

Coaching Athletes: A Foundation for Success



Life Ready Through Sport

The LA84 Foundation is the organization created to manage Southern California's share of the surplus from the 1984 Olympic Games. Located in the historic Britt House since 1985, the LA84 Foundation has committed more than \$170 million to create, support and expand existing youth sports programs, and develop the Paul Ziffren Sports Resource Center. The Sports Resource Center is a state-of-the-art learning and cultural center for sports which contains sports books, films, videos, photographs and memorabilia. To date, more than two million boys and girls and more than 1,000 youth sports organizations throughout Southern California have benefited from our endowment.

The goal of the LA84 Foundation is to be an innovator in youth sports and coaching, and to increase opportunities for achieving athletic excellence at every level. The Foundation grants financial assistance to organizations providing youth sports opportunities, initiates and operates its own youth sports programs including Run For Fun, Summer Swim, and offers free coaching education workshops through the LA84 Foundation Coaching Program. For additional information regarding the LA84 Foundation please visit our web site at **www.LA84Foundation.org**.

Thomas E. Larkin, Jr., *Chairman*

Anita L. DeFrantz, *President*

Board of Directors:

John E. Bryson

Yvonne Braithwaite Burke

Jae Min Chang

Anita L. DeFrantz

James L. Easton

Janet Evans

Priscilla Florence

Robert V. Graziano

Rafer Johnson

Maureen Kindel

Thomas E. Larkin, Jr.

Charles D. Miller

Peter O'Malley

Joan Payden

Amy Quinn

Frank M. Sanchez

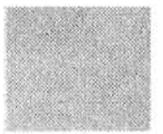
Peter V. Ueberroth

Gilbert R. Vasquez

Casey Wasserman

David L. Wolper, *Chairman Emeritus*

John Ziffren



Coaching Athletes • A Foundation for Success

Written By:

Monika E. Schloder, Ph.D.

Richard T. McGuire, Ph.D.

About the Authors

Monika E. Schloder is a professor in the Department of Kinesiology at the University of Calgary. Dr. Schloder is a Canadian Master Coach.

Richard T. McGuire is a professor in the Department of Education and Counseling Psychology at the University of Missouri, and is the head men's and women's coach for track & field and cross country at the university.

© 2001-2007 LA84 Foundation. All rights reserved.

Table of Contents

Amateur Athletic Foundation of Los Angeles.....	2
(Currently the LA84 Foundation)	
1. Coaching Youth Sports	8
Introduction	8
The Importance of Being a Coach.....	9
<i>The Sporting Group.....</i>	<i>10</i>
The Role of the Modern Coach	14
<i>The Art of Coaching Leadership</i>	<i>15</i>
<i>The Art and Science of Coaching</i>	<i>16</i>
<i>Teaching Versus Coaching</i>	<i>17</i>
<i>Developing a Coaching Philosophy.....</i>	<i>18</i>
<i>Program Success and Coaching Philosophy.....</i>	<i>20</i>
<i>Program Monitoring and Coaching Evaluation.....</i>	<i>22</i>
<i>Ethical Coaching Conduct.....</i>	<i>23</i>
<i>The Guiding Principles</i>	<i>25</i>
<i>Athletes' Rights.....</i>	<i>26</i>
2. Understanding Young Athletes	30
Keeping Winning in Proper Perspective	32
<i>The Process of Being a Success.....</i>	<i>36</i>
Enhancing Motivation: Helping Kids Reach for Their Best.....	39
Allow Youth Sport to Be Fun	46

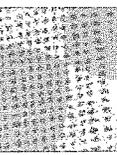
Table of Contents



Communication	52
<i>Communication Skills</i>	55
<i>Communicating in Correcting Errors</i>	56
<i>Use of Positive Reinforcement</i>	57
Summary	58
3. Teaching Sports to Young Athletes.....	60
Developing the Sports Program	60
<i>The Planning Process</i>	61
TLC: Planning Effective Practice Sessions	64
<i>Teaching Content</i>	65
<i>Learning Process</i>	65
<i>Competition</i>	66
Teaching Sport Skills Effectively in a Positive Sports Environment.....	67
<i>Planning the Practice</i>	67
<i>Post-Session Coaching Reflections</i>	75
Game/Event Coaching.....	75
<i>Quality Preparation Yields Reward</i>	75
<i>The Athletes</i>	76
<i>Match/Event Preparation</i>	81
4. Developing and Maintaining Healthy Athletes	86
“Social Myths” and Modern Dilemmas.....	86
General Considerations for Training	88
<i>The Human Body</i>	89
<i>Planning the Training Program</i>	92
<i>Basic Training Terms</i>	100
<i>Energy Systems</i>	103

<i>Training Methods</i>	105
<i>Additional Types of Training Methods</i>	108
Other Considerations for Training.....	113
<i>Specificity Training</i>	113
<i>Preliminary Activity: Warm-Up</i>	114
<i>Warm-Down</i>	114
<i>Physical Attributes of Successful Performance</i>	114
<i>“Daring To Do It Differently”</i>	116
5. Nutrition and Safety	120
Nutrition.....	120
<i>Carbohydrates</i>	120
<i>Proteins</i>	121
<i>Fats</i>	122
<i>Vitamins</i>	122
<i>Minerals</i>	125
<i>Water</i>	125
<i>Nutrition Guidelines</i>	127
<i>Obesity, Eating Disorders, and Malnutrition</i>	138
Injuries: Prevention and Care.....	145
<i>Pre-Season Medical Data Base</i>	145
<i>The Emergency Action Plan (EAP)</i>	147
Injuries.....	151
<i>In Case of Minor Injury</i>	152
<i>Miscellaneous Conditions</i>	156

Table of Contents



6. Managing Your Program	166
The Coach and the Parents	167
<i>Key Ideas for "Winning" the Parents</i>	<i>168</i>
Team Discipline	171
Fund Raising	174
<i>Needs Assessment</i>	<i>174</i>
<i>Methods of Fund Raising.....</i>	<i>175</i>
<i>Special Funds Management</i>	<i>176</i>
Summary.....	176
 References	 178

1

Coaching Youth Sports

“Sports are wonderful; they can bring you comfort and pleasure for the rest of your life. Sports can teach you so much about yourself, your emotions and character, how to be resolute in moments of crisis and how to fight back from the brink of defeat. In this respect, the lessons of sports cannot be duplicated easily; you quickly discover your limits but you can also build self-confidence and a positive sense of yourself. Never think of yourself as being above sports.”

— Arthur Ashe, *Days of Grace*, (1993)

Introduction

Sport is a global and universal involvement. It is a form of nonverbal communication, namely, the language of the body, a language anybody in the world can understand. It is fascinating and emotional. It is drama played out in front of audiences all over the world. People either watch it or participate in it.

Most children and youth are in love with sports. Most have a sports idol and dream of becoming just like him or her. Whether a child's particular sport experience is rewarding depends exclusively on the people who are in charge of the programs.

The Importance of Being a Coach

To be a coach at any level of sport is both a privilege and an honor. To be a youth sport coach is especially meaningful. This role is incredibly important and vital and carries with it significant responsibilities and personal accountability.

Young athletes meet sport at the coach. The coach is at the very hub of the sport activity. The coach is the architect, the definer, the creator, and the provider of each athlete's experiences in sport. In this role, the coach can make or break the quality of each athlete's experience.

In youth sports, coaches are providing youngsters with their first introduction and earliest experiences with sport, with being a part of a team, with learning skills, rules, and strategies, and with the excitement, thrills and risks of athletic competition. The quality of these first sport experiences — literally, whether they are “make” or “break” — may have a profound influence and significant impact on the youngsters' enjoyment and continued participation in sport, as well as their personal growth and development.

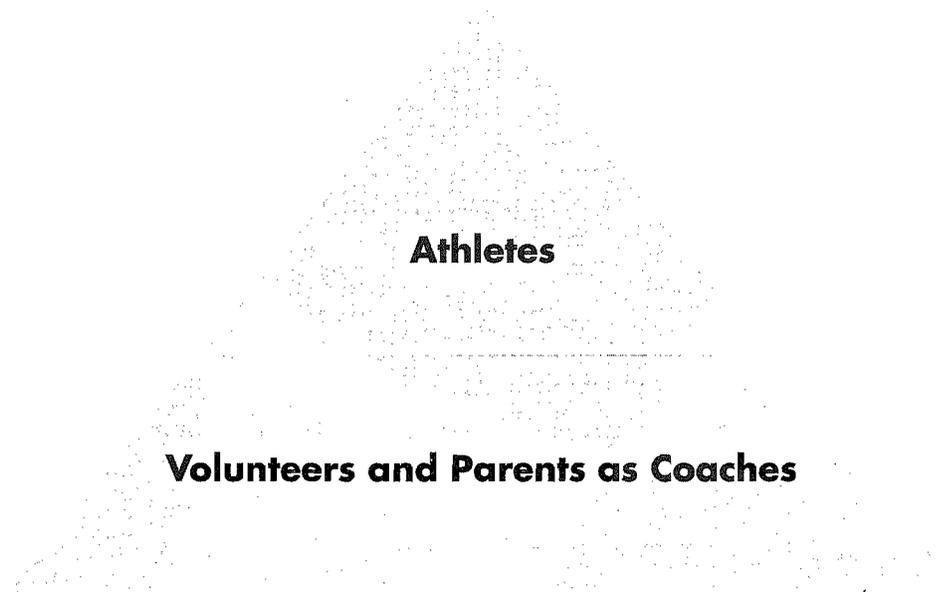
Simply, these early experiences must be positive, exciting, enriching, encouraging, and enjoyable. For the youth sport coach to be well prepared to provide such an experience requires right intentions, strong commitments, and several key and important understandings.

“Coaching is a very serious part of the learning process experienced by athletes. The way in which coaches behave, the roles that they procure, and the overall impression they portray to their athletes contribute to the sporting experience” (Huber, 1996, p. 1). The modern approach to coaching is competency-based. This means evaluating the specific behavior of the coach — namely, what he or she knows, what he or she is able to do, and what he or she values.

THE SPORTING GROUP

The sporting scene consists of various participants who may join a sport organization for a multitude of reasons and interests.

- Who are these people?
- Where do they come from?
- Why do they get involved with children and youth sports?
- How do they get involved?
- What are the rewards, if any?



The Athletes

Participants in youth sports fit into three age categories, each with unique characteristics. While obvious differences exist among the three groups, they also share a common belief in having fun and engaging in a personal pursuit of excellence under the guidance of a knowledgeable and committed coach.

The 6–11-Year-Old Group. The major focus is on fun, fitness, and fundamentals, with an approach that emphasizes participation rather than intense competition and instruction aimed at developing skills and techniques. These athletes are the “busy bees” in sports who want to be involved in everything at the same time — and every 10 minutes in something new and exciting.

They become bored easily, especially if FUN is not part of the program. When they are bored, they lose focus and can become discipline and management problems. Their attention span is minimal, and therefore long practices don't generally lead to a lot of new learning. The children in this age group are enjoyable to coach because of their spontaneity, their willingness to try anything, and their eagerness to learn. They will bring homemade cookies and birthday cards, and they want above all to be with their friends and have fun together.

The 11–15-Year-Old Group. The major focus is participation and skill refinement. These athletes are in the transitional stage of learning (passing from childhood to adulthood) and, true to their nature, love to challenge authority. At the same time, they seem to experience some daily identity crisis on whatever issue. Life resembles an emotional roller coaster with ups and downs, like a yo-yo. They are the real socializers, which means peer influence, positive and negative, has a major impact.

Negative influences can contribute to an adolescent's dropping out of sports — if and when the peer group decides that fun is somewhere else. This group needs a coach who can tolerate challenges, nonsense, and complaining, as well as set the guidelines and limitations for expected behavior. This group needs a very special person who is secure enough to enforce the consequences for violations of established group norms. The person in charge also needs to demonstrate several strong leadership qualities such as fairness and consistency of treatment and follow-through — actions always under scrutiny by this particular age group.

The 15-and-Over Group. This group is ready for higher demands of intense competition — strategies and tactics — and is able to deal emotionally with the aspects and consequences of winning or losing. This group is also ready for evaluation and critique by the coach, peers, and the public. Except for a few, these athletes have reached maturity, have improved their communication skills, and are striving to become more independent. These athletes need a coach who is able to contribute to the final stages of maturity and assist in the “fine tuning” of individual and social skills. They should be given the freedom to think critically, make independent decisions, and face the consequences of their decisions. The athletes' experiences during this period form the basis for value systems they can carry forward into young adulthood.

Volunteers and Parents as Coaches

Volunteers come from all walks of life, and most have the best intentions for providing a learning opportunity for children.



In order to be effective as youth leaders and ultimately as role models, coaches have to deal in a responsible manner with any problems unique to the three age groups. This is often difficult because “nobody remembers who comes in second” and “win at all cost” attitudes prevail. We are a competition-driven society, and this point of view by coaches and parents alike has filtered down into youth sports. As a result, winning-oriented attitudes by coaching volunteers and parents have contributed to the increase in athletes’ dropping out of sports.

“Most people who are involved with youth sports organizations say they are ‘in it for the kids,’ and most are sincere about it.”
(Thompson, 1993, p. 329.)

Several stereotypes of volunteer adults tend to exist within sports groups and are identified under various labels:

- **The “Avoider.”** This individual makes sure everybody has F-U-N, but does so at the expense of skill learning.
- **The “Pusher-Perfectionist.”** This very intense individual personally identifies with the team’s performance. This performance is perceived as a reflection of the individual’s personal coaching ego, which is continually in need of a boost. Only the best players play and the score is “run up” despite a big scoring lead. Losing is taken as a personal letdown, and the team or individual players may have to endure punishment (extra-tough practices) or the “silent” treatment, or they suffer social isolation.
- **The “Convincer.”** This individual coaxes athletes via promise or dominates through guilt or fear, believing that these techniques are highly motivational. Often, this volunteer persuades athletes to play while injured or in pain. He or she does not realize these methods are potentially lethal to any program in due time. Usually, few athletes return the following season.

- **The “Facilitator-Enabler.”** This individual is the ideal coach. The athletes are the focal point of the program. This person empowers the athletes and facilitates the learning process. For the Facilitator coach, seeking instant gratification is not on the agenda because he or she is aware of the complexity and responsibility in teaching the generation of tomorrow.

Volunteer coaching is not “sugar and spice and everything nice.” Encouraging the educational process and providing leadership demands full commitment, patience, tolerance, and it is relentless work. Rewards are not always in the present. They more often happen later, when former athletes succeed at higher levels of sport or acknowledge the prior coaching influence in other areas of life.

The Role of the Modern Coach

The role of the modern coach is demanding, multidimensional, time-consuming, and consequently very complex. Any potential coach needs to reflect seriously on whether he or she is ready for the degree of involvement and leadership required.

Coaches may at times be called on to fill divergent roles such as:

- Substitute Mother or Father
- Friend–Confidant–Soul Searcher–Miracle Worker
- Guidance Counselor–Therapist–Disciplinarian
- Teacher–Coach–Trainer
- Equipment Manager–Detective
- Leader–Organizer–Manager–Salesperson–Recruiter
- Public Relations Person–Fund Raiser

In addition, coaches are expected to carry out a wide range of functions in relation to themselves and their athletes:

For self:

- Develop personal coaching competency.
- Develop a coaching philosophy.
- Prepare the coaching program.
- Be able to communicate.
- Demonstrate leadership.
- Evaluate the program.
- Evaluate the coaching staff.
- Manage within the coaching context.

For athletes:

- Identify individual differences.
- Develop technical abilities.
- Develop physical and athletic abilities.
- Develop psychological abilities.
- Evaluate performance.
- Effect and facilitate change.
- Facilitate life-skills learning.

THE ART OF COACHING LEADERSHIP

Society in the past has attributed several “mythic” characteristics to leadership (Lautzenheiser, 1992, pp. 132-135).

Some of these myths are:

- Leadership is a rare skill.
- Leaders are born.
- Leaders are created by dramatic events.
- Leaders are at the top of an organization.
- Leaders control.
- Leaders are charismatic.
- Power is bad.

The art of leadership requires the coach to think about his or her role as a steward (keeper) in terms of human relationships; in terms of the legacy to be left behind, effectiveness, and permanently instilled values (DePree, 1989).

Leaders are responsible for the quality of the organization and for potential changes. Coaches should aspire to create organizations that inspire the soul. “Every coach has a special gift, and sharing that gift with others is the key to enjoying its full value” (Secretan, 1996, p. 135). “There aren’t any rules for success that work unless you do” (Secretan, p. 165). Coaches as leaders have to acknowledge the fact that they in turn are “responsible to identify, develop, and nurture future leaders” (DePree, 1989, p. 14).

THE ART AND SCIENCE OF COACHING

The “Art of Successful Teaching” is content knowledge, communication, positive interaction in human relationships, and leadership — “a thorough blend of content and context” (Lautzenheiser, 1992, p. 7). Anyone who can remember a great teacher will not only reflect on his or her personal qualities but also remark that the teacher had absolute magic “making boring stuff motivating, created interest and held everybody in spell” (Lautzenheiser, 1992, p. 17).

In order to educate the total individual, whose well-being is entrusted to the care of the specific coach, science (scientific knowledge and practical application) becomes the “toolbox” of modern coaching.

According to leading sport sociologists and psychologists, 67% of children burn out or drop out of sports by the age of 12. Since another 8% drop out by the age of 15 and only 11% advance to the elite levels, an examination of present coaching attitudes is warranted. The role of the coach becomes a crucial factor in this potentially destructive process.



TEACHING VERSUS COACHING

There is an ongoing debate about the relative merits of teaching versus coaching athletes through new skills. Recent studies seem to favor an instructional approach.

Through observing coaches and analyzing their methods, the researchers conclude:

- Coaches are teachers and need to use sound pedagogical (teaching) principles.
- Coaches need to be able to shift these principles to the training scene.
- Coaches should implement a variety of teaching/coaching styles.

Within the spectrum of teaching styles, the following are available from teacher-centered and learner-centered perspectives (Mosston & Ashworth, 1994).

Teacher Centered:

- The Authoritarian Style
- The Practice Style
- The Reciprocal Style (partner teaching)
- The Self-Check Style (participant uses skill checklists)
- The Inclusive Style (all participants are included, working on the same skill at various levels)

Learner Centered:

- The Discovery Style (problem solving)
- The Guided Discovery Style (discovery with one final solution)
- The Divergent Discovery Style (diverging into many solutions and options)

- The Converging Discovery Style (uses reasoning and critical thinking)
- The Individual Programming Style
- The Learner Initiated Style (designs own program with guidance)
- The Self-Teaching Style (most advanced— independent learning— high motivation)

The teacher-centered authoritarian style is used most often because:

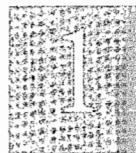
- Power and control are mistaken for good management and discipline.
- It creates a personal comfort zone, since it is easy.
- It is very effective, especially when conducting drills sessions.
- It is the way most coaches were coached.

Youth sports organizations are not only competing with other sport activities for enrollment. Organizations also have to match the fun aspects of various forms of entertainment available to children.

Additionally, specific needs may have to be considered in order to entice children and adolescents who are exposed to or involved in destructive behavior. Coaches should offer the best programs possible. They have to remind themselves that each individual athlete has the right to develop to his or her fullest potential — whatever and whenever that may be.

DEVELOPING A COACHING PHILOSOPHY

Philosophical considerations become important because coaches have to decide whether to develop general athleticism first and sport-specific athleticism second — or resort to a quick fix, instant success method. The latter tends to backfire, often resulting in stale phases that interfere with the athlete's normal progress. This method tends to create frustration and motivational problems and may trigger the athlete to drop out of the activity.



A well-constructed philosophy operates as the driving force for:

- The entire program and future program aims.
- The athletes' welfare.
- Teaching/coaching staff interactions.
- The selection of management styles.
- Support-staff cooperation and effectiveness.
- Parental involvement.
- The monitoring/evaluation process.

Training Versus Education

Coaches need to decide if their only role is to train the athlete or if it includes educating the individual as well. The coach also needs to decide if the process is going to be one-dimensional or multidimensional.

One-dimensional method:

A one-dimensional method develops the physical aspects of the athlete (body/physique/physiology) through physical programs and training.

Multidimensional method:

- Develops physical skills and proper techniques.
- Provides knowledge and new information.
- Fosters social-psychological, emotional aspects.
- Provides fun and motivation.
- Enhances communication and social skills.
- Facilitates the learner/athlete's ability to make independent decisions.
- Encourages moral reasoning and the assumption of responsibility for one's decisions and actions.

PROGRAM SUCCESS AND COACHING PHILOSOPHY

One should always remember that the best teacher for the coach is the athlete.

The approach to teaching/coaching is based on major philosophical questions in order to establish and build an operational framework. The success of any program depends ultimately on a fundamentally sound philosophical approach that examines the following important questions:

Who Are We, as Coach and Athlete? (questions the nature of being)

- Who am I, as a person and the coach?
- What is the nature of the learner/athlete?

What Is Knowledge? (questions the nature of knowledge)

- What current knowledge base (information) do I need as a person/coach?
- What knowledge base (information) does the learner/athlete need in order to become a successful individual and athlete?

What Are Moral Values? (questions the nature of values: what is good—what is bad—moral judgments)

The discussion entails what constitutes moral and non-moral values for the common (societal) good and the effects non-moral values have on moral beliefs and action (Hahm, Beller, & Stoll, 1991).

- What are my value systems as a person and as a coach?
- What value systems are essential for the learner/athlete in order to function fully and independently as an individual and as an athlete in the 21st century?



- How do I facilitate and guide this process in order to develop the individual/athlete so that he or she may feel empowered to think critically, learn to reason morally, and learn to shoulder consequences for actions or behavior. In other words, how do I as a person/coach teach responsibility to the prospective athlete? What learning episodes must I provide to teach those important principles?

“When Handshakes Become Unsportsmanlike Conduct...League bans long established customs to avert post-game fights” (Front-page headline, *Los Angeles Times*, March 25, 1994).

“...and manners are missing in action — as fundamental decency has nearly disappeared” (Editorial, *Calgary Herald*, September 28, 1996).

How do I teach respect for:

- The self
- Teammates
- The coach
- Other teams and athletes
- Referees
- The sport environment
- Property

“... There can be no true sport without fair play, and without fair play sport has no future” (Willi Daume, former NOC President of Germany, 1988).

How do I teach fair play, honesty, and integrity?

Coaches have to make the athlete the center of their teaching/coaching environment instead of basking in the traditional power role. In the end, coaches need to decide on the appropriate timing to let go of the power base and empower athletes instead. Likewise, they are obligated to teach athletes strategies to handle these newly acquired roles and inherent responsibilities.

What Are Aesthetic Values? (questions the nature of values: what is beautiful—what is ugly)

What concepts of the aesthetic, related to athletics in general and sports specifically, do I as a person/coach teach the learner/athlete? How do I teach movement skills so that athletes feel good about their performance?

Grace and beauty are qualities sports fans admire in elite athletes because they make performances look so easy. Aesthetic concepts in sport relate to the beauty and grace of such movement. The Greek philosopher Plato said that “the most beautiful motion is that which flows naturally and accomplishes the greatest results with the least amount of effort” (Schloder, 1974, p. 8). “Every movement given shape by the person carrying it out touches the core of personality” (Diem, cited in Schloder, 1974, p. 9).

Building a coaching philosophy is a prolonged and evolving process, since it essentially leads to the success or downfall of a program. It is the working document, the business plan for all participants: athletes, coaching staff, support staff, and parents. No successful business operates without a plan. The establishment would go bankrupt — and many do.

PROGRAM MONITORING AND COACHING EVALUATION

Program monitoring and coaching evaluation are absolutely essential in order to maintain a program’s continuity or implement necessary changes. The beginning and conclusion of any program are an assessment for effectiveness and accountability.

The monitoring process should be conducted on an ongoing basis for overall program stability and success because:

- A program is built on beliefs.
- Beliefs give direction to the program.

- Beliefs help formulate objectives and goals for the program.
- Beliefs with resulting objectives and goals will serve as a basis for the selection or rejection of activities to be included.
- Beliefs help to interpret the program to the public.
- Beliefs provide a basis for defending the program, if necessary.
- Beliefs become the basis for sound evaluation of the program.
- Beliefs help incorporate strategies to improve the overall educational and instructional process.

Teachers and coaches alike shy away from official evaluations. Instead, the attitude should prevail that regular program and peer assessments are necessary to help monitor and improve instruction. Hence, existing programs and all those involved will ultimately benefit.

ETHICAL COACHING CONDUCT

The coach must be a person with a high moral base who is expected to display proper ethical conduct, regardless of the training or game/event situation. Personal character, therefore, “is everything in promoting the pursuit of excellence in sport” (Gough, 1997, cover page).

All coaches have a “right,” namely, the right to coach. However, this right is governed by universal principles of ethics determined by society at large. These universal principles of ethics include:

- **Conduct.** This is defined as “the act of guiding, management, and behavior” (Schloder, 1998a).
- **Ethics.** This “examines human character and conduct in relation to the distinction between right and wrong, moral duty, and obligations to the community at large” (Schloder, 1998a).
- **Morality.** This is explained as “the practice of moral duties, virtue, and ethics” (Schloder, 1998a).

