Using Technology in Physical Education
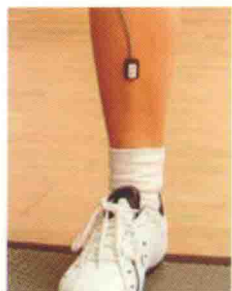
7th edition

Bonnie S. Mohnsen
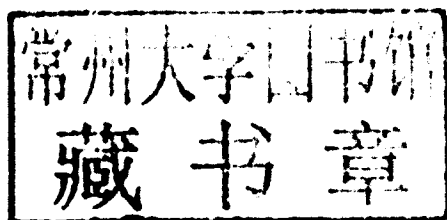
Ph.D.

Using Technology in
Physical Education
Seventh Edition

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Bonnie's Fitware Inc.
Cerritos, California

Copyeditor: Carol A. Bruce

Printed in the United States of America

Dedication

To Carolyn Thompson for her constant professional
and personal support.

Preface

Using *Technology in Physical Education, Edition 7* is designed to keep you abreast of the ever changing landscape of technology and its uses in physical education. This book is updated every two years to ensure that you are receiving the most current information. After reading this edition you will be able to accomplish your teaching responsibilities more efficiently and effectively. Technology can assist you with your paperwork and help you improve the quality of your instruction. Now is the time for you to benefit from the power of technology, and this book will help you to get started. Here's what you will find.

Chapter 1 describes the growth and variety of available technology and how to incorporate the most recent technological advances into your physical education program. It also provides you with rationale and research for including technology in physical education. Chapter 2 describes your options for computers and peripherals, such as printers and monitors.

Chapters 3 through 7 introduce the many ways you can present information—including text, data, images, audio, and video segments—in physical education. Chapters 3-5 provide examples: using word processing software to create study guides, database software to create a locker system, spreadsheet software to create a budget, and desktop publishing software to create your own newsletters to keep parents and community members informed about your programs. Chapters 6 and 7 provide additional examples of uses for sound and video: creating instructional material, inserting video clips into presentations, documenting student learning, and narrating presentations.

Chapter 8 introduces the use of telecommunications in physical education. Whether you are sharing information with colleagues

or reviewing lesson plans with a student teacher, electronic mail can help you make more efficient use of your time and abilities. This chapter addresses the wide-range of services from electronic mailing lists to audio/video conferencing.

In the classroom or the gymnasium, computers can help you instruct and improve your students' understanding of physical fitness, motor skills, and social skills. They can help you individualize instruction for your students, allowing them to progress at their own rates. Chapter 9 shows how computers can help students understand cognitive concepts, develop skills, and create their own fitness plans. Chapter 10 shows how computers can assist with assessing students. Information on fitness reporting software, student response systems, grading programs, and electronic portfolios is included in this chapter.

Chapters 11 and 12 focus on devices (large and small) that can assist in the learning process—especially in the area of fitness. You will learn how to enhance a physical fitness unit with interactive exercise equipment, easy-to-operate blood pressure monitors, body composition analyzers, and heart monitors.

Chapter 13 looks at the next stage of evolution for instruction: online physical education. This chapter examines the different types of online learning including online activities, hybrid classes, and courses presented entirely online. You also will learn how to create your Web pages in this chapter.

Chapter 14 focuses on how you can become an even more effective teacher. For example, you can use video technology and special software to watch yourself teach, analyze your performance, and enhance your teaching skills.

The final chapter takes a look at the future of technology and provides possible scenarios that will help to prepare you for the technology to come. You will notice many changes in this chapter since many of the items discussed in previous editions have already become a reality.

For those of you who purchased previous editions of this textbook, you will notice a reorganization and an increase from 12 to 15 chapters. The new organization better aligns with the current state of technology in education and, specifically, physical education. It also presents the technology information in a step-by-step learning sequence that should prove beneficial to those using the textbook for a college course. Be sure to pay special attention any time you see this icon since you will find additional information at the web site noted.

A companion Web site is located at http://www.pesoftware.com/ Support/techbk.html. Here you will find additional tutorials, podcasts, links to additional Web resources, updates on this book, and additional learning opportunities. In addition, for those using this book to teach a college course, you will find sample syllabi and course outlines along with additional reflection questions and projects.

I hope this book will help you find the justification and leverage you may need to begin or increase your use of technology in physical education. It's a wide open field with continuous innovations. Our challenge is to learn to use these innovations to best meet our needs and the needs of our students.

