SECOND EDITION

AND EXPANDED ADAPTED PHYSICAL EDUCATION NATIONAL STANDARDS

National Consortium for Physical Education and Recreation for Individuals with Disabilities

LUKE E. KELLY

EDITOR

Adapted Physical Education National Standards

SECOND EDITION

National Consortium for Physical Education and Recreation for Individuals with Disabilities

Luke E. Kelly

Editor



Library of Congress Cataloging-in-Publication Data

National Consortium for Physical Education and Recreation for Individuals with Disabilities (U.S.)

Adapted physical education national standards / National Consortium for Physical Education and Recreation for Individuals with Disabilities: Luke Kelly, editor.-- 2nd ed.

p. cm.

Includes bibliographical references. ISBN-13: 978-0-7360-4603-9 (soft cover) ISBN-10: 0-7360-4603-8 (soft cover)

1. Physical education for children with disabilities--Standards--United States, 2, Physical education teachers--Certification--United States. I. Kelly, Luke, II.

Title.

GV445.N38 2006 371.9'04486--dc22

2005037754

ISBN-10: 0-7360-4603-8 ISBN-13: 978-0-7360-4603-9

Copyright © 2006 by National Consortium for Physical Education and Recreation for Individuals with Disabilities

All rights reserved. Except for use in a review, the reproduction or utilization of this work in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including xerography, photocopying, and recording, and in any information storage and retrieval system, is forbidden without the written permission of the publisher.

The Web addresses cited in this text were current as of April 5, 2006, unless otherwise noted.

Acquisitions Editor: Bonnie Pettifor; Managing Editor: Jacqueline Eaton Blakley; Assistant Editor: Bethany J. Bentley; Copyeditor: Patsy Fortney; Permission Manager: Dalene Reeder; Graphic Designer: Robert Reuther; Graphic Artist: Dawn Sills: Photo Manager: Sarah Ritz; Cover Designer: Fred Starbird; Photographs (interior): © Les Woodrum, unless otherwise noted; photo on lower right-hand side of pages 1, 9, 21, 41, 55, 63, 89, 95, 105, 119, 133, 139, 145, 151, and 155 by Kim Thorne. Printer: United Graphics

Printed in the United States of America 10 9 8 7 6 5 4 3 2 1

Human Kinetics

Web site: www.HumanKinetics.com

United States: Human Kinetics

P.O. Box 5076

Champaign, IL 61825-5076

800-747-4457

e-mail: humank@hkusa.com

Canada: Human Kinetics 475 Devonshire Road Unit 100

Windsor, ON N8Y 2L5

800-465-7301 (in Canada only) e-mail: orders@hkcanada.com

Europe: Human Kinetics 107 Bradford Road Stanningley

Leeds LS28 6AT, United Kingdom

+44 (0) 113 255 5665 e-mail: hk@hkeurope.com

Australia: Human Kinetics 57A Price Avenue

Lower Mitcham, South Australia 5062

08 8277 1555

e-mail: liaw@hkaustralia.com

New Zealand: Human Kinetics

Division of Sports Distributors NZ Ltd.

P.O. Box 300 226 Albany

North Shore City

Auckland

0064 9 448 1207

e-mail: info@humankinetics.co.nz

INTRODUCTION

Standards provide a guiding light—in terms of basic knowledge, skills, and attitudes—for people within a professional field and those in higher education who have the job of preparing them. Adapted Physical Education National Standards (APENS) were developed in 1995 to guide the certification of professionals in adapted physical education throughout the United States who successfully passed the national examination. In addition, the APEN standards have been infused into numerous teacher education programs at the undergraduate and master's levels as the foundation of preparation programs. Further, at some universities, the successful passing of the APENS examination has become an option in place of a thesis or professional paper for partial fulfillment of the requirements to graduate.

Since 2003 numerous professionals have worked to revise these standards to reflect current knowledge and practices and to present the information in a more user-friendly format. This book is the reflection of the revision.