- **Moralizing.** In coaching, this means to reflect and decide on “what is ultimately good or bad or right or wrong.” This is placed in the context of society at large and the sport environment (the micro society or sport subculture) specifically.

Since people transfer their value systems into sports — without a close examination of those values — issues and problems in modern sport have multiplied. The coach as a person has to challenge personal beliefs in order to understand moral questions, which include 1) choice, 2) value, 3) obligation, and 4) principle (Hahm, Beller, & Stoll, 1994b).

A coach’s influence reaches far beyond the sports environment. This influence can impact the life of the athlete forever. “Sport builds character” is a myth and a misconception of traditional past thinking. A child’s value systems are said to be established between the ages six and eight. A sport experience either reinforces (strengthens) these values or adds confusion to the previously established value base. The coach is important because the role-modeling effect has an either positive or negative impact on the athlete’s shaping of accepted group norms.

The coach becomes the “guiding light” and facilitator in the moralizing process. Therefore, he or she has to have a strong value base in order to teach effectively and with moral responsibility.

The National Association for Sport and Physical Education, with input from experts in several sports organizations, drafted and developed national standards in order to provide “quality coaches for quality sports” (National Association for Sport and Physical Education, 1995).

The National Standards for Athletic Coaches include the following:

- Professional preparation and development
- Teaching and administration
- Risk management
- Injury prevention, care, and management



- Social-psychological aspects of coaching
- Growth, development, and learning
- Training, conditioning, and nutrition
- Skills, tactics and strategies

(National Association for Sport and Physical Education, 1995.)

THE GUIDING PRINCIPLES

- **Coaching Competence.** Strive to be well prepared at all times and current in knowledge in order that all duties in the respective discipline are fulfilled with competence.
- **Integrity.** Act with integrity in performing all duties owed to athletes, the sport, other members of the coaching profession, and the public.
- **Athletes' Interests.** Act in the best interest of the athlete's development as a total person.
- **Respect for Rules.** Accept both the letter and the spirit of the rules that define and govern sport.
- **Respect for Officials.** Accept the role of officials in providing judgment to ensure that competitions are conducted fairly and according to the established rules.
- **Responsibility to Other Coaches.** The coach's conduct toward other coaches has to be characterized by courtesy, good faith, and mutual respect.
- **Overall Personal Conduct.** The coach has to maintain the highest standards of personal conduct (all aspects) and support the principles of fair play at all times.

(Adapted from *Canadian Coaching Certification Coaching Code of Ethics*, Profile Forms, 1996.)

ATHLETES' RIGHTS

Coaches have the right to coach, as stated earlier, and each athlete has the right to learn, while parents have the right to know.

Athletes come from various economic, social, ethnic, racial, educational, and religious backgrounds. They may come from a single-parent or two-parent family setting. They want to be treated with respect and dignity. They also wish to be coached by competent coaches who care about them as unique individuals with different needs.

Most coaches are still under the impression that younger athletes should not have input into program planning. Coaches discredit the capabilities, motivational level, and general interest of children to do so. Obviously, younger children need to be facilitated in that process. However, they have to be given the chance — and plenty of opportunities — to engage in the risk to discover their self-worth.

Research has long shown that all participants involved in sport programs work harder and perform better in a democratic system and, in the end, they are happier. Sport thereby becomes educational, which after all is its foundation, and the foundation of education in America is democracy.

Coaches have an obligation to foster and support democratic principles, if they truly believe in the worth of the individual sport participant. These principles are also aligned with the general aims of the Olympic ideal: “to promote the development of those physical and moral qualities which are the basis of sport” (Coubertin, 1894).

The Athlete's Bill of Rights

Every athlete has:

- A right to play with equal consideration on the team.
- The right to participate with teammates and against opponents at a level equal to his or her maturity and ability.
- Rights as a member of the team and can be dismissed from the team for deviant behavior and violation of accepted group norms.
- The right to due process.
- The right to free speech.
- The right to a safe environment, including the right to safety information and to participation in improving playing conditions.
- The right to as much information as possible about the team; about his or her position; playing hazards; possibilities of playing at a higher level; and information necessary for educational enrichment and development.
- The right, when appropriate, to participate in the decision-making process due to his or her position on the team or athletic experience as a whole.
- The right to oppose authority when the foregoing principles are not met, without verbal, physical, emotional, or sexual harassment.

(Based on "Athlete Rights," cited in Stoll, 1993, pp. 85–87.)

Notes

[This section contains faint, illegible text, likely bleed-through from the reverse side of the page.]



Notes

[This area contains faint, illegible text, likely bleed-through from the reverse side of the page.]

2

Understanding Young Athletes

The most important word in “youth sport” is *youth!* The most important word in “youth sport coach” is also *youth!* Being a youth sport coach is far more about youth than it is about sport. Understanding sport is important. However, having an understanding of young athletes is most important.

Young athletes are young people, children. If their youth sport experiences are to be positive and successful, it is vitally important for their coaches to understand children — their wants, needs, desires, motivations, worries, fears, behavior, and attitudes. In addition, one has to understand the priority and context of sport relative to their total growth and development.

Young Athletes



Does a person really need a college degree in child psychology to be an effective youth sport coach? Obviously, the answer is, “Of course not!”

But to be an effective and successful coach of young athletes, a person must...

- Have a genuine love for children.
- Have a sensitivity to the priority and special nature of the lives of children.
- Have a passionate commitment to contribute to the joy and happiness of children through sport.
- Find personal enjoyment and fulfillment in seeing excitement in children’s eyes and smiles on their faces.

It is the intention of this chapter to contribute to the efforts of youth sport coaches by adding to their understanding of the young athletes they coach. The development of this understanding will focus attention on four key coaching principles for effective and successful youth sport coaches. These coaching principles include:

Principle #1. *Build a foundation* for future successes — physically, psychologically, socially, and morally — both in sport and in life!

Principle #2. Create, nurture, and protect each child’s *feelings of self-worth!*

Principle #3. *Allow* young athletes to have *fun* — to experience the sheer joy and excitement of playing sport!

Principle #4. *Communicate* with those whom you lead as you would wish to be communicated with by those who lead you!

KEEPING WINNING IN PROPER PERSPECTIVE

“It does matter whether you win or lose!”

Our society is passionately engaged in a tremendous love affair with sport. There’s just no getting around the fact that a major focus of that societal attention and emotion is directed toward winning and winners. Whether good or bad, the reality is that the priority placed on winning is a central feature of the sport experience.

But, winning should not be the only focus of the sport experience. In particular, it should not be the only focus of the *youth* sport experience. So, it’s essential for effective and successful youth sport coaches to have a clear understanding of just where this whole issue of winning fits into their personal values, priorities, and approaches to coaching young athletes.

If given the choice, and all other factors being equal, most individuals would prefer to win. They would choose to gain a victory. Certainly, then, it is normal for youth sport coaches to have a desire for their teams to win, rather than not win. Doesn’t winning often determine or define whether people are considered to be really good coaches?

What, then, is the price of winning? What values or priorities are compromised or sacrificed as part of the cost of winning? Nobody wins all the time, and all of those other factors are not always equal. Where does winning fit for the youth sport coach?

Again, the answer lies in the focus of youth sport: the youth.

The primary mission of youth sport, and thus of youth sport coaches, is not to win games or races. It is not to win titles or championships. The reason for youth sport and the mission of youth sport coaches is simply to *win kids!*

Youth sport participants, youth sport athletes, are not mini major leaguers. They are not pint-sized pro athletes. Youth sport athletes are kids!

Being a child — a kid — is a very specific stage in one's life. And it is a very important stage in everyone's life. Youth sport participation is a very important activity for millions of kids, and for some, their most important activity. It is critical that youth sport activities provide experiences that match the developmental needs of children at this stage in their lives.

This is a stage of building developmental experiences that provide *the foundation for future success*. Youth sport coaches are foundation builders.

The elementary school teacher nurtures the learning of fundamental arithmetic skills and mathematical concepts in anticipation that some day in the future this may lead to the study of calculus, computer programming, or medicine. So, too, does the youth sport coach provide fundamental nurturing experiences that build a strong foundation for future successes in sport and in life. Youth sport coaches are foundation builders.

To apply an analogy from house construction, youth sport coaches would not be the roofers or the painters. Neither would they be the interior decorators or the carpet installers. Instead, they would be found digging the footings and pouring the foundation. Their work may not be as visible when the project is finished, but it surely is vital to the ultimate success, durability, and long life of the house. Youth sport coaches are foundation builders.

What goes into this foundation? What fits in this stage of development for these young athletes? Coaches have to consider at least four critical cornerstone areas in their foundation-building efforts: physical, psychological, social, and moral.

Physical

This is a time when kids are exploring their bodies. Youth sport participants come in many varying stages of physical development and maturity. Some are tall and thin; some are short and stout; some are strong and have lean bodies, while others are rather soft and weak; some are quite agile, yet others seem to have three left feet. But none come fully developed, and all are exploring the challenge of discovering what they can do with their bodies. Typically, they are eager (some are timid and hesitant but show desire) to learn new skills. They have lots of energy but need good instruction, direction, and focus.

They need to know the right positions and feel of a correct stance — whether hitting a ball, fielding a grounder, shooting a lay-up, or blocking a defender. They want to learn how to “keep their eye on the ball” so they can get a hit or “keep their eye on the rim” so they can make the basket. They need to learn that “staying low” and “having a wide base” can contribute to fielding a grounder, playing defense, or executing an effective block.

They want to learn ways to become stronger or quicker or faster. They also need to know and understand how all of these can be achieved in sport safely.

These are the types of fundamental experiences that are built into a youngster’s foundation through youth sport and youth sport coaches. They are much more important at this time of development than intricate offensive or defensive strategies, and certainly more important than winning the game. These experiences provide the foundation for future skill development, future athletic participation, and future successes.

Psychological

Youth sport activities provide some of a child's earliest experiences for venturing out on his or her own. This is a time of taking risks, of developing self-confidence and trust, of building self-awareness and self-image, and of establishing and nurturing the youngster's personal pride and individual identity. As simple as it may sound, childhood is a time to be happy and to have fun just being alive. Youth sport is an ideal environment for learning the importance of behavioral and emotional control, as well as developing concentration and attention-focusing capabilities. Again, the nurturing and development of each of these provides the foundation for a child's becoming healthy, happy, and successful in sports as well as in life.

Social

Youth sport can provide tremendous foundation experiences in a child's social development. These include being a part of the team, learning to follow leadership, working together with others, coordinating moving and timing with other teammates in executing a play, contributing, giving, sharing, receiving, cooperating, compromising, accepting and being accepted, trusting and being able to be trusted, and enjoying the camaraderie of good friends and teammates. All of these are critical aspects and attributes of the social development of successful individuals, and all are intimately integral aspects of a positive youth sport experience.

Moral

The development of moral reasoning — the ability to determine for oneself what is right from what is wrong and then make decisions about one's actions and behavior accordingly — is one of life's most critical lessons and compelling experiences. The many influences contributing to this process are powerfully active and influential during childhood.

Sport generally, and youth sport activities particularly, provide a perfect setting for challenging, testing, and gaining one's sense of moral reasoning. All sports are defined and played by a set of rules. They spell out both the parameters and mechanics of the playing of the game, as well as the acceptable behavior and interactions of the participants. There is to be common agreement among all participants to abide by and play within the accepted rules. There are officials (referees, umpires, judges) assigned specifically to determine when individuals may have broken these rules and to assign penalties as punishment and deterrent for such behavior. There are questions related to whether one can bend the rules to one's advantage: *Is it against the rules if I don't get caught? I really want to win, and the object of the game is to win, and I can win, but to be able to win I have to break this one little rule, and nobody will ever know, and everybody expects me to win, etc.*

Youth sport provides the perfect laboratory experience and a powerful medium of influence for appropriate positive instruction and leadership in the development of an individual's moral reasoning. What could be more important as a cornerstone in the developmental foundation for the future of a successful person and a successful society?

THE PROCESS OF BEING A SUCCESS

When these four cornerstones of the youth sport experience are in place, the body of the foundation is built on principles of the process of being a success. We live in a fast-paced, hectic society where urgency, instant gratification, and quick fixes are the norm. Youngsters are bombarded with masses of quick and easy information, literally right at their fingertips. Kids learn and come to believe that if they want something they can and should have access to it quickly and easily.



Yet true success, in sport or in life, typically does not come quickly or easily. There is an identifiable and predictable process of individual personal investment that leads to the achievement of true success.

This process includes:

- Realistic goal setting (even dream goals).
- Proper planning.
- Purposeful practice and preparation (development of necessary knowledge, skills, and capabilities).
- High value placed on personal investment and individual effort.
- Dedication and commitment.
- Patience and persistence.
- Experiencing personal pride and fulfillment in the reward when the task is completed and the goal is attained.
- Pride and fulfillment become catalysts for establishing new goals and reinvesting in the process of achievement.

Understanding the process of achievement is one of the most important parts of a youngster's education. Youth sport experiences provide the ideal setting and environment for its acquisition.

So, where does winning fit? Is it important? Is it proper for youth sport coaches or young athletes to want to win?

The answer, of course, is that it's OK to have a desire to win.

If coaches win games but lose kids, then they've missed the point and purpose of youth sport!

If coaches win championships but fail to promote and protect each child's development and future, they've again missed the point and purpose of being a youth sport coach!

But:

- If coaches genuinely desire to understand young athletes, and
- are sensitive to kids' lives and development, and
- are committed to carefully creating and purposefully providing experiences in youth sport that build a deep and firm developmental foundation for supporting further success and happiness in youngsters' futures, then
- not only will coaches be winning in these kids' lives, but they will also probably have placed themselves and their teams in the best position to win plenty on game days as well.

It really does matter whether you win or lose because it really matters that youth sport coaches win in the life of each and every kid they touch through sport!

COACHING PRINCIPLE #1.

Build a Foundation for future successes — physically, psychologically, socially and morally — both in sport and in life!

Enhancing Motivation: Helping Kids Reach for Their Best

A question often asked by coaches is, “What can I do to motivate my athletes?” At first, this would seem to be a rather normal and obvious concern for leaders of young people generally and youth sport coaches specifically. Some might observe that kids today just aren’t very motivated. What can a coach do to light a fire and get them going?

But there is a puzzle here, a contradiction and paradox. Most kids who enter youth sport arrive filled with lots of motivation. They want to play. Sport is fun, and the sheer thrill of running, jumping, throwing, catching, kicking, making, missing, pushing, pulling, sweating, straining, stopping, resting, and going at it all over again is in itself motivating. The excitement of being a part of the team, dreaming together, working together, striving together, succeeding together, celebrating together, and even failing together and mourning together all serve to add to the participants’ sense of motivation. Certainly, with a good leader, a coach, adding just the right personal touches of challenge, courage, and confidence, the participants should be filled with motivation.

And yet, coaches continue to ask, “What can I do to motivate my athletes?” The reality of this question necessarily means that they are working with kids and observing kids who appear to lack motivation. By either their behavior or their attitude they are displaying less motivation than the coach considers to be necessary or appropriate.

What could be happening to explain this frustrating phenomenon? Either something is happening in the athletes’ sport experience or something is happening in the rest of their lives to diminish or extinguish their motivation, or the coaches are inaccurate in assessing and interpreting what they are seeing in the athletes’ behavior and attitudes.

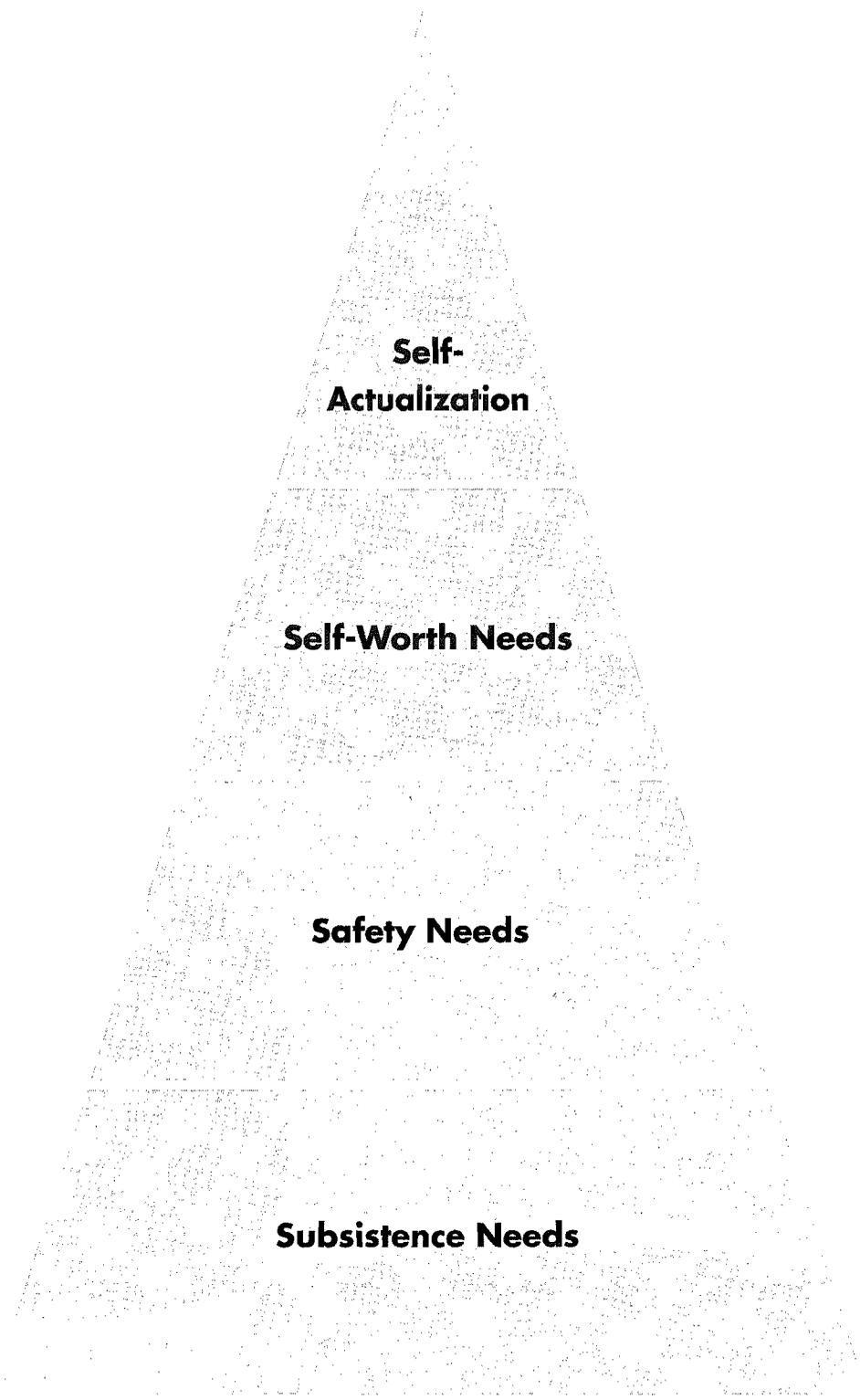


Figure 1. An adaptation of Maslow's Hierarchy of Needs

The challenge to all youth sport coaches is to gain an understanding of kids that allows them to lead and provide for young athletes in a way that maintains the motivation that they bring with them, that will predictably enhance this motivation, and that will ultimately encourage each child to strive to be the very best that he or she can be, both in sport and in life.

The famous psychologist and educator Abraham Maslow provides a very clear and concise model for helping coaches gain this important understanding. See Figure 1 (on page 40) which adapts Maslow's Hierarchy of Needs.

Any young athlete's motivation is directly related to his or her desire to fulfill a need. To understand athletes' motivations, then, the coach must know what needs they are desiring to fulfill. Maslow's model helps identify and clarify what these needs might be and where they might fit in relative priority.

Starting at the bottom of the pyramid, the model identifies individuals' most basic needs as being **subsistence needs**. These include factors needed to sustain life, notably food, water, and shelter. The key understanding here is that everyone, at the most fundamental level, is motivated to fulfill this need to stay alive, and until that need is met, *no one* is motivated to fulfill any further higher-order needs, represented here as those listed higher on the model.

Thus, when a person's subsistence need is fulfilled, he or she is motivated to fulfill the next level of needs, shown here as **safety needs**. Everyone has the need to feel safe from both physical and emotional harm and will be motivated to seek ways to find safety or protection. Until these needs are met, no one is highly motivated to seek the fulfillment of any higher-order needs.

Motivation is all about having needs and striving to fulfill those needs. What does Maslow's model show youth sport coaches specifically about understanding their young athletes' motivation? What are ways that coaches can enhance their athletes' motivation? And how can coaches help their athletes strive to become the very best that they can be?

From the Maslow model, youth sport coaches should understand: Before athletes can be motivated to strive and reach for their very best, they must first have plenty to eat and drink and get plenty of rest. They must feel safe from harm, both physical and psycho-emotional. Finally, they must feel worthy.

- Some kids may come to practice hungry, really hungry. What may appear to be a lack of motivation may really be hunger.
- Some kids may come to practice tired. Maybe they don't know from one night to the next where they will be staying, or maybe there are too many in the bed for them to get enough rest and sleep. What may seem to be a lack of motivation or a bad attitude may really be fatigue.
- Some kids just do not live in a safe environment. They live with fear. Sometimes this fear may be for their physical safety, because they have experienced threats or abuse from bullies, peers, parents, or siblings. Perhaps they may have experienced sexual abuse or harassment (this is ugly, but it is real). And with far too much frequency, kids experience lots of emotional abuse including screaming, yelling, intimidation, humiliation, taunting, degrading, and worse, from their peers and from their families.

At times things may happen in sport, on the practice field or in the competition setting, that add to these safety needs and fears. Coaches' behavior and actions, though intended to be challenging, encouraging, or motivating, may in fact be interpreted as threatening, demeaning, or humiliating. Where boys and girls are playing together, or men are coaching young girls, inappropriate comments or actions could be interpreted (or intended) to be of a sexual nature.

In such cases, youngsters may fear for their physical or emotional safety. What may appear to be a lack of motivation may actually be the result of a fear or an experienced threat to a youngster's safety.

All young athletes need to feel lots of self-worth. In many cases, the younger they are and the less experienced they are, the more vulnerable they are. Make sure that every kid feels worthy!

Coaches should be filled with the specific intention to provide meaningful skill-development drills and practice experiences with the express purpose of building each youngster's level of competence. When a kid is struggling and slow to learn, coaches should provide even more time and attention, and reward small gains in skill level. Success in gaining competence will encourage motivation to practice harder and to get even better!

Coaches should be sure to provide many ways of measuring achievement. Winning or being the best on the team is great for those who win or those who are the best, but what about everybody else? Since nobody wins all the time, and sooner or later everyone experiences not being the best, it is important to have other measures of achievement.

Coaches can purposefully use failure settings and frustrating situations to reinforce for young athletes that they are still valued and important and worthy, even when they do not achieve. Achievement is only one avenue to self-worth, but it is far from the only meaningful measure. Be just as happy and proud of your kids after a loss or a failure as you are after a success.

Coaches can and should provide unconditional love for each and every athlete every day. Show them that they are important to you, that you are excited about them, proud of them, and that you really care about them. Nurture this same mutual acceptance within the team. Make sure that cliques do not undermine the unity of the group and that individuals are accepted rather than being shunned or frozen from group activity.

Many times young athletes perceive even their parents' love for them as being conditioned on how they perform as athletes, or on whether they win, or on how well they played in the last game (or the next game). What may appear to be a lack of motivation may really be a lack or loss of self-worth.

Provide unwavering, unending, unconditional love. When young athletes are filled with a sense of self-worth, they will overflow with motivation and desire to reach high for their very best and to strive to be all that they can be!

The most important key to young athletes' motivation is self-worth. Most kids come to the sport setting motivated to seek fun and success. Coaches should provide a sport environment that is free from debilitating experiences that would diminish or extinguish self-worth and motivation. They should create an environment that is filled with experiences that will build and enhance self-worth and motivation. Young athletes then will be highly motivated and excited about reaching for their best!

COACHING PRINCIPLE #2.

Create, nurture, and protect each child's **feelings of self-worth!**

Allow Youth Sport to Be Fun

Possibly the most important and most basic understanding regarding young athletes and their participation in youth sports is this: Kids participate in youth sport because they want to have fun! This is pure and simple. The number-one reason kids play sport is because they think that it will be fun. *When playing sport is fun, they like it, and they continue to play!*

The Ten Most Important Reasons I Play My Best Sport

1. To have fun
2. To improve my skills
3. To stay in shape
4. To do something I'm good at
5. For the excitement of competition
6. To get exercise
7. To play as part of a team
8. For the challenge of competition
9. To learn new skills
10. To win

Table 1. Sample: 2,000 boys and 1,900 girls, grades 7-12, who identified a "best" sport. Answers above were among 25 responses rated on a 5-point scale (Ewing & Seefeldt, 1988).

