information about the nature of human movement—the keystone of physical education, exercise science, and sport.

In Part Two, the historical and scientific foundations of physical education, exercise science, and sport are presented in five chapters. The historical foundations of physical education, exercise science, and sport are covered in Chapter 5. The development of physical education, exercise science, and sport from early cultures to today is traced. The biomechanical, physiological, sociological, and psychological foundations are reviewed in Chapters 6, 7, 8, and 9, respectively. These chapters present students with information about the development of the subdisciplines, questions that are typically addressed by researchers within the field, key concepts, and current areas of study.

Part Three, which consists of four chapters, addresses professional considerations, such as career opportunities within the field, preparation for a career in physical education, exercise science, and

sport, and professional responsibilities. Chapter 10 focuses on professional development, including professional responsibilities, ethics, leadership, and certification. Chapters 11, 12, and 13 offer in-depth information about specific career opportunities in physical education, exercise science, and sport, including responsibilities associated with each career and specific strategies to enhance one's professional marketability. Chapter 11 describes teaching and coaching careers and how opportunities for these careers have broadened from the school setting and school-aged population to nonschool settings and to include persons of all abilities and ages. In Chapter 12, the many new employment opportunities in fitness and health-related careers are examined. Careers in sport management, sport communication, performance, and other sport-related careers such as officiating are described as well as information on the growing field of sport entrepreneurship in Chapter 13.

Part Four explores issues and challenges confronting professionals today and looks at the future of physical education, exercise science, and sport. Chapter 14 addresses timely issues in physical education, exercise science, and sport. Five issues are examined: the leadership role of the physical education, exercise science, and sport professionals in the physical activity movement, the promotion of values, the role of physical education, exercise science, and sport professionals in youth sports, the growing discipline and the debate over its name, and the gap between research and practice. Four of the challenges facing professionals are making quality daily physical education in the schools a reality, advocacy on behalf of our programs, attaining the health objectives for the year 2010, and promoting lifespan involvement in physical activity for all people. The final chapter, Chapter 15, examines the future of physical education, exercise science, and sport. Societal trends are analyzed in light of current developments. To prepare for the future, professionals must be willing to assume the responsibility for the leadership of our field and work to improve the manner in which we provide services to people of all ages.

NEW TO THIS EDITION

Updated Content

With an increased focus on health promotion, this edition features updated content, including the latest government reports, up-to-date information on cultural and linguistic competency for health professionals, and strategies for overcoming barriers to physical activity in the older population.

Emphasis on Exercise Science

Highlighting the growing field of exercise science, this edition includes expanded content for biomechanics, sport and exercise psychology, sport sociology, motor behavior, and exercise physiology. It also includes historical background on the exercise sciences.

Focus on Career

For students considering a career direction, these boxes offer listings of professional organizations and journals. The web addresses are included, as available, to allow easy access to the suggested sites.

Lifespan and Cultural Perspectives

This feature highlights a variety of chapter-related questions that researchers might choose to address. These thought-provoking questions can be used for classroom discussion or project ideas.

NEW OR EXPANDED TOPICS

Chapter 1: Meaning and Philosophy

- Emergence of exercise science
- U.S. President's Report: Promoting Better Health for Young People Through Physical Activity and Sport 2000
- Sport philosophy
- President's Council on Physical Fitness and Sports 2000: Definitions of Health, Fitness, and Physical Activity
- Healthy People 2010

Chapter 2: Objectives for Education and the Fields

- Updated information on national education goals: Condition of Education 2000 and “No Child Left Behind”
- Assessment and its importance in physical activity programs
- Fitnessgram and Activitygram

Chapter 3: Role in Society and in Education

- National Health and Nutrition Examination Survey (NHANES) 1999
- Updated health and census statistics
- Cultural competency and standards
- CDC report: Increasing physical activity: A report on recommendations of the task force on community preventive services (2001)
- Youth Risk Behavior Surveillance Data
- National Health Interview Survey 2000
- CDC guidelines for school and community programs to promote physical activity among young people
- National Blueprint: Increasing Physical Activity among Adults Aged 50 and Older, 2001
- NASPE Shape of the Nation 2001
- School Health Policies and Programs Study 2000

