Chapter 2

Foundations of Coaching Children

The Art and Science of Coaching

"The most important things that must be seen in youth soccer are those things that are unseen."
Dr. Ronald W. Quinn, Associate Professor, Xavier University

Is coaching an art or a science? With the rapid advances in sports technology, it could be a science. However, since it deals with children, youth coaching could be an art that only improves with experience.

Coaching is both an art and a science. All involved with coaching–whether volunteer or paid–and the administration of youth organizations should address player development from an educational training perspective. Rainer Martens, a noted youth sport researcher and author, stated that youth coaches exert great influence on young athletes, but fewer than 20 percent of these coaches have received any type of training to become a coach. If we are truly concerned with the positive development of children to become productive, compassionate and moral citizens through sports, then all should be adequately prepared to be a youth coach.

Whether paid or a volunteer, coaches are still involved with the same aged child. Children do not make any distinction between a "professional coach" or a "volunteer coach." Both coaches can have a profound influence on how a child views sport, physical activity, themselves and others. Jay Coakley, a noted sport sociologist, states:

"Coaching education programs will become more popular because of an effort to certify youth coaches as experts. This will be done to satisfy parents' demands for more professional approaches to youth sports and to minimize legal liability. Youth programs will emphasize sports development rather than recreation, and parents will become increasingly concerned about how their child's participation may pay off in the future—in scholarships and social acceptance. "

The Role and Importance of the Science of Coaching

Over the last 30 years, we have experienced an information explosion. Technology and science, our knowledge of physical training, growth and development, and instructional methods have dramatically improved during that time. We now know that it is dangerous to deny an athlete water during a training session, and certain stretches such as the "hurdlers stretch," place unnecessary stress on the knee.

Children who specialize in one sport too early are more prone to overuse injuries and burnout. "Military" style coaching is no longer appropriate for youth soccer. Unfortunately, this information is not common knowledge within youth organizations. Many coaches still deny children water, many have them run laps as punishment, and many run a practice like a drill sergeant, ignoring the creativity and energy that children bring to the sport. It is important that coaches seek out current information on child development by attending clinics, going to the library, and/or searching the internet.

The Role and Importance of the Art of Coaching

The art of coaching is difficult to describe because it can't be measured by quantitative data in a society that is most interested in measurement. Our educational system is based on proficiency tests, SAT/ACT scores and teaching to the curriculum. To place value on something that is difficult to measure faces much resistance. Still, the importance of interpersonal skills, developing a healthy team climate, imparting a moral and value-based coaching approach is gaining strength as an integral part of the youth soccer experience. This qualitative approach can be measured and for our purpose can be viewed as good art–you know it when you see it. A good coach who is actively practicing the craft of coaching is easily identified. The players will be active, coaches are teaching, players are learning and everyone is having fun.

The quality of player/coach interaction, the development of player self-esteem and self-confidence, and introducing children to sport as a life long pursuit with strong moral values are the primary objectives of youth soccer in America. Developing winning teams or pursuing sport for future economic gains creates very few winners and countless losers.

Ron Quinn states, "The needs of the child, while playing soccer, should be placed above the needs, convenience and self-interest of the adults. True player development focuses on the development of the player, not the development of the team! Up to age 12, this should be the only criteria used in designing and running (youth soccer) programs.

Child-Centered Coaching

Richard Schmidt, a motor learning and motor development expert, developed a schema theory (1975, 2000), which suggests that children up to age 14 should experience a wide range of movement in early life to aid in solving future movement challenges. "When people practice a number of specific throwing distances, they learn something that allows them to generalize this experience to the performance of many throwing distances."

Child-centered coaching places a high priority on the total development of the young athlete. The early specialization of sport skills has a limiting effect on child development. Sport skills require specific motor patterns and a child should be exposed to a wide range of movement experiences early in life. A great basketball player doesn't necessarily have the skills to be a great baseball player at early ages. Does the name Michael Jordan ring a bell?

When developing youth soccer players, apply the schema theory by presenting a wide range of movement activities and challenges during practices.