The need for national adapted physical education standards and a national certification examination evolved approximately 30 years ago from the mandates of federal legislation, including the Individuals with Disabilities Education Act (IDEA) and the Individuals with Disabilities Education Improvement Act (IDEIA) (as amended on December 3, 2004). These mandates required that physical education services, specially designed if necessary, be made available to every student with a disability receiving a free and appropriate public education. These services should be provided by highly qualified teachers (IDEA, 2004; U.S. Department of Education, 2002).

The definition of who was highly "qualified" to provide physical education services to students with disabilities was left to the individual state certification requirements based on the assumption that these currently existed. Unfortunately, most states did not have defined certifications for adapted physical educators. Although 14 states subsequently implemented an endorsement or certification in adapted physical education, the majority of states and eight territories have not defined the qualifications teachers need to provide adapted physical education services to their students with disabilities (Cowden & Tymeson, 1984; Kelly, 1991a).

In 1991 the National Consortium for Physical Education and Recreation for Individuals with Disabilities (NCPERID), in conjunction with the National Association of State Directors of Special Education (NASDSE) and Special Olympics International, conducted an "Action Seminar" on adapted physical education for state directors of special education and leaders of advocacy groups for individuals with disabilities.

Although the group identified numerous barriers to providing appropriate physical education services to students with disabilities, the most significant barriers for state education leaders was the fact that they did not know what adapted physical education was, how individuals with disabilities could benefit from appropriate physical education programming, or what competencies teachers needed to deliver appropriate physical education services to students with disabilities. In response to these needs, the group recommended that NCPERID develop professional standards and a means for evaluating these standards (see Appendix A for background on this consortium). These standards could then be used by state and school administrators as well as parents to communicate the need for quality adapted physical education and to evaluate who was qualified to provide physical education services to students with disabilities.

The Action Seminar recommendations were presented to the NCPERID board in the summer of 1991. A NCPERID committee was formed and charged with creating a plan for developing national standards and a national certification examination. To this end, a special project proposal (Kelly, 1992) was submitted to the U.S. Department of Education (USDOE), Office of Special Education and Rehabilitative Services (OSERS), Division of Personnel Preparation (DPP) in the fall of 1991. This grant was funded in July of 1992 and provided funding for five years.

The purpose of this national standards project was to ensure that physical education instruction for students with disabilities is provided by qualified physical education instructors by (a) developing national standards for the field of adapted physical education and (b) developing a national certification examination to measure knowledge of the standards. The committees and procedures used to develop the national standards are presented in Appendix B. The results of these processes culminated in the establishment of a set of national standards, which are presented in this manual.

Standards

Based on the results of a national needs assessment (see Appendix B and Kelly & Gansneder, 1998), the content adapted physical educators needed to know was identified and divided into 15 broad standards areas. Following are brief descriptions of the specific standards.

Standard 1: Human Development

The foundation of proposed goals and activities for individuals with disabilities is grounded in a basic understanding of human development and its applications to those with various needs. For the adapted physical education teacher, this implies familiarity with theories and practices related to human development. This standard focuses on the knowledge and skills helpful in providing quality adapted physical education programs.

Standard 2: Motor Behavior

Teaching individuals with disabilities requires some knowledge of how individuals develop. In the case of adapted physical educators, it means having knowledge of typical physical and motor development as well as understanding the influence of developmental delays on these processes. It also means understanding how individuals learn motor skills and applying principles of motor learning during the planning and teaching of physical education to students with disabilities.

Standard 3: Exercise Science

Adapted physical educators must understand that modifications to the scientific principles of exercise and the application of these principles may be needed when teaching individuals with disabilities to ensure that all children with disabilities enjoy similar benefits of exercise. Although there is a wealth of information in the foundational sciences, this standard focuses on the principles that address the physiological and biomechanical applications encountered when working with diverse populations.

Standard 4: Measurement and Evaluation

Adapted physical educators must have a knowledge base in measurement and evaluation to comply with the mandates of legislation and meet the needs of students. Understanding the measurement of motor performance, to a large extent, is based on a good grasp of motor development and the acquisition of motor skills covered in other standards.

Standard 5: History and Philosophy

Legal and philosophical factors involved in current-day practices in adapted physical education are important to understand the changing contribution that physical education can make in the lives of students with disabilities. Major components of each law that related to education and physical activity are emphasized. This standard also offers a review of history and philosophy as they relate to special and general education.