Let us begin our journey…

Other Books by Bonnie Mohnsen

Teaching Middle School Physical Education, 3rd

Concepts and Principles of Physical Education: What Every Student Needs to Know, 3rd (editor)

The New Leadership Paradigm in Physical Education (editor)

Integrating Technology and Physical Education

Assessing Student Understanding of Motor Learning Concepts

Assessing Concepts: Secondary Biomechanics

Standards-Based Assessment and Grading in Physical Education: K-12

Online Courses
shop.pesoftware.com

Fitness Software - $100.00 - BF705

You will learn how to use the Fitness Report software. Additionally, you will learn to use the Heart Monitor/Pedometer Report and the Clipboard. You will complete this course competent in the use of these programs.

Record Book - $100.00 - BF706

You will learn how to set up and use the Record Book software. You also will learn about standards-based grading/assessment and how the use of this software can facilitate the grading/assessment process. You will complete this course competent in the use of the Record Book software.

Web Design - $100.00 - BF707

Introduces you to the wide range of instructional possibilities using the World Wide Web. You will explore exemplary web sites, participate in web-based learning activities, and design your own web site using Komposer.

Instructional Software - $100.00 - BF704

Introduces you to standards-based instructional software. You will experiment with a number of software programs and design your own standards-based lesson plans using one piece of software as a resource. You also will learn class management strategies for using technology in physical education

Technology Devices - $100.00 - BF708

Introduces the use of pedometers, heart monitors, body composition analyzers, blood pressure devices, spirometers, accelerometers, digital cameras, and digital camcorders in physical education. You will design your own standards-based lesson plans using one of these technology devices as a resource. You also will learn class management strategies for using these devices.

Electronic Portfolios - $100.00 - BF703

Introduces you to standards-based assessment and the use of electronic performance portfolios to document student learning. You will experiment with several pre-designed electronic portfolios and create your own.

Spreadsheets for Physical Educators - $100.00 - BF818

Introduces you to the use of spreadsheets for teacher productivity and instruction. You will complete the course with intermediate skills. You need to have a version of Excel to participate in this course.

PowerPoint for Physical Educators - $100.00 - BF1190

Teaches you how to use PowerPoint to design presentations for physical education. Includes information on inserting pictures, audio, video, tables, and charts. Also contains design principles for making your presentations look professional.

Fitness Equipment
shop.pesoftware.com

Let us design a lab for your!
   Contact us at sales@pesoftware.com
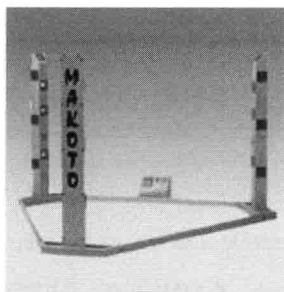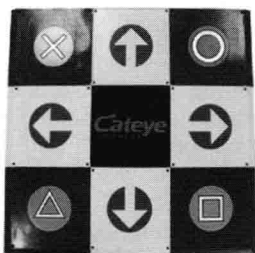
Pedometers and Heart Monitors
Available at: shop.pesoftware.com

DigiWalker 200 - BF697
Very reliable
Steps only
Hinged protective covering
Durable construction
Secured battery
Includes security strap.

User replaceable batteries.

Cardiosport First- BF436
Simple to use single button operation with giant numbers. Shows continuous reading of the heart rate in large readout. Water resistant to 20 m.

Cardiosport Fusion 10 - BF1035
Fusion 10 uses a safe low frequency digital transmission system with improved signal interference and coding to allow exercise in close proximity to other monitors. There is a large, clear two row LCD screen with a zone indicator to show exercise heart rate and time during exercise.

Cardiosport Fusion 30 - BF1036
Fusion 30 uses a digital transmission system. It features a personalized calories counter based on exercise intensity, age, and weight. There is a time-in zone display where your heart controls an additional stopwatch so you only count exercise at the correct level.

Cardiosport GT5 -BF1249
GT5 uses a digital transmission system. It includes up to 80 hours of recording available in up to 6 separate training sessions. Each heart monitor comes with a computer interface.

Bowflex Strapless - BF1415
The Bowflex Strapless heart monitor works without a chest transmitter.
It also includes a pedometer. Track heart rate and steps at the touch of a button.
We have tested these and they are great!

