USA Volleyball has developed, and is continuing to refine, a continuum of six Athlete Development Phases based on the chronological, volleyball and training ages of players. Each of these stages includes athlete competencies in the areas of Physical Skill, Strength & Conditioning, Mental or Cognitive, Emotional, Experiential, and Maturational development, which will help guide both athletes and their coaches through the process of training for volleyball. Corresponding Coach Competency guidelines have also been developed.

The Athlete Competency Handbook is available in synopsis form on the web site, or may be purchased in booklet form from USA Volleyball.
From the 2000 National Seminar: Critical Thinking on Athleticism and Volleyball Athlete Development

This is a partial list of the most important information resulting from the USA Volleyball 2000 National Seminar on Athleticism and Volleyball Athletes. The complete list of findings may be found on the web site’s Education pages at www.usavolleyball.org.

What we KNOW:

- How to play volleyball.
- Motor learning principles have been established that frame motor behavior.
- Best methods for learning techniques/skills have also been established.
- Children learn differently than adults.
- Children need many repetitions in context with short duration practices.
- An emphasis on agility, balance, coordination and speed abilities is highly important in early development for future success.
- Long-term training is essential to athletic success.
- We need more user friendly, easily understood resources on athlete development.

What we THINK WE KNOW:

- Effective methods of teaching volleyball skills.
- The influences of strength and speed training.
- Fundamental movement skills must be the primary emphasis during childhood years.
- High quality physical education programs are vital for proper teaching of basic movement skills.
- An American educational system that provides children with more “volume” (frequent repetitions with low intensity) in basic movement skills is invaluable for athletic development.
- There are not enough developmentally appropriate experiences for children emerging as talented athletes.

What we DO NOT KNOW:

- If general athletic ability really does exist.
- If men’s and women’s/girl’s and boy’s teams should practice differently.
- Exactly how to integrate the 5 S’s (Stamina, Speed, Strength, Skill and Suppleness) into an effective training program.
- If increasing fitness makes a better volleyball player- research in other sports shows that fitness contributes to their performance (long jumpers, weight lifters, etc.). However, we DO know that:
  — Fitness and conditioning are two different terms.
  — Cannot use the same model at all levels of athletes from elite down to beginners.
  — It is critical to have a level of fitness specific to the sport.
  — Time needed for sport skill development cannot be replace with fitness development time.
  — Minimum levels of fitness for success in volleyball must be defined.
- The professional and preparation background of youth coaches who have a vitally important role in an athlete’s opportunity for enjoyment and success (no nationwide or worldwide standards for coach education and preparation).

What we NEED TO KNOW:

- How to develop athletes optimally under less than optimal circumstances (insufficient time).
- How to optimally develop athletes when they have not had proper early fundamental training.
- If it is possible to develop players to perform their best and still “win” weekend matches.
- Coaches need to know what other specialists in their fields know, that would contribute to our program (weight lifting coaches, athletic trainers, psychologists, etc.).
- How to get younger athletes educated and experienced in basic movement foundations leading to the ability to physically train.

Athlete and Coach Competencies
Sample Characteristics of Athlete Development

This information based partly on Dr. Istvan Balyi’s 4 Stage model of Long Term Player Development for Volleyball and the USAV/CAP 2000 Critical Thinking Seminar on Athleticism & Volleyball Athlete Development.

**FUN with FUNdamentals Phase**

(zero volleyball experience and generally 8-10 years old)

**General Recommendations**

1. **FUN and participation are most important.**
2. Introduce simple tactics and develop speed, power and endurance through FUN and games.
3. Proper running, jumping and throwing techniques along with the ABC’S (agility, balance, coordination, speed) of athleticism should be developed.
4. Strength should be developed using medicine balls, Swiss balls and own body weight exercises.
5. Introduce mental training techniques.
6. Introduce kids to all volleyball positions.
7. Play lots of modified games.
8. Encourage participation in other sports.
9. Generally provide 3 training sessions for every 1 competition.
10. Generally, practice sessions should be about 60 minutes long.
11. Provide up to 4-6 general/fitness training sessions (ABC’S) per week.
12. Provide 2 volleyball specific training sessions per week, with participation in other sports.