Standard 6: Unique Attributes of Learners: Considerations for Professional Practice

Adapted physical educators must have a knowledge base of the disability areas identified in the Individuals with Disabilities Education Improvement Act (IDEA as amended in 2004). Material is categorically organized to present the information in a systematic manner. This organization is not intended to advocate a categorical approach to teaching children with disabilities. All children should be treated as individuals and assessed to determine their unique needs.

Standard 7: Curriculum Theory and Development

Those planning to teach physical education to students with disabilities should understand certain curriculum theory and development concepts, such as selecting goals based on relevant and appropriate assessments. Curriculum theory and development is more than writing unit and lesson plans. This is especially important when planning a program for a student with a disability.

Standard 8: Assessment

The process of assessment is commonly taught as part of the basic measurement and evaluation course in a physical education degree curriculum. Assessment goes beyond data gathering to include measurements for the purpose of making decisions about special services, placement, and program components for individuals with disabilities.

Standard 9: Instructional Design and Planning

Instructional design and planning must occur before an adapted physical educator can provide services to meet legal mandates, educational goals, and the unique needs of individuals with disabilities. Many of the principles addressed in other standards regarding human development, motor behavior, exercise science, and curriculum theory and development are needed to successfully design and plan adapted physical education programs.

Standard 10: Teaching

A major part of any adapted physical education position is teaching. In this standard many of the principles addressed earlier, such as human development, motor behavior, and exercise science, are applied to effectively provide quality physical education to individuals with disabilities.

Standard 11: Consultation and Staff Development

As more students with disabilities are included in the general education program, teachers will provide more consultation and staff development activities for colleagues. This will require sensitivity and excellent communication skills. Understanding the dynamics of interdisciplinary cooperation in the consultation process requires knowledge of several consultative models. This standard identifies key competencies that an adapted physical educator should have related to consultation and staff development.

Standard 12: Program Evaluation

Program evaluation is a process of which student assessment is only a part. It involves evaluation of the entire range of educational services. Because national standards for programs have only recently become available, few physical educators are formally trained for program evaluation. Therefore, most program evaluations that have been conducted are specific to the school or district or are limited to a small range of parameters such as the number of students scoring at a certain level of a physical fitness test. Adapted physical education programs or outcomes for students with disabilities are almost never considered in these program evaluations.

Standard 13: Continuing Education

Adapted physical educators must remain current in their field. A variety of opportunities for professional development are available. Course work at a local college or university is just one avenue. Adapted physical educators can take advantage of inservice workshops, seminars, and presentations at conferences and conventions. Distance learning opportunities are also becoming available.

Standard 14: Ethics

A fundamental premise within the APEN standards is that those who seek and meet the standards to be certified as adapted physical educators will strive at all times to adhere to the highest of ethical standards in providing programs and services for individuals with disabilities. This standard has been developed to ensure that adapted physical educators not only understand the importance of sound ethical practices, but also adhere to and advance such practices.

Standard 15: Communication

In recent years, the role of the professional in adapted physical education has evolved from that of a direct service provider to include communicating with families and other professionals to enhance program instruction for individuals with disabilities. This standard addressed the importance of adapted physical educators effectively communicating with families and other professionals using a team approach.

Each of the 15 standards is presented in a separate section in this book. Within each standard, the content adapted physical educators should know is presented in five levels (see table 1). The first three levels represent the content that all certified physical educators should know. The fourth level represents additional content knowledge adapted physical educators should know. The level five statements contain example applications of the level four content adapted physical educators should be able to demonstrate. The number and title of the standard is the Level 1 information centered at the top of the first page of each standard. Level 2 information, the major components of the standard, is bold and highlighted with lines above and below. Level 3 information, subcomponents of knowledge, is bold. Level 4 information, the unique adapted physical education content, is indented and italicized. Level 5 information, applications of the Level 4 content knowledge, is bulleted and indented under the Level 4 content.

