



Summaries/Recommendations May 25, 2013 Forum in Los Angeles

The Santa Monica Sports Medicine Foundation (SMSMF) and Play Soccer Nonprofit International (PSNI) organized a Forum on May 25, 2013 to discuss the rationale for incorporating health and social skills and other medical and physical education content into coaching education curriculum for children and youth. The Forum was hosted by the LA84 Foundation. The purpose of the Forum was to identify and address important content not usually included in coaching education and to broaden knowledge and understanding as to why and how this content should be included. It brought together experts and professionals from the fields of medicine, public health, sports science, coaching and other relevant fields to present and explore how to use sport and coaching education for this purpose. Though the focus was particularly on soccer, the discussion was relevant to all sports and coaching education. The Forum was an initial working session, an opportunity to share and introduce ideas, and to exchange suggestions and positive critiques.

The summaries below are drawn from the presentations and advice of the presenters. Each topic is broken down into a general summary of the content, key points and recommendations made by the presenter. Full presentations are available online in the Dropbox folder (link has been circulated).

Introduction

Dr. Bert Mandelbaum, *Director Research MLB; FIFA Medical Committee; F-MARC Member; Team Physician US Soccer, LA Galaxu, Chivas USA; Pepperdine University*

How Did Soccer Become THE Most Popular Sport In the World?

Summary:

Soccer has 300,000,000 players in 207 countries. Looking at the Khoi San bushman of 50,000 years ago, we can conclude that we are genetically hardwired to be pursuit hunters, which took about 90 minutes. Ancient philosophers even mentioned exercise as essential to good health. Here are the 11 reasons why soccer is so common:

1. The British created the first football association and then spread their culture throughout the world under the British Empire, including spreading the game.
2. The game involves passion which is shared amongst children and their families.
3. All can participate regardless of size, age and ability.
4. The sport has many well-recognized star athletes
5. There are great offshoots, including beach soccer, foot volley and 5 a side.
6. The sport has great media and corporate support
7. There are great traditional rivalries, regionally and globally, that transcend socioeconomic, religious and cultural boundaries; as evidenced by the Olympics
8. The women's game is growing
9. The family engagement through soccer; the soccer moms, dads and kids
10. Football empowers politics, economics and social development

11. The World Cup – In 2010, the World Cup brought pride to South Africa as well as the African continent.

Key Points/Recommendations:

- The game is the same regardless of race, ethnicity, place of birth or residence
- The smiles, cries, laughs and disappointments are the same everywhere
- Soccer helps understand similarities, but also embrace differences
- The victorious spirit is primal and universally motivating
- Soccer transcends victory and defeat
- The sports illustrates the intense human drama and thin line between victory and defeat
- Soccer highlights imperfections and displays perfections too
- Victory speaks when there is no common language
- Soccer is the WORLD’S game

**1. David DeLeon, *President of the California South Soccer Foundation*
Building a Healthy Community Through Sport**

Summary:

When building a healthy individual we need to consider building the mind and the body. The most basic needs for all children are living in a healthy home, eating healthy, educating the mind and having a home not threatened by crime or poverty. The reality is that kids are faced with many of these challenges.

We need to identify three platforms to communicate messages in order to influence positive community change (city programs, faith based groups, schools). Working together and forming a partnership is crucial. Commitment to developing these relationships can begin to influence a change in the sub-culture of community engagement.

Key Points/Recommendations:

- Three groups which can collectively communicate messages: City programs, faith-based groups, schools.
- Three components to partnerships: They must be a willing participant, must be good communicator, must be able to define their role.

**2. Maria Stefan, *Senior Advisor for Global Strategic Partnerships, American College of Sport Medicine*
Importance of Physical Activity for Health and Social Well-being and as Preventative Medicine**

Through engagement in physical activity, children grow physically, mentally, socially, and emotionally. A toxic combination of recessionary economics and impacts from rapid urbanization and 21st century lifestyles, however, over the past two decades, are causing a physical inactivity epidemic, where kids today are projected to have a shorter life expectancy than their parents, by up to 5 years. The effects of a “world that has stopped moving” are now troubling too many children’s lives. In fewer than two generations, physical activity in the USA declined 32% and is on track for a nearly 50% drop by 2030, according to *Designed To Move, A Physical Activity Agenda*, co-authored by ACSM, Nike, and the International Council for Sport Science and Physical Education. As a result, we are seeing growing rates of obesity, heart disease, diabetes, increased social and mental health disorders, like bullying and violence, and deficient school performance, as some of the resulting impacts. Youth sports is a societal investment opportunity with far-reaching benefits unlike any other, in helping our nation reverse the inactivity and obesity crisis, promote social integration, and be an enabling support for increasing their human potential. As the issues are so complex that no one policy or institution can cope effectively or solve sets of interlocked issues unilaterally, program providers, coaches and parents involved in

youth sports have a unique role to play in helping reverse the epidemic of physical inactivity that impacts our children, developmentally, economically, and socially.