**Physical Characteristics & Implications for Coaches**

1. Large muscle groups are more developed than smaller ones, so children are skillful in movements using large muscle groups. This means that general/basic skills should be developed in this phase.
2. The heart and lungs are still developing, but endurance levels are more than adequate - children are little aerobic machines! This means that endurance can be developed through playing short games (because of short attention span).
3. Joints & ligaments are getting stronger, but the ends of bones are susceptible to stress or heavy pressure injury. This means that strength training should be confined to progressive hopping & bounding, own body weight and light medicine ball activity.
4. Motor patterns become refined, resulting in greater speed, agility, balance, coordination and flexibility gains. This means that games and activities must emphasize coordination, kinesthetic sense, gymnastics and athletic field events.
5. Girls develop coordination skills faster than boys, but generally there are no other differences. Kids can train and play together.

**Mental/Cognitive Characteristics & Implications for Coaches**

1. Attention spans are short, so young players cannot sit and listen for long periods of time. Kids want to move and participate. This means that coaches should use short, clear, simple instructions and get them moving.
2. Kids have very limited reasoning ability and are generally leader-oriented - they love to be led! Coaches must use a “follow me” or “follow the leader” approach and plan well for fun activities.
3. Kids enjoy repetitious activities; these activities also help improve abilities greatly. Coaches need to provide correct demonstrations of the basic skills needed at this level and let them try it - over & over again!
4. Imaginations are blossoming, so encourage experimentation & creativity. This means that coaches need to encourage input from the kids - they love to try new things!

**Emotional Characteristics & Implications for Coaches**

1. Self concepts are developing through experience and comments from others, so children tend to view themselves as a “good person if I do well” or a “bad person if I do poorly”. Coaches must supply lots of positive reinforcement to motivate kids to continue.
2. Kids like to be the center of attention, but when a situation becomes threatening, they quickly lose confidence. Coaches need to select activities, progressing from simple to complex, where success is virtually guaranteed.
3. Peers have a strong influence and acceptance into the group often depends on one’s abilities. This means coaches must supply a variety of practice opportunities for technical and tactical development & improvement.
4. Kids begin to understand rules & structure, so can understand & play simple games with simple rules. They will question rules and expect thoughtful answers. Coaches must emphasize fun and participation rather than winning!
Sample Characteristics of Athlete Development

**Learning to Train**
(3-6 years volleyball experience and generally 11-13 years old)

**& Training to Perform Phases**
(6-9 years volleyball experience and generally 14-16 years old)

**General Recommendations**
1. Emphasize general physical conditioning and FUNdamental technical skills progressing toward more specific skills.
2. Teach the FUNdamentals tactics.
3. Encourage participation in complementary sports with similar movement patterns.
4. Begin individualizing fitness and technical training and continue training for all positions.
5. Generally provide 5 training sessions for every 1 competition.
6. Generally, practice sessions should be about 60-120 minutes long.
7. Provide up to 2-4 general/fitness training sessions (strength, agility, balance, coordination, speed) per week.
8. Provide 4-5 volleyball specific training sessions per week, with participation in other sports.

**Physical Characteristics & Implications for Coaches**
1. Bones, muscles & tissues are growing and may appear as sudden growth spurts. This means that skills & performance may be affected and coaches must individualize training activity.
2. Girls begin their growth spurts between ages 12.5-14 and boys between 12.5-15, so early in these phases girls may be faster & stronger, but later boys overcome and pass the girls. This means that age may not be the best way to group players.
3. Smaller muscle groups are becoming more developed & speed, agility and coordination are improving rapidly. This means that all basic skills are able to be mastered and players should learn how to physically, technically and tactically train.
4. Arms & legs will grow faster than the body, which means changes in center of gravity, limb length and core strength will determine training content. Some of the already learned skills may have to be refined or re-learned.
5. The central nervous system is almost fully developed, so agility, balance & coordination are fully trainable. Coaches should use the warm up period to further this development.

