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Essentials of Youth Fitness – Table of Contents

Part I. Fundamental Concepts

Chapter 1. Physical Activity and Children's Health Chapter 2. Principles of Pediatric Exercise Science Chapter 3. Growth, Maturation, and Physical Fitness Chapter 4. Long-Term Athletic Development Chapter 5. Pedagogy for Youth Fitness Specialists Part II. Youth Fitness Development Chapter 6. Assessing Youth Fitness Chapter 7. Dynamic Warm-Up and Flexibility Chapter 8. Motor Skill Training Chapter 9. Strength and Power Training Chapter 10. Speed and Agility Training Chapter 11. Aerobic and Anaerobic Training Chapter 12. Integrative Program Design Part III. Contemporary Issues Chapter 13. Youth Athletes and Sport Participation Chapter 14. Exercise for Overweight and Obese Youth Chapter 15. Exercise for Youth with Selected Clinical Conditions Chapter 16. Nutrition for Youth

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regress each participant's program based on skill level, performance, behavior, and attitude.

Given the need to provide clear instructions, informative demonstrations, and direct feedback during every lesson, practitioners should know how to manage a group of participants, organize a lesson, and provide exemplary instruction (Tomporowski, McCullick, & Horvat, 2011). Practitioners must also attend to sex-related differences and the effect of instructor feedback on effort and performance. For example, in order to improve attitudes toward exercise in girls, youth fitness specialists should praise good effort, offer nonverbal support, and spend adequate time with the girls when providing feedback (Nicaise, Bois, Fairclough, Amorose, & Cogérino, 2007). Adults who do not have academic training and experience in youth fitness may be less able to create an instructional environment in which learning is engaging, enjoyable, and long-lasting for all participants. Practitioners can also enhance the learning experience, both for participants and for themselves, by engaging in ongoing assessment of and personal reflection about the planning and delivery of their programming.

Youth Coach's Dozen

Effective pedagogy lies at the heart of any successful youth program. Although knowledge of pediatric exercise science and developmental psychology remain necessary as prerequisites for effective teaching, youth fitness specialists ultimately need to design and implement instructional methods that enhance the process of learning and discovery. Research has enhanced our understanding of effective instructional practices in the classroom, but it is up to us to adapt these fundamental principles to the practice of pediatric exercise science. We can find a useful framework for discussing the characteristics of successful exercise and sport professionals in the 5 Cs perspective on positive youth development-namely, competence,

Teaching Tip

confidence, connection, character, and caring (Jones, Dunn, Holt, Sullivan, & Bloom, 2011; Lerner et al., 2005).

The coach's dozen is a list of 12 principles that youth fitness professionals should consider when teaching children and adolescents (Faigenbaum & Meadors, 2016). Some of these principles are well supported by research (Ames, 1995; Bulger, Mohr, & Walls, 2002; Schickedanz, Schickedanz, Forsyth, & Forsyth, 2000), whereas others are based on practical experience in working with school-age youth in schools, fitness centers, and sport programs. The list is not meant to be definitive or comprehensive; rather, it is a collection of principles to help youth fitness specialists promote learning through safe, effective, and enjoyable instructional methods.

1. Ensure a safe exercise environment.

The exercise area must be spacious, uncluttered, well ventilated, and well lit. Exercise equipment should be in good working order and appropriate for the smaller body size of children and adolescents; participants should not use broken or malfunctioning equipment. Loose equipment such as dumbbells, weight plates, and medicine balls should be stored in proper locations. Participants should dress appropriately for the session, and practitioners should periodically review safety rules.

2. Stay connected.

The success of any exercise class or sport program depends largely on the leadership provided by instructors and coaches, who should stay connected to the participants in the program. Take the time to learn every child's name, address individual concerns, and show genuine interest in every participant. A child who makes friends, plays fair, and feels connected to the instructor or coach cannot at the same time be a child who routinely disrupts the program or engages in negative behavior. Encourage participants to ask questions; never use sarcasm.

TEACHING BOYS AND GIRLS

Although both boys and girls can benefit from regular participation in well-designed fitness programs, their thoughts and feelings during exercise classes may differ. Therefore, teaching styles that enhance performance in boys may be suboptimal for girls, or vice versa. For some girls, the social and emotional aspects of training may be just as important as the physical skills (Barr-Anderson et al., 2008; Robbins, Wen & Ling, 2019). Accordingly, practitioners should realize that establishing trust with participants in a supportive environment can affect what they think and how they react. In addition, although coeducational exercise classes are beneficial, it may sometimes be appropriate to offer different classes for less-fit teenage boys and girls in order to reduce negative feelings and optimize adaptations.