TABLE 1 Example of the Five Levels of a Typical Standard

Level 1 Standard number and title

Standard 10: Teaching

Level 2 Major components of the standard

Teaching Styles: Demonstrate various teaching styles in order to promote learning in physical education

Level 3 Subcomponents and dependent pieces of knowledge of fact or principle related to the major component

Understand the command style of teaching

Level 4 Adapted physical education content—additional knowledge regarding the subcomponents that teachers working with individuals with disabilities need to know

Understand the effectiveness of using command style teaching with individuals with disabilities in order to promote learning in physical education 10.01.01.01

Level 5 Application of adapted physical education content knowledge from Level 4 to teaching individuals with disabilities

- Provide clear, concise, and simple language when needed
- Use specific, clear, concise verbal cues to highlight points
- Use total communication as needed
- Use visual cues to demonstrate skill such as using a colored sock to show kicking foot

APENS and NASPE Standards

A basic philosophical tenet of APENS is that physical educators who teach students in integrated or segregated environments must be able to demonstrate basic instructional competencies. This is clearly reflected in the Level 1 through Level 3 competencies, which are the foundation of the Level 4 and Level 5 competencies specifically related to adapted physical education. APENS are logical extensions of the *Advanced Physical Educators Standards* (NASPE, 2001) as reflected in the APENS Levels 4 and 5. This comparison between APEN and NASPE/NCATE standards is presented in Table 2. It should be noted that the APEN standards, although developed *before* the NASPE standards, clearly reflect the content of the NASPE standards.

student needs.

TABLE 2 Comparison of the NASPE Advanced Physical Education Standards to APENS

- **1. Content Knowledge:** Master physical educators have a command of the subject matter of physical education that reflects both breadth and depth that promotes lifetime physical activity.
- 2. Curricular Knowledge: Master physical educators consistently articulate a value base for selecting, planning, and evaluating their curriculum to meet
- **3. Equity/Fairness/Diversity:** Master physical educators model and promote behavior appropriate in a diverse society by showing respect for and valuing all members of their communities and by having high expectations that their students will treat one another fairly and with dignity.
- **4. Sound Teaching Practices:** Master physical educators thoroughly comprehend the fundamental goals of physical education, blending relevant principles of pedagogical practice with the complex nature of the physical education content.
- **5. Assessment:** Master physical educators consistently use a variety of authentic assessments aligned with national and state standards, state and local program goals, and student outcome goals to provide feedback to students, report student progress, shape instruction, and evaluate curriculum and program goals.
- 6. High Expectations for a Physically Active Lifestyle: Master physical educators maintain a stimulating, productive learning environment that holds all students to the highest expectations for a physically active lifestyle.
- **7. Methods of Inquiry:** Master physical educators know, understand, interpret, critique, and consistently use research to improve teaching practice.
- **8. Collaboration, Reflection, Leadership, and Professionalism:** Master physical educators are lifelong learners who collaborate as members of a larger learning community to improve school physical education for all students and enhance the professional culture of their field.
- **9. Mentoring:** Master physical educators contribute to the professional development and support of other current and/or future educators.

- 1. Human Development
- 2. Motor Behavior
- 3. Exercise Science
- 4. Measurement and Evaluation
- 5. History and Philosophy
- 7. Curriculum Theory and Development
- 8. Assessment
- 9. Instructional Design and Planning
- 10. Teaching
- 4. Measurement and Evaluation
- 7. Curriculum Theory and Development
- 9. Instructional Design and Planning
- 12. Program Evaluation
- 3. Exercise Science
- 6. Unique Attributes of Learners
- 11. Consultation and Staff Development
- 14. Ethics
- 15. Communication
- 9. Instructional Design and Planning
- 10. Teaching
- 4. Measurement and Evaluation
- 8. Assessment
- 12. Program Evaluation
- 7. Curriculum Theory and Development
- 10. Teaching
- 15. Communication
- 8. Assessment
- 12. Program Evaluation
- 13. Continuing Education
- 14. Ethics
- 11. Consultation and Staff Development
- 13. Continuing Education
- 14. Ethics
- 15. Communication
- 11. Consultation and Staff Development
- 15. Communication

How to Use This Manual

This manual may be used in different ways, depending on one's purpose for studying it.