**Mental Characteristics & Implications for Coaches**
1. Kids are capable of abstract thinking and are able to handle decision making through complex technical training. Coaches should base the decision making experiences on the skill level of the player.
2. Much emphasis is placed on self identity, which may result in the strong fear of failure. Coaches need to create an optimum learning environment, matching skill & drill levels, and introduce simple coping strategies & mental imagery.
3. Players are eager to perfect their skills, so lots of individual, specific direction is needed along with a variety of methods to measure success. This means coaches must positively reinforce with ALL players, not just those who show the greatest early development. Coaches must be able to demonstrate specific skills and supply additional images on video or other visual material.

**Emotional Characteristics & Implications for Coaches**
1. Peers are tremendous influences. They create & reinforce values & attitudes. The coach should supply strong direction & supervision, and be a role model.
2. Ability to cooperate and accept responsibility increases, but some players may not want to accept responsibility due to fear of failure. Coaches need to keep open lines of communication.
3. General tension between adults & teens exists, so open communication from adults is that much more important. Coaches are generally better accepted than other adults and should involve kids in the team decision making process.
4. Physical, mental and emotional maturity do not always develop at the same rate & feelings of confusion or anxiety are common. This means a coach’s communication skills and understanding are important to curb exaggerated or unacceptable behavior.
5. There is a desire to have friends of the opposite sex and social activities are important. Coaches should plan coeducational activities.

**Sample Characteristics of Athlete Development**

**Learning to Train**
(3-6 years volleyball experience and generally 11-13 years old)

**& Training to Perform Phases**
(6-9 years volleyball experience and generally 14-16 years old)

**General Recommendations**
1. Emphasize general physical conditioning and FUNdamental technical skills progressing toward more specific skills.
2. Teach the FUNdamentals tactics.
3. Encourage participation in complementary sports with similar movement patterns.
4. Begin individualizing fitness and technical training and continue training for all positions.
5. Generally provide 5 training sessions for every 1 competition.
6. Generally, practice sessions should be about 60-120 minutes long.
7. Provide up to 2-4 general/fitness training sessions (strength, agility, balance, coordination, speed) per week.
8. Provide 4-5 volleyball specific training sessions per week, with participation in other sports.

**Physical Characteristics & Implications for Coaches**
1. Bones, muscles & tissues are growing and may appear as sudden growth spurts. This means that skills & performance may be affected and coaches must individualize training activity.
2. Girls begin their growth spurts between ages 12.5-14 and boys between 12.5-15, so early in these phases girls may be faster & stronger, but later boys overcome and pass the girls. This means that age may not be the best way to group players.
3. Smaller muscle groups are becoming more developed & speed, agility and coordination are improving rapidly. This means that all basic skills are able to be mastered and players should learn how to physically, technically and tactically train.
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4. Physical, mental and emotional maturity do not always develop at the same rate & feelings of confusion or anxiety are common. This means a coach’s communication skills and understanding are important to curb exaggerated or unacceptable behavior.
5. There is a desire to have friends of the opposite sex and social activities are important. Coaches should plan coeducational activities.
Sample Characteristics of Athlete Development

Performing to Compete Phase
(9-12 years volleyball experience and generally 17-19 years old)

General Recommendations
1. Begin sport-specific and individual-specific physical conditioning.
2. Begin sport-specific technical and playing skills in competitive conditions.
3. Begin advanced tactical training.
4. Individualize the technical-tactical skill training.
5. Begin social and team dynamics training.
6. Train for position-specific fitness, techniques and tactics.
7. Generally provide 6-9 training sessions for every 1 competition.
8. Generally, practice sessions should be about 60-150 minutes long.
9. Provide up to 4-6 general/fitness training sessions (agility, balance, coordination, speed) per week.
10. Provide 6-9 volleyball specific technical, tactical and fitness training sessions per week.