Buy a Copy for Yourself
Using Technology in Physical Education
http://shop.pesoftware.com

Using Technology in Physical Education, 7th ed. - $45 BF1451

Using Technology in
Physical Education
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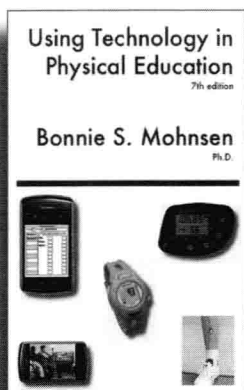
This book provides comprehensive information and practical classroom applications for fitness testing equipment, digital video, computers and peripherals, telecommunications, computer-assisted instructional and assessment software, and multimedia systems. This is the number one technology textbook for preservice training, professional development, and practitioners.

Table of Contents

Other Books Available from Bonnie's Fitware Inc.
http://shop.pesoftware.com

Standards-Based Assessment & Grading - $30 BF667

Chapter 1:Standards-Based Assessment
Chapter 2: Assessment Tools
Chapter 3: Scoring Systems
Chapter 4: Assessments for Standard 1
Chapter 5: Assessments for Standard 2
Chapter 6: Assessments for Standard 3
Chapter 7: Assessments for Standard 4
Chapter 8: Assessments for Standard 5
Chapter 9: Assessments for Standard 6
Chapter 10: Student Portfolios
Chapter11: Grading
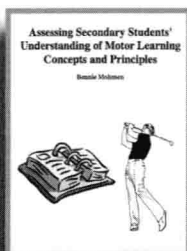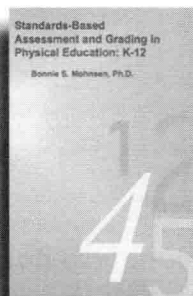
Assessing Student Understanding of Motor Learning Concepts $10 BF842

Available in PDF, this book provides numerous examples of how to assess student understanding of the motor learning concepts. The understanding of motor learning concepts is aligned with National Physical Education Standard 2.

Fitness Web Book - $30 BF666

This 30-page reproducible web-activities booklet on CD provides 15 web-based lessons on health-related fitness. Individual pages may be reproduced for student use. Great for online classes.
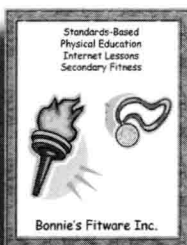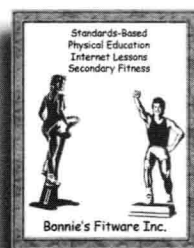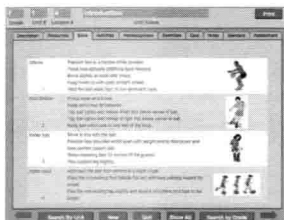
Olympic Web Book - $30 BF667

This 30-page reproducible web-activities booklet on CD provides 15 web-based lessons on the ancient and modern Olympics. Individual pages may be reproduced for student use. Great for online classes.

Curriculum
# http://shop.pesoftware.com

Standards-Based Middle School Detailed Lesson Plans

On CD-ROM for easy searching - 180 detailed lesson plans for each grade level (5th, 6th, 7th, and 8th) aligned with the National Physical Education Standards and State Physical Education Standards. Also contains safe exercises for warm up, cool down, muscular strength and endurance, flexibility, and cardiorespiratory endurance. Includes posters to reinforce cognitive concepts. Includes assessment information and a written quiz for each unit. You can print out all the lessons if that is more convenient for you. The lessons are editable.

Standards-Based High School Detailed Lesson Plans

On CD-ROM for easy searching - contains detailed lesson plans for all the high school units listed on this page. Aligns to the National Physical Education Standards and state Physical Education Standards. Also contains safe exercises for warm up, cool down, muscular strength and endurance, flexibility, and cardiorespiratory endurance. Assessment information and a written quiz for each unit are also included as well as posters to reinforce cognitive concepts.
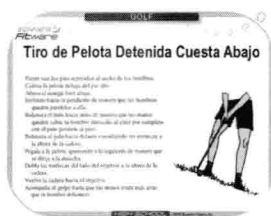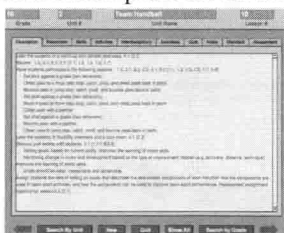

High School Task Cards

On CD-ROM for easy printing. Contains task cards for all 17 high school units. Each card includes a color picture. You are purchasing a site license which means that you may print cards for every teacher at your school.