Teachers Preparing for the APENS Examination

Teachers planning to take the APENS exam can use this manual to help prepare for the exam. First, they will need to distinguish between the content they already know and the content they need to review or learn. To start, teachers should read the Level 2 and Level 3 statements to understand the context. Next they should read the Level 4 statement and its applications, which are listed in the Level 5 statements. Once they understand the Level 4 and Level 5 statements, they can move on to the next Level 4 statement. If they do not know the Level 4 statement or only vaguely remember the content, they should mark it with a highlighter. Teachers should systematically repeat this process until they have reviewed all Level 4 statements for all 15 standards. Note that the numbers at the end of the Level 4 statements are codes used by NCPERID to link the statements to the study guide content (Kelly, 2006) and the exam questions.

Teachers working alone will need to look up this content in their college or university textbooks, in past class notes, or on the Web. This manual tells you the concepts you need to know, but it does not explain them. Teachers studying in groups can distribute some of the review work. First, they can meet as a group and review the Level 4 statements that each teacher has identified. In most cases, other members of the group will be able to review information on one or more of the Level 4 statements that other members do not know. After this review, there will probably still be some Level 4 statements that other members of the group do not know. These can be divided among the group members. Each member looks up the content of the Level 4 statement that he or she is assigned and then shares this information at the next group meeting.

University Faculty

Because the APENS are based on a needs assessment of what adapted physical educators need to know to do their jobs, they can also be used by faculty members at colleges and universities to evaluate their adapted physical education preparation programs. The APENS can be used much the way NCATE and the NASPE standards are used to evaluate teacher preparation programs in physical education. The APEN standards can be distributed to the faculty, with each faculty member being asked to review the standards in their area and indicate which ones are addressed in their courses. A simple process such as writing in the margin which course addresses each objective will suffice. One faculty member or faculty committee then summarizes which Level 3 and 4 standards are currently not being addressed in the curriculum. These can then be discussed at a future faculty meeting and distributed across the curriculum.

K-12 Administrators

All administrators share the goal of ensuring that all students with disabilities receive physical education taught by a qualified teacher. However, many may not be able to judge who is qualified. Administrators can use the APENS and the national exam as criteria when reviewing and hiring new teachers. Because the majority of students with disabilities are educated in the general physical education setting, ideally, all physical educators would be certified adapted physical educators (CAPEs). If it is not feasible or realistic to employ CAPEs for all general physical education positions, adapted physical education specialists who are CAPEs could be employed to work collaboratively with general physical educators to help them meet the physical education needs of the students with disabilities in their classes. If funding is not available to employ adapted physical education specialists, another option is to provide inservice training for the existing physical education staff so they can acquire the knowledge and skills needed to become CAPEs. The NCPERID can be contacted to identify local university faculty members who can provide both credit and noncredit options for preparing general physical educators to appropriately address the physical education needs of their students with disabilities. The Web site address is www. uwlax.edu/sah/ncperid.

Parents

Parents of students with disabilities should know that if their children require specially designed instruction in physical education, it should be designed and implemented by a qualified physical educator. To this end, parents should inquire at their child's IEP meeting who will provide the adapted physical education services and what qualifies this individual for this role. If the proposed teacher is a CAPE, the parents have some assurance that this teacher has met at least the minimal national standards established by the profession. If the proposed teacher is not a CAPE, the parents should request a written explanation stating why they are not employing a qualified teacher for this role and indicating that the school accepts responsibility and liability for any injuries or emotional distress their child may encounter that can be attributed to not being taught by a highly qualified educator.

Frequently Asked Questions

Based on numerous requests, an APENS Frequently Asked Questions section has been included in this edition. To review the questions and answers, see Appendix C.

Bibliography

Given the diversity of terms and the common use of abbreviations and acronyms in the field, a glossary has been provided at the end of the manual. Although not coded to each statement, a summative list of references that were used by the various committees in developing the standards is also included at the end of the manual.