Physical Characteristics & Implications for Coaches
1. Circulatory and respiratory systems reach maturity and are capable of maximum output. This means players can be maximally aerobically and anaerobically trained specifically to volleyball.
2. Increases in height & weight gradually lessen and the muscular system stabilizes. Muscles have grown to mature size but strength continues to increase until the late twenties. This means that strength training can be maximized.
3. The skeleton continues to mature and connective tissues are still strengthening. This means that progressive overload in training should be continued.
4. By age 17, girls have reached adult proportions and generally gain more weight, but boys do not until several years later. This means that aerobic training for girls should be optimized and coaches should be aware of the weight gain issue and its impact on physique. Players need to learn to compete in all aspects of training.

Mental Characteristics & Implications for Coaches
1. By age 16 the brain has reached adult size but continues to mature neurologically for several more years. Players can now cope with multiple strategies and tactics. Coaches should ensure refinement of all technical and tactical skills.
2. Critical Thinking skills are developing as is the capacity for self analysis and correction. This means that coaches should encourage the further development of decision making through the technical and tactical training.

Emotional Characteristics & Implications for Coaches
1. Peer group influence is still strong, but independent decision making and leadership skills are becoming more developed. Coaches should give players opportunities to develop leadership or responsible roles on the team (captain, athlete representative, warm up leaders, etc.), yet maintain strong direction & discipline.
2. Players are searching for a stable, balanced self image, and this is still influenced by successes and failures. Coaches must teach more coping techniques, and continue to give positive reinforcement and evaluation of performance.
3. Activities and interaction with the opposite sex plays a strong role. Male players need to understand female athletes’ concerns about femininity vs. sport development, and female players must understand that male athletes often relate performance to masculinity. Coaches must address and deal with these issues through education.
Sample Characteristics of Athlete Development

**Competing to Win**
(12-15 years volleyball experience and generally 20-24 years old)

**& Winning World Class Competitions Phases**
(15+ years volleyball experience and generally 25 years and older)

**General Recommendations**
1. Train to maintain (or improve) all physical capacities.
2. Further develop all technical, tactical and playing skills.
3. Athletes model all aspects of training and performance.
4. Provide frequent time off for rest & recovery.
5. Individualize all aspects of training.
6. Fine tune position-specific training & capabilities.
7. Generally provide 6-12 training sessions for every 1 competition.
8. Generally, practice sessions should be about 60-180 minutes long.
9. Provide up to 3-6 general/fitness training sessions (strength, agility, balance, coordination, speed) per week.
10. Provide 9-15 volleyball specific technical, tactical and fitness training sessions per week.

**Physical Characteristics & Implications for Coaches**
1. The body reaches maturity and all physical systems are fully trainable. Coaches must employ advanced techniques and sport science information for maximum training effect and minimal injury. Coaches must ensure that all muscle groups and body alignments are well balanced and optimum flexibility exists. Testing and monitoring should be included and over training/over stress should be monitored carefully.
2. For females, the skeleton matures by about age 19-20 and for males about three years later. Begin regular medical monitoring.

**Mental Characteristics & Implications for Coaches**
1. Brain activity matures by about 19-20 years of age and players are capable of self analyzing, correcting and refining skills, as well as analyzing and conceptualizing the game of volleyball. For coaches & athletes, winning becomes the major objective.
2. Athletes understand and accept rules, regulations and structure, but must also perceive the rules as being clearly defined and fair. Coaches must involve the athletes in decision making and planning of team activities.

**Emotional Characteristics & Implications for Coaches**
1. Athletes feel a need to be self directed and independent. They are ready to assume responsibility and accept the consequences of their actions. Coaches must emphasize goal setting to give the athletes direction and purpose in their training program.
2. Self actualization and self expression are important to athletes and they must be treated as adults, with respect. Coaches still need to provide direction and structure.
3. Major decisions may be made and careers, education and lifestyle may be priorities at some point in these last phases. There may be major changes in interests, hobbies and physical activities. Coaches should make professional guidance available to the athletes to help with these decisions.
4. Interaction with the opposite sex is still a strong priority and lasting friendships develop. Coaches must understand that athletes need ample time for independent social interaction.

**Athlete and Coach Competencies**