Chapter 4: Movement: The Keystone

- Movement education
- Developmentally appropriate instruction

Chapter 5: Historical Foundations

- Physical activity and sport during the Renaissance and Age of Enlightenment
- Reorganization of European historical contributions
- Societal conditions throughout history
- Contributions of Native Americans

Chapter 6: Biomechanical Foundations

- Qualitative analysis
- Growth of biomechanics

Chapter 7: Exercise Physiology and Fitness

- 2000 Consensus Statement on the dose-response relationship between physical activity and health

- Goal setting
- Nutrition and health
- Current American College of Sports Medicine Recommendations on Fitness
- NIH and CDC Guidelines on Overweight and Obesity
- U.S. Surgeon General’s report: A Call to Action to Prevent and Decrease Overweight and Obesity (2001)
- Air displacement plethysmography or Bod Pod for assessment of body composition
- USDA’s Dietary Guidelines for Americans (2000)

Chapter 8: Sociological Foundations

- Race and athletics, including NCAA report on the composition of its membership and 2001 Racial and Gender Report Card
- Updated participation statistics for high school and college athletics
- Updated information on college graduation rates
- 2001 Knight Foundation report on intercollegiate athletics: A Call to Action: Reconnecting Athletics and Higher Education
- United States General Accounting Office 2001 report: Intercollegiate Athletics: Four-Year Colleges’ Experiences Adding and Discontinuing Teams
- The United States Commission on Civil Rights Commission statement on the use of Native American images and nicknames as sports symbols (2001)

Chapter 9: Psychological Foundations

- Motor development, including phases and fundamental motor skills
- Motor behavior
- Application of transtheoretical model to promotion of physical activity and use of psychological skills training.
- Relationship of physical activity to mental health
- Rehabilitation adherence, including the importance of social support

- Personality and psychological predispositions of elite athletes
- Intervention approaches used to help athletes achieve optimal performance

Chapter 10: Careers and Professional Development

- Ethical issues, including examples from various professional code of conduct
- Certification information
- Use of portfolios for physical educators, exercise scientists, and sport leaders
- Leadership today
- Updated information on professional organizations

Chapter 11: Teaching and Coaching Careers

- Importance of cultural competency for teachers and coaches
- Updated salary information
- NASPE Coaches Council: The Coaches Code of Conduct (2001)
- Updated information on youth sports
- Burnout and its prevention

Chapter 12: Fitness- and Health-Related Careers

- Worksite health promotion programs, commercial and medical fitness programs, and personal training
- Strength and conditioning professionals and ACSM clinical exercise physiologists
- Certification
- Kinesiotherapy as a career option

Chapter 13: Sport Careers in Management, Media, Performance, and Related Areas

- Probability of competing past high school level
- Trends in the sport industry
- Job opportunities as academic support programs
- Current administrative opportunities in sports
- Career opportunities reflecting the growth of sports on the Internet

Chapter 14: Issues and Challenges

- Sport and affective development, including Character Counts! Sports and the Arizona

Summit Accord and Pursuing Victory with Honor

- Advocacy and its critical importance to achievement of our mission
- National Coalition for Promoting Physical Activity
- Importance of assuming a leadership role
- Teaching Personal and Social Responsibility Model
- Increased emphasis on working with underserved populations
- Attainment of Healthy People 2010 goals
- Role modeling, including 2002 Physical Activity and Fitness Recommendations for Physical Activity Professionals

Chapter 15: Future Trends

- The future and technological advances
- Medical fitness growth and issues in worksite health promotion
- Contribution of physical education, exercise science, and sport to CDC's Coordinated School Health Program
- Importance of social and behavioral interventions in improving health and well-being

SUCCESSFUL FEATURES

To facilitate use by instructors and students, the following pedagogical aids have been incorporated into this textbook:

Instructional Objectives. At the beginning of each chapter the instructional objectives and competencies to be achieved by the student are listed. This identifies for the student the points that will be highlighted. Attainment of the objectives indicates the fulfillment of the chapter's intent.