ACKNOWLEDGMENTS

Maintenance of the APEN standards and exam. It goes without saying that individual support—such as the case of individual teaching—is the backbone of the adapted physical education profession. For every CAPE who is certified, there are many more individuals with disabilities who deserve the services of qualified professionals. The following people are acknowledged for their tremendous commitment to ensuring that the mission of APENS—"A CAPE in every school district in the country"—is one day realized.

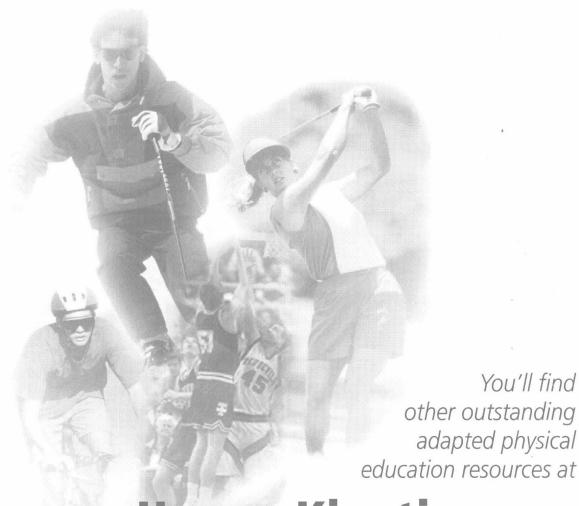
Ron Davis, PhD, CAPE—Ball State University, Muncie, Indiana
Timothy D. Davis, PhD, CAPE—State University of New York, Cortland
Ron French, EdD, CAPE—Texas Woman's University, Denton
Hester L. Henderson, PhD, CAPE—University of Utah, Salt Lake City
Mike Loovis, PhD, CAPE—Cleveland State University, Cleveland, Ohio
Jan Seaman, EdD, CAPE—Executive Director, AAPAR/AAHPERD, Reston, Virginia

External assistance was provided by Dr. Dave Nichols, Texas Woman's University, and Dr. Katie Price, Angelo State University in Texas, who edited and reviewed the Exercise Science standard, and Dr. April Tripp from the University of Maryland at Townson, who edited and reviewed the Consultation and Staff Development standard.

We were also very grateful for the willingness of the following graduate students, who helped to edit and reformat all of the standards for clarity and uniformity: Valerie Hodge and Chad Wiet from the University of Utah and Tiffany Bowers and Colleen Koval from Texas Woman's University. Special thanks to Jim Melton for editing the final draft.

A special thanks to Tom Moran, the APENS administrative assistant from SUNY Cortland, for his assistance in including all of the revisions into the standards.

Secretarial assistance for this project was provided by Judy Melton, secretary at Texas Woman's University.



www.HumanKinetics.com

In the U.S. call

1-800-747-4457

Australia	08 8277 1555
Canada	1-800-465-7301
Europe+4	4 (0) 113 255 5665
New Zealand	0064 9 448 1207



HUMAN KINETICS

The Information Leader in Physical Activity
P.O. Box 5076 • Champaign, IL 61825-5076 USA

CONTENTS

Introduction VII	Acknowledgments XV
STANDARD 1Human Development1Cognitive Development.2Language and Cognitive Development.3Social or Affective Development.3Diversity of Families.4	Pretest Planning
Moral Development	, , ,
Theories of Personality	Trends in Education
STANDARD 2 Motor Behavior	Philosophy: Physical Education
Motor Learning	STANDARD 6 Unique Attributes of Learners: Considerations for Professional
STANDARD 3 Exercise Science	Practice 63
	Mental Retardation
Exercise Physiology Principles	Deafness and Hard of Hearing
Muscular Concepts	Speech and Language Disorders
Cardiorespiratory Factors	Blindness and Visual Impairments
Respiratory Factors	Behavioral Conditions
Nutrition	Learning Disabilities
Body Composition	Cerebral Palsy
Environmental Effects	Muscular Dystrophy
Exercise Prescription and Training	Spina Bifida
Biomechanics/Kinesiology	Amputations
Bone Growth and Development	Spinal Cord Injury
Neuromuscular Function	Posture Disorders
Human Skeletal Articulations	Juvenile Rheumatoid Arthritis
Neck and Upper Extremity Movement	Dwarfism
Spine and Pelvis Movement	Osteogenesis Imperfecta
Lower Extremity Movement	Autism
and Extramity Maramont.	Traumatic Brain Injury
STANDARD 4 Measurement and Evaluation 41	Heart Conditions
	Tuberculosis80
Standardized Procedures	Nephritis
Types of Scores	Asthma
Standard Scores	Sickle Cell Anemia
ndicators of Relationship Between Performances45	Lead Poisoning
Normal Curve	Hemophilia
Descriptive Values	Seizure Disorders
Measures of Position	Leukemia83
PSI I DATACTORISTICS A7	Luanotes 0.4