We invite you to join a growing coalition of physical activity, physical education, sport and fitness champions around a shared vision, common messages, and series of best practices that put the child at the center. Youth sports programs that promote universal access, age-appropriate movement activities with appropriate dosage and duration baselines, fun, and feedback loops among coaches, parents, and athletes, are critical to:

- Creating early positive experiences for children in sports and physical activity, and,
- Integrating physical activity into everyday life

Designed to Move is the framework/call to action for a new “normal.” Focusing on kids under the age of 10 is the pivot point that can help effect a positive change in their growth trajectory, promote lifelong physical activity, and health and well-being across the life course. If exercise and physical activity were a wonder drug, it would be a blockbuster, hitting all the headlines. Doctors assessing physical activity status in every patient visit and prescribing sports and physical activity as medicine. should be a vital part of our standard of care and insurance benefit systems. We must align strategies and combine resources to show physical activity for the effective and cost-affordable investment opportunity that it is!

Key Points/Recommendations:

- We need to put “health” at the center of our youth sports programs by ensuring they meet standard baselines that create early positive experiences for children, especially those aged 10 and under.
- The physical activity, active play, physical education, and youth sports community need to align around common messages, strategies and resources that shows physical activity for the investment impact it has - politically, economically, socially, environmentally, and developmentally.
- Example Programs: Designed to Move (www.designedtomove.org) and Exercise is Medicine (www.exerciseismedicine.org).

3. Dr. Jill McNitt-Gray, USC, Biomechanics Lab Fundamental Whole Body Mechanics

Summary:

The Soccer Project takes what is being learned with elite athletes and brings it back down to the grassroots level and puts the information in the hands of volunteer youth coaches. A free toolkit has been developed online for coaching education. This toolkit integrates physical preparation into coaching education so children can learn how to control their own body in relation to the ball and other players. It involves all the FUNdamentals and additional physical preparation (core strength). The toolkit follows a progressive quality of practice, relative to the level of play and age of the children.

The coaching focus is on three topics, which not only apply to children learning to play, but also to physical development as an adult and later in life: playing with your head up (spatial awareness), keeping your body behind the ball and feet underneath your body (well-balanced), and being proficient with both feet (both sides of the body). Coaches need to make sure to prioritize at practices and create specificity within a practice to best use their time with the kids. This involves observing the kids (best during warm-up) to see limitations and following a plan to address specific physical skills and soccer skills. Preparing the kids physically allows them the best chance for success.

The toolkit has sample practices sessions which follow a basic format beginning with warm-up/fun games, transitioning to ball control games with varying degrees of difficulty and challenges, then to an actual game context and then ends with a cool down and re-cap/chat of the session.

Key Points/Recommendations:

Focus on three components:

1. Keeping your head up – Teaches children to keep their head up when dribbling to be able to see the ball, the goal and other players. Spatial awareness is a critical component to physical development.
2. Keeping the body behind the ball – This allows children to keep their feet beneath their body and maintain balance while executing skills.
3. Use both feet – Making sure children are proficient at using both sides of their bodies.

The entire Toolkit detailing all guidelines is available online at:

<http://www.usc.edu/dept/LAS/kinesiology/biomech/AAF%20project/projgoals.html>

4. Chad Fenwick and John Kruse, Los Angeles Unified School District, Physical Education Dept. Physical Activity

Summary:

In exercise physiology, there are five health related fitness components: aerobic capacity, muscular strength, muscular endurance, flexibility and body composition. Dynamic warm-ups are important for proper development. There should be a progressive overload of activities and proper energy balance.

Motor learning is the “how”: deliberate practice, practice schedules and feedback. There are two types of movement patterns: generalized movement patterns (throw in, kicking the ball) and parameterization of generalized movement patterns (variations of kicking). Using deliberate types of practice helps build proper skills and development.

Key Points/Recommendations:

Dynamic warm-ups: NO static stretching before game or practices, should be lower intensity than activity, at the beginning of practice or before a game, static stretching at the end.