The three learning domains described below provide a conceptual framework to guide us in the design of developmentally appropriate games and practices.

Psychomotor (Physical)

Children grow at different rates. Balance, center of gravity, length of limbs, body mass, and gross and fine motor control all play a part in a child's ability to move effectively. Within the same age group, some are shorter or taller than others, some have better balance, and others fall down quite often. As a result, we cannot pass false judgement on a child whose development is a little slower than the rest of the team.

Activities should be designed in which players are provided the opportunity to practice a wide range of locomotor movements (running, skipping, hoping, galloping, leaping, etc.), nonlocomotor movements (bending, pulling, twisting, pushing, etc.) and other movement components such as balance, change of direction, strength, and cardiovascular endurance.

Cognitive (Thinking & Learning)

Knowledge gained from studying early learning theories can be used to help plan effective experiences for youth sport beginners. It is equally important to understand how a child thinks; how they perceive and understand their surroundings and the world. Experience and challenging the mind become the two most important characteristics of learning and future performance.

The authors have introduced the work of various cognitive theorists such as Jean Piaget, Eric Erikson, Lawrence Kohlberg, and Albert Bandura in an attempt to bridge the gap between theory and practice. If we understand how the child thinks, or their stage of development, then perhaps we can better understand the child.

Psychosocial (Psychological & Sociological)

It has already been mentioned that nothing good happens in isolation when learning sport skills. We cannot teach dribbling without creating an interest and desire to dribble. Force-feeding skill development through drills does not work! There is a great tendency to underestimate the importance and role that emotion, feelings and motivation play during the youth soccer experience. Young children don't pass the ball to a teammate in the best position to receive it; they pass to their best friend. Why? Because most tactical decisions don't

Piaget's Cognitive Development Theory

Jean Piaget (1896-1980) is credited with forging the single most comprehensive theory of intellectual development. He discovered early in life an interest for studying children and in particular how they responded to questions and how they reasoned answers. He determined that children think in entirely different ways than adults. He spent countless hours observing children's spontaneous activities. His attempt was to learn from the children themselves. He primarily interviewed and observed children between the ages of four and twelve.

Piaget recognized that children pass through "stages" of development at different rates (periods) and attached little importance to the ages associated with each stage. He did believe that children moved through these stages in the same order. He did not think that these stages are genetically determined. They represent increasingly comprehensive ways of thinking. He felt that children were constantly exploring, manipulating, and trying to make sense out of the environment and were actually constructing new ways to deal with it (Kohlberg, 1968).

Piaget developed a four-stage approach that is often referred to as The General Periods of Development. According to Piaget, development is not governed by internal maturation or external teachings; it is an "active construction process," in which children, through their own activities, build increasingly differentiated and comprehensive cognitive structures (Crain, 2000). For the purposes of youth soccer, parents and coaches have to provide an environment in which children can participate independently and with their peers at constructing their own soccer environment.

Stage Summary

Sensory Motor (0-2): Learning through senses and early development of language.

Preoperational (2-7): Early childhood, very egocentric, highly imaginative.

Concrete Operational (7-11): Development of rule structure, cooperative play and development of friendships.

Formal Operational (11+): Abstract thought and expanded social groups.

exist and they are most concerned with sharing the ball with a few of their best buddies. If we recognize this, then we can work within it and create activities in which players get to know each other better.

Principles of Coaching

The principles of youth coaching are guidelines developed as a foundation or a sounding board to assess the appropriateness of an activity or training session. The following six principles are presented so that youth players receive a healthy and positive youth soccer experience.