Middle School Task Cards

Task Cards (on CD with detailed colored picture) for Implementing the Standard-Based Middle School Physical Education Curriculum. Includes drills and activities along with the critical features for each motor skill. You are purchasing a site-license.
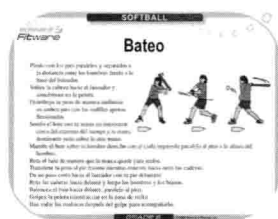
Instructional Software for Students
http://shop.pesoftware.com

Health Related Fitness Tutorial/Portfolio

This software is used in grades 4-12. It addresses the five components of health-related fitness, the FITT concepts, principles of fitness, safe versus dangerous exercises, and warm-up/cool-down procedures. The software comes with video clips for playing on your handheld, ultramobile, notebook, or desktop computer for student viewing during class. It also includes printable task cards for self check and/or peer feedback, electronic portfolio assignments for alternative assessment, and a quiz section for traditional assessment (print out or take online).
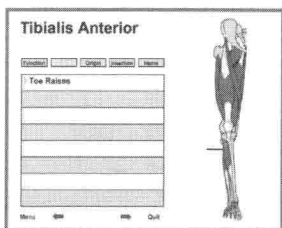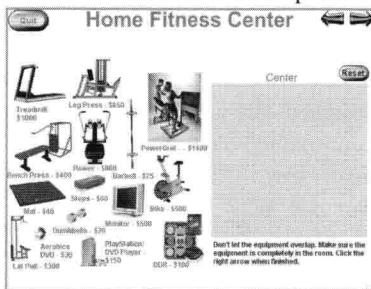
Muscle Flash

Instructs students on the name of the muscle, location, function, and related exercises. Uses age-appropriate terms and definitions. In addition to the self check feature provided by the electronic flash cards, there are quizzes on the name, function, and exercises.

SimAthlete

This program instructs students on how to develop their own practice plans. It provides a reference section on each of the motor learning principles, instructional activities, a simulation section so that students can assume the role of a coach developing a practice plan for an athlete, and a quiz so that students can demonstrate their learning.
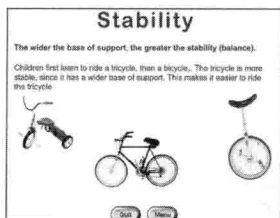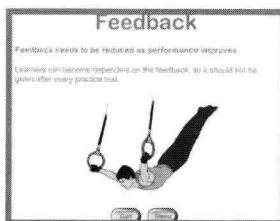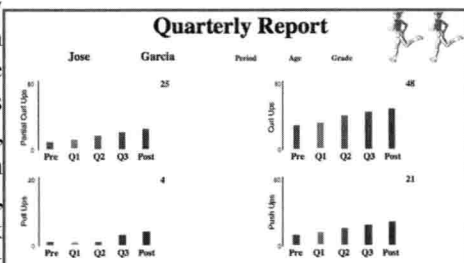
Biomechanics Made Easy

This program instructs students on analysis of movement. It provides a reference section on each of the biomechanical principles, labs based on real-life situations, and a quiz so that students can demonstrate their learning.

Software for Teachers
http://shop.pesoftware.com

Fitness Report

This program provides for the collection of fitness scores using Windows or Macintosh. Check online for specifications regarding handheld use. Additional screens have been specifically designed for use with an Ultra-mobile computer. The main test battery includes curl ups, push ups, pull-ups, modified pull ups, flexed arm hang, walk/THR, mile run, pacer, shoulder stretch, back saver sit-and-reach, trunk

lift, skinfolds, and body mass index. In addition, there is software for the following test batteries: California, Connecticut, Virginia, President's Challenge, and Missouri

Standards-Based Record Book

Provides for the collection of attendance, behavior, and standards-based grading for use on a Windows or Macintosh computer. Additional screens have been specifically designed for use with an Ultra-mobile computer. Check online for specifications regarding handheld use.

Physical Education Clipboard

Locker system, lesson template, video inventory, music inventory, equipment inventory - - all your clipboard needs on your computer! Check online for specifications regarding handheld use.

Heart/Pedometer Record

Provides for the manual collection of heart rate and pedometer data using Windows or Macintosh. Check online for specifications regarding handheld use. Produces reports and charts for students.

Table of Contents