Progressive Overload – there should be approximately 10% increase workload per week of stress on the body

Energy balance – calories burned versus calories consumed, keep as even as possible

Use types of deliberate practice:

- Blocked practice: same skill over and over (10 throws, 10 kicks, 10 dribbling)
- Random practice: different skills, random order
- Constant practice – variations of the same skill over and over (10 kicks 10 yards, 10 kicks 20 yards)
- Varied practice – random practice of same skill with variations of parameters

5. Dr. Joshua Scott Sports Medicine and Youth Soccer

Summary:

There are specific exercise recommendations for all adults and children including 60 minutes of moderate to vigorous activity most days of the week, walking and using stairs and basic strength training, which all help to prevent obesity.

Sport specialization is a major issue facing young people and increases the risk of overuse injury. Athletic goals for children should be to have fun and promote healthy, active lifestyles.

Common pediatric soccer injuries include, but are not limited to, lower extremity musculoskeletal injuries, contusions and sprains and concussions. Common overuse injuries are shin splints, heel growth plate injuries and anterior knee pain. The key components to decreasing pediatric knee injuries are proper warm-up, stretching, strengthening, and agility exercises. Other recommendations include avoiding heading under age of 10 and promoting fair play. Examples of common pediatric injuries are Severs Disease, Osgood-Schlatter disease, hip avulsions, concussions, exercise induced asthma,

Key Points/Recommendations:

Exercise Recommendations for children:

- 60 minutes of moderate to vigorous activity most days of the week
- Focus on play and enjoyment of exercise
- Strength training with adequate supervision and no max lifting

Risk of Specialization – overuse injuries common among young athletes, total training (intensity, frequency, duration or combination) should not increase more than 10% per week

Rest/Sufficient recovery is necessary

Decreasing Pediatric Soccer Injuries: not to teach purposeful heading under age of 10, teach and enforce fair play

Recognizing Common Injuries

- Severs Disease: pain at the Achilles insertion of the heel usually with activity
- Tibial Tuberosity Apophysitis: Pain with kneeling or touch below the knee
- Hip Avulsions: Painful popping with kicking or sprinting followed by the inability to walk
- Concussion: rapid onset, neurological impairment, concussion grading no longer used, most resolved in short 7-10 day period, recovery time longer in children and adolescents
- Exercise induced asthma: occurs after aerobic exercise, peaking 5-20 mins post and associated with coughing or wheezing

6. Dr. Ray Padilla Dentistry for Youth Sports

Summary:

1. Hygiene – Proper brushing and flossing techniques will help children maintain proper dental hygiene.
Nutrition – Proper nutrition with balanced carbohydrates, fats and proteins will help with proper tooth and gum development. Sports drinks cause dental erosion in children and adolescents and are a major concern. The pH levels in these drinks are in the acidic range, causing erosion.
2. Preseason Exams – Exams to be performed before the sport season to identify dentitions at risk for trauma or injury helping to eliminate issues during the season. Exams can identify tooth decay and gum inflammation.
3. Dentition at Risk – Certain dentitions are at greater risk for trauma
4. Tooth and Gum Problems
5. Trauma Treatment – Tooth fractures or evulsions can be treated if acted upon immediately. The longer the tooth is out of the mouth, the less chance for re-implantation
6. Prevention of Trauma – Mouth guards serve to prevent oral trauma, but only correct mouth guards (not boil and bite ones). There is a lot of misleading advertising out there suggesting that mouth guards prevent concussion, but scientists in the field have concluded there is no evidence to support the theory that mouth guards prevent concussion.

Key Points/Recommendations:

- Nutrition – Sports drinks can cause dental erosion. Do not brush teeth within one hour of consuming sports drinks. If possible, dilute sports drinks with water. Use alkaline toothpaste which will reduce the natural pH of the mouth and neutralize the plaque acids which cause erosion and decay.
- Pre-season exams – Young children should be screened before the season to identify any dental issues that may be treated in order to avoid further problems during the season and keep the child from further risk of injury
- Trauma Treatment - If tooth is fractured or knocked out, re-implant the tooth immediately (do not wait for the dentist). If re-implantation is not possible, keep the tooth in milk packed in ice and get to dentist immediately.
- Prevention of Trauma – If wearing a mouth guard, make sure to have one properly made (not boil and bite). Mouth guards, however, DO NOT prevent concussion

7. **Denise Barry, RD, CSSD, *Athletes Performance*** **Youth Sport Nutrition**

Summary:

It is important to fuel properly for optimal performance, to maximize recovery and to decrease injury potential. The main nutrients to include are: carbohydrates as the body's main fuel source, protein as the building blocks of muscle, fats to help absorb vitamins and also to better balance blood sugars, and vegetables to protect against illness.