- ***Developmentally Appropriate.*** This challenges the coach to examine the appropriateness of the activity. The requirements or demands of the activity should fall within the range of a players' abilities. Examples include: Attempting to teach a wall-pass to U8's when they cannot think in advance of the ball or asking a U6 player to stay in a specific position when their spatial awareness is limited and possess a strong desire to chase the ball.
- ***Clear, Concise and Correct Information.*** How instructions are given is crucial when dealing with young children. Too much information overwhelms them and too little information doesn't give them enough to get started. Provide enough information to get them started and then add new challenges.
- ***Simple to Complex.*** Are the activities presented in a way that allows for ongoing modifications and new challenges to meet the players interests and abilities?
- ***Safe and Appropriate Training Area.*** The area should be free of hazardous materials (e.g., glass, stones, branches, holes, etc.) and be safe from traffic or other environmental dangers. The training environment should be psychologically safe. Does the child feel emotionally secure? Is the fear of failure reduced? Can the child take creative risks without the fear of admonishment from the coach?
- ***Decision Making.*** Are there opportunities for the players to make decisions? Decisions may be spatial (where to run or pass), temporal (when do I pass or run), or kinesthetic (how do I handle the ball)? These need to be present in all activities for learning to occur. Remember that learning is not efficient and that effective learning may be the result of inefficient trials.
- ***Implications for the Game.*** The activities presented in a training session must in some way reflect the demands a player faces in the game. The younger the player the less clear this may seem, while the older the player (i.e. 10 or older), the more clear it will become. However, the implications for the game are even

more important for the younger players. The coach at this level is providing the foundational movement and thinking skills that will enable the player to later solve more complex problems.

Eliminating lines, laps and lectures

This was to be included as a principle of coaching, but we decided that its importance warranted its placement here: Eliminating lines, laps and lectures means:

a) having players stand in lines waiting for their turn generally indicates an inappropriate activity. If players are standing and not moving the activity will not keep their interest;

b) running laps, especially without a ball, is a waste of time. All practice activities should take place on the field, preferably with a ball;

c) lectures should be left for the classroom. Children come to practice to be active and participate, not to be talked to for extended periods of time.

Often, coaches design activities that focus on determining a winner. These activities typically involve elements that lead to players being eliminated from the activity. Those eliminated first are players who usually need the most work on technique and decision-making. Design activities that keep all players engaged throughout the length of the activity. Eliminate elimination games!!

Punishment

The use of physical activity such as laps, push-ups, sit-ups etc., as punishment for misbehavior is an inappropriate method of discipline. Players will come to believe that physical training is actually a form of punishment. Players need to understand the importance of fitness and making them run when there is a behavior problem is counter to what you what to develop. When the consequences warrant, short-term exclusion from the activity will often get a positive result.

Game/Activity Classifications

Game/activities are organized into three separate categories. It is important for coaches to select game/activities from each category that are age group appropriate. The categories are:

Body Awareness — activities that emphasize the use of body parts, motion, coordination, balance with and without the ball.

Target Games — activities that involve solving the objective by going from "point A to B." In contrast to Maze Games, these activities are more directionally defined and can be done both with and without the ball.
Maze Games — activities in which the player has the opportunity to move in a 360º or circle environment with and without the ball. Even though the area is defined, it does not necessarily have a specific target or boundary to go to. These activities allow the players to make decisions while moving in all directions.

There are times when the concepts of each of these three types of activities may be utilized in a single activity.

Drills versus Game/Activities

Drills are generally an absence of thought. An individual repeats the same movement or patterns exactly the same way each time. This approach with regard to youth soccer has several limitations.

During a soccer game the environment is constantly changing, therefore activities must also reflect this ever changing competitive environment. Children are drawn to games and activities like opposite poles of a magnet, whereas drills repel them and decrease their interest. A game/activity approach creates an environment that allows technique, tactics, fitness and creativity to develop in harmony. Below is a simple illustration of the differences between "Drills" and "Game/Activities." Which do you think best fits the developmental needs of children?

Learning Through Game/Activities

Characteristics of Drills	Characteristics of Game/Activities
Static	Dynamic
Military	Organized but unstructured
Lines	Free Movement
Boring	Fun
No Thought	Decision Making
Age Inappropriate	Age Appropriate

The embedded method of teaching physical skills or games involves a brief introduction and demonstration, a warm-up and stretching period, organization of instructional groups, practicing and repeating specific sport techniques, intermittent verbal cues or demonstration, and concludes with "the game." This approach, although efficient from an organizational perspective, may not be the most effective. What has been lacking are the opportunities for players to practice the various techniques in the context of the actual game.