The 12 Most Important Reasons I Play My Best Sport

BOYS

1. To have fun
2. To improve skills
3. For the excitement of competition
4. To do something I'm good at
5. To stay in shape
6. For the challenge of competition
7. To be a part of a team
8. To win
9. To go to a higher level of competition
10. To get exercise
11. To learn new skills
12. For the team spirit

GIRLS

1. To have fun
2. To stay in shape
3. To get exercise
4. To improve skills
5. To do something I'm good at
6. To be a part of a team
7. For the excitement of competition
8. To learn new skills
9. For the team spirit
10. For the challenge of competition
11. To go to a higher level of competition
12. To win

Table 2. Sample: 2,000 boys and 1,900 girls, grades 7-12, who indicated they had a best sport. They rated a total of 25 answers on a 5-point scale (Ewing & Seefeldt, 1988).

Conversely, when kids stop playing sport, the most important reasons are that sport just wasn't fun and that they lost interest in playing. So, they stopped.

Compelling evidence for this understanding has been provided by Michigan State University researchers Ewing and Seefeldt in their study, *American Youth and Sports Participation, (1988)*, in which they surveyed 10,000 American youths from 11 cities across the country about their feelings about sports. Their findings were strikingly clear and are portrayed in Tables 1 and 2 (pp. 46–47). A UCLA/Amateur Athletic Foundation of Los Angeles study reached similar conclusions (Scanlan, 1990).

The results are clear. The number-one reason that kids play sport is to have fun. "To have fun" was rated the highest by both boys and girls!

Ewing and Seefeldt (1988) also report that in a separate question seeking to identify the single most important reason for participating in sport, "to have fun" was the overwhelming winner from more than 6,000 kids who responded.

What surprises many adults is the low ranking assigned by kids to "winning." Many adults (coaches, parents, sports fans) would subscribe to the notion that kids want to have fun: *But what's really fun is winning! It's a lot more fun to win than to lose!* This may be adult logic, but it just doesn't cut it for most kids. Kids might not dispute that it is more fun to win than to lose. They, too, if given the choice, would choose winning over losing. However, whatever fun comes with winning alone is not enough. Kids identify many more reasons for playing sport that are more important to them than winning. For the kids who participate, the most important reason of all to play sport is to have fun.

Tables 3 and 4 add further evidence and support for the importance of sport being a fun experience for young athletes. Kids who had recently dropped out of sport participation reported that their most important reasons for leaving sport were that it "just wasn't fun" and "they lost interest."



The 11 Most Important Reasons I Stopped Playing a Sport

1. I lost interest.
2. I was not having fun.
3. It took too much time.
4. Coach was a poor teacher.
5. Too much pressure (worry).
6. I wanted a nonsport activity.
7. I was tired of it.
8. I needed more study time.
9. Coach played favorites.
10. Sport was boring.
11. Overemphasis on winning.

Table 3. Sample: 2,700 boys and 3,100 girls who said they had recently stopped playing a school or non-school sport. Answers above were among 30 responses rated on a 5-point scale (Ewing & Seefeldt, 1988).

I Would Get Reinvolved in a Sport I Dropped If...

BOYS	GIRLS
1. Practices were more fun.	1. Practices were more fun.
2. I could play more.	2. There was no conflict with studies.
3. Coaches understood players better.	3. Coaches understood players better.
4. There was no conflict with studies.	4. There was no conflict with social life.
5. Coaches were better teachers.	5. I could play more.
6. There was no conflict with social life.	6. Coaches were better teachers.

Table 4. Sample: 2,700 boys and 3,100 girls who said they had recently stopped playing a school or non-school sport. Answers above were the top 6 out of 21 different responses rated on a 5-point scale. (Ewing & Seefeldt, 1988).

When asked to respond to questions related to what changes they would make to get involved again in the sport that they dropped, both boys and girls placed “to make practices more fun” at the top of their list.

The message is clear: Kids want to have fun playing sport!

This message should be clear as well: *Kids should be able to have fun playing sport!*

How can coaches make the sport environment and sport experience more fun for kids?

- Be happy and enthusiastic. Smile a lot. Laugh easily. Show that coaching and sport is fun for you, too.
- Show that you understand kids and that you care about them personally, not just as athletes. Be a good communicator, including being a really good listener.
- Place an emphasis on skill development. Kids want to learn how to get better. Have a variety of drills, with varying levels of proficiency demanded, so that kids at all skill levels can feel both challenged and improving. Avoid just doing drills that show who's good and who's not so good. Create a balance between skill development and challenge.
- Have lots and lots of activity. The fun of sport is found in the playing and active participation. Keep everyone involved, and avoid having athletes standing around. Let every kid try playing all of the positions, all aspects of the sport.
- Be creative and innovative in designing practice activities, games, and drills. Don't be trapped into having to "follow the book." Even let the athletes participate in the practice planning, or allow them to suggest new ideas for drills or team activities.
- Have practices that are organized, but not "over-organized." Too much organization and regimentation will restrict or squash spontaneity, freedom of expression, and self-discovery. Remember, an intimate part of the positive sport experience is that kids *play* sport. Keep the play in sport!
- Make the competitions fun, regardless of the outcome. Defuse the "winning-makes-me-worthy" bomb that is so often a part of the sport setting.

- Allow kids to *have fun* playing youth sport. Kids meet sport at the coach. The experience they have is defined, shaped, and provided by the coach. Let it be fun. Find great personal enjoyment and fulfillment in the fun that kids have with you in sport.

It is important for kids to participate in youth sport, and it is important for kids to continue to participate in sport. The key to both is that they have fun. While many great coaches at all levels — youth sport, high school, collegiate, professional, and Olympic — understand and subscribe to this important truth, it is most critical that all youth sport coaches understand, believe, and are committed to a sport experience filled with fun!

COACHING PRINCIPLE #3.

Allow young athletes to have fun — to experience the sheer joy and excitement of playing sport!

Communication

Communication is the key to coaches' providing a great sport experience for kids. Communication is the conduit through which the coach translates all of these important understandings, values, priorities, and intentions into experiences, activities, actions, instructions, and directions and then delivers them all to the kids. Communication is the bond that connects and links coaches to kids, builds relationships, and establishes the basis for trust and belief. At the heart of all great sport experiences is great communication.

Where communication between coaches and athletes is poor, the quality of the sport experience is diminished — at the very least — and potentially threatened and destroyed.

Young Athletes



Great coaches are also great communicators. All great coaches do not necessarily communicate in the same way or with the same style. Most have had to work hard at learning more about themselves, their athletes, and developing a wide repertoire of ways to best deliver their message.

In youth sport, the methods of communication should reflect these key understandings of young athletes — their lives, their feelings and motivations, and their desires for their sport experience — as they have been discussed throughout this chapter. The methods, means, and style of communication should fit the setting, the purpose, and the participants. Always remember, this is about youth playing sport, not an army fighting a war!

Here are some thoughts and suggestions on ways youth sport coaches can become great communicators.

Remember the Golden Rule: Communicate with those whom you lead as you would wish to be communicated with by those who lead you. This is obviously an adaptation and application of the Golden Rule (Do unto others as you would have them do unto you). If coaches use this as a guideline, they almost can't go wrong.

This is especially true when considering the issue of negative coaching. However, sport at every level is filled with many coaches who use negative coaching.

Negative coaching is characterized by lots of yelling, constant criticism, sarcasm, cursing and other forms of violent language, taunting, degradation, public humiliation and embarrassment, threats, fear, emotional manipulation, and generally abusive treatment — all in the name of instructing, leading, and motivating. Many coaches are absolute masters of this form of communication.

The truth is that not one of these coaches would like abuse from their bosses, supervisors, or leaders in their work place in front of their friends, peers, or fellow workers. Nor would they appreciate being abused in their homes in front of their families. Not one of them would accept this treatment in a public setting or respond to it as the most positive, appropriate, and effective mechanism for motivating them to do their best! Not one!

Yet, coaches communicate with athletes like this throughout sport today. Somehow, parents, teachers, educational leaders, sport administrators, and the public have chosen to stand back and accept it, allow it, pardon it, and sometimes even reward it and affirm that it is right and good. Why? Because it's sport?

Well, this type of communication, this negative coaching, is not right and it is not good!

It is immoral, unnecessary, abusive, and wrong! It provides a terrible model for kids and their values, attitudes, and behavior. It implies that the rules of human decency and personal interaction are different in sport than in life. The ends do not justify the means. It is totally unacceptable.

And most important of all, there is no reason, no excuse, and no place for negative coaching with kids in youth sport!

Positive coaching is the only way. All the way!

Communicate with those whom you lead as you would wish to be communicated with by those who lead you.

COMMUNICATION SKILLS

Coaches communicate in a variety of ways. What we say, what we write, what we do, how well we listen, and how close we are to those with whom we are communicating are among the most obvious mechanisms for communication.

Speech:

- With young athletes, it's best to be happy, cheerful, positive, and encouraging. This defines and reflects the whole environment.
- In times of stress, be calm and gentle.
- In giving instruction, be concise and brief. Kids' attention spans are short.
- Provide "constructive instruction"; build up rather than tear down; use lots of *how-tos*, and minimize the *don't-dos*.

Written communication:

- Provide some form of *regular* newsletter or memo. Weekly works well; this allows communication to both athletes and parents.
- Follow a *consistent* format and the same organizational plan each week. This makes it easier for them to find and gain the key information you are providing.
- Be sure these communications are *thorough*, providing all of the information necessary.

Actions:

- Actions speak louder than words.
- Actions speak loudly in spite of words.
- The coach's role-modeling influence is powerful.

Effective listening:

- This may be the most overlooked and most powerful communication mechanism of all.
- Communication represents interaction within a relationship. Listening to others and hearing what they share shows the value placed on the other person. It communicates loudly and clearly that “you count for me, and you are important to me.”

Proximity:

- Distance implies priority. If you are so far away that you have to shout to be heard, that implies one level of priority.
- But if you move toward the person and get close to communicate, this implies an entirely different, higher level of priority.

COMMUNICATING IN CORRECTING ERRORS

These six steps work nicely.

- 1. One focus.** Correct only one behavior, or one movement at a time. Save others for tomorrow.
- 2. Ask before you tell.** Give the kids the chance to tell or explain what they think they did. It gets them “tuned in” to the issue, and you may find out a lot that helps let you sound positively brilliant.
- 3. Apply the back-up principle.** The cause of an error necessarily comes somewhere prior to the actual occurrence of the error. Back up to the cause of the error, and address fixing the cause.
- 4. Provide constructive instruction.** Avoid too much of “what’s not right” and focus on “how to do it right.” Always be building them up, and not tearing them down.
- 5. Praise before preaching.** Always begin by praising something that the kids are doing well. Now you have their attention, trust, and receptivity. Next, provide the constructive instruction: concise,

instructive, and to the point. And before the kids realize that they are actually being criticized and begin to turn you off and tune you out, add another shot of praise and encouragement.

- 6. Use a lead-up.** If you really have more than one issue that you wanted to address and you just can't resist the urge to share it, just briefly mention it at this point. Without going deeply into it, say that you'll get together and work on it tomorrow. This alerts the athlete that this issue will be addressed and provides an easy lead-up to it the next day. In many cases, you'll find that the problem has taken care of itself by the time you get back to it.

USE OF POSITIVE REINFORCEMENT

Create an environment that is intended to provide young athletes with a positive experience in youth sport, where:

- people are happy and having fun.
- self-worth is valued as a priority and is protected and nurtured.
- kids are met with realistic expectations and constant encouragement.
- seeds of belief, trust, and self-confidence are planted and regularly cared for.
- praise is used liberally and there are more than enough pats on the back, high fives, and hugs to go around.
- criticism is constructive, caring and gentle, pointed toward the behavior, not the person.
- kids are loved and loved and loved.

When kids meet sport in an environment like this, *positive reinforcement happens all of the time!!*

COACHING PRINCIPLE #4.

Communicate with those whom you lead as you would wish to be communicated with by those who lead you!

Summary

Youth sport is important — not because sport is important, but because youth are important! Kids are important!

Understanding kids, understanding young athletes, is difficult and a challenge, sometimes a genuine puzzle. However, it is a challenge worth meeting and a puzzle worth solving.

Youth sport coaches are very special men and women who everyday make a real difference in the lives of our kids.

This is where *winning* really counts!

Coach, it really does matter whether you win or lose!

Win kids through sport!

Be a winner of winners!

This is the *biggest win* of all!

Young Athletes



Notes

Blank lined area for taking notes.

3

Teaching Sports to Young Athletes

Developing the Sports Program

Be responsible for the greatest show on earth!

The beginning of the show depends on whether a coach is establishing a new team or a sport organization is trying to hire a new coach.

In the first case, the coach has to recruit future athletes who are suitable to his or her coaching philosophy. Here, the coach has more freedom to design specific program objectives and therefore can be more creative without interference from administrators.

In the second case, a club or sport organization will recruit a coach with a compatible coaching philosophy. In this case, the coach may discover that he or she has to compromise certain principles.



In other words, a coach needs to be careful that the goals of the program match his or her philosophy. Otherwise, the coaching environment becomes hampered by “mixed messages,” which frequently creates negative experiences for the team, the athletes, or management.

Modern sport management encourages a “fine tuning” of professional coaching skills so that athletes can be recruited to the program and stay with the program.

For the coach to be successful, these suggestions are provided:

- Be resourceful.
- Exceed expectations.
- Use creativity.
- Take certain risks.
- Provide positive experiences.
- Develop awareness.
- Engage in ongoing training and education.
- Be innovative because high-quality programs go beyond the ordinary.
- Be organized.
- Create a network for information and support.

THE PLANNING PROCESS

Step 1. Program Expectations

First, the coach has to become familiar with the expectations set by the particular organization or group.

Second, guidelines are established that are *based on* and *reinforced by* the program philosophy in line with the organization’s expectations.

Program objectives are outlined and accepted by all people who are involved. The program should operate creatively but also focus on results that *can* be achieved.

Third, respective coaching duties and responsibilities are clarified. Duties and responsibilities of all coaching and support staff (potential parent helpers) are outlined. This is essential, since all people involved in the organization need to share similar principles in order to be supportive and to make the program successful.

Fourth, the leadership role for the coach is established. This includes expectations on and off the field as a respectable representative of the organization.

Fifth, it is important to plan the program before it actually is started because effective planning is the foundation for a successful season. Planning should not become a last-minute effort because lack of preparation has tremendous impact on the performance of athletes. This seasonal plan has to be constructed carefully and systematically. The seasonal layout is a “charted plan of action” in the form of a large calendar, plotted with months/weeks/days. It includes (a) potential preseason fitness and skill testing; (b) team trials; (c) the number of weekly training sessions; (d) the physical, mental, psychological, and skill preparation of athletes; (e) intermediate testing dates (fitness assessment, skill testing, and others); (f) the schedule of competitions, games, and tournaments; and (g) social activities.

The plan should also include a list and/or working schedules for assistant coaches, team managers and any designated volunteers (for travel and medical purposes). (Refer to pp. 80-81)

Sixth, parent meetings are scheduled to discuss program/coaching philosophy and to express any other concerns. In addition, guidelines for parental input during practice and competitive events are set.

The coach takes pride in being well organized and builds upon each individual’s strength to offer the best show ever.

Step 2. Consideration for Athletes

The next step in developing a sports program deals with considering each athlete as an individual, then deciding ways to fit individuals into the team-building concept. Exact expectations for each athlete have to be laid out to avoid misunderstanding or misconceptions. These have to be reasonable and are based on the specific characteristics of the particular age group (refer to Chapter 1). The growth-and-development stage of each athlete in terms of his or her physical, intellectual, social, emotional, and moral capacity is considered for all planning.

Step 3. Consideration for a Safe Sport Environment

Planning a safe coaching and practice environment for all participants is the responsibility of the individual coach. This includes (a) designing and organizing procedures for a pre- and post-practice facility check (grounds and washrooms); (b) developing and organizing an emergency plan and first aid procedures; and (c) developing travel safety guidelines to and from games or events.

Step 4. Consideration for Program Content

If coaches always plan in advance, they will have fewer difficulties in modifying or changing subsequent training sessions. First, a decision is made on activities that have to be included (the “what”) and ways (the “how”) these should be taught (sequence).

The following have to be considered:

- The use of appropriate facilities.
- The activity range (age and skills of athletes).
- Variety (cross-training) to enrich the specific activities.
- Appropriate measures to evaluate skills and individual development of athletes.

Second, the coach selects the appropriate teaching/coaching styles for the actual training session. Third, the coach monitors each training session and reflects on the training session afterward (“what happened,” “what worked”).

Modern teaching/coaching methods no longer focus on what the teacher/coach is expected to do — rather on what the learner/athlete is expected to learn (Harrison, Blakemore, Buck, & Pellett, 1996). In other words, the athlete is at center stage while the coach’s role is to make sure that learning takes place. This is essential because the coach has to determine what the athlete is expected to learn in terms of technical skills, strategies, tactics, information, and social and moral behavior. If that is not intentionally planned, correction of performance errors or negative behavior becomes more difficult. The coach only facilitates, not dictates, the learning, but in the end is accountable for the outcome for each athlete.

Practice Plan + Evaluation = Next Practice Plan

TLC: Planning Effective Practice Sessions

Careful planning sets the stage for Teaching, Learning, and Competition (TLC) in a positive and effective learning environment.

Proper planning, on the other hand, also sets the stage for putting the actual practice plan into action as a three-way process:

- Teaching (instructing).
- Learning (the athlete is motivated and ready to learn information and absorb the material).
- Competition (the opportunity to show “the skills taught and learned” during training; competition provides a stage for performance under more stressful conditions).

TEACHING CONTENT: THE “WHAT” IN A POSITIVE SPORTS ENVIRONMENT

Modern teaching/coaching occurs in a positive environment, which not only enhances but also challenges each athlete. Therefore, good teaching/coaching is a blend of dedication, fairness, persistence, patience, a sense of humor, and personal enjoyment. In addition, personal discipline, the ability to communicate, and above all respect for the athlete as an individual are characteristics of a good coach.

The coach with an athlete-centered philosophy creates many so-called “teachable moments” that develop the “total athlete” (athletic as well as lifetime skills). This type of coach helps the athlete to believe and trust in his or her own abilities. The “I believe that I can do it” attitude is absolutely essential before any athlete can feel competent and then self-confident.

Many coaches fail to understand that the young athlete needs this psychological progression for confidence building in order to become successful. Equally, emotional self-discipline and the ability to remain focused have to be taught. The modern coach also has to spend more time on developing moral reasoning and awareness for individual responsibility as the team develops rules, guidelines, and consequences *together* with the coach.

LEARNING PROCESS: THE “HOW” IN A POSITIVE SPORTS ENVIRONMENT

The athlete needs to be ready to learn, willing to take and apply information. The athlete, above all else, has to be self-motivated to learn.

Therefore, learning an activity has to be a meaningful experience for the young athlete. Coaches in the past assumed that everybody learned in the same way, which created frustrations for many participants.

Today, coaches also consider individual learning styles, in addition to their various teaching/coaching styles. Effective learning requires two-way communication, constructive feedback, cooperation, and — most important — purposeful daily objectives and obtainable goals for the athlete.

Successful learning always takes place in a nonthreatening environment in order to develop skills in several areas: physical, mental, psychological/emotional, social, and moral. This encourages personal and team development, fun, and the pursuit of excellence.

COMPETITION: THE “SHOW AND TELL” STORY OF SUCCESS IN A POSITIVE SPORTS ENVIRONMENT

Competition is the real measure of “all done well in practice.” Coaches get upset easily when a team or individual athletes perform below expectations. If this happens, one has to evaluate the planning and activities of each training session leading up to the specific match or competition. Many coaches still believe that “more training automatically guarantees better results” in competition. However, quality and intensity of training, as well as proper sequence of training patterns, are the keys to success.

This means that most training sessions are divided into three stages: (a) teaching or refinement of skills; (b) match or event simulation (some pressure); (c) match or event condition (full speed, full efforts, full pressure). This is maintained except for the days or stage when special sessions on strategies and tactics are needed. If these training patterns are maintained, the coach and athletes are able to identify potential errors or performance breakdown. Subsequently, athletes learn ways to cope with various forms of pressure in order to perform under stress (opponent) and in stressful conditions (bad weather or facilities).

Success in competition also depends on the specific goals and objectives set by the team, the individual athlete, and the coach. *Each* team member is expected to contribute equally without special or favored treatment to meet these goals. Any win or lack of success should therefore be evaluated and accepted as a group performance.



Teaching Sport Skills Effectively in a Positive Sports Environment

Effective teaching/coaching is linked closely to competency, productivity, and accountability. It is also identified as strong, dynamic, potent, influential, and powerful. These characteristics can be applied to coaching as well as the athlete's learning, since they are interrelated.

PLANNING THE PRACTICE

The "tools" for effective coaching:

- Proper planning and organizing.
- Teaching of meaningful activities (meaningful for both athlete and coach).
- Reflecting on the teaching after each session (what worked and what did not), which helps the coach in planning the next training session.

Each daily session routinely follows certain teaching principles and outlines:

- Daily technique objectives for skills
- Daily individual or team objectives for performance
- Daily objectives for fitness

Each practice plan is designed with several major sections and reflects a well-staged organization by the coach (see p. 70). This plan also becomes a valuable document in the case of injury and potential litigation. The plan includes the following:

Percent Time of Practice. This is the portion of time (in minutes) spent for each specific section of the training session. It is based on the total time available for each training session. The length of each session should suit the attention span and skill level of the particular age group.

Activity. This is the content taught in the particular training session. It includes the “overall theme” of the training session, specific skills, techniques, activities, mental skills, tactics, games, etc., in a progressive sequence.

Organization. The coach charts specific diagrams for each activity. Squad-formation diagrams and symbols are used for activities such as warm-ups, warm-downs, drills, skills, activities, and games. These illustrations are part of efficient practice planning so that athletes move quickly from one activity or location to another without wasting time.

To be effective, the coach needs to:

- Decide the time to be spent on each activity (drill, skill, etc.).
- Decide on ways to present each new skill, tactic, etc., using the whole method (present the total skill), the part method (teach part by part), or the whole/part/whole method (assembling parts).
- Decide on effective drill formations.
- Decide who will do the demonstrations for each new skill.
- Decide what view of the skill (from the front, side, back) athletes need to see.
- Use voice and body to good effect.
- Use positive, constructive, and specific feedback.
- Select and vary teaching styles.
- Select teaching aids (visual, audio, equipment choice).
- Design an observation plan for detecting and correcting errors.

The coach needs to select the teaching/coaching style(s) most suitable for the age group for each particular skill or activity. The selection of appropriate audio-visual and other teaching aids is essential in order to teach most effectively.



Analyzing skills or correcting errors includes several distinct steps:

- Identifying the purpose of each skill (what it is used for).
- Separating each skill into several major parts.
- Identifying the key elements of each major part.
- Developing an observation plan.
- Preplan coaching reflections.

Key elements of each major part:

- Preliminary movements: footwork and body position; getting ready for the skill.
- Backswing or recovery movements (before force is applied).
- Force-producing movements (movements that produce force or impact on the body or an object).
- The critical instant (action and release): determines the effectiveness of any skill (any changes to a skill or performance have to be made prior to this point).
- The follow-through: body movements and adjustments made after the critical instant (slowing the body parts down gradually, which helps prevent injuries or regaining body balance).

The observation plan:

- The number of observations for each skill.
- The purpose of each observation.
- The positioning during each observation for a better view of the skill.
- The scanning strategies (side, front, back angles).

Coaching reflections are actually preplanned (before the actual teaching) and indicate the expected learning/teaching cues such as: demonstrate/explain/check/rotate (coach) and active/stretching/cooperate/share/all participate (athlete). Technique cues may include mental pictures or images such as: soft touch/high elbows/strong push, etc. These reflections are reviewed after each training session to check whether they actually were carried out by the coach during the training period. Therefore, they become important self-check tools to improve teaching techniques.

Organization Diagrams	% of Practice	Activity	Reflections "Cues"
	3%	I. Facility and Safety Check	
	2%	II. Introduction (Explanation of training objectives)	
	20-25%	III. Warm-Up	
	60-65%	IV. Main Theme <ul style="list-style-type: none"> • Review • Introduce new skill • Skill development/refinement • Review 	
	8%	V. Warm-Down	
	2%	VI. Closure	

The Practice Plan



I. Facilities and Safety Check

The training environment is checked for potential safety hazards by the coaching staff. It is not advisable to use athletes for checking, due to potential safety risk and liability. The facility is set up for the practice start up as quickly as possible.

II. Introduction

The coach and athletes/team have a daily routine for announcements at the beginning of each practice session. Daily training objectives are explained by the coach, and a question and answer period to answer any questions should be planned.

III. Warm-Up

This activity is the “warming up and tuning of the body engine” to get ready for the training session. The Warm-Up is based on exercise physiology and other scientific principles and has become more detailed and specific in nature than in the past. A proper warm-up takes up 20%–25% of total practice time(!) to ready the body for action and to avoid potential injuries. Coaches frequently ignore physiological and medical guidelines (contra indicators), conducting exercises which are potentially damaging to young athletes. More often, though, coaches do not plan for sufficient warm-up time (too short).

The warm-up activity precedes each training session and leads directly into the main theme of the practice. The warm-up is planned as a continuous activity and acts as a transition without interruptions (for example, the athletes are sitting down while the coach “talks”). It is progressive and consists of several important stages.