- To get proper fuel before a game, focus on carbohydrates to make sure you have energy to sustain during physical activity.
- During a training session/game, make sure to replenish carbohydrates and maintain fluid levels to ensure proper hydration and energy during physical activity.
- After an activity, make sure to rehydrate (get plenty of water), replenish (with quality carbohydrates), and repair (by including lean protein). Make sure to begin this process as soon as possible after a game/activity (0-60 minutes)

Apply what you know and have a plan for fueling on the road.

Key points/Recommendations:

Carbohydrates – grains/starches (bread, pasta, rice, potatoes, corn, etc); fruit (apples, strawberries, blueberries, cantaloupe, bananas, etc)

Proteins – chicken, turkey, beef, pork, eggs, dairy, etc.

Fats – olive oil, nuts, avocado, fish, etc

Vegetables – red bell peppers, broccoli, carrots, spinach, eggplant, cabbage, tomato, etc.

Fueling Pre-Activity Tips

- Limit high fat and high fiber foods the night before and morning of activity
- Limit sugary foods and beverages which can spike blood sugar levels
- Experiment with items during practice to determine best timing and tolerance
- Fuel muscles early with easily digestible carbs (within 1 hour of waking)
- Examples: 1-3 hours before → cereal + yogurt, bagel + peanut butter, include plenty of FLUIDS; 1 hour or less before → banana or Gatorade (something more simple and easily digestible)

Fueling During Activity Tips (or in between games)

- Start with a full tank, begin exercise fueled and hydrated
- Don't try new products and foods on game day, experiment with what works best during practices
- Consume fluids early and consistently to replace sweat losses
- Examples: Every 10-15 mins of activity → 4-6 gulps of water/sports drinks; in between games → bread + jelly or crackers + banana

Fueling Post Activity Tips

- If no appetite following activity, choose liquid food to recover (example: low fat chocolate milk)
- If possible, make a recovery shake or meal with a 2:1 ratio of carbs to protein
- Begin recovery nutrition within 0-60 mins after activity
- Examples: fluids (water or Gatorade); Snack (1/2 turkey sandwich + banana); meal (chicken, rice, salad and fruit)

Fueling on the Road Tips

- Choose places that allow for substitutions
- Tailor your meals, baked broiled, grilled, dressing on side
- Avoid words like creamy, crispy and fried
- Eat by cuisine: Mexican (tacos with grilled veggies, chicken, fish steak); Sandwich shop (customize sandwich, pack on veggies); Fast food (grilled chicken sandwiches, turkey burgers, fresh fruit, salads with dressing on side, low fat veggie soups)
- Pack your own snacks (trailer mix, beef/turkey jerky, fresh fruit, raw veggies, bagel or toast with nut butter, dry cereals, sports bars, string cheese, low fat yogurt, peanut butter and jelly sandwiches, pretzels with nut butter, nuts and seeds)

8. **Holly Silvers, Santa Monica Sports Medicine Foundation** **Perfecting the Injury Prevention Process**

Summary:

Proper warm-up and strength building techniques can prevent injury, especially ACL injury. The PEP (Prevent Injury and Enhance Performance) program uses avoidance, agility, strengthening, plyometrics and flexibility to prevent ACL injuries. The FIFA 11+ Injury Prevention program is another example of a comprehensive warm-up program used to prevent injuries. Returning to a sport after an injury involves an assessment with six testing positions (step down, drop jump, lateral shuffle, deceleration, triple jump and a side step cut). Together with a strength assessment and a gait analysis, clinicians can use these steps to assess if the person is ready to return to sport.

Once the person is re-introduced to the field based activity, precautionary steps such as being a neutral player, systematically increasing load and duration of training and simultaneously continuing prevention efforts, are the best way to effectively transition back to the sport. Successful return to match play involved continual assessment of bilateral mechanics, continual treatment to prevent development of muscle imbalance, integration of prevention methods into warm-up and a career long commitment to prevention.

Key Points/Recommendations:

- Use a step-wise progression for ultimate safe return to play
- Use sport specific movement patterns in a non-contact setting
- Utilize a qualitative analysis system for return to play decisions. Disband the notion of chronology in your decision making process.
- Be diverse in your assessment; some scores will be optimal, while others will be deficient.
- Utilize tools to measure injury rates – this is the critical piece to the prevention puzzle.