Just like substitute teachers in the classroom, substitute coaches who do not form partnerships with participants will have a very difficult time teaching youth and inspiring them to achieve personal goals. The best approach is for professionals to develop a positive rapport with participants and show that they care.

3. Be enthusiastic.

Youth fitness specialists should be positive and passionate about exercise, fitness, and sport. If coaches are not enthusiastic about teaching, then children will not be enthusiastic about learning. Enthusiasm is contagious and contributes to a positive learning environment. In turn, a positive learning environment contributes to participants' success, which is a powerful motivator for engaging in the desired activities with energy and vigor. Inspiring practitioners generally possess content knowledge, instructional experience, and genuine interest in helping all participants perform to the best of their abilities.

4. Foster creativity.

Youth exercise programs should be both stimulating and engaging while providing an opportunity for participants to develop a positive sense of self. Creativity is associated with physical fitness in children (Latorre Román, Pinillos, Pantoja Vallejo, & Berrios Aguayo, 2017), and efforts to encourage creativity are needed in order to reclaim opportunities for children and adolescents to use their imagination, collaborate with peers, and release their creative energy. Sadly, creative thinking appears to be declining in children (Kim, 2011), which is all the more reason that participants should be given opportunities to create new games and exercises that are safe, stimulating, and fun. Notwithstanding the importance of education and instruction, the creation of new games and exercises contributes to a mastery-oriented climate in which participants control the type of task engagement and overcome self-determined challenges as they apply learned skills in novel situations. For example, participants might create a new exercise with medicine balls or modify a game of tag that requires speed and agility. This type of instruction can enhance the learning experience and promote physical engagement during exercise classes and sport programs.

5. Understand the process.

In addition to teaching participants about the quantitative aspects of the program (e.g., sets, repetitions, training intensity), youth fitness specialists should also engage participants in activities that are both

physically and mentally challenging (Collins et al., 2016). That is to say, both the quantitative and the qualitative aspects of the movement experience should be considered when implementing and evaluating youth programs (Faigenbaum & Rial, 2018; Pesce, Faigenbaum, Goudas, & Tomporowski, 2018). Highly effective youth fitness specialists use instructional strategies that engage participants repeatedly throughout the practice session. When participants do something right, the practitioner should praise them; and if they do something wrong, the practitioner should help them understand that they are still liked as a person. The most important motives for youth are to demonstrate physical competence, gain social acceptance, and have fun.

6. Deliver clear instructions.

Successful youth fitness specialists are good listeners and exceptional communicators who understand individual needs and learning styles. In order to teach effectively, practitioners need to be concerned with how they deliver content to participants and how the participants react to that delivery. To help explain an exercise or game, a practitioner can use aids such as analogies, demonstrations, and coaching cues. The practitioner's tone, pronunciation, and choice of words can also influence participants' ability to understand lesson content. In some cases, it may be helpful to provide participants with an agenda for the activity period. Combining instructions with clear demonstrations and an organized lesson plan will likely yield the highest physical, cognitive, and affective benefits for participants (Tomporowski et al., 2011).

7. Diversify the portfolio.

The most stimulating youth programs encompass a variety of skills and activities that are developmentally appropriate, challenging, and fun. The outcome of a youth exercise program is determined by systematic and sensible progression of program variables over time, along with enthusiastic instruction. Most children find prolonged periods of monotonous aerobic exercise to be boring. Instead, youth should be exposed to an assortment of exercises and sport activities in a variety of settings with different people so that they can discover what they enjoy while maximizing their physical, psychological, and social development (Lloyd et al., 2014; Pesce et al., 2018).

8. Learn from mistakes.

Youth will inevitably make mistakes when they learn a new exercise or perform a complex skill.

Instead of being viewed in a negative light, mistakes should be recognized as valuable parts of the learning process that provide opportunities for participants to become aware of what they know and what they need to improve. When participants correct their own mistakes or offer constructive feedback to a peer, they become engaged learners who are able to think for themselves. Consequently, instead of merely recognizing the strongest participants, or those who perform a complex movement correctly, practitioners should also acknowledge participants who learn from their mistakes, ask for advice, and offer meaningful assistance to others. Collaborative learning provides an opportunity for youth fitness specialists and participants alike to share ideas, learn from each other, and work toward a common goal. This type of engagement can facilitate the acquisition of the necessary knowledge and skills to achieve long-term objectives.