The Warm-Up follows a distinct sequence:

- Light aerobic activities (for example, jogging), progressively vigorous.
- Dynamic stretching (swinging-type activities).

- Slow stretching, head to toe (standing to sitting or vice-versa), slow, sustained, held.
- Aerobic activity.
- Specific warm-up (related to upcoming skill/drill).
- Conditioning, fitness, general to specific as needed for upcoming skill/drill.

IV. Main Theme

The so-called Main Theme is the overall focus of the specific training session. It includes all activities such as skill/technique review and development, games, and skills in other areas (mental, social, moral, etc.).

The guiding principles in the main theme are:

- TLC (Teaching, Learning, Competition)
- PAF (Practice, Application, Feedback)

Therefore, the Main Theme is a three-part buildup and consists of:

- Skill-related activities
- Match/event-related activities
- Match/event condition activities

The Main Theme is arranged in progressive steps.

The coach always applies the so-called “sandwich” approach to skills training, using the “old (review)–new–old (review) method” to reinforce learning.

Introducing and explaining objectives for the training session includes:

- Question-and-answer time for athletes
- Review of previously taught skill(s) to provide a link to new skills

Introducing and demonstrating new skill(s). Developing “learning moments,” which may include one or all of the following:

- Technical skills
- Mental skills — learning to recognize and correct problems when performing skills
- Psychological skills
- Strategies
- Tactics
- General team building skills
- Fitness in all energy systems and/or specific fitness needed for specific skills

Introducing game/event-related skills — applying some pressure conditions, developing match/event condition skills:

- Creating competition conditions.
- Developing coping and relaxation skills to deal with stress, skill breakdown, or mental errors.

The time allotted for each segment of the buildup is an approximate one third of the overall planned time for the Main Theme. The daily plan has to be executed in this systematic sequence if the learning of new skills is to improve.

The careful planning of this specific buildup is crucial if athletes are to succeed in future competitions under pressure. Athletes progress through simple to more difficult skills under pressure-free to high-pressure conditions in order to become prepared for the real-life match/event.

Training this way provides the opportunity to test whether athletes are in control of the necessary skills (physical, fitness-technical, mental, emotional, tactical, and strategic) under game/event situations. Together, athletes and the coach are able to identify “crisis points” if skill or techniques break down or tactical or strategic errors occur. Subsequently, appropriate coping strategies can be developed and practiced. After all, skill development is meaningless if skills cannot be executed under pressure conditions when it really matters.

Training sessions are also for:

- Learning social skills.
- Learning moral skills.
- Reviewing previously taught skill(s) in order to monitor individual and team progress, check whether athletes understand the skill(s) and know how to apply the skill(s), and reinforce learning and assist athletes so that the skills become more automatic.

V. Warm-Down

The Warm-Down (often referred to as the “Cool-Down”) is the finish to the active part of each training session. The purpose is physiological, namely to let the body down slowly from a higher rate of activity to less intense exercises (for recovery and to avoid potential injury). Athletes should stretch particular muscles, especially those used more frequently during the practice session (legs/running in soccer). Relaxation and rhythmic breathing exercises may also be incorporated into the Warm-Down.

The Warm-Down for aquatic sports consists of a two-part series:

- The Warm-Down Swim
- The Warm-Down Stretch on dry land (neglected by most swimmers and coaches due to time constraints)



VI. Training Session Closure

The practice session closes as the coach interacts with athletes, providing general and specific feedback, praise, encouragement, motivational talks, or information for the next practice or upcoming event(s).

POST-SESSION COACHING REFLECTIONS

The coach reflects (evaluates) after each training session the preplanned “cues” to check whether they were actually carried out during the actual training session. The coach evaluates: a) what happened; b) what went well; c) what has to be changed; d) whether the skills were taught too fast/too slowly; and e) whether the number of skills taught was appropriate (too many/too few).

Game/Event Coaching

Sport is unique since it always contains the 50-50 chance of a win or loss result, even in the best of circumstances. That *is* the actual drama of sport, which also makes sports fascinating.

QUALITY PREPARATION YIELDS REWARD

If any athlete is to become successful in competition — and who would not want to be? — he or she has to be taught that each practice is an important steppingstone toward future success. Practice and competition are very closely linked because quality and effort in practice create quality experiences in real competitive situations. Meaningless practice sessions lead to frustration and futile attempts in real competition.

The body and mind react exactly the way they are accustomed to in training. Sometimes, athletes encounter the odd and lucky situation, whereas most of the time there are no surprises (which is the “you get what you put in” syndrome).

THE ATHLETES

Fitness Level

Athletes as individuals and as team members need to be in excellent shape to compete at their best. Fitness includes not only the physical but also the mental aspects and the overall state of well-being (health, sleep, rest, nutrition). Proper training methods are needed to make sure that the fitness level is appropriate for the type of upcoming competition (length of the game/event, duration, number of matches in a tournament, etc.).

Pre-competition Mental Preparation

Mental training is an important part of daily preparation. However, only athletes 15 years old and older are able to visualize because at this age skills are now automatic (doing a skill without having to think about it).

Younger children are not able to use these same strategies because their skills still contain many technical errors. Instead, younger participants should be encouraged to use mental pictures to learn and practice techniques (for example, arms like “soft wings”). It is important that these word cues, or mental pictures, have meaning for each individual athlete (the *athlete's* words are used rather than the coach's). The coach therefore has to remember the special cues each athlete likes to use for future skill learning. These cues also are helpful in competition when an athlete is under stress and needs to concentrate or relax.

Coaches may be uneasy about or afraid of using mental-training techniques because psychology in coaching is a specialty science. Subsequently, they do little or no mental training or can't afford to hire an expert for the team. In the end, however, one has to realize that performance is *all* mental. Coaching mental excellence is part of good coaching, leadership, and team building (Vernacchia, McGuire, & Cook, 1996). Education and reading materials are always available through various public agencies (city/college/university libraries) and professional books or magazines. A coach has to be willing to educate himself or herself in order to properly prepare athletes. As stated earlier, coaching has become a science and athletes are entitled to the best training available. And that is exclusively the coach's responsibility and professional obligation.

Pressure and Distraction

"Thinking too much, worrying about the results, and being distracted by stupid stuff" (former Olympic athlete's statement) is a very common symptom among many inexperienced and some experienced athletes.

Various personalities form a successful sports team. Coaches have to know the mental outlook and the emotional state of *each* athlete to assist in personal goal setting. In a positive training environment, the coach is able to observe the emotional reactions and potential distractions for athletes. Coping strategies are developed and practiced. Personal progress should be recorded in a daily diary by each athlete and shared with the coach in a brief weekly session.

Some athletes are perfectionists and feel that every performance has to be perfect, and they insist that they be pushed to new heights. Often, overthinking on the part of the athlete and overcorrection and overanalysis by the coach may create the so-called mental “paralysis” of the athlete. Other athletes focus on “not losing,” “looking bad,” or “getting embarrassed.” They worry more about what others may think rather than taking necessary personal risks to be successful. There are also some athletes who are overconfident, “saving it all for the final.” Of course, they usually get eliminated in the preliminary round and are looking for excuses for their lack of success.

Good coaches should avoid two common errors: (a) overcoaching, and (b) hesitating to correct an athlete’s performance because it may upset the athlete. Any coach who is able to anticipate an athlete’s specific behavior and potentially new attitude is ready to deal with unexpected reactions by the individual athlete or respective team members.

Proper Preparation and Enjoyment of Competition

Match/event simulation in training is necessary to get ready for success in competition. If athletes (as individuals or as a team) feel good about their “homework,” or feel competent, they glow with confidence and self-esteem. They want to show off their skills. These athletes are intimidating to other teams because they are *ready* and therefore *act ready*, which is a psychological advantage over the opponent. When athletes or a team perceive competition as nonthreatening, they also display enjoyment and have fun competing. Competition has become nothing more than a chance to show their skills in front of an audience.

Importance of Establishing Routines

Established routines are necessary for good training sessions and are equally significant immediately prior to, during, and after competitions. They tend to reduce unnecessary stress and help athletes to get ready. The coach has to be aware that some athletes may change their normal way of preparation (routine), thinking that somehow what they are doing is not adequate. This can result in serious consequences for the athlete or team. Established and consistent routines reduce pregame anxiety or excitement and allow everyone to focus on the task at hand.

Team Sport Routines

Every match the team plays or the athlete competes in has specific goals and objectives, but each athlete has to know his or her role and the expectations set by the coach for a specific match.

Player Assignment

- All players are familiar with their assigned roles.
- Event athletes know their performance goals.

The coach is prepared to play with several groups of players: starters, substitutes, and specialists. The roles are assigned, and once set, there are no changes — unless an unexpected event occurs.

Starters

- These are the players who begin the match and are the best players chosen (and accepted by team members) to achieve the set goals for that match.
- These are the players who have the skills best suited to matching those of the opponent.
- These are the players with the psychological temperament needed for the match.
- These are the players who have earned the right to start.

Substitutes

- These players enter the game for a starter.
- These players assist the team by replacing a starter.
- These players replace a resting starter.
- These players vary the team's offense/defense system.
- These players help to achieve the team objectives and success.

Specialists

- These players are very good at one specific aspect of the game.

Designing a Competition-Day Schedule

All athletes need routines on competition days, such as:

- Specific time for breakfast
- Travel requirements to competition
- Specific pregame meal and site
- Specific time for lunch
- Facility change for match/event
- Scheduled pre-match team meeting
- Scheduled pre-match/event warm-up
- Match/event(s) expectations
- Scheduled post-match/event warm-down
- Scheduled post-match/event(s) meeting
- Announced changes
- Scheduled post-match meal
- Travel requirements back home

Equipment Checklist

To avoid surprises and potential problems, an equipment checklist is created. A copy is provided to all coaches, assigned team managers, and parent volunteers.



Items that should be included:

- Eligibility forms
- Copies of athletes' medical forms and emergency telephone numbers
- Medical permission slips (in case of emergency transport)
- Medical kit (checked prior and stocked)
- Extra numbered uniforms
- Extra uniform shorts or track/swimsuits
- Extra pair of knee pads/shin guards
- Balls and ball bags
- Water bottles
- Towels
- Video recorder, extra tapes, battery, extension cord, tripod
- Name of assigned recording person(s)
- Statistics forms
- Stopwatches
- Clipboards, pencils, pencil sharpener
- Charts
- Rule book
- Snacks and fruit

MATCH/EVENT PREPARATION

The coaching staff has the following duties:

- Confirm schedule.
- Confirm travel arrangements.
- Check competition site (floor or field, ceiling height, lighting, washroom location, telephone access).
- Check competition factors (type of ball used and protest procedures).

- Prepare the game plan, which includes prior information on opponent (scouting) and strategies based on opposing teams, and make sure it is practiced at least one week in advance of the match/event.
- Check required equipment and uniforms for competition.
- Organize and schedule pre-game warm-up with preassigned leader(s).

Coaching at the Game

Make sure that all coaches are:

- Well prepared
- Confident
- Organized and routine-oriented
- In control
- Exhibiting calmness
- Leading by example

The saying “the coach’s work is complete by the time the match starts” is only partially true. In fact, the coach assumes a very different role during the competition. Other duties may be a shared responsibility of the total coaching staff.

These are:

- Inform team of starting lineup positions.
- Give a brief review of the game plan/event strategy.
- Analyze player error and verbally correct when possible.
- Examine opponent’s strategies and counter effectively; exploit weakness.
- Examine opponent’s strengths; adjust and try to nullify advantages.
- Change the momentum of the match, if advantageous.
- Prepare substitutes and specialists on the bench to be ready to go into the game.
- Insert substitutes at proper time (keep records).
- Call time outs (keep records).
- Keep statistics.
- Videotape the match/event.
- Provide water bottles and towels to players when possible.
- Continue to assist with strategies.

Between-Game Coaching

Tournament-type competitions require additional prior planning in order to make sure that all athletes are rested and have adequate and proper nutrition instead of “fast food.” Younger athletes are reminded to think about their personal mental pictures (cues) to stay ready during a game. Older athletes should engage in visualization and use relaxation/breathing exercises to reduce potential stress or anxiety.

Coaches have to stay informed of all potential schedule or facilities changes. If needed, the previous match/event performance is analyzed constructively. The team is informed of the next opponent’s strengths and weakness; appropriate strategies are discussed and decided. The specific location and time schedule for the team warm-up prior to the next match/event are planned.

Post-Game Coaching

Based on established routines, the team may have a post-match/event meeting on site or at a later time (next practice), unless it is a tournament and a between-game talk session is needed.

The coach’s feedback to the team should be:

- A constructive review of the team’s performance.
- Instruction on improving the team’s play (individually and collectively).
- Instruction on improving each athlete’s performance (in an individual event, for example, better pacing).

The coach should always use praise because even the worst performance has a positive aspect for future learning. Instructions for departure time and next practice schedule are provided. The players should also have the right to pose questions or offer comments where appropriate.

4

Developing and Maintaining Healthy Athletes

The training environment has tremendous impact on the development and the health of young athletes. For this reason, it is important to examine the social setting of sports.

"Social Myths" and Modern Dilemmas

The most common social myth states that "values learned in sports are carried over into society, and because American society is so competitive, *not* being competitive in sports puts one at a disadvantage in life."

Sport sociologists disagree, however, cautioning that sport experience can have either a positive or negative effect, depending on the particular sports environment and *especially* on the coach.

Healthy Athletes



“It does matter whether you win or lose.”

Everybody *wants* to be a winner! However, not everybody is, or can be, or will be. Coaches should help their athletes understand the complex experience of winning or losing. They should teach, and show, their athletes ways to compete successfully, and to view winning — and sports in general — in a proper perspective. The true measure of success should always be whether or not the athlete has given his or her best. Athletes are, after all, only “heroes of time” (Traenhardt, 1994, title page), and their success is fleeting.

Many people confuse competition with achievement. This confusion is rampant in youth sports and puts undue pressure on young athletes. According to Coakley (1994), an individual’s efforts and his or her drive for achievement, as well as the ability to function within the group, are more important than competition because...

Successful, hardworking individuals in society are not necessarily competitive. In fact, these people may combine strong achievement orientation with cooperative or individualistic orientation. People who are cooperative or who judge themselves without making comparisons with others are just as likely to be successful as those who always try to outdo and establish superiority over others. They are usually happier people, and they are more pleasant to work with and, especially, to play with (p. 80).

An obsessively *competitive*, rather than *achievement*, orientation is a major cause of the rise in today’s sport burnout and dropout from organized youth sports. Experts cite the following reasons:

- Sport is no longer *fun*.
- Skills do not improve.
- Coaches may demonstrate preferential treatment.
- Students have other priorities.

(Coakley, 1998; Eitzen, 1997; Leonard, 1998.)

Sport sociologists discovered long ago that young female athletes (age 13 to 15) operate according to **social exchange theory**, in which *demands* are weighed against *rewards*. By nature, females tend to be more introspective and sincere with themselves. They will disengage from sports participation much sooner than males, for whom “quitting” is highly stigmatized. No adolescent male wants to be branded a “quitter” or a “loser.” Consequently, male athletes “hang in” longer, often in despair, frustrated, and lacking motivation. In this state of mind, they may become potential distractions for team members and discipline problems for the coach.

General Considerations for Training

An athlete’s body is a precious and expensive human engine — but not a machine which is misused until it suffers a breakdown. Nowadays, more and more athletes treat the body as an “object,” especially through substance abuse and excessive training procedures (Schloder, 1996).

It is essential that coaches maintain an accurate, up-to-date knowledge of physical training. Their training approach should be systematic and founded on scientific principles. The training of athletes is not an opportunity for experimentation on the human body and should not be based on unfounded assumptions or performance-enhancing substances.

Coaches should begin by educating themselves in the basics of human anatomy and exercise physiology: What are the body parts; how does the body perform; and how can it perform better? In addition to understanding the body’s general performance requirements, coaches also need to learn the sport-specific requirements.

For example, Warm-Up and Warm-Down principles are important not only in preparing for activity but also for preventing injuries.



Likewise, coaches need to develop a knowledge of nutrition, including the specific nutritional factors that affect athletic performance (too many myths and abuses exist). Coaches need enough nutritional background to be able to guide their athletes toward healthy eating habits, as well as to be able to identify potential eating disorders.

THE HUMAN BODY

Human anatomy is the science concerned with the structure of the human body. Physiology deals with the function of the body (Van De Graft, 1995, p. 2).

The study of human anatomy is organized according to the structure and function of the parts of the body. Each part, in turn, contributes to the total organism. In order to develop the total organism, coaches have to understand the interaction of the various parts and apply their training in a systematic, not haphazard, way.

The Skeletal System

The skeletal system consists of 206 individual bones arranged into a strong, flexible framework. Each bone has a characteristic shape and feature, indicating its specific function and relationship to other bones, muscles, and to the body structure as a whole. The bones perform the mechanical functions of internal support, protection, and leverage for body movement. Bones produce white blood cells, which protect the body from invading bacteria and viruses. They also play a role in the metabolic functions of the body. Bones are connected to other bones at joints. Ligaments connect bone to bone and stabilize joints by preventing inappropriate motion. Cartilage acts as a “pad,” or shock absorber, between bones.

The Muscular System

The muscular system consists of about 215 pairs of skeletal muscles and about 600 muscles altogether. This system has three functions: (a) movement, (b) heat production, and (c) posture and body support. Muscles are attached to the skeletal frame and normally account for about 40% of the body's weight (Canadian NCCP, Level 1, 1991). Tendons connect muscle to bone, enabling the muscles to pull on the bone(s) to cause movement at a joint. The brain and nervous system control muscles through chemical processes, creating signals in the muscle cell that cause the muscle to contract. All human movement depends on the proper functioning of skeletal muscles — that is to say, it depends on the transforming of chemical energy into mechanical energy. Since muscle, like car engines, have to burn fuel to create motion, only *premium* fuel — in the form of proper nutrition — will promote optimal performance.

It appears as though each skeletal muscle acts alone, but actually muscles are arranged in pairs, working against each other. When one muscle tenses to produce movement, the other relaxes so the movement can take place. However, the stronger muscle always dominates; therefore, the joint eventually becomes unstable, subjecting the weaker muscle to possible injury.

Training should always aim at balanced muscle development to promote joint stability and to avoid injury.

When a previously trained muscle suddenly becomes inactive through injury or immobilization, major changes take place within a matter of hours. The longer the muscle is inactive, the more the muscle tissue undergoes **atrophy**, decreasing in size and strength. Muscles can and often do recover from atrophy when activity is resumed.

Muscle growth, or **hypertrophy**, occurs with repeated resistance training (i.e. body building) and represents actual structural changes in the muscle.

Muscle pain or soreness during and after exercise results from accumulated waste products. This is often referred to as **acute muscle soreness** while pain or soreness after a day or two is called **delayed muscle soreness**, and, to date, is not fully understood.

Every muscle is a collection of long fibers (muscle fiber) grouped in bundles. However, not all muscle fibers are alike. There are two types, **fast twitch** (FT) and **slow twitch** (ST). Each plays a different role in physical activity. FT fibers are better suited to performing **anaerobic** (without oxygen) activities lasting up to 10 seconds. ST fibers have a big **aerobic** (endurance) capacity and are used preferentially for low-intensity activities requiring prolonged muscular endurance.

Every muscle contains both fiber types, though one type may dominate. Fiber composition is hereditary, beginning to develop before birth and continuing to change considerably during the first year of life. Development is completed during the teenage years. As we age, we tend to lose FT fibers, thereby increasing the percentage of ST fibers. Fiber typing has been used by scientists in some countries as a tool to screen and guide young athletes into sports for which they are best suited.

The Cardiorespiratory System

The cardiorespiratory system consists of the heart, the lungs, and associated blood vessels. This system supplies the muscles with fuels, oxygen, and other building materials while carrying away the waste products, **lactic acid** and **carbon dioxide**. If the cardiorespiratory system is not trained along with the muscles, it becomes a weak link, with adverse affects on performance.

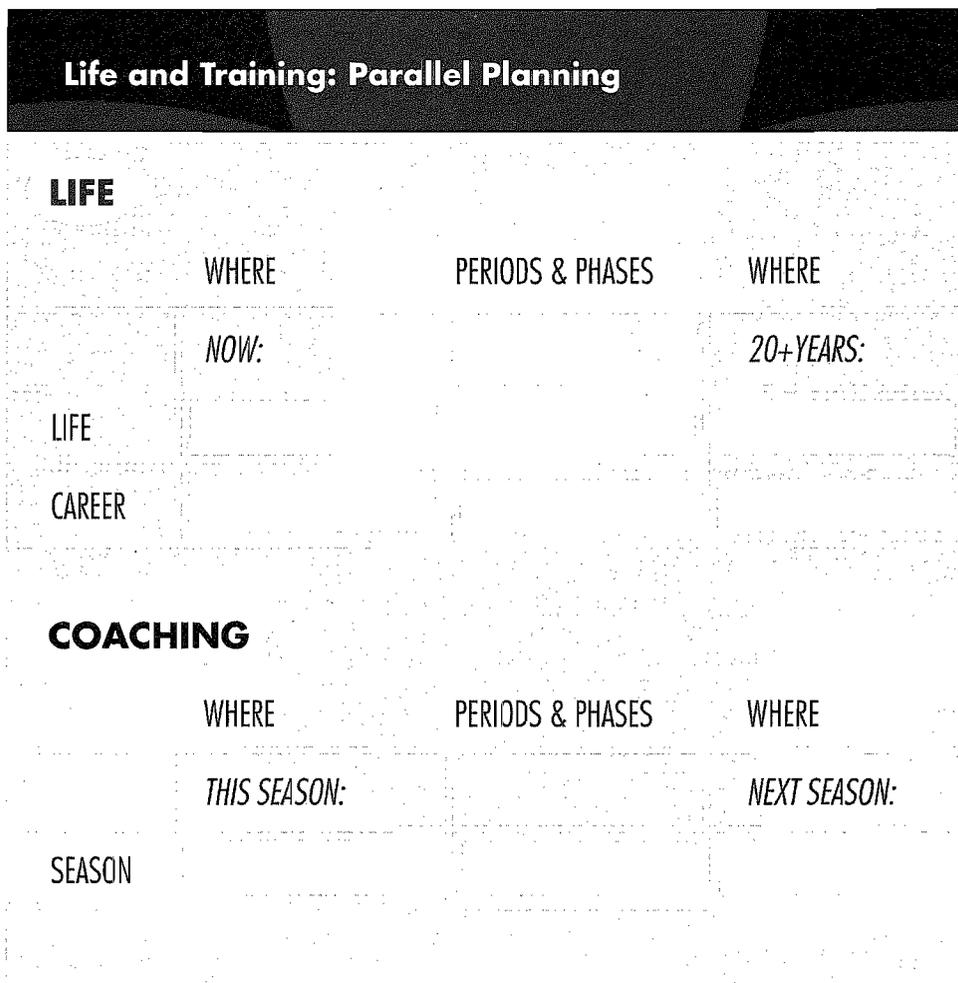
Conditioning this system effectively requires at least 15, and preferably 30, minutes of training at least three times a week. The activity has to be intense enough to “break a sweat” and raise the heart rate.

PLANNING THE TRAINING PROGRAM

Several major considerations are important to all training programs: (a) training features (such as off-season, pre-season, and in-season periods; each with several stages); (b) basic training principles (concerning the body's energy system and training methods); (c) preliminary activities or Warm-Up; (d) Warm-Down activities; and (e) various other factors.

Training Features (Training Seasons)

One could easily draw a parallel between coaching and life in general because both events happen in cycles, seasons, periods, and phases:



Healthy Athletes



The key to seasonal planning is to understand that a season is divided into different parts and with a different focus of training. Therefore, training patterns or workouts change depending upon the respective stage within the season. Training programs can vary depending on the sport and the length of the overall season. They may also differ to a greater or lesser extent from phase to phase.

Training programs within all sports have a common format and specific terminology:

Long-term Cycle — such as the 4-year planning cycle for training Olympic athletes. This may also apply to 4-year college varsity sport programs since coaches have to establish long-term program goals.

Season — The overall number of months (macro cycles) or weeks (micro cycles) of a specific sports program. The duration of any season (Fall/Winter/Spring/Summer or year-round) depends on the specific sport, league, or school sports (such as high school varsity).

Seasonal Period — A time period/phase such as **Pre-Season**, **In-Season**, and **Post-Season**. Most sports divide their season or annual plan into these three major categories. The length of each period/phase depends on the overall duration of the particular sport season. Each of these periods/phases contains specific goals and training activities.

- **Pre-Season or Preparatory Phase.** This phase is often divided into two Sub-Phases, namely a General one (early in the phase) and a more Specific one (later in the phase). For year-round programs, the Pre-Season can be the longest training period (3 or 4 months).
- **General Pre-Season Sub-Phase:** The major focus is on physical training, technical and tactical skill development. Mental training is also important. The volume of training is high but lower in intensity.