Deaf/Blind Attention-Defici Acquired Immu Congenital Effec		Disorder Syndrom		Decreasing Bet		
Developmental	Coordination I	Disorder.			Staff Development 133	
	ters	oment	89 9091	Administrative S Group Dynamic Interpersonal C	.	
Learner Analysi Deriving Learnir	s			Consulting Mod	Dimensions	
Devising Learning	ng Experience	S		STANDARD 12	Program Evaluation 139	
STANDARD 8 Legislative Issue				Program Opera	nes	
Terminology Administration .				STANDARD 13	Continuing Education 145	
Decision Making	g			Current Literatu Professional Org	owth	
STANDARD 9	Instructiona and Planning		105	Teaching Certifi		
Curriculum Plar	1		106	STANDARD 14	Ethics151	
Unit and Lessor IEP and IFSP Technology App Assistive Device	Plans	· · · · · · · · · · · · · · · · · · ·		Appropriate Pro Advance the Pro	fessional Conduct	
STANDARD 10	Teaching		110	STANDARD 15	Communication 155	
Teaching Styles Teaching Behav Applied Behavio	iors			Public Relations Roles of Other P	milies	
APPENDIX A	National C	onsortiu	m for Physical I	Education		
	National Consortium for Physical Education and Recreation for Individuals with Disabilities					
APPENDIX B	How the Adapted Physical Education Standards and National Certification Examination Were Developed					
APPENDIX C	Frequently Asked Questions					
APPENDIX D	Evaluation/Review Committee Members					
	Glossary	180	Bibliography	189 About	the Editor 191	

STANDARD 1



Human Development

Understand cognitive development

Explain the theory of cognitive development as proposed by Piaget

Understand the implications of Piaget's theory for the development of individuals with disabilities 1.01.01

- Apply Piaget's theory to the development of infants and individuals with various disabilities
- Recognize the strengths and limitations of Piaget's theory as applied to individuals with disabilities

Understand that perception, attention, and memory may impact the ability to effectively participate and learn in a physical education environment

Understand the impact cognitive disabilities have on perception, attention, and memory for learning in the physical education environment 1.01.02.01; 1.01.02.03; 1.01.02.04

- Develop programs that sequence materials appropriately for individuals with disabilities, recognizing unique attention deficits and perceptual disorders
- Create environments that enhance instruction in physical education by reducing external stimuli as needed

Understand the difference between short-term and long-term memory capacity as applied to individuals with selected disabilities (see Standard 2) 1.01.02.02

- Recognize the implications of short- and long-term memory in the learning process, specifically among individuals with disabilities
- Adapt the learning environment to compensate for short- or long-term memory deficits for individuals with disabilities such as mental retardation, traumatic brain injury

Understand the impact of physical and sensory disability on perception, attention, and memory for learning in physical education 1.01.02.03

- Adjust programs to respond to the challenges associated with the individual's
 perceptual skills (e.g., individuals with cerebral palsy or spina bifida may have
 other disabilities such as hearing disorder or mental retardation)
- Adjust programs to respond to the challenges associated with short attention spans and decreased memory

Understand the impact of emotional disability on perception, attention, and memory for learning in physical education 1.01.02.04

- Adapt programs to respond to the needs of individuals with various forms of emotional disturbance and behavior disorders including depression and mental illness
- Develop programs to respond to the unique needs of individuals with clinical mental disabilities including psychosis, neuroses, and personality disorders
- Recognize that some individuals with behavior disorders have the ability to excel in physical activity