Summaries. Each chapter ends with a brief review of the material covered, assisting the student in understanding and retaining the most salient points.

Self-Assessment Tests. Self-assessment tests and activities are presented at the end of each chapter to enable students to check their comprehension of the chapter material.

References. Each chapter provides up-to-date references to allow students to gain further information about the subjects discussed in the chapter.

Suggested Readings. Additional and easily accessible resources from current literature that relate to the chapter topic have been selected and *annotated*. These readings offer students the opportunity to further broaden their knowledge and understanding of various subjects.

Internet Resources. Each chapter begins with a *Get Connected* feature, which lists Internet sites that provide up-to-date information about relevant topics. The self-assessment exercises include activities that draw on these Internet resources.

Photographs. Carefully chosen photographs, many new, have been used throughout the text to enhance the presentation of material and to illustrate key points.

Writing Style. *Foundations of Physical Education, Exercise Science, and Sport* has been written in a style that students find readable and that provides them with important insights into the foundations and the roles of physical education and sport in the world today. Students will find substantial information about the career and professional opportunities that exist for knowledgeable, dedicated, and well-prepared professionals committed to the promotion of lifespan involvement in physical activity for all people.

ACKNOWLEDGMENTS

My thanks are gratefully extended to the publisher's reviewers for their insightful comments and critical suggestions, which helped greatly in the revision of this book. They include Margaret Carlisle Duncan, University of Wisconsin-Milwaukee; Craig A. Harms, Kansas State University; Joyce Graenig, University of Arkansas; Karen McNew Thomas, Texas Woman's University; Sharon L. Van Oteghen, University of Memphis; Jim L. Wasem, Eastern Washington University; and Doris L. Watson, University of Utah.

I would like to extend a special recognition to the outstanding professionals at McGraw-Hill, especially my editor, Carlotta Seely. Carlotta's com-

mitment to this revision, her encouragement and timely advice, greatly contributed to the completion of this project. Special thanks are also extended to Project Manager, Christine Walker, for her untiring efforts and good humor.

I extend most heartfelt thanks to my friends and colleagues, who helped in many ways in the revision of this book. I especially appreciate the help of Sarah Rich for her assistance with photography and editing, and of Vic Mancini for his continued support.

This book is lovingly dedicated to my daughter, Meriber Carola DeVida Wuest, who now, at the age of 10, loves being a student-athlete. This book is also dedicated to my late-night writing companions, my loyal cats, Abby and Jake.

ANCILLARIES

Instructor's Manual and Test Bank

The printed Instructor's Manual and Test Bank that accompanies this text serves as an excellent teaching resource. It includes chapter overviews, test items (both subjective and objective, including multiple choice, true/false, completion, and matching), suggested activities, case studies, and Internet-based activities.

Computerized Test Bank

Brownstone's Computerized Testing is the most flexible, powerful, easy-to-use testing program available in higher education. It allows the instructor to edit, delete, or add questions and print tests and answer keys. In CD-ROM format, this testing is available in Diploma 6 (Windows) and Exam 6 (Macintosh).

Online Learning Center

The Online Learning Center to accompany *Foundations of Physical Education, Exercise Science, and Sport* offers a wide variety of resources for both instructors and students:

For the instructor:

- PowerPoint presentation for all chapters
- Professional resources

- Guide to using the Internet
- PageOut
- Health and Human Performance website

For the student:

- Chapter overviews and learning objectives
- Quizzes: multiple choice, fill-in-the-blank, and true/false
- Flashcard and concentration game
- Career opportunities
- Chapter-related readings
- Student poll

To access the Online Learning Center for this book, go to: www.mhhe.com/wuest14e

PowerWeb

The PowerWeb card packaged with each new copy of this text allows access to a reservoir of course-specific articles and current events. Students can use PowerWeb to take a self-scoring quiz, complete an interactive exercise, click through an interactive glossary, or check the daily news. An expert in each discipline analyzes the day's news to show students how it relates to their field of study.

Ready Notes

The printed Ready Notes designed to accompany this text include the frames from the chapter-by-chapter PowerPoint presentation along with space for students to write their notes and comments.

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