The Seasonal Training Plan

Key

◆◆◆◆◆ = Relative amount of time spent on a specific aspect of training

Annual Coaching Plan

Pre-Season Plan

Developmental Training

- ◆◆◆◆◆ General Conditioning
- ◆◆◆ Skill-Specific & Mental Work

Weekly Plan

Daily Plan

In-Season Plan

Developmental Training

- ◆◆◆ General Conditioning
- ◆◆◆◆◆ Skill-Specific & Mental Work

Competitive Training

- ◆◆◆◆◆ Competition, increasing over time to maximum intensity

Wind Down

- ◆ General Conditioning
- Skill-Specific & Mental Work

Post-Season Plan

Off-Season Plan

Time Off

(Light activity to maintain fitness)

The plan is not static, throughout the season you should be consistently monitoring, assessing, evaluating, and adjusting all levels of the plan.

Healthy Athletes



- **Specific Pre-Season Sub-Phase:** The major focus is to combine various types of training. The training volume remains high but exercises or drills become more specific. This phase acts as a transition into the In-Season/Competitive Phase. Therefore, technical and tactical skills simulate more and more the required level of competition.
- **In-Season or Competitive Phase.** The In-Season is the competitive part of the overall season. The main focus is to stabilize the athletes' performance under stress (match) condition. Competition opportunities now are increased. Once competitions start, training *and* performance goals need to be incorporated. The time spent on any kind of training is directly related to the number and importance of competitions/matches/events.
- The In-Season or Competitive Phase can be further divided into several Sub-Phases:
 - **EARLY:** Developmental or Pre-Competitive Phase — Fitness is maintained. Athletes take all the skills learned in the Pre-Season and attempt to incorporate them successfully. Technical skills undergo refinement, under stress simulation (match/event simulation). There are some competitive events but they are still less important than in the main competitive phase. In fact, coaches should use these competitions to refine training and to find out athletes' readiness under stress (match) condition. Performance, therefore, may be inconsistent. Constant adaptation to competitive situations should be occurring.
 - **MID:** Main Competitive Phase — Fitness levels are maintained. Sport specific strength programs should be maintained. Technical, tactical, and mental skills continue to be developed. The training volume decreases to accommodate the intensity level.

The intensity of training remains high. The number of competitions increases and the stress of competition is also high. This is the phase where major competitions are used to build up toward qualifying tournaments and potential play offs for final championships. The focus is on results and the objective is to maximize performance.

- **LATE: Peaking Phase** — This phase features the most important competition, championships, and/or league finals.
- Therefore, the Mid and Late Phases include a short Taper period (training volume and intensity are reduced leading up to a major). Active rest (1–2 days) or total recovery (days off) after a major competition are implemented to re-energize athletes. This tends to improve and enhance athletes' ability to perform at their peak. This process, however, depends entirely on the ages of the athletes, the training volume and training intensity, and the importance and the stress of the match/event in this phase.
- **Post-Season or Off-Season.** The overall season is over and athletes discontinue their participation or engage in alternative activities which may be linked to their sport or be totally different. Athletes should train several days per week to maintain their fitness levels.

Note: Some tend to refer to the Off-Season as *Transition* which is inappropriate.



Off-Season Training

Activity for young athletes during Off-Season training really hinges on the long-term goals of the program and the philosophy of the coaching staff. It also depends on whether the program is trying to achieve program stability (i.e., whether it has continuity) or is started up every season with new coaches and new athletes.

Generally, young athletes during the Off-Season are not “in training” but may be asked by the coaching staff to stay fit, maintain appropriate bodyweight, and remain active. They may participate in school sports or other recreational sports for fun or relaxation. They may take part in some type of running program to build endurance. Those old enough to do so could be involved in weight training programs with emphasis on strength, explosive power, and muscular endurance, depending on the specific requirements of their sport. Younger athletes should engage in gymnastic-type activities such as rope climbing or hanging on apparatus, which require supporting one’s body. Athletes may also work individually on specific skills such as shooting accuracy, various ball skills, or flexibility.

Pre-Season Training

As mentioned earlier, the length of an annual season depends on the specific sport and the league. Some sports allow a reasonable length of time to develop athletes successfully, while other sports “cram” their seasons. Therefore, the Pre-Season phase may be anywhere from 4 to 10 weeks. This phase is the period prior to competition.

The emphasis of Pre-Season training is to develop the three major energy systems to maximum levels, especially endurance and that predominant system necessary for the specific sport activity. Specific high intensity training is implemented during the later part of this phase. Weight training — if it is part of the program — is maintained.

THE ANNUAL OR SEASONAL TRAINING LOG / Training goals and objectives

SPORT _____ AGE GROUP _____ YEAR _____ LEVEL _____ TRAINING HRS _____ PER WEEK _____

PHILOSOPHY

PERFORMANCE

PHYSIOLOGICAL
DEVELOPMENT

PHYSICAL
DEVELOPMENT

TECHNICAL
DEVELOPMENT

TACTICAL
DEVELOPMENT

PSYCHOLOGICAL
DEVELOPMENT

DATES Month _____
Week# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

COMPETITION Home _____
Away _____

DATES Location _____

Training Period _____

Training Phase _____

Strength _____

Endurance _____

Speed _____

Skills _____

Tests _____

TRAINING FACTORS
 Volume ——— 100%
 Intensity - - - - 90%
 Peaking ^ ^ ^ ^ 80%
 Physical * * * * 70%
 Technical + + + + 60%
 Tactical = = = = 50%
 Psychological 40%
 Physical * * * * 30%
 Technical + + + + 20%
 Tactical = = = = 10%
 Psychological 0%

Physical Development

Physiological Development

Technical Development

Tactical Development

Psychological Development

* This Seasonal Training Log is set up as a 52-week Planner. The plan can be adjusted to fit any Seasonal Model (2 month, 3 month, etc). The training periods and phases are more concentrated (condensed) in shorter seasons. The concepts and principles are the same.

** The left side legend of the log indicates the various training factors and principles that are plotted into the grid using various symbols (+ + + +, ———) or colored pencils.



In-Season Training

The In-Season phase is generally divided into **early**, **mid**, and **late** parts. During the early (preparatory) segment, physical fitness and skill development occur. Some psychological preparation is started.

The Mid (development) segment places emphasis on refinement of skills, stress management, and psychological coping skills, including emotional control, focus and concentration, tactics, and strategies. Coaches put athletes through drills and scrimmages under increasingly stressful conditions. These activities have to be intense enough to maintain the athlete's energy capacity. Weight training — if already part of the program — is continued in alternating upper and lower body training sessions, one per week.

The Late (competition) segment is a fine tuning of skills in preparation for upcoming major competitions or matches, with an emphasis on the final championship. Weight training is discontinued. Physical demands are reduced, while mental and psychological preparations become the main focus.

The **Recovery** phase is an important part of training at elite levels of sports, where longer cycles and the intensity of training programs may necessitate rest of up to 2 weeks. For younger athletes, however, a single day off after an important competition, especially when travel is involved, usually provides a sufficient “break.” In most cases, the season is not long enough and the training not intense enough to warrant a Recovery phase.

The term **Transition** denotes a linkage between two Annual Cycles (for example, Short course/Long course swimming; Indoor/Outdoor track and field). The major objective is to “facilitate psychological rest, relaxation, and biological regeneration as well as to maintain an acceptable level of general physical preparation” (Bompa, 1993, p. 220).

BASIC TRAINING TERMS

All coaches should understand the following commonly-used terms:

Center of Gravity — This is the point at which all the body's mass seems to be concentrated. It is the balance point of a body and also the point about which a body rotates.

Force — Something that causes or tends to cause a change in the motion or shape of an object or body.

Balance — The ability/inability to maintain equilibrium. It can be static (non moving) or dynamic (while moving).

Flexibility — The ability to move through the full range of motion at a given joint. There are three types of flexibility: **static active** (involving slow, controlled muscular activity); **dynamic active** (involving strong, fast muscular contraction); and **passive** (occurring when an external force is applied).

Strength — The greatest force a muscle or muscle group can generate at a given velocity.

Power — The rate of transformation of metabolic potential energy to work or heat — or, in simpler terms, the rate at which work is performed. Power refers to a combination of speed and strength.

Overload principle — Progressively increasing the intensity of the workout over the course of the training program as fitness improves.

Metabolism — The sum of the chemical changes in the body.

Metabolic system — A system of biochemical reactions that lead to the formation of “waste” products (metabolites) and the manufacturing of ATP, lactic acid and oxygen systems.

Acid — A chemical compound that gives up hydrogen ions in solution.

Aerobic power — The highest rate at which an athlete can consume oxygen during an all-out effort, resulting in total exhaustion. It is the best indicator of cardiorespiratory fitness.

Cardiorespiratory endurance — The ability of the lungs and the heart to take in and transport adequate amounts of oxygen to the working muscles during activities that require large muscle masses and are performed over long periods of time.

Fatigue — A state of discomfort and decreased efficiency resulting from prolonged or excessive exertion during activity.

Glucose — A sugar.

Ion — An electrically charged particle.

Energy — The capability of the muscles to perform work, produce force, or generate body heat.

Energy continuum — The concept that energy for an activity may be provided by a specific metabolic system or a *combination* of systems, depending on the speed and the duration of the activity (e.g., all-out sprinting versus middle-distance running versus long-distance running).

Energy capacity — The greatest amount of energy that can be freed by a metabolic system, using all available stores of fuel, regardless of time.

Energy system — The three energy systems, involving a series of chemical reactions leading to the formation of “waste” products (metabolites) and the production of ATP — and their relationship with another.

ATP — A complex chemical compound formed with the energy released from food. It is the only chemical stored in the muscles, and provides the fuel for muscular contraction.

Anaerobic alactic energy system — A system capable of producing bursts of energy lasting up to 10 seconds without using oxygen.

Anaerobic lactic energy system — An energy system that requires no oxygen and produces lactic acid during activities lasting 10 seconds to 2 minutes.

Aerobic energy system — An energy system that uses oxygen and is capable of sustaining activities longer than 2 minutes.

Lactic acid — A metabolite of the lactic acid system that causes fatigue. It results from the incomplete breakdown of glucose (sugar).

Lactic acid system (LA system) — An anaerobic energy system in which ATP is formed when glucose is broken down to lactic acid during high-intensity exercise lasting from 10 seconds up to 2 minutes.

Oxygen system — An aerobic energy system in which ATP is manufactured when sugar and fat from food are broken down. This system produces ATP in large quantities and is the primary energy source for endurance activities.

Oxygen debt — The amount of oxygen consumed during recovery from exercise, above and beyond that normally consumed at rest.

Heat — A form of energy.

Kilo joules (kj) — A unit of energy.



ENERGY SYSTEMS

The so-called **basal metabolic rate** (BMR) is the minimum amount of energy required by the body to sustain basic functioning of cells. BMR is normally measured under rigid laboratory conditions. Coaches and athletes need to know the BMR to ensure that energy “output” through exercise and daily activities balances with energy “input” through food intake, especially during growth spurts.

In order to develop proper training and conditioning programs for athletes, it is important to know which of the three energy systems predominates in various activities and sports.

Energy is stored in the carbohydrates, fats, and proteins we consume in food. These basic components can be broken down in our bodies to produce ATP, a form of chemical energy that is then stored in our cells. Body movement does not occur without “cost.” We pay this cost with ATP.

The process that leads to the creation of ATP is known collectively as **body metabolism**. Since all energy is eventually degraded to heat, the amount of energy released is calculated from the amount of heat produced. The energy demand of an activity or sport is measured in kilocalories (kcal) used per minute, which is the “cost” of that activity. The amount of energy expended varies with the intensity and type of exercise. For example, jogging a 7 mph pace expends 14.5 kcal/min, whereas running at 15.5 mph expends 29 kcal/min. Additional factors such as age, sex, size, weight, and body composition of the athlete will also affect the caloric expenditure.

Any athlete — in any sport, at any level — trains in three distinct energy systems at various times. These systems provide muscles with the specific type of energy they need to tolerate repeated and intense effort. Coaches have to understand fully the training principles associated with each of these three systems. Training in the wrong mode can have severe consequences, not only for performance but also for the health of the athlete. The three systems are:

The Anaerobic Alactic Energy System

This is the main energy system for activity lasting up to 10 seconds — such as the 100m dash, short sprints in soccer, and starts and turns in swimming. Every person has this 10-second system available. It requires no oxygen, produces no lactic acid, and uses only the ATP stored in the cells for fuel. ATP is able to supply the necessary energy because of the short duration of the activity. Once those limited ATP stores are exhausted, however, the muscles have to rely on other chemical processes to restore them, since only ATP can fuel the muscle cells.

The Anaerobic Lactic Energy System

This system requires no oxygen, uses carbohydrate as fuel, and produces lactic acid as a by-product. It is the main source of energy for activity lasting from 10 seconds to 2 minutes. (The first 10 seconds of effort are sustained by ATP stored in the muscles, as described above.) If the ATP stores are not replenished fast enough, fatigue sets in. Fatigue, therefore, is the result of slow and ineffective energy conversion and may be caused by a lack of proper nutrients. Therefore, good nutrition is important.



The Aerobic Energy System

This system depends on oxygen and uses fats and carbohydrates as fuel. It produces no lactic acid and is the principal source of energy for prolonged activity (lasting longer than 2 minutes). Sports such as long-distance running and swimming are mostly aerobic in nature.

Most sports involve all three energy systems described here, depending on the specific task or activity taking place at any given moment. For example, starts and turns for the 800m swimming event are anaerobic alactic because they last no longer than 10 seconds, even though the event itself is aerobic. Quick, short sprints in soccer are anaerobic alactic, but the game itself is aerobic.

ATP resynthesis occurs through the release of energy from the breakdown of glucose. About 99% of all sugars in the blood are used to generate the energy for sports performance. Before this can happen, glucose has to be converted from a compound called **glucose 6-phosphate**. The breakdown of glucose is dependent on special enzymes. One of these, the hormone PFK (phosphofructokinase) is not produced until puberty. Pre-pubescent children therefore have a limited ability to perform anaerobic-type activities. They should therefore train in slow aerobic-type activities, developing general and specific fitness and skill techniques.

TRAINING METHODS

The basic principles in any training program consist of these concepts:

- Recognizing the major energy systems used to carry out any sport activity.
- Designing a training program that will develop that particular energy system more than will any other. This includes specificity training and the so-called overload principle through intensity, frequency, and duration of training.

- Understanding the necessary rate of recovery (work:rest ratio; type of rest) for each of the three energy systems.

Most sports shift among the three energy systems. While one system usually dominates, depending on the sport, one or two energy systems are generally considered when planning the training program. Energy demand depends on the degree of intensity of each system in the particular activity or required task. This so-called energy split is determined by three factors:

Intensity

Work intensity refers to the degree of effort involved in an activity.

The application of intensity training is probably the most significant of the three factors. The easiest way to determine the intensity of the training program is the heart rate method, which measures intensity of an exercise load in terms of heart rate response. The heart rate (HR) is monitored in order to establish the overload being placed on the body in general and the cardiorespiratory system specifically. The higher the heart response, the greater the intensity of the exercise.

To determine endurance-training intensity, the coach must first determine the athlete's **maximal heart rate** (MHR or HR_{max}) and **resting heart rate** (RHR or HR_{rest}). From these, the coach can calculate a value called the **heart rate reserve** (HRR) and finally, establish the athlete's **target heart rate** (THR) for training.

Calculate the *maximal heart rate* (MHR) by subtracting the athlete's age from 220.

Determine the *resting heart rate* (RHR) by having the athlete take his or her pulse several days in a row and then averaging the results. The best time to take a pulse reading is early in the morning after getting out of bed and sitting up for a short while.



Now, subtract the resting heart rate (RHR) from maximal heart rate (MHR). The result is the *heart rate reserve* (HRR).

Finally, calculate the athlete's *target heart rate* (THR) by taking a percentage of the heart rate reserve (HRR) and adding the resting heart rate back in. The percentage should range from 50% for low-intensity training to 80% for high-intensity training.

For example, for a 14-year-old athlete with a RHR of 70 beats per minute for whom a high training intensity (the 75% level) is appropriate:

$$\begin{aligned} \text{MHR} &= 220 \text{ b.p.m.} - \text{athlete's age} \\ &= 220 \text{ b.p.m.} - 14 \text{ b.p.m.} \\ &= 206 \text{ b.p.m.} \end{aligned}$$

$$\begin{aligned} \text{HRR} &= \text{MHR} - \text{RHR} \\ &= 206 \text{ b.p.m.} - 70 \text{ b.p.m.} \\ &= 136 \text{ b.p.m.} \end{aligned}$$

$$\begin{aligned} \text{THR} &= (\text{HRR} \times \text{training intensity percentage}) + \text{RHR} \\ &= (136 \text{ b.p.m.} \times .75) + 70 \text{ b.p.m.} \\ &= 172 \text{ b.p.m.} \end{aligned}$$

Therefore, the activity during training should be intensive enough so that the athlete's heart rate reaches 172 beats per minute.

Frequency and Duration

“Generally, the more frequent (more than twice per week) and longer (13 weeks) the training program, the greater the fitness benefits will be” (Fox, Bowers & Foss, 1993, p. 294).

Depending on the sport and the specific goals of the program (recreational or more advanced levels), the following schedule is suggested:

- For endurance programs: 3–5 days per week.
- For sprint or anaerobic programs: 3 days per week.

Two additional principles have to be considered when designing the training program:

- **Work Time** — which refers to the duration of work without rest.
- **Work-Pause Ratio** — the duration of work in relation to rest.

It is helpful to develop a systematic chart with the following indicators:

Activity	Work Time	Work Intensity	Pause Time	Work: Pause Ratio	Prioritization of Energy System
Soccer	7 Seconds	Intense Sprint	10–18 Seconds	1:2	Anaerobic alactic; Anaerobic lactic; Aerobic

ADDITIONAL TYPES OF TRAINING METHODS

There are two major methods of improving an athlete’s aerobic and anaerobic system: **interval training** and **continuous training**.



Interval Training

This is a system of physical conditioning involving short but regular, repeated periods of stressful activity (work) alternated with adequate periods of rest or work relief. The components of this type of training are:

Work interval:

- The portion of the training involving high-intensity effort (a 100m sprint at a set time standard)

Relief interval:

- Rest: walking with relaxed breathing, or moderate stretching (rest relief)
- Active: moderate exercise such as jogging or rapid walking (work relief)
- A combination of A and B: complete rest with relaxation before the next bout of work with maximal effort

Work to pause ratio:

- 1:1 (work and relief are equal)
- 1:2 (relief is twice as long as work)
- 1:3 (relief is three times as long as work)

Repetitions:

- The number of work intervals within a given set

Set:

- A series of work and relief intervals

Training distance:

- The distance of work interval (e.g., 100m)

Training time:

- The rate at which the work is to be accomplished (e.g., 100m sprint in 11.5 seconds)

Training frequency:

- The number of workouts per week

Example:

- $3 \times [6 \times 100 \text{ at } 11.5 (1:00)] = 3$ sets of 6 repetitions, covering a 100-meter training distance in 11.5 seconds, interspersed with 1:00-minute relief intervals.

Continuous Training

This type of training involves continuous activity (running) without rest intervals. It varies from Low-intensity activity of extended duration to High-intensity continuous activity to moderate duration. (Wilmore & Costill, 1994). Both are based on the aerobic system to enhance endurance capacity.

Low-Intensity Activity with extended duration:

- **Continuous, Slow Distance Training** — The main objective is distance rather than speed. The activity is performed at about 60–80% of the HR_{max} . Heart rates seldom get above 160 beats per minute for the young athlete (Wilmore & Costill, 1994).

This type of training is probably the most common, general endurance conditioning used by athletes who participate in team and endurance sports, and by those who want to maintain endurance conditioning during the off-season.

For these purposes, the pace is kept at 60–80% HR_{max} with lesser distance than the regular long, slow distance (LSD) training (Wilmore & Costill, 1994).

- **Long, Slow Distance (LSD) Training** — This type of training consists of long distance running at a slow(er) speed or a speed similar to race pace. It is designed for endurance and aerobic power training. Regardless of the pace, the intensity of the run should be high enough to bring the heart rate to within 70–75% of the HR_{rest} or about 80–85% of the HR_{max} (Fox, Bowers, & Foss, 1993).

- **Jogging** — This form of training is also slow, continuous running — but the speed usually varies from person to person. One person's running speed may be a faster person's jogging speed.
- **Fartlek training or “speed play”** — This type of training is also called “free running” or a “form of continuous activity with a hint of interval training” (Wilmore & Costill, 1994, p. 18).

The method usually consists of 45 minute running (can be longer) whereby the pace is varied from jogging to high speed, as desired. The main objective is fun whereas distance and speed are not considered — though speed should periodically reach high intensity. Fartlek is often carried out in hilly terrain (the countryside) and can be a supplement to either high-intensity continuous training or interval training (Wilmore & Costill, 1994).

High-Intensity Continuous Activity with moderate duration:

- This type of training consists of running in a pace that is faster than LSD running, resulting in earlier fatigue. Subsequently, less distance is covered. The intensity should be such that the THR is about 80–90% of the HRR or 85–95% of the HR_{max} (Fox, Bowers, & Foss, 1993).

There may be several repeats within a training session. Between these, the athletes should perform 5 minutes of active rest, such as walking or light jogging. These efforts are near race pace and therefore very stressful and exhausting. Subsequently, the demands of this type of training are very high, especially when they are extended over several weeks. Therefore, slower paced variations should be introduced (one or two times per week) to provide some relief from the high-intensity training, according to Wilmore and Costill (1994).

Resistance training:

- This type of training is especially designed to increase strength, power and muscular endurance.

When planning a resistance program, one has to decide which muscle groups have to be trained and then select the appropriate resistance exercises. For each exercise, the workout consists of number of sets, number of repetitions, and resistance (Willmore & Costill, 1994).

Circuit training:

- In this type of training, a series of selected exercises or activities in a *given sequence* is performed — i.e., a circuit.

A circuit usually has about 6–10 stations. Specific exercises are performed at each station. Athletes should progress through the circuit as quickly as possible, though executing each exercise correctly. Improvement is apparent when athletes can complete the entire circuit in less time or can do more work at each station.

The circuit can be merged with traditional resistance training — i.e., circuit resistance training. This type of training is usually performed slowly and methodically — inclusive short work intervals and long rest periods. The work is done at 40–60% of the athletes’ maximum strength for periods of about 30 seconds with 15 seconds rest intervals. Athletes complete as many repetitions as possible within the 30 seconds, followed by the 15-second rest interval — during which they move on to the next station. Circuit resistance training enhances strength, muscular endurance, and flexibility — to a lesser degree aerobic endurance (Willmore & Costill, 1994).



Other Considerations for Training

SPECIFICITY TRAINING

Sport Specific Requirements — Coaches have to select the best training method or specific training method for improving performance in a specific sport or sports activity. Therefore, they have to understand the following:

- Various training methods and activities to develop the three energy systems (anaerobic alactic, anaerobic lactic, and aerobic).
- Training methods and activities to develop the predominant energy system for that particular sport or event. Athletes need to train in all three energy systems since most sports utilize all three. However, at any given time one energy system may dominate a training phase or parts of a skill learning/training session. For example:
 - **Swimming** — Starts and turns for all swimming events occur in less than 10 seconds — which requires training in the anaerobic alactic system.

Sprint sets or events, however, utilize the anaerobic lactic system.

Distance swimmers, on the other hand, need to train mostly in the aerobic system — though they also execute starts/turns, and finish their race with sprinting.

- **Soccer** — The game itself is aerobic in nature but quick short bursts of speed are common — which is the anaerobic alactic system (up to 10 seconds).

High speed running bouts during the game for longer than 10 seconds is anaerobic lactic.

Goal tending is mostly anaerobic alactic in nature since quick reactions are needed — though it can also become anaerobic lactic when constant maneuvering and repositioning is necessary.

On the other hand, the overall game is aerobic even for the goalie who has to maintain alertness, focus, concentration, and endurance.

- Development of general physical attributes for overall athleticism *and* sport specific training.
- Understanding the function of physical attributes and their interrelationship (effect on each other).

PRELIMINARY ACTIVITY: WARM-UP

A pre-training Warm-Up is an important factor in the effectiveness of the training program, since it serves as the major link to the series of upcoming activities in each training session. In addition, proper and sequential Warm-Up is essential for overall safety (avoiding potential injury). Warm-Up activity includes light jogging, dynamic calisthenics, slow stretching exercises, games, and formal activity specific to the sport. Refer to the Warm-Up discussion in the planning of daily training sessions (Chapter 3, p. 71).

WARM-DOWN

A Warm-Down routine at the finish of each training session is important as a letdown from activity. The benefits are physical, physiological, and psychological (through increased relaxation). Those muscle groups most used during the training session in particular need to be stretched to avoid potential injury. Refer to the Warm-Down discussion in the planning of daily training sessions (Chapter 3, p. 74).

PHYSICAL ATTRIBUTES OF SUCCESSFUL PERFORMANCE

It is important for coaches to have at least a basic understanding of the role physical factors tend to play generally and within each sport specifically. This is the first step in building a proper training program aimed at developing overall athletic ability.

Healthy Athletes



The physical attributes essential to becoming a good athlete include:

- Agility and coordination
- Balance — both static and dynamic
- Muscular endurance (the ability to maintain technique)
- Aerobic endurance
- Flexibility
- Strength

It should be noted that high levels of strength, power, and skill are impossible to achieve if the young athlete has not reached puberty or maturity. Strength increases with age, and *peak* strength is usually not attained until age 20 for females and between 20 and 30 for males (Wilmore & Costill, 1994).