Team sports present a dynamic and unpredictable environment. To isolate specific techniques is unwise since technique is useless without the dynamics of time, space, decision making, and teammate/opponent movements.

This is where the article "Teaching Games for Understanding," (TGFU) approach (Turner & Martinek, 1995) is gaining importance in academic literature. This approach works on the premise that nothing happens in isolation. It teaches that technique cannot be learned without incorporating decision making, without considering the emotional and motivational state, and without creating an environment that mirrors the physical demands of the game. If learning a skill is not enjoyable and if it does not feature lots of movement, the players will stop participating before they get to the game. If learning occurred in a static environment, do the players possess the understanding to make game decisions? That would be unlikely.

The game/activity approach is a dynamic instructional method that allows the participant to fully experience the sport. It is not the "just let them play," approach. Proper technical execution is not important. Technique will improve with practice and experience. Children need to make decisions, exert themselves physically, perform technical skills and, most importantly, have fun. The game/activities presented in this manual and in the recommended books employ a coaching method in which the emotional, physical and mental aspects are addressed. The checklist below provides a measuring stick to evaluate practice activities.

Game/Activity Checklist

- Are the activities fun? Are they enjoyable to perform and will it keep their interest?

- Are the activities organized? Are the objectives clear? It doesn't need to be highly structured or without any rules, but the purpose and guidelines of the activity need to be understood.

- Are the players involved in the activities? Is there maximum participation of all players, or are some more active than others?

- Is creativity and decision making being used? Are their decisions to move or employ a particular skill ever changing, or are they just repeating the same movement without thinking?
- Is the space appropriate for the age group and number of players? If they can effectively move without colliding into each other as well as not becoming too exhausted from trying to cover too much ground, it is probably a sufficient area. Is the space allowing for the objectives of the activity to be realized?

- Is the coach's feedback appropriate? For younger players, feedback should be positive and frequent. Players up to around age nine view effort and ability as synonymous. If they try hard, they believe they are really good. Coaches should try to combine feedback with the player's first name. It leads to a more personalized approach and players tend to focus on the feedback better.

- What are the implications for the game? Are the objectives of the activity related to the demands they will face in a game? The younger the child, the broader and less clear the activity objectives may appear in relation to the game. But a closer examination may reveal key building blocks. These blocks may be in any one or all three of the learning domains (psychomotor, cognitive, and psychosocial).

Summary

Coaching is a very complex and complicated activity. We need to take it much more seriously and recognize the important role of the coach. A passage on readiness in Zorba the Greek by Kazantzakis seems appropriate to conclude this section.

"I remember one morning when I discovered a cocoon in the bark of a tree, just as a butterfly was making a hole in its case and preparing to come out. I waited a while, but it was too long appearing and I was impatient. I bent over it and breathed on it to warm it. I warmed it as quickly as I could and the miracle began to happen before my eyes, faster than life. The case opened, the butterfly started slowly crawling out and I shall never forget my horror when I saw how its wings were folded and crumpled; the wretched butterfly tried with its whole trembling body to unfold them. Bending over it, I tried to help with my breath. In vain.

It needed to be hatched out patiently and the unfolding of the wings should be a gradual process in the sun. Now it was too late. My breath had

forced the butterfly to appear all crumpled before its time. It struggled desperately and, a few seconds later, died in the palm of my hand. That little body is, I do believe, the greatest weight I have on my conscience. For I realize today that it is a mortal sin to violate the great laws of nature. We should not hurry, we should not be impatient, but we should confidently obey the eternal rhythm."

Can we really afford to disrupt the great laws of nature and create an environment in which youth players have not had the developmental time to adequately prepare? Shouldn't we blend the science and art of coaching so that our young people view sport as a healthy, life long pursuit?