9. Be patient.

Although it may be tempting to look for quick fixes and rapidly advance youth through exercise protocols, sustained participation in exercise and sport is built on a solid foundation of general preparation (Haff, 2014; Lloyd et al., 2016). Therefore, youth fitness specialists need to be patient in their practice so that participants have time to develop basic movement patterns before progressing to more complex skills and advanced training techniques. Practitioners should also recognize individual differences and realize that progression or regression should be based on skill proficiency, disposition, and understanding of training principles. Patience is needed in order to correct technical errors and develop physical skills that properly prepare youth for the enduring demands of exercise and sport. In contrast, an impatient approach to teaching and training increases the risk of injury and limits participants' long-term potential.

10. Maximize recovery.

Designing programs for youth of any age involves balancing the demands of training (required for adaptation) with the need for recovery (also required for adaptation) (Lloyd et al., 2016). Although any practitioner can make a child tired, successful youth fitness specialists understand and value the importance of developing high-quality movement patterns and enhancing the learning experience through less intense training sessions and appropriate recovery strategies. A training and recovery schedule that is well planned and well balanced improves participants' learning and the program's overall effectiveness. Practitioners need to attend to what is done between sessions as well as what is done during them. The importance of adequate recovery needs to be reinforced regularly because a "more is better" attitude is counterproductive. Related factors such as adequate hydration, proper nutrition, and sufficient sleep also promote well-being, which in turn enhances learning and on-task behavior during exercise sessions and sport practices (Oliver et al., 2011).

11. Think long-term.

Physical activity is a learned behavior; therefore, children and adolescents should be given ongoing opportunities to participate in exercise and sport programs. Without a long-term approach to physical development, boys and girls are less likely to reach their performance potential (Lloyd et al., 2016). Although some practitioners may want immediate results and quick-fix solutions to problems they encounter, a long-term approach is needed in order to optimize training adaptations and enhance the holistic development of all youth (Oliver et al., 2011). If the health-enhancing benefits of daily physical activity early in life are to be realized later in life, youth fitness specialists must know when to progress an activity and how to modify or even regress an exercise due to poor technique or inappropriate behavior. When practitioners help participants connect new information with what they already know, they encourage participants to think longterm about their education and training.

12. Enjoy the game.

The importance of having fun should not be underestimated when engaging youth in fitness, sport, and clinical exercise programs (Dishman et al., 2005; Visek et al., 2015; Watson, Baker, & Chadwick, 2016). When participants see others having fun and learning new skills, they are more likely to participate and become or remain engaged learners. Although encouragement and support from youth fitness specialists can influence exercise habits, the sheer enjoyment that a child experiences during an exercise session can facilitate sustainment of desired behaviors. In this vein, it is sometimes helpful for practitioners to remember what types of fitness activities they enjoyed as children. The most successful professionals maintain a balance between skill and challenge so that exercises and sport activities remain enjoyable. Participants who become proficient and perceive themselves as skilled are more likely to respond to effective teaching with a higher level of engagement and enjoyment.

DO YOU KNOW?

The best youth fitness specialists are often those who understand that each child is unique and learns in a distinctive way.

Summary

It is not enough merely to be a youth fitness specialist with exceptional motor skills, good intentions, and a desire to work with children and adolescents. To help youth become the best they can be, practitioners must also gain field experience, network with successful colleagues, and adapt training sessions to each individual's chronological age, developmental age, and training age. Effective teaching strategies help participants acquire new skills and physical abilities as they learn to organize physical, cognitive, sensory, and emotional subsystems and their movement patterns become more efficient. Without qualified instruction, youth are less likely to master desired movements and more likely to drop out. But with qualified instruction, they are more likely to engage in the learning process as they socialize with others, gain confidence in their abilities, and become skilled movers.

Effective pedagogy lays the foundation for longterm physical development. If participants are not actively engaged in the learning process, they will not learn the desired movement skills or exercises with energy and interest. The most successful youth fitness specialists are themselves lifelong learners who are willing to try new instructional methods and learn from others in the field. They explain procedures, demonstrate techniques, assess performance, correct mistakes, minimize off-task behaviors, and provide direct feedback during every class. Although research on coaching effectiveness continues to enhance our understanding of effective pedagogical practices, we must also prioritize interacting positively, communicating effectively, managing efficiently, and taking time to reflect on our own practice.