Strength training using machines is not recommended for children and pre-pubescent adolescents. Weight-room equipment is designed for adults and mature athletes. The pre-pubescent torso is too short, and the feet can't reach the floor for proper support and balance. In addition, the back is still weak. Young athletes usually try to use the back to initiate lifting, which leads to potential injury.

Instead, children and preadolescents should engage in self-supporting, gymnastic activities aimed at:

- Speed
- Power, explosive power
- Body awareness (kinesthetic sense)
- Rhythm
- Spatial awareness (personal space, equipment space, general space, overall and in relation to others). For example, young soccer players “crowd” the ball (where the action is) instead of playing their position.
- Hand/eye coordination

“DARING TO DO IT DIFFERENTLY”

According to sports experts, too many coaches are still “hooked into the trap” of thinking that being a better athlete means training more. However, *more* does not necessarily make for better! Rather, quality counts in the training and developing of athletes. Most coaches are adept at the physical, physiological, and technical methods of training. They are less experienced in the socio-psychological and moral aspects. They particularly lack the ability to assist athletes in developing their critical thinking skills, including decision making and raising questions.

It has been stated that we not only have to teach information but also need to teach wisdom (which is not the same as knowledge or information). We also have to teach athletes various ways to communicate, instead of intimidating them (making them afraid to speak their minds), socially isolating them (not talking to them because their performance was or is disappointing), or even separating them emotionally from their support system of teammates, friends, or parents.

Creativity in Training

It has been said that creativity is largely missing from sports training. *Creativity in sports training is “daring to be different” and a challenge to the mind* of all of those involved. Perhaps if we thought of creativity in sports as the “Olympics of the mind” — the ultimate challenge — then coaches would buy into the idea.

Creative Athletes with TIPS

How about some “Brain Olympics” in our sports environment because we need athletes who excel in TIPS:

T = TALENT

physical athleticism, motor skills, technique skills

I = INTELLIGENCE = CREATIVITY

mind, focus, mental attitude, motivation

P = PERSONALITY = TRAIT or PSYCHE

perseverance, emotional stability, balance

S = SPEED = PHYSICAL and MENTAL

quickness, ability to learn fast, absorb, modify, change rapidly

We need to help athletes develop these qualities:

- Clear focus
- Higher hopes, aspirations, expectations
- The ability to make a committed effort
- Low anxiety or fear
- The ability to direct motivation
- Competency
- High self-esteem and confidence

5

Nutrition and Safety

Athletes are no good to themselves or the team if they become injured or don't stay healthy. This chapter will deal with the topics of good nutrition and safe training.

Nutrition

Children and adolescents have specific nutritional needs because of rapid growth during their developmental years. Proper daily nutrition requires six major nutrients. Each plays a different role in the creation and maintenance of good health. These six nutrients are **carbohydrates, proteins, fats, vitamins, minerals, and water.**

CARBOHYDRATES

Carbohydrates are composed of simple sugars (glucose, fructose, sucrose):

Sources

Carbohydrates are found in nutrient-rich **complex sugars** (strings of glucose sugar groups) in foods such as potatoes, sweet potatoes, fruits, milk and yogurt, grains, and all products made from them, as well as dried fruit, beans, and peas.

They are found as **simple sugars** — nutrient-poor sources — in sweetened soft drinks, table sugar, honey and syrup, candy, and baked goods.

Role

Carbohydrates supply energy to the brain and nervous system and can be stored in limited quantities in the muscles. They are the principal fuel for anaerobic energy production but can also be used by the aerobic system.

PROTEINS

Proteins are formed of, and digested into, amino acids, which are absorbed by the blood and carried to the tissues. Amino acids are important building blocks for enzymes, antibodies, and hormones. They also play a key role in immune system function, oxygen transport, and other metabolic processes.

Sources

Proteins are found in meat, fish, milk and other dairy products, eggs, cereals, dried beans, peas, lentils, soy beans, tofu, and nuts.

Role

Proteins provide structural material for growth and the repair of muscles, bone, and damaged tissues (cuts, bruises, arthritis, tendinitis). They are necessary for a healthy immune system. They can be used as fuel if the body cannot supply enough carbohydrates or fats to meet its energy requirements. Protein, however, cannot be stored; any excess is excreted or converted to fat and stored in adipose (fatty) tissue.

FATS

Fats are formed from the combination of three fatty acids and an organic alcohol called **glycerol**. When fats are digested, they become fatty acids. Fats are either **saturated** (like butter, usually solid at room temperature) or **unsaturated** (in liquid form, like cooking oil). Unsaturated fats have the higher nutritional value.

Sources

Often, fats are “visible,” as in poultry skin, butter, margarine, solid cooking fats, various cooking oils, salad dressing, and sauces. Yet, they can also be “hidden,” as they are in milk products, processed meats, baked goods (cookies, cakes, pies, muffins), cheese, peanut butter, nuts and seeds, chips, and fried food.

Role

Fats are the primary fuel for the aerobic energy system. The body can store unlimited quantities of fat. Small quantities of dietary fat are needed to provide essential fatty acids for the digestion process and to transport certain vitamins.

VITAMINS

There are two categories of vitamins: **water soluble** and **fat soluble**.

Water-soluble vitamins are required more regularly because of their limited storage in the body. These are thiamin, riboflavin, niacin, B6, B12, C, and folic acid. *Fat-soluble* types are A, D, E, and K.

Role

Vitamins assist in the production of energy from carbohydrates, fats, and proteins. They do *not* provide fuel. They are essential for the construction and maintenance of healthy tissues.

VITAMIN / MAIN FOOD SOURCES CHART

VITAMIN	MAIN FOOD SOURCES
A	Liver; green and yellow vegetables (spinach, squash); carrots; yellow fruits (cantaloupe); egg yolk; milk products (milk, cheese)
D	Vitamin D-enriched milk and margarine; egg yolk; liver; fish
E	Oils (wheat germ, corn); sunflower seeds; wheat germ; whole-wheat bread and cereal; liver; margarine; eggs; green vegetables
K	Green leafy vegetables (lettuce, spinach); liver; milk; eggs
Thiamin (B1)	Whole and enriched cereal products (bread, breakfast cereal, pasta); meat (pork); organ meats (liver, kidney); brewer's yeast
Riboflavin (B2)	Milk and milk products; liver; eggs; whole or enriched cereal products
Niacin (B3)	Liver; meat (beef); chicken; legumes (chick-peas); peanut butter; whole or enriched cereal products; milk; eggs
C	Citrus fruit and juice (orange, lemon, grapefruit); broccoli; green pepper; cantaloupe; kiwi fruit; strawberries
Folic Acid	Organ meats; legumes; fruit; dark green leafy vegetables; brewer's yeast
Pyridoxine (B6)	Meat; fish; poultry; milk; whole-wheat cereal
Cobalamin (B12)	Animal products (meat, liver, poultry, eggs, milk products); enriched soy milk

MINERAL / MAIN FOOD SOURCES CHART

MINERAL	MAIN FOOD SOURCES
Calcium	Milk and milk products; canned sardines and salmon with bone; broccoli; legumes; dried fruits
Iron	<p>Iron readily absorbed: liver, heart, kidney, meat, poultry, fish, oysters, clams</p> <p>Iron less readily absorbed: seeds; dark green leafy vegetables; whole or enriched grains; legumes (beans); blackstrap molasses; dried fruit</p>
Magnesium	Milk and yogurt; cereals; nuts; molasses; green leafy vegetables (spinach); cocoa; soybeans
Sodium	Salt; marinade; broth; soy sauce; salty canned foods; deli foods; cheese
Potassium	Meat (pork); fruit and vegetables (especially potato, cantaloupe, banana, orange, grapefruit); milk; cereals; legumes
Zinc	Meat; liver; whole grains; legumes; milk

MINERALS

Minerals are naturally occurring homogeneous, inorganic substances and chemical elements. Some of the major minerals are calcium and so-called trace minerals such as copper, zinc, and iron.

Role

Minerals assist in the transformation of fuel into energy. They also help maintain healthy tissues and regulate body fluid.

WATER

Water serves as the environment in which cells live (the embryo is surrounded by water as life begins in the womb).

Water makes up about 60% of the body's weight. The total amount of fluid in the body is kept constant by delicate balancing mechanisms. Dehydration and water intoxication are the results of fluid imbalance.

Role

All tissues require water for normal functioning. Water transports nutrients in the digestive tract, bloodstream, and cells. It regulates body temperature and, as directed by the brain and kidneys, it transports waste out of the body. Athletes should be aware that a large amount of water is usually lost through sweating during intense activity.

Electrolytes are substances that ionize in solution and can conduct an electrical current. *Electrolytes* in the body help keep fluids in their proper compartments and buffer the environment in which all life processes take place. Water lost due to vomiting and diarrhea ultimately is drawn from every cell of the body.

Hydration

Adequate fluid intake during exercise is essential and critical. Therefore, athletes must be given time to replenish any fluid loss. Many coaches still ignore this issue. This may be partly due to lack of understanding or because of time constraints. Frequent water breaks do slow down the training session. Nevertheless, if the air temperature is high, athletes can lose a significant amount of water through sweating. During intense or prolonged workouts, this depletion can become extreme. The athlete's total blood volume may decrease, closing down the sweating mechanism. Body temperature then rises to dangerous levels. Thirst does not indicate a need for water; rather, it is the alarm signal that the body is already dehydrated. Dark (concentrated) urine indicates inadequate rehydration or fluid supply.

Medical experts recommend that athletes drink two cups of water for every pound of water lost during activity — a number that is difficult to gauge. Also, the lost fluid should be replaced with water at approximately body temperature. A common mistake of young athletes is to drink very cold or ice water. This is a problem because most of them do not drink enough to begin with, and the colder temperature induces them to drink even less.

A good rule of thumb is that athletes should drink several cups of fluid in the hour before activity, every 20 minutes throughout the activity, and afterward until all fluid has been replaced.



NUTRITION GUIDELINES

Recommended Dietary Allowances (RDA) used in the United States and Canada normally represent suggested average daily intakes of selected nutrients for average people in good health. Separate recommendations are made for specific groups, such as men, women, pregnant women, children, and others. For coaches, helping athletes to develop sound nutritional habits can be frustrating. Coaches can't always influence or control factors such as parental awareness and education on nutrition, ethnic background (and their various eating habits), economic status (i.e., whether parents have the means to buy the proper food), meal planning, and the junk-food addiction common among younger people and lower economic groups.

The nutritional needs of athletes are more complex because age, sex, and sport-specific requirements have to be considered. Most nutritional guidelines provide only minimum recommendations. Often, they need to be modified to address athletic demands. In some instances, athletes have two practices a day, and this requires special consideration. The nutritional plan for athletes should consist of several daily meals and should be high in carbohydrates, low in fat, and varied in nutrients.

Daily intake should consist of the following:

- Milk and milk products, 2–6 servings a day
- Meat, fish, poultry, and other protein, 2–6 servings a day
- Breads and cereals, 5–15 servings a day
- Fruits and vegetables, 5–15 servings a day

Tips on Nutrition

Athletes have to take responsibility for the quality of their nutritional intake. In the end, they are the performers and need the proper energy fuel for success. Coaches, on the other hand, should be models of good eating habits in order to be as credible as possible when providing nutritional tips to athletes.

Coaches should stress the following points:

- The athlete's diet should be high in carbohydrates and low in fat. Avoid junk food, even though we all tend to like it.
- Select nutrient-rich versus nutrient-poor foods.
- The popular idea that athletes need large amounts of protein is a myth. Athletes need only slightly more protein than non-athletes. Excessive protein intake may lead to dehydration and other conditions that can affect athletic performance. The average daily diet contains more than enough protein.
- Extra doses of vitamins (beyond the minimum requirements) do not improve performance, healing, or health. The body will only absorb vitamins in quantities proportional to the athlete's body size and to the amount of fuel burned. Megadoses of vitamin C, taken by many to avoid colds, make for "expensive" urine excretion. Large quantities of some vitamins can produce toxic effects, including headaches, pain in joints, loss of appetite, and fatigue. While minimum amounts of vitamins are essential, vitamin supplementation has only been shown to improve performance in individuals who are vitamin deficient to start with.
- Vitamin supplementation is really not necessary if proper daily nutritional guidelines are followed.
- A well-balanced daily nutritional plan supplies all the necessary minerals — and usually in adequate quantities. Exceptions may exist in the case of females who need extra iron due to heavy menstrual flow or children who are undergoing rapid growth and need extra calcium.

FOOD GROUPS AND RECOMMENDED SOURCES CHART

	SERVINGS PER DAY	SOURCES	SUGGESTED SERVINGS
Fruits & Vegetables	5–15	<p>Fruits: fresh, canned, dried, or frozen</p> <p>Fruit & vegetable juices</p> <p>Vegetables: fresh, frozen, or canned</p>	<p>Variety</p> <p>Variety</p> <p>Avoid fried vegetables: french fries, zucchini sticks, onion rings.</p> <p>Use only small amounts of butter, sauces, and margarine; use oil sparingly for stir fry.</p>
Breads & Cereals	5–15+	<p>Breads: all varieties</p> <p>Pasta: all varieties</p> <p>Rice: all varieties</p> <p>Cereals: hot (oatmeal, Cream of Wheat)</p> <p>Cereals: cold (whole grain)</p>	<p>Whole grain is best</p> <p>Tomato-based sauces are best, cheese, oil, and cream sauces are high in fat.</p> <p>Steamed or boiled is best, fried rice is high in fat.</p> <p>Top with various fruits, use milk or yogurt.</p>
Milk & Dairy Products	2–6	<p>Milk: low- or non-fat</p> <p>Cheeses, yogurt</p> <p>Sherbet, ice milk, milk fruit shakes</p>	<p>Excellent source of calcium. Have milk/dairy products as snacks instead of junk food.</p> <p>Variety</p>

CONTINUED ON NEXT PAGE

FOOD GROUPS AND RECOMMENDED SOURCES CHART

	SERVINGS PER DAY	SOURCES	SUGGESTED SERVINGS
Meat, Poultry, & Fish	2-6	Variety: chicken breasts, steak, halibut, etc.	<p>Smaller portions: 2-4 oz. per serving (cooked)</p> <p>No visible fat: bake, broil, roast, poach, barbecue, or steam instead of frying</p> <p>Canned fish in water instead of oil</p> <p>Avoid high-fat meats such as salami, sausage, etc.</p>
Meat alternatives		<p>Cooked dried beans and peas, lentils (legumes)</p> <p>Nuts, seeds, peanut butter</p>	<p>In casseroles, stews, chili High in protein, carbohydrate</p> <p>In moderation; very high in fat</p>
Other Foods		<p>Jams, jellies, honey, white sugar, candies, jelly beans, marshmallows, chocolates</p> <p>Desserts, cakes, cookies, pastries</p> <p>Sauces, gravies, salad dressing, mayonnaise, butter, margarine, cream, sour cream, cream cheese, whipped cream</p> <p>Snacks</p>	<p>High in carbohydrates but no nutritional value</p> <p>High in carbohydrates and fat</p> <p>All high in fat; use small amounts. Use milk instead of cream in tea or coffee; yogurt instead of sour cream and mayonnaise</p> <p>Avoid chocolate, potato chips, cheesecake, tortilla chips, nachos (very high in fat) Eat unsalted, unbuttered popcorn, pretzels.</p>

EACH FOOD GROUP IS ESSENTIAL BECAUSE IT PROVIDES ITS OWN SET OF NUTRIENTS

NUTRIENTS	GRAIN PRODUCTS	FRUITS & VEGETABLES	MILK PRODUCTS	MEAT & MEAT ALTERNATIVES
Protein:	✓		✓	✓
Fat:			✓	✓
Carbohydrates:	✓	✓		
Fiber:	✓	✓		
Thiamin:	✓			✓
Riboflavin:	✓		✓	✓
Niacin:	✓			✓
Folic Acid:	✓	✓		✓
Vitamin B12:			✓	✓
Vitamin C:		✓		
Vitamin A:		✓	✓	
Vitamin D:			✓	
Calcium:			✓	
Iron:	✓	✓		✓
Zinc:	✓		✓	✓
Magnesium:	✓	✓	✓	✓

KEEPING AN EATING LOG

DAY	GRAIN PRODUCTS 5–15+ servings	FRUITS & VEGETABLES 5–15 servings	MILK PRODUCTS 2–6 servings	MEAT & MEAT ALTERNATIVES 2–6 servings	WATER 8 8oz. servings
M	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
T	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
W	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Th	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
F	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
S	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Su	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Place check mark in square or circle to record daily intake.
 = minimum required servings; = optional recommended servings.



SAMPLE EATING PLAN FOR THE ADOLESCENT ATHLETE

SUGGESTED SERVINGS	SAMPLE MEALS
<p>Meal 1 (a.m.): 1/2 meat or alternative 1 milk 1 fruit 2 breads/grains/cereals 1 water</p>	<p>1 egg 1 cup of skim, 1%, or 2% milk 1 apple 2 pieces of toast with margarine 1 glass of water</p>
<p>Snack (midmorning):</p>	<p>snack</p>
<p>Meal 2 (noon): 1/2 meat or alternative 1 milk 1 fruit 2 breads/grains/cereals 2 vegetables 1 water</p>	<p>1 tuna-fish sandwich 1 cup of skim, 1%, or 2% milk 1 banana 1 raw carrot 1 celery stick 1 glass of water</p>
<p>Snack (afternoon):</p>	<p>snack</p>
<p>Meal 3 (3:45 p.m.): 1 fruit 1 water Training (5:00-6:30 p.m.)</p>	<p>1 cup of orange juice 1 glass of water water</p>
<p>Meal 4 (p.m.): 1 meat or alternative 1 milk 2 breads/grains/cereals 1 vegetable 1 green leafy vegetable 2 water</p>	<p>3 oz. of stir-fried chicken 1 cup of skim, 1%, or 2% milk 2 cups of steamed rice broccoli (in stir-fry) spinach salad 2 glasses of water</p>

TOTALS

Milk Products	Meat & Meat Alternatives	Fruits & Vegetables	Grain Products	Fluids
3	2	7	6	9

Meals for Travel and During Competitions

To assist athletes on road travel:

- Plan ahead.
- Appoint a nutrition manager for the team.
- Provide tips on nutrition to athletes on a regular basis.
- Hold educational seminars for athletes and parents (since they tend to buy the groceries and athletes may not have a say in the matter).
- Have athletes design a nutrition log and record their daily intake.
- Help athletes develop responsibility for their own eating habits.
- Teach athletes to resist “junk food” (during travel, at the competition site, and after the competition, when parents provide “treats”).
- Serve as a role model, especially during travel and overnight trips.

Planning ahead is vital, especially when traveling. Recommended foods are usually not available at the competition site, while “junk food” always seems to be accessible. Nutritional snacks should be packed carefully at home (no mayonnaise on sandwiches) and then transported in the team’s equipment bag or nutrition kit or in the athlete’s personal bag.

Food for Travel

- Juice packs
- Fruit, fresh or dried
- Fruit yogurt
- Cheese and crackers (no salt)
- Muffins and quick breads (no fat)
- Bagels (no fat)
- Pudding
- Fig Newtons, biscuits
- Small boxes of various cereals (no sugar)
- Plenty of water at room temperature



SAMPLE TRAVEL MENUS

RECOMMENDED	NOT RECOMMENDED
<p>Hot cakes with fresh fruit topping Milk, 8 oz.</p>	<p>Scrambled eggs Sausage patty Hash browns</p>
<p>Orange juice, 12 oz. Apple Banana</p>	<p>Hamburger French fries Milk shake</p>
<p>Spaghetti, 1½ cups w/tomato sauce with meat, ¾ cup French bread, 4 slices, lightly buttered Tossed salad, 1 tbs. dressing Sherbet, 1 scoop</p>	<p>Spaghetti w/cream sauce French bread, buttered Soda Ice cream</p>
<p>Cheese and vegetable pizza (1/2 of a 10" pizza) Rolls, 2 large, lightly buttered Tossed salad, no dressing or vinegar Fruit juice, 1 cup</p>	<p>Double cheese and pepperoni pizza Buffalo wings Soda</p>
<p>PORTABLE BREAKFAST Apple juice, 8 oz. Raisin bran, 2 small boxes Milk, 8 oz. Banana</p>	<p>PORTABLE BREAKFAST Toaster pastries (such as Pop Tarts) Chocolate milk Orange juice cocktail-type drink</p>

When eating out, choose restaurants where recommended nutritional foods are available. If you're unfamiliar with the area in which your team is competing, seek out information on appropriate eating places prior to travel.

It may be difficult during travel to meet the recommended dietary targets for carbohydrates (60%–70%) and fat (10%–15%). Nevertheless, try to keep meal plans (and all other aspects of training) as normal and routinelike as possible. Appointing a parent volunteer as the “nutrition manager” for the team will help.

Responsibilities of the nutrition manager:

- Prepare the travel nutrition kit, with all the eating essentials: knives, forks, plates, cups, etc.
- Prepare team coolers for juice, water, milk, yogurt, etc., and containers for hot drinks (seasonal).
- Develop a standard shopping list for all required food items.
- If staying overnight, arrange for housekeeping facilities at the hotel/motel.
- Set up “food headquarters” in a designated room for easy access.
- Scout and select appropriate restaurants.
- Assist athletes in the selection of food in restaurants.

Precompetition Meals

The main purpose of the precompetition meal is to provide fluid intake and energy for athletes during the competition, event, game, match, or tournament. Since many young athletes experience abdominal discomfort if they have food in their stomach during competition, the timing of the food intake is very important. In most cases, athletes feel comfortable if they eat 2–3 hours before an event; however, this depends on the individual. Some participants require a light snack as late as 30 minutes before competition. Coaches and nutrition managers should be aware of individual preferences and not attempt to change an athlete's routine.

The pre-competition meal should:

- Consist of foods the athlete likes and tolerates easily.
- Consist of foods the athlete usually eats.
- Contain carbohydrates.

The day of competition is not the day to experiment with new food!

Post-Competition Meals

Post-competition meals are every bit as important as precompetition meals. The post-competition meal should not be seen as a chance to reward the athlete with sweets — a common habit, especially among parents of younger athletes. Such an approach is detrimental because (a) it causes younger participants to link success with sweets, (b) it encourages athletes to view the eating of sweets as routine rather than as an occasional treat; and (c) it provides incomplete refueling. After the energy depletion of competition, the energy system needs to be restocked with nutrient-rich foods, not “empty calories.”

OBESITY, EATING DISORDERS, AND MALNUTRITION

“Healthy eating is a learned behavior.”

Athletes have to be taught to adopt healthy eating strategies early in their training so that these can become sound nutritional habits. According to 1996 statistics, 58 million Americans (25% of the population) are clinically obese. Another 33% of the population is overweight, and an estimated 10% suffer from some sort of eating disorder.

Overweight

Since sports are always a reflection of society, it is only reasonable to assume that overweight and obesity problems show up in sports as well. In most instances, overweight participants tend to be more prevalent in school physical education classes than in community sports where participation is voluntary.

Females of certain ethnic backgrounds seem to experience weight problems more frequently. Lack of education, poor eating habits (such as indulging in fried foods), and a social body image, reinforced by males within the ethnic group, are usually to blame.

Eating Disorders

It is very difficult to pinpoint the current extent of eating disorders in North America. Estimates range from 1% for **anorexia nervosa** (called **sport anorexia** in athletics) to 2–3% for **bulimia nervosa**. The problem is that there could be many more anorexics or bulimics in the “closet.” It has been reported that up to 10% of college women suffer from bulimia nervosa.

Approximately 90% of those with eating disorders are women. These disorders afflict people of all races and social classes. While the age of onset is typically 14–25, eating disorders do occur throughout a wide age range. People with these problems are greatly dissatisfied with their body size and shape and have a tremendous fear of gaining weight.

A recent USA study of college-age athletes shows that 32% of females have engaged in at least one form of eating disorder-related behavior, such as self-induced vomiting, laxative abuse, or routine use of diet pills. A newer practice of college females centers on “group binging” as a bonding function. Students consume large amounts of food and then engage in “communal” vomiting in dormitory bathrooms.

While eating disorders can affect individuals of any age, adolescents are especially at risk because of the hormonal and physiological changes occurring during puberty. Previously slim females who gain weight may respond with a series of yo-yo diets, which may lead to eating disorders. There have been reported cases of 8-year-old girls engaging in various weight-control measures.

Eating disorders are the dark secret in sports because they put a blemish on the clean image of what sport is supposed to be. Several deaths among female athletes have occurred in recent years. Some former Olympic competitors are undergoing psychological counseling years after their sports careers have ended (Ryan, 1995).

Previously, only so-called aesthetic sports, like gymnastics, rhythmic gymnastics, figure skating, and dance have been associated with eating disorders. According to researchers, eating disorders are now an issue among other sports participants such as young female swimmers. Taub and Benson conducted a study in 1992, in which adolescent swimmers were questioned about their weight. The authors found that 75% of

underweight and 70% of normal-weight females wanted to lose weight. While this does not indicate an eating disorder in itself, it demonstrates a major preoccupation with society's image of "thinness" (reinforced by media and supermodel advertisements). The crucial issue is that any form of eating disorder indicates a lack of self-esteem. It is an emotional and psychological problem that needs early and immediate medical, as well as expert psychological, attention.

Coaches need to be very careful when they 1) discuss weight status in general; 2) complement "thinness" (you are really looking good); and 3) make reference to an "ideal or desired performance weight" in a given sport. This usually occurs more so within those sports that emphasize or require a smaller body size, thin shape, or low(er) weight ("wrestling down" in a lower weight class is a common practice.) Females have a greater tendency to compare themselves to their teammates.

Any comments on a *subtle* level could be perceived by the athlete(s) to be a suggestion from the coach to "shed a few pounds." The typical daily "weigh-in" in certain sports are indeed a "deadly spiral." This can lead to potential eating disorders and, in some cases, has resulted in death (Ryan, 1995). Though in the latter, the coaches of those athletes deny strongly that "they had anything to do with it." The blame was shifted solely onto the athlete (Ryan, 1995). Several national sports federations have issued official warnings and have provided educational material on this issue since 1995 — though only after the events (death) received extensive media coverage ("bad publicity").

Male coaches are at a slight disadvantage since they obviously can't enter female athletes' dressing rooms. Therefore, they may not always be "tuned in" to current team gossip or the "happenings" (such as potential eating disorders, self-induced vomiting, "hidden" bingeing in the bathroom before practice, team or group bingeing, etc.). In many cases, however, teammates are quite aware of the behavior patterns. Afflicted athletes are very clever in disguising changes in their appearance. Loosely fitting clothes are often used to hide extensive weight loss. Therefore, the coach may have difficulties in detecting any serious problems.

Since the disorder still occurs more commonly among females (... "a female thing because females are, after all, more emotional" ...) male coaches may be reluctant to address the problem. On the other hand, they may feel uncomfortable or helpless because they may lack the background, education or knowledge base to deal with the disorder itself.

Anorexia Nervosa

The onset of anorexia nervosa occurs most commonly around ages 14–15, frequently around the time of puberty (which means that some start at age 11 or 12). In other words, the disorder tends to develop during the transition from childhood to adolescence. Anorexia nervosa is best described as an "obsession" with thinness, generally sought through gradual self-starvation. The desire to continually lose weight is often based on false perceptions of body image: "seeing" oneself as fat or "feeling" fat.

Characteristic features of anorexia nervosa (sport anorexia):

- Significant weight loss
- Drive for thinness and extreme fear of weight gain
- Poor body image
- Exercise addiction (excessive training to stay slim)

Early indications:

- Constant negative self-talk
- Always wearing loose-fitting clothing to hide thinness
- Constant dieting
- Skipping meals
- Denial of hunger
- Lack, or irregularity, of menstruation
- Lowered blood pressure
- Dizzy spells

Bulimia Nervosa

This disorder often develops at a later age than anorexia nervosa, usually in the late teens. The onset tends to coincide with the change from adolescence to early adulthood.

Bulimia nervosa is a syndrome of chaotic eating behavior. Binge eating is followed by various purging methods aimed at maintaining body weight. Nevertheless, weight fluctuation is a common symptom of this disorder. During bingeing episodes, the bulimic feels a lack of control over the eating. Purging methods include self-induced vomiting (sometimes small instruments are inserted into the throat), laxatives or diuretics (including special teas), strict dieting, fasting, or vigorous exercise.

Characteristic features of bulimia nervosa:

- Binging (recurring episodes of uncontrollable eating)
- Purging (a need to vomit)
- Self-induced vomiting (to attempt to rid the body of all calories)
- Abusive dieting (fasting, skipping meals, using appetite suppressants)
- Laxatives (affect the large intestine) and diuretics (rid the body of water leading to serious dehydration)
- Strenuous or exhausting exercise (obsessive behavior to burn off calories, which in turn places a strain on the heart and can result in blackouts)

Early indications:

- Consumption of large quantities of high-calorie food (chocolate, candies, cookies, soft drinks)
- Ulcers in the corner of the mouth; constant blisters on the lips
- Damaged tooth enamel caused by frequent vomiting
- Acid breath

Early identification of eating disorders is absolutely crucial because of the health damage they can cause, which may even result in death. Coaches who suspect an athlete of having an eating disorder should meet privately with that athlete and discuss their concerns in a non-threatening way. The coach needs to find out whether the athlete acknowledges having a problem or, as is common, is still in the denial stage. In most cases, clinical assistance is needed in order to deal swiftly and effectively with the condition. Coaches should not attempt treatment on their own due to the potentially destructive nature of the disorder.

The athlete should undergo immediate counseling. Coaches have to work with the expert to help the athlete get well. This is usually a long process, depending on the severity or the stage of the disorder.

Sports Malnutrition

Training schedules, intense training, and time pressure all contribute to **sports malnutrition**, a new syndrome among young athletes. Other factors may be bad eating habits, irregular eating habits, and various workout schedules.

Most athletes rush to school without eating an adequate breakfast. Noontime meals, also, are not as customary in North America as in other countries. Experts consider the noontime meal to be important to the refueling process. Although experts recommend eating small nutritional snacks 4–6 times during the day, young athletes tend to be careless in this aspect as well; while those who do snack tend to choose nutrient-poor foods. Late-afternoon training sessions require additional fuel; yet, many athletes participate without adequate food intake. Their energy supply is low and insufficient to meet the demands of training. “Running on empty” increases the risk of injury due to fatigue.

Injuries: Prevention and Care

First and foremost, *all* activity and training has to be conducted in a safe sports environment. This refers not only to the sport facility but includes emergency procedures as well as the coach's preparation. An emergency action plan (EAP) should be designed, organized (including provisions for backup people), and *practiced* at various times in preparation for potential emergencies.

One of the major responsibilities of the coach is to do everything possible to prevent injuries. Beyond this, a basic knowledge of procedures to treat common minor injuries is essential; without it, the coach may risk charges of negligence.

In the interest of preventing sports injuries, the coach should take several important steps to make the sports environment as safe as possible:

PRE-SEASON MEDICAL DATA BASE

No athlete should be permitted to join a team without proper medical examination and medical clearance. Too many incidents occur because an athlete's medical condition was not obvious or known. The liability is too great to take these risks.

- Prospective athletes need medical clearance before joining the team.
- Copies of the clearance and personal medical history should be on file, within easy access.
- The coach should at all times have an up-to-date copy of every athlete's history in the medical kit.
- All doses of medication should be recorded, including the amount and the time of administration. Wear-off effects and potential side effects should also be recorded.
- The coach should develop an injury prevention plan.

EMERGENCY PROTOCOL CARD

1. Facility's Phone Locations (please list):

2. Ambulance Phone Number:

3. Type of Emergency:

4. Address of Facility and Location of Access Doors:

5. Other Emergency Numbers:

Fire:

Police:

Medical Clinic:

Hospital Emergency Department:



THE EMERGENCY ACTION PLAN (EAP)

The purpose of an emergency action plan is to get expert care to the injured athlete as quickly as possible. Only professionals who have specialized training should deal with injured athletes. Coaches should be trained in First Aid to take care of minor sprains and minor injuries, such as nosebleeds, blisters, scrapes, scratches, and cuts.

- Develop an EAP and inform all participants.
- Make sure all participants know and *practice* the plan.
- Have designated volunteers assigned to help out in emergency situations. The coach cannot leave the team during practice or competition.
- Have designated reserve volunteers as backups in case of absences.

The coach should design a checklist specific to the training facility and/or training situation (indoors/outdoors/fields/courts). Items are marked off after being checked:

- Athletes' medical records and histories are *on-site* and easily accessible in case of emergency or to send with an ambulance.
- The medical kit is "stocked" and accessible to the coach or team manager(s).
- Bronchodilator, a bronchial anti-inflammatory, is in the medical kit, in case it is needed by asthmatic athlete(s) on the team.
- The emergency number is checked — some smaller communities may not use the standard 9-1-1.
- The office door/facility door (or other access to a telephone) is unlocked.
- Telephones are in working condition — including the public telephone close to the facility.

- Small change (quarters) for public telephone use — for emergency numbers other than 9-1-1 or to contact an athlete's parent or guardian.
- Coins are taped to the inside lid of the medical kit. If a cellular telephone is used, make sure it is charged up and that a spare battery is available.
- Doors/gates to be used by an ambulance service are unlocked and unblocked.
- Crutches, tensors, slings, and stretcher are easily accessible.

The Charge Person:

- Is a capable and responsible person who can handle athletic injuries and accidents.
- Is a medical volunteer other than the coach who should be certified in First Aid.
- Activates the EAP if ambulance service is needed.

The Call Person:

- May be any volunteer *appointed* by the Charge Person who is reliable and able to remain calm.
- Can be an official, assistant coach, or another medical volunteer.
- All information the Call Person needs should be written on a 5 x 9 card (coated with plastic to avoid smears). The card is part of the medical kit and should be posted at the telephone, if possible.

The emergency number should be articulated as separate numbers: 9-1-1.

The EAP must be practiced (reserve personnel should be included).

Send the Call Person to make the call.

Tell the Call Person:

- The exact location of the telephone.
- The number to call.
- The suspected type of injury.
- The exact address of the facility/field; major street intersection(s); location of nearest doors/gates for entry; information about any potential hazards (stairs).
- To come back and report to people in charge; to inform them that all instructions were carried out.

If an injury occurs, those in charge should:

- Know the exact procedures for serious and emergency conditions.
- Assess the seriousness of the injury to determine whether emergency service is needed. Concussions, neck/back injuries, and severe bleeding are always considered serious and are therefore emergency conditions.
- Have strategies in place to keep team members calm, focused on the task, and away from the injured athlete(s).
- Designate a volunteer to accompany the athlete if he/she is taken to a medical facility; inform the athlete's family.
- Make sure that the volunteer takes the injured person's medical record along for the medical staff.
- Record the order of events during the incident and list the precautions that were taken.

The coaching staff and/or designated volunteers should:

- Inform the club management as soon as possible to take steps to protect against claims of negligence.
- Ensure that the injured athlete receives appropriate follow-up care.
- Educate the athlete about the injury and the recovery.
- Keep in contact with the injured athlete; build rapport and support throughout the time the athlete is recuperating.
- Make sure that the athlete has received medical clearance before returning to action.

Nobody intentionally plans for injuries in sports; however, they do occur. Many injuries can be avoided if all precautions are taken and safe training methods are carried out by coaches. For example, between 1992 and 1996, 300 sports-related concussions (17 deaths) were reported in the USA. The dramatic fact is that many of the injuries were so-called “two timers.” Coaches sent the athlete back to training or the playing fields before the athlete had fully recovered and received medical clearance. Researchers who examined 3,000 gymnastics-related injuries during the late 1980s pointed out that of the 56 types of severe injuries that took place, only 18 cases were unavoidable (i.e., all precautions had been taken).

Whether injuries may or may not occur, coaches have to be able to recognize factors that potentially can lead to injuries. Injuries are usually due to incorrect training methods, incorrect exercises, incorrect skill techniques, overtraining, or potential heat exhaustion during humid weather.



Injuries

There are four major categories of sports injuries:

- Head, neck, and spine
- Bone and cartilage
- Soft-tissue
- Miscellaneous conditions (exercise-induced asthma; minor soft-tissue injuries such as nosebleeds, blisters, scrapes, scratches, and cuts)

The first step when an injury happens is to assess its seriousness. The coach quickly decides whether an ambulance is necessary and whether the EAP should be activated. This and all other decisions should be made from the standpoint of the athletes' health and safety.

Only after the injury is assessed as thoroughly as possible should the designated volunteer(s) deal with the specifics of the injury.

- Injured athletes should *not* be given aspirin or any other forms of painkiller.
- Injuries in which bleeding occurs should be treated with surgical gloves (stocked in medical kit).

Recommended procedures:

- Keep other athletes away from the injured athlete.
- Check to see if the athlete is conscious.
- Check the athlete's breathing pattern — if not breathing, start rescue breathing or mouth-to-mouth resuscitation.

Check (in this order!):

- Check for obstruction in the airway; respiratory failure (potential asthma attack due to heat or exercise stress); cardiac (heart) failure; severe heat disorder; damage to the brain or head (concussion); injury to the spine or back.
- Check for signs of shock (paleness, clammy skin, listlessness).
- Check to see whether there is bleeding — if so, determine the body part and the severity of the bleeding.
- Once it is decided that no life-threatening condition exists, determine whether the injury is serious or minor.

In case of serious injury:

- Get help as quickly as possible.
- Care for the athlete until trained medical personnel arrive.
- Move the athlete only if necessary for safety. Do not move an athlete with suspected spinal injuries!
- If the athlete is moved, stabilize the head to keep it from rolling, making sure that the feet are not dragged.

IN CASE OF MINOR INJURY

- Determine whether the athlete can keep training or playing.
- Determine the best way to get the athlete off the playing field/court/track/equipment.
- If the athlete needs medical aid, he or she should be removed from training or play for closer observation and/or examination.

INJURIES

SERIOUS CONDITIONS

EMERGENCY CONDITIONS

INJURY

SYMPTOMS

ACTIONS TO BE TAKEN

SYMPTOMS

ACTIONS TO BE TAKEN

HEAD

- Dizziness
- Headache
- Disorientation
- Ringing in the ear
- Nausea

- ANY OR ALL OF THESE:
- Remove the athlete from activity
 - Monitor signs every few minutes
 - If symptoms worsen (or with combination of several symptoms), get medical help at once

- Temporary unconsciousness
- Temporary amnesia
- Bleeding or fluid from ears or nose
- Uncoordinated movement & confusion

- Activate the Emergency Action Plan (EAP)
- If the athlete is unconscious, treat the injury as a serious neck or back injury
- **DO NOT MOVE** an UNCONSCIOUS ATHLETE

NECK & BACK

- Temporary loss of sensation in the neck
- Temporary numbness or tingling

- Never move or roll the injured athlete or try to remove any equipment
- Leave the athlete lying as found, providing he or she has no trouble breathing
- Even if sensation returns, seek medical care

- Sensation in the neck, back, arms, or legs does not return
- Numbness and tingling in arms and legs continue
- The athlete is unable to move neck, arms, or legs

- Activate the Emergency Action Plan (EAP)
- **NEVER** move or roll the athlete or REMOVE any equipment
- Leave the athlete lying as found, provided he or she has no trouble breathing
- Provide comfort to the athlete and keep him or her warm

SEVERE BLEEDING

- Excessive bleeding and loss of blood

- Apply pressure over a clean pad, directly on the wound
- Keep the pressure firm until the bleeding stops
- Elevate the injured part if the athlete can move the affected area
- Seek medical care

- Persistent bleeding that cannot be controlled
- Blood pulsing from a cut
- Loss of skin color in the face
- Dizziness, nausea

- Activate the Emergency Action Plan (EAP)
- Immediate treatment is the same as the treatment for serious bleeding

FRACTURES

CLOSED FRACTURE

- Bone disrapture (break)
- Localized pain over the bone area
- Visible deformity
- Swelling
- Loss of function

- Place in the most comfortable position
- Do not straighten or splint the break
- Apply ice
- No weight bearing
- Seek medical care

OPEN FRACTURE

- Bone disrapture (break) with bone sticking through the skin surface
- Gross deformity
- Loss of function
- Bleeding
- Pain

- Activate the Emergency Action Plan (EAP)
- Apply direct pressure
- Make sure that the area is in the most comfortable position
- Do not try to move or apply traction or splint

- Removing the athlete is best carried out in this sequence:
 - Have the athlete sit down before getting up to avoid passing out.
 - Make sure that the athlete can start movement by him or herself.
 - Ask whether movement is possible without assistance.
 - If so, have the athlete get up slowly and walk away slowly.
- An athlete with an upper-body injury can be permitted to stand and walk, with upper body support.
- An athlete with an ankle, knee, or hip injury should be removed by stretcher, while using crutches, or with support from helpers.

Indications of Inflammation of Soft-Tissue Injuries (SHARP)

- **S**welling (immediate or gradual)
- **H**eat; increased temperature on the injured part
- **A**ltered function of the injured part (limited movement)
- **R**edness
- **P**ain (a definite warning sign of soft-tissue injury; requires resting the afflicted part)

Basic and Immediate Care of Soft-Tissue Injuries

RICE or PIER are methods of caring for the inflammation of soft-tissue that occurs following injury. Their purpose is to reduce swelling and inflammation. Proper and immediate care usually speeds up recovery.

RICE:

- **R**est = to avoid making the injury worse.
- **I**ce = whatever type is available — apply within 5–10 minutes after the injury happens; ice pack should be wrapped firmly in place; use a wide elastic wrap; make sure circulation is not hindered; leave in place for 20 minutes; after removing ice pack, apply an elastic wrap for compression; apply ice every 2 hours during the first 48 hours.

- **C**ompression = use a stretch elastic bandage, wrapping toward the heart; use compression at all times, except when sleeping.
- **E**levation = during and after the application of ice — Elevate the injury above the heart; elevation should continue as often as is practical; keep the injured part elevated as much as possible — even in bed.

PIER is a term used by experts referring to the same principle as RICE:

- **P** = pressure applied
- **I** = ice applied
- **E** = elevation
- **R** = restriction

Returning from Injury to Resume Activity

Any injured athlete must be fully recovered before being allowed to participate or train again. Otherwise, the chance of re-injury is high. Full recovery means that the athlete has received medical clearance, whether the injury was major or minor.

Additionally, the athlete should:

- Have 100% range of movement (the coach should check this).
- Be pain-free.
- Be able to perform the required activity or necessary skills (starting slowly and then increasing activity gradually).
- Be emotionally and psychologically ready to return (the coach should repeatedly inquire how the athlete is feeling and check for potential fear of being injured again).

MISCELLANEOUS CONDITIONS

More common than traumatic injuries are conditions such as exercise-induced asthma and various minor soft-tissue injuries — usually nosebleeds, blisters, scrapes, scratches, and cuts. It is important that coaches or designated volunteers be prepared to deal with those conditions, since they occur frequently in *all* sports.

Exercise-Induced Asthma

Asthma is a common problem, affecting about 10% of the population, according to medical experts. An asthma attack occurs when an irritation in the lungs causes the airways to tighten, making breathing difficult. Air pollution, pollen, and dust, as well as exercise, can all trigger an asthma attack. Some athletes experience symptoms only during exercise, in which case the condition is called *exercise-induced* asthma. There are indications that stress may also contribute to asthma. Maintaining a good level of fitness helps to reduce the severity of asthma.

Symptoms:

- Coughing, wheezing, greater shortness of breath than normal
- Symptoms seem to be worse during the first 10–20 minutes of activity and are worse in cold or dry air than in moist air

Nosebleeds

Nosebleeds are very common and may be caused by direct injury (i.e., an impact to the nose), allergies, dry air or high humidity, or blood vessel rupture. It is important to know that the amount of bleeding does not always indicate the severity of the injury; even a minor injury may bleed profusely.

Care of nosebleeds:

- Have the athlete sit down and pinch the bridge of his or her nose between thumb and forefinger.

- Have the athlete bow his or her head forward and remain still for about 5 minutes.
- If bleeding continues, repeat the “pinching” technique; if it persists, seek medical help.
- No materials should be “stuffed” into the nostrils to stop the bleeding.
- Apply ice over the nose to reduce bleeding and swelling.
- After the bleeding stops, have the athlete avoid strenuous exercise for about an hour.
- Do not attempt to dislodge blood clots that are inside the nose.
- If the athlete exhibits severe swelling or emotional shock, seek medical help.

Blisters

Blisters are very common injuries resulting from friction against the skin. The best precaution is to make sure that all equipment (pads, shoes, gloves or hand guards used in gymnastics) fits properly.

Additional precautions against blisters:

- Wear new equipment for short periods at a time until it has been broken in.
- Dust shoes and socks with baby powder to reduce friction.
- Apply skin lotion on feet to keep them moist; tape hands and fingers to protect them.
- If blisters occur, avoid puncturing them, since this can lead to infection.

If blisters need to be punctured:

- Clean the area with water and surgical soap (stocked in the medical kit). Be careful in doing so: the soap destroys bacteria but tends to destroy the tissue as well. Saline solution or peroxide are sometimes recommended and may be useful for removing dirt; however, they are not antiseptic.
- Leave any remaining skin in place.
- Keep the blistered area dry and cover it with a nonstick bandage. If necessary, protect the entire area with a larger bandage or a “donut” pad.
- Clean the area and change the bandage daily.

Scrapes, Scratches, and Cuts

These are the most common types of injuries. In many cases, they require only direct pressure over the wound to stop the bleeding.

Care of scrapes, scratches, and cuts:

- Clean with water, soap, and an antiseptic.
- Remove any small particles lodged in the wound. This should be done by medical personnel.
- After cleaning, dry and cover the wound with a sterile pad or bandage. Keep the wound dry and clean; change the bandage daily.
- *Good hygiene* will prevent a major infection.

Incorrect Training

Even in the case of a recreational sport lasting one season, it is the coach's responsibility to design a seasonal plan with progressive training methods and principles — a plan that includes the training of all three energy systems. Failing to do this can have severe consequences, not only for performance but also for the health of the athlete (See Chapter 4, p. 103). The plan should also include appropriate Warm-Up and Warm-Down activities. Otherwise, the coach is committing a serious error in the physical preparation of the athletes.

Safety Considerations for Proper Training

For liability reasons, the coach should be able to answer “yes” to the following questions:

- Were all precautions taken to provide a safe sports environment?
- Were all training procedures followed correctly?
- Was the training session planned properly?
- Were Warm-Up and Warm-Down activities correctly and safely carried out?
- Were the aspects of the skill(s) taught in proper sequence?
- Were the age, growth, and development of the athlete considered?
- Was the drill appropriate to the skill level of the athlete?
- Was the athlete physically, mentally, and psychologically ready for the skill and challenge?

Incorrect Exercises

Coaches should stay abreast of new information concerning exercises they intend to use in their training program. They should make certain the exercises they choose are appropriate to the age, growth, and developmental stage of the athletes. They should be sure they understand the proper techniques for each exercise. Finally, coaches should be aware of, and avoid, exercises that are no longer recommended for medical reasons (such as traditional jumping jacks; neck bridges, or other bridges with emphasis on the lower back; duck walks, etc.).

In particular, coaches should be aware that weight training for younger, pre-pubescent athletes is dangerous. Exercises that load the back or shoulders, or exercises that involve lifting from the floor are inappropriate for this age group.

Incorrect Skills

Skill learning resembles “building with blocks.” Simple skills provide the basis for more complex skills and need to be taught in the proper sequence and progression to ensure effective learning. Drills used to teach skills should be specific, skill-related, and *safe*. Skills that elite or professional athletes perform are not necessarily appropriate for young athletes.

Overtraining

Physical preparation of athletes can easily lead to overtraining, especially with eager coaches who put a strong emphasis on physical fitness (the “run until you drop” attitude).

Overtraining refers to the cumulative effect of all stress factors — physical, mental, social, emotional, and psychological — on the athlete. This can become a very serious problem. Not only does it often lead to injury, but it can cause athletes to feel discouraged about their performance; their training; their support system; their friends; and their sport involvement in general.

Indications of overtraining:

- Slow-healing bruises, cuts, and abrasions
- Frequent infections, constant colds, flu, or mononucleosis
- Loss of appetite
- Constant tiredness
- Excuses to miss practices
- Chronic muscle soreness
- Loss of body weight
- Fluctuating moods
- Low hemoglobin (complex in red blood cells containing iron)
- Weak immune system
- Higher-than-normal lactic acid levels when at rest

Heat Disorders

Training and exercising in high humidity is difficult for two reasons: (a) body temperature increases; and (b) the body has to expend more effort to try to regulate the body temperature. Moisture in the air prevents sweat from evaporating, rendering the body's efforts to cool itself less efficient. Under these conditions, athletes may lose a significant amount of water through sweating. This can lead to a heat crisis and a total body collapse.

The No. 1 precaution is simply to have the athlete drink fluid more frequently. Many coaches still advise athletes to take salt tablets with water; but in fact, combining salt with water only slows down absorption of the water. Also, excessive sweating may cause persistent cramping due to mineral loss. A diet containing plenty of potassium- and zinc-rich foods is a good safeguard.

Coaches should be able to identify the following heat disorders:

Heat cramps

Symptoms:

- Increased body temperature
- Heavy sweating
- Muscle spasm
- Fatigue

Heat exhaustion

Symptoms:

- Normal body temperature with elevated pulse rate
- Cool skin
- Extreme weakness
- Nausea
- Dizziness

Heat stroke is a serious medical emergency, and athletes must stop all activity immediately.

Symptoms:

- Elevated body temperature
- Hot and dry skin because the sweating mechanism is no longer functioning
- Confusion or disorientation
- Staggering
- Headache
- Nausea

Safety measures against heat disorders:

- Make sure athletes wear proper (loose-fitting) clothing and that they do not wear more clothing than necessary.
- Make sure athletes drink plenty of fluids.
- Make sure athletes become accustomed during practice to temperatures they may experience in competition.
- Make sure that athletes are *always supervised*.

Notes

[This section contains faint, illegible lines of text, likely bleed-through from the reverse side of the page.]

6

Managing Your Program

Being a youth sport coach can be an exciting, challenging, and personally fulfilling experience. If the teaching and coaching of young athletes were all there was to being a coach, it would be wonderful! However, that is not the reality.

Coaches “wear many hats.” The coach has to be an administrator, personnel manager, public relations and sales person, recruiter, fund raiser, business manager, equipment manager, grounds keeper, diplomat, trainer, psychologist, judge, and, above all, a competent, caring, committed teacher. Obviously, managing the program and all of these roles can sometimes cause conflict and stress.

It is the coach’s knowledge, skill, anticipation, preparation, insight and wisdom in managing the total program that creates the necessary environment for everything to run smoothly. This chapter will address three aspects of the challenge facing most youth sport coaches in managing their programs.

The Coach and the Parents

Many coaches cringe at the thought of dealing with their athletes' parents. Horror stories of difficult parents are legend. Some coaches have almost come to view parents as the "enemy."

Clearly, this is neither healthy nor necessary. Parents should be very welcome and valued members of the sport family. They have the potential to contribute a great deal. They have the right to be close to, and to enjoy, their children's sport experience. This section will offer some ideas and approaches that can be helpful for youth sport coaches in building strong, healthy, and supportive relationships with their athletes' parents.

Parents are surely a significant influence in most youngsters' lives. Their influence may range from very positive, constructive, and supportive to negative, destructive, and contentious. Whatever the quality of their influence may be, it will be significant in its impact on their children.

The coach's challenge is to harness this influence: to get the parents on the same page with the coach, thus having the parents' influence and the coach's influence working in the same direction. This means that the coach and parent are working together to build a great experience for the child. This relationship, the coach-athlete-parent bond, is sometimes referred to as the athletic triangle, and represents an important aspect of effective sport leadership. The stronger the bond of this triangle becomes, the more likely it is that the child will have a great sport experience.

KEY IDEAS FOR "WINNING" THE PARENTS:

- Prior to each season, coaches should contact the parents of each athlete on their team. A brief note of introduction followed by a phone call works fine, but a face-to-face meeting can be even more effective. Visit the athlete's home and introduce yourself in person. Obviously, this is even more critical for parents of kids who are new to the program.
- Invite all parents to a pre-season parents meeting. This meeting can be held in a public meeting area, in conjunction with a social gathering at the coach's house or at a park. You can go a long way toward winning people through their stomachs.
- Prepare a brief *Parents Manual*. It does not have to be fancy or professional. Provide a few pages outlining elements such as: the coach's philosophy of coaching; goals and intentions for the kids and the season; the benefits their kids will gain from the coach and their participation on the team; an outline of a typical practice; a schedule showing time and place for all practices; a competition schedule, along with procedures for notification if a game or match is canceled or rescheduled.

Also, list the coach's expectations for athlete behavior at practices and competitions, and expectations regarding parents' actions and behaviors at practices and competitions. The manual should also include a listing of important league and team rules and policies, along with a team roster, with the names of both the athletes and their parents (phone numbers should not be distributed without permission of the family).

- At the parents meeting, the coach presides over introductions and then proceeds to make a presentation of the material in the *Parents Manual*. This is a “sales” presentation, selling the parents on the very positive experience their children are about to have. Above all, this is the chance for you, the coach, to assure the parents that you will provide their child with the opportunity to develop and play in a fair environment.

This is also the time to stress the importance of positive reinforcement, both from the coach and at home. The coach might share some key words, cue words, phrases, or strategies typical of what the kids will hear at practice or in games. The coach might instruct the parents on the best way to respond to their children after games won or lost. The coach should provide tips on being positive and supportive when the kids are feeling frustrated and discouraged.

Finally, this is the chance for the coach to ask for the parents’ support and to affirm the need for communication between the parents and the coach. After all, the most important thing is that their kids have a positive season and have a lot of *fun!*

- This is also a recruiting session, in which coaches can enlist support and help from the parents for volunteer coach support; managing equipment and uniforms; helping with the weekly team newsletter; coordinating the team car pool; scheduling and taking team pictures; or making sandwiches and drinks for game days. Whatever the needs may be, this is a great setting in which to get the parents to “join your team!”
- Many youth sport teams have active parent/booster clubs. If one already exists, let the club chairperson make a short recruiting pitch. If there isn’t one yet, this could be a great time to introduce the idea to form one.

- It is important to give the parents a chance to ask questions, offer feedback on ideas the coach has shared, or to express their expectations for their child's youth sport experience. This discussion should happen only after the coach has made the sales presentation and the group interactions have warmed up the crowd. The question/feedback time serves at least three purposes. First, it gets any questions or misunderstandings addressed and answered as early as possible. Second, it allows the coach to assess which parents are going to be supportive and which parents may not be. And, third, it gives the coach a glimpse of the home experience of each of the athletes. It provides valuable information and insight to help in understanding, leading, and nurturing each child.
- The first meeting with the parents creates the cornerstones for the base of the coach-athlete-parent triangle relationship. The coach should follow up with each of the parents, particularly those with whom it appears that building a strong supportive relationship may be difficult.
- Schedule a date and time for a second, midseason meeting. This allows for follow-up and review and assures parents that you are encouraging and providing opportunity for their input.
- Schedule a final meeting to take place after the season is over. This allows you to evaluate and review the season, tie up any loose ends, and begin to plan for the coming year before important issues, questions, or information is lost or forgotten.

Parents can become strong, powerful allies and provide tremendously positive support for the coach and the program. They can also be enemies, working against, undermining, and thwarting the coach's best intentions and efforts. Coaches do not have, and never will have, authority and control over parents. Coaches can only attempt to influence parents as best they can.

Most parents can be won over as allies and friends. After all, both the coach and parents share a common goal — to provide a great youth sport experience for their kids!

Team Discipline

This is certainly not a favorite topic for most coaches. And yet it is an important one. All coaches need to address team discipline as part of their program management responsibilities.

The old adage, “An ounce of prevention is worth a pound of cure,” is fitting when it comes to the issue of team discipline and athletes’ behavior. To reinforce this, let’s refer back to ideas presented earlier in this manual:

Create an environment that is built with the intention to provide young athletes, kids, with a positive experience in youth sport — where:

- People are happy and having fun.
- Self-worth is valued as a priority and being protected and nurtured.
- Kids are being met with realistic expectations and constant encouragement.
- Seeds of belief, trust, and self-confidence are planted and regularly cared for.
- Praise is used liberally, and there are more than enough pats on the back, high fives, and hugs to go around.
- Criticism is constructive, caring and gentle, pointed toward the behavior, not the person.
- Kids are loved and loved and loved.

Where kids meet sport in an environment like this, *positive reinforcement is happening all of the time!*

You will probably have prevented most discipline problems as well.

Kids who are happy, active, and having fun just don't have the time to get into much trouble and are not very likely to be much of a problem regarding discipline.

But even the very best coaches, in the most wonderful sport environments and with the most responsible intentions are not always successful in avoiding discipline issues. Coaches have to be ready and prepared to deal with this sometimes uncomfortable aspect of being a youth sport coach.

Here are some ways to prepare yourself to deal with team discipline questions:

- Develop team rules and policies from the perspective of wanting to include and retain kids in the program, rather than to exclude and lose them. Focus on rewarding good behavior, rather than on punishing bad behavior.
- Allow the kids to have some input in setting expectations and defining team rules and policies. This builds and reinforces agreement. Kids are more likely to identify with, buy into, and follow rules that they helped establish than rules totally imposed on them.
- Have as few rules as possible. Avoid "getting painted into a corner."
- When a rule is broken, the coach should take action quickly. Procrastination can make the task more difficult and allows time for outside parties and opinions to enter the picture unnecessarily.
- The coach should display professionalism and remain calm and controlled. There should be no emotional outburst or displays of anger by the coach. Do not react in frustration. Be a good role model for the team.

- Allow the athlete(s) involved to explain their behavior and to tell their version of the story.
- Determine the appropriate punishment. Inform the athletes and their parents immediately. Enforce the punishment. Get the whole issue resolved and left behind as quickly as possible. Punish the behavior, not the person. Try not to punish too frequently.
- Avoid using physical activity (laps, push-ups, etc.) as punishment. Sports programs should promote the idea that physical activity is fun and a good thing to do. Using it as punishment sends all the wrong messages.
- After the incident and punishment are over, get back to business as usual.
- Always be fair and consistent. Do not show favoritism, especially toward “star” players.
- Never discuss individual discipline issues with others, especially other parents.

In general, never let your approach to team discipline undermine or destroy the most important values and principles of your philosophy and sport environment. Build a happy, loving, caring, active, and fun environment. Keep kids busy, involved, and on task. Let the environment work for you!

Avoid being simply an enforcer of rules. Enjoy being a coach!

Fund Raising

It takes funds and other key resources to be able to provide sport programs for young athletes. In some cases, all of the necessary funding is provided by the organization or agency sponsoring the sport program. When this is the case, coaches have the good fortune of not having to concern themselves with fund raising.

In the vast majority of situations, however, raising funds to sustain or supplement a youth sport program is a fact of life. This does not mean it has to be a nightmare. Depending on the program and community, some programs have a greater need than others. Similarly, depending on the program, the sport, and community resources, fund raising is easier for some than for others.

At least three key issues should be addressed when considering effective approaches to raising funds for a youth sport program.

These are:

- What are the financial needs?
- What are viable methods for generating the desired funds?
- What is the best mechanism to manage the funds raised?

NEEDS ASSESSMENT

Don't just "raise money to raise money." Make a careful assessment of the actual needs of the team to maintain a good program and to provide the kids with a good sport experience. Is there a need for equipment, uniforms, T-shirts, travel, or something else? Identify the needs. Research the costs. Determine a net amount to be raised.

Caution: Avoid the lure and trap of luxury. Don't lavish young athletes with uniforms and equipment that would be the envy of professionals. Providing too much too soon takes the focus of the youth sport experience away from the goal of having fun and learning the game. Let them be kids!



METHODS OF FUND RAISING

Methods of fund raising are limited only by the law and the fundraiser's imagination. Certainly, this is an important area in which to enlist and involve the parents group or booster club.

A number of methods that have proven successful in many youth sport activities include:

- Direct solicitation. Seek the direct support of local businesses and community-minded citizens who may have both the interest and the financial means to be very supportive. Don't be apologetic about asking. You have a great product to sell: the chance to invest in the lives and futures of the kids of the local community. Create theme clubs (e.g., "High Scorers Club," "Golden Baton Club," "Touch-down Club," "Grand Slam Club") to provide fun and recognition for the donors. Be sure to let your boosters pay a membership fee to be in the booster club.
- Charge participation fees to those who can afford to pay. Those who are able to do so will pay willingly. Provide some form of scholarship or fee waiver for those who cannot afford to pay. Never deny any kid the chance to participate in youth sport because he/she cannot afford the participation fee.
- Fund-raising activity. Events that involve all of the kids in their sport activity work nicely. Jog-a-thons, swim-a-thons, shoot-a-thons, marathon ball games, and 100-inning games all work well as fund raisers. Parents, boosters, neighbors, and friends can also participate and add to the potential total. It's fun, efficient (completed in one day, with no items to inventory, sell, or deliver) and, given enough participants, has the power to generate significant funds.
- Gate receipts and concessions work particularly well for sports with high spectator interest. If allowed by local laws and ordinances, raffles and 50-50 drawings in conjunction with special tournaments or competitions are attractive, fun, and potentially quite lucrative.

SPECIAL FUNDS MANAGEMENT

Register your booster or parents organization as an official not-for-profit entity. Establish bylaws and elect officers, including a treasurer. The coach should not be the treasurer and not be directly responsible for the collection and expenditure of the funds — give this duty to a member of the executive committee. Decisions should always be made through the democratic process; basic accounting principles should be followed; and regular public financial reporting procedures should be implemented. This protects both the coach and the use of the funds. Ultimately, it really protects the kids.

Summary

Effective youth coaching requires effective program management. It takes attention, anticipation, preparation, organization, and motivation to create and maintain a successful program. Working with parents, enforcing discipline, and fund raising represent only three aspects of program management. Dealing with these issues and the many others that enter the coach's life are all part of the challenge of providing an environment that will be as conducive as possible to a great sport experience for young athletes.

Notes

[This section contains faint, illegible horizontal lines representing a notes area.]

References

- Baechle, T.R., ed., *Essentials of strength training and conditioning*. Champaign, IL: Human Kinetics, 1994.
- Berning, J.R., & Nelson Steen, S., *Sports nutrition for the 90's: The health professional's handbook*. Gaithersburg, MD: Aspen Publishers, Inc., 1991.
- Bloom, B.S., *Developing talent in young people*. New York, NY: Ballantine Books, 1985.
- Bompa, T.O., *Periodization of strength. The new wave in strength training*. Toronto, ON, CAN: Veritas Publishing Inc., 1993.
- Brookfield, S.D., *The skillful teacher*. San Francisco, CA: Jossey-Bass Publishers, 1990.
- Canadian Gymnastics Federation, *Coaching certification manual, Level 1. Introductory gymnastics*. Gloucester, ON, CAN: Canadian Gymnastics Federation, 1986.
- Chambers, S., "Factors affecting elementary school students' participation in sports." *Elementary School Journal [Special issue: Sports and physical education]*, May, 1991, 413-419.
- Clark, N., *Sports nutrition guidebook. Eating to fuel your active lifestyle (2nd ed.)*. Champaign, IL: Human Kinetics, 1997.
- Coakley, J.J., *Sport in society. Issues & controversies (5th ed., pp. 77-133)*. St. Louis, MO: Mosby, 1997.

References



- Coakley, J.J., *Sport in society. Issues & controversies (6th ed., pp. 116–143)*. Boston, MA: Irwin McGraw-Hill, 1998.
- Cox, R.H., *Sport psychology. Concepts and applications (3rd ed.)*. Dubuque, IA: WCB Brown & Benchmark, 1994.
- Depree, M., *Leadership is an art*. New York, NY: Dell, 1989.
- Eitzen, D.S., & Sage, G.H., *Sociology of North American sport (6th ed., pp. 57–80)*. Dubuque, IA: WCB Brown & Benchmark, 1997.
- Ewing, M.E., & Seefeldt, V., *Participation and attrition patterns in American agency-sponsored and interscholastic sports: An executive summary*. Preliminary report to the Athletic Footwear Council. North Palm Beach, FL: Sporting Goods Manufacturers Association, 1988.
- Fox, E., Bowers, R., & Foss, M., *The physiological basis for exercise and sport (5th ed.)*. Dubuque, IA: WCB Brown & Benchmark, 1993.
- Fox, K.R., *The physical self. From motivation to well-being*. Champaign, IL: Human Kinetics, 1997.
- Gough, R.W., *Character is everything. Promoting ethical excellence in sport*. Orlando, FL: Harcourt Brace & Company, 1995.
- Gough, R.W., *Character is everything. Promoting ethical excellence in sport*. Orlando, FL: Harcourt Brace College Publishers, 1997.
- Harrison, J.M., Blakemore, C.L., Buck, M.M., & Pellett, T.L., *Instructional strategies for secondary school physical education (4th ed.)*. Dubuque, IA: Brown & Benchmark, 1996.
- Hellison, D., *Teaching responsibility through physical activity*. Champaign, IL: Human Kinetics, 1995.

- Huber, R., "Sport and education: The effect of the coach's role on athletes' experiences." Unpublished term paper, KNES 453, Winter Semester, 1996. Sociology of sport. Faculty of Kinesiology, University of Calgary, AB, CAN, 1996.
- Jensen, P., *The inside edge. High performance through mental fitness.* Toronto, ON, CAN: Macmillan Canada, 1992.
- Jones, D.C., ed., *The spirit of teaching excellence.* Calgary, AB, CAN: Detselig Enterprises, Ltd., 1995.
- Kreider, R.B., Frey, A.C., & O'Toole, M.L., *Overtraining in sports.* Champaign, IL: Human Kinetics, 1998.
- Lautzenheiser, T., *The art of successful teaching: A blend of content and context.* Chicago, IL: Gia Publications, Inc., 1992.
- Light Shields, D.L., & Light Bredemeier, B.J., *Character development and physical activity.* Champaign, IL: Human Kinetics, 1995.
- Lumpkin, A., Stoll, S.K., & Beller, J.M., *Sport ethics. Applications for fair play.* St. Louis, MO: Mosby, 1994.
- Martens, R., *Successful coaching (2nd ed.).* Champaign, IL: Leisure Press, 1990.
- Maslow, A.H., "Self-actualizing people: A study of psychological health." *Personality Symposia*, 1, 1950, 11-34.
- McArdle, W.D., Katch, F.I., & Katch, V.L., *Exercise physiology. Energy, nutrition and human performance (4th ed.).* Baltimore, MD: Williams & Wilkins, 1996.
- McGuire, R.T. & Cook, D.L., "The influence of others and the decision to participate in youth sports." *Journal of Sport Behavior*, 6, 1983, 9-16.

References

- Mosston, M., and Ashworth, S., *Teaching physical education. Teaching styles (4th ed.)*. New York, NY: Macmillan College Publishing Company, 1994.
- National Association for Sport and Physical Education, *National standards for athletic coaches. Quality coaches. Quality sports*. Reston, VA, Dubuque, IA: Kendall/Hunt Publishing Company, 1995.
- National Eating Disorder Information Center, "Eating disorders: An overview." Toronto, ON, CAN: Toronto General Hospital, 1988a.
- National Eating Disorder Information Center, "Understanding and overcoming an eating disorder: Resource kit for those with anorexia nervosa or bulimia nervosa." Toronto, ON, CAN: Toronto General Hospital, 1988b.
- Orlich, D.C., Harder, R.J., Callahan, R.C., & Gibson, H.W., *Teaching strategies. A guide to better instruction (5th ed.)*. Boston, MA: Houghton Mifflin Company, 1998.
- Ringhofer, K.R., & Harding, M.E., *Coaches guide to drugs and sport*. Champaign, IL: Human Kinetics, 1996.
- Rowland, T. W., *Developmental exercise physiology*. Champaign, IL: Human Kinetics, 1996.
- Ryan, J., *Little girls in pretty boxes. The making or breaking of elite gymnasts and figure skaters*. New York, NY: Doubleday, 1995.
- Scanlan, T.K., *Playing On. Motivations for continued involvement in youth sport programs*. Los Angeles, CA: UCLA Sport Psychology Laboratory, 1990.
- Schloder Sublette, M.E., "Natural movement as the essence of man." *Journal of the Arizona Association of Health, Physical Education, and Recreation*. Spring 1974, 8–10, 20–21.

Schloder, M.E., Lecture material. *The body in socio-cultural studies*. KNES 240, Winter Semester, 1996. Faculty of Kinesiology, University of Calgary, AB, CAN, 1996a.

Schloder, M.E., Lecture material. *Sociology of sport*. KNES 453, Winter Semester, 1996. Faculty of Kinesiology, University of Calgary, AB, CAN, 1996b.

Schloder, M.E., Lecture material. *The body in socio-cultural studies*. KNES 240, Winter Semester, 1997. Faculty of Kinesiology, University of Calgary, AB, CAN, 1997a.

Schloder, M.E., Lecture material. *Sociology of sport*. KNES 453, Winter Semester, 1997. Faculty of Kinesiology, University of Calgary, AB, CAN, 1997b.

Schloder, M.E., Lecture material. *International perspectives of sport*. KNES 455, Fall Semester, 1997. Faculty of Kinesiology, University of Calgary, AB, CAN, 1997c.

Schloder, M.E., Kilb, B., McGavern, D., & Gramantik, L., Lecture material. *Foundations of coaching*. KNES 331, Winter Semester, 1997. Faculty of Kinesiology, University of Calgary, AB, CAN, 1997.

Schloder, M.E., Lecture material. *The body in socio-cultural studies*. KNES 240, Winter Semester, 1998. Faculty of Kinesiology, University of Calgary, AB, CAN, 1998a.

Schloder, M., Lecture material. Personal notes. National Coaching Certification Program, Coaching theory 1, 2, 3. Calgary, AB, CAN: 1998b.

Schloder, M., Lecture material. Personal notes. National Coaching Certification Program, Coaching theory swimming technical 1, 2, 3. Calgary, AB, CAN: 1998c.

References



Schloder, M., Lecture material. Personal notes. National Coaching Certification Program, Coaching theory gymnastics technical 1, 2. Calgary, AB, CAN: 1998d.

Schloder, M.E., Kilb, B., & Gramantik, L., Lecture material. *Foundations of coaching*. KNES 331, Winter Semester, 1998. Faculty of Kinesiology, University of Calgary, AB, CAN, 1998.

Secretan, L.H.K., *Reclaiming higher ground. Creating organizations that inspire the soul*. Toronto, ON, CAN: Macmillan Canada 1996.

Stern, H.P., Prince, M.T., Bradley, R.H., & Stroh, S.E., "Coaches' goals for young children in a recreational sports program." *Clinical Pediatrics*, 28, 1989, 277–281.

Stern, H.P., Bradley, R.H., Prince, M.T., & Stroh, S.E., "Young children in recreational sports: participation and motivation." *Clinical Pediatrics*, 29, 1990, 89–94.

Stier, Jr., W.F., *Successful coaching. Strategies and tactics*. Boston, MA: American Press, 1995.

Stoll, S.K., *Who says this is cheating? Anybody's sport ethics book*. Dubuque, IA: Kendall/Hunt Publishing Co., 1993.

Stoll, S.K., & Beller, J.M., *Summary of data on moral reasoning/moral development of athlete population*. Center of Ethics, University of Idaho, Moscow, ID, 1994a.

Stoll, S.K., Beller, J.M., & Durant, S.M., "A bill of rights for athletes: A novel idea or blasphemy." *For the Record*. June/July, 1993, 3.

Stoll, S.K., Beller, J.M., Reall, M., & Hahm, C.H., "*The importance of teaching methodology in moral education of sport population*." Paper presented to the Research Consortium of AAHPERD, Denver, CO. April 1994.

- Swimming/Natation Canada, *Coaching young swimmers. Level 1 technical*. Gloucester, ON, CAN: Swimming/Natation Canada, 1990.
- Swimming/Natation Canada, *Coaching adolescent swimmers. Level 2 technical*. Gloucester, ON, CAN: Swimming/Natation Canada, 1993.
- Taub, D.E., & Benson, R.A., "Weight control techniques, and eating disorders among adolescent competitive swimmers: The effect of gender." *Sociology of Sport Journal*, 9, 1992, 76–86.
- The Coaching Association of Canada, *Coaching theory, Level 1. National coaching certification program*. Gloucester, ON, CAN: The Coaching Association of Canada, 1988.
- The Coaching Association of Canada, *Coaching theory, Level 2. National coaching certification program*. Gloucester, ON, CAN: The Coaching Association of Canada, 1989.
- The Coaching Association of Canada, *Coaching theory, Level 3. National coaching certification program*. Gloucester, ON, CAN: The Coaching Association of Canada, 1990.
- The Coaching Association of Canada, *Coaching code of ethics. Principles and ethical standards*. Gloucester, ON, CAN: The Coaching Association of Canada, 1996a.
- The Coaching Association of Canada, *Straight talk about children and sport. Advice for parents, coaches, and teachers*. Gloucester, ON, CAN: The Coaching Association of Canada, 1996b.
- Thompson, J., *Positive coaching*. Dubuque, IA: Brown and Benchmark, 1993.
- Thompson, J., *Positive coaching. Building character and self-esteem through sports*. Portola Valley, CA: Warde Publishers, Inc., 1995.

References



Thompson, R.A., & Trattner Sherman, R., *Helping athletes with eating disorders*. Champaign, IL: Human Kinetics, 1993.

Van De Graaff, K.M., *Human anatomy (4th ed.)*. Dubuque, IA: WCB Brown Publishers, 1995.

Van Praagh, E., ed., *Pediatric anaerobic performance*. Champaign, IL: Human Kinetics, 1998.

Vernacchia, R.A., McGuire, R.T., & Cook, D.L., *Coaching mental excellence. It does matter whether you lose*. Portola Valley, CA: Warde Publishers, Inc., 1996.

Weinberg, R.S., & Gould, D., *Foundations of sport and exercise psychology (pp. 399–511)*. Champaign, IL: Human Kinetics, 1995.

Williams, M.H., *The ergogenics edge. Pushing the limits of sport performance*. Champaign, IL: Human Kinetics, 1998.

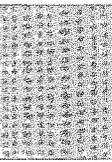
Wilmore, J.H., & Costill, D.L., *Physiology of sport and exercise*. Champaign, IL: Human Kinetics, 1994.

Wuthrich, K., "Eating disorders among elite female athletes in gymnastics." Unpublished term paper. KNES 453, Winter Semester, 1997. Sociology of Sport. Faculty of Kinesiology, University of Calgary, AB, CAN, 1997.

Yesalis, C.E., & Cowart, V.S., *The steroid game. An expert's inside look at anabolic steroid use in sports*. Champaign, IL: Human Kinetics, 1998.

Notes

[Faint, illegible text lines for notes]



Notes

[This section contains faint, illegible text lines, likely bleed-through from the reverse side of the page.]

Notes

[This section contains faint, illegible horizontal lines, likely representing a scanning artifact or bleed-through from the reverse side of the page.]



Notes

[The page contains approximately 20 horizontal lines of faint, illegible text, likely bleed-through from the reverse side of the paper.]