9. **George Weaver, *Brotherhood Crusade*** **Preventing Risky Behavior**

Summary:

Soccer is a great platform of change and allows us to galvanize communities around soccer programs. This involves family engagement in order to address issues of trauma and finding out why kids are acting out.

In terms of risky behavior, adolescents are more susceptible to engage in these behaviors and less likely to weigh the risks and benefits. The following are risk factors which predispose youth to risky behaviors: low self-esteem, negative peer groups, low school engagement or educational aspiration, negative school climate, poor neighborhood quality, low socioeconomic status, poor parent-child communication, low parental monitoring, lack of family support, parent engagement in risky behaviors and poor relationships with non-parental adults.

Changing the program design can allow you to incorporate nutrition, health messaging, anti-violence messaging, and preventing gender based violence all through drills. People need something to do, someone to love and someone who loves them, so try to address all of these through your program.

Key Points/Recommendations:

Effective strategies to address risky behavior risk factors:

- Provide a safe space
- Focus on individual progress not performance
- Listen to participants
- Act on teachable moments
- Clearly communicate expectations
- Strict, but agreed upon behavior code with alternate options
- Story sharing and in-depth discussion
- Individual team time
- Build connections
- Focus on what is important
- Be willing to be unpopular
- Avoid arguments (do not feel obliged to judge everything, agree or disagree; avoid trying to reason when a child is upset, wait until they have calmed down; avoid talking teens out of their feelings, acknowledge reaction without condoning it; talk)
- Be respectful
- Encourage participation in positive activities
- Help youth make healthy decisions

10. **Dre de La Peza, *America SCORES Los Angeles*** **Promoting Leadership Skills, Conflict Resolution and Sportsmanship**

Summary:

In order to coach and teach leadership, conflict resolution, and sportsmanship in youth sports, one must define what each of these ideals means within the context of his/her program, create programmatic tools and goals, and establish cultural values that will allow for the desired behaviors to be supported and ingrained. Leadership involves three processes: identifying personalities, strengths and limitations; enabling kids by finding opportunities to build confidence; and empowering children by supporting them and listening. Conflict Resolution can best be addressed by modeling good behavior, involving children in mediation, reinforcing positive values, and promoting understanding skills. Sportsmanship and fair play can be promoted through unstructured play, emphasizing safety over competition, reacting accordingly when kids are misbehaving or not following rules and modeling behavior directly.

Key Points/Recommendations:

- Ways to promote leadership – positive reinforcement, letting kids choose their activities, kids as assistant coaches, in-game coaching, naming activities, kinda-captains
Avoid: kids picking their own teams, negative reinforcement, passive scrimmages
- Ways to promote conflict resolution – 35 kids and two coaches can be easier than 10 kids and one coach, positive reinforcement, mediation
Avoid: Arbitration, negative reinforcement, waiting until the end of practice to handle issues, prejudice
- Ways to promote sportsmanship/fair play - pairing talented student with beginners, always asking the right questions (Did you have fun? What could you have done better? What did you do well?), coach to play with the kids, create games for choosing teams, have fun
Avoid: Skill-based separations, kids picking teams, allowing unsportsmanlike conduct to occur unnoticed, uneven scores: what to do? Is it wrong? Try to change lineups, positions, etc.

11. **Jacob Toups**, *Up2Us*, *Los Angeles Regional Coordinator* **Trauma Sensitive Coaching**

Summary:

On the spectrum of coaching and youth programs, Up2Us focuses on sports-based youth development coaches or coaching through the game. Ways to improve our programs include having consequences for behavior, coaching training, focus on staffing and focus on individual progress, not performance. Trauma-sensitive coaching emphasizes the life skills part of the spectrum, even more than the sports skills.

Common responses to stress include fight, flight or freeze. Some triggers to these stress responses include impulsivity, emotional dys-regulation, aggression/violence, low sociability, lack of self-awareness and shutting down. Re-designing programs through design principles, program practices, coaching techniques and player skills can help us design for proper skill development.

Key Points/Recommendations:

Ways to do this with kids are offering opt-outs, coaching the bench/praising the play, using 60 seconds after a player has been removed from the game to connect, measuring individual progress and asking a lot of questions to the child.

12. **Measuring Impact**

Summary:

There are five pillars of sport-based youth development which are great coaches, intentional programming, physical and emotional safety, strong administration and context. By evaluating these pillars, we can measure the impact of programs. Up2Us offers the Quality Assessment Tool (QAT) for Sport-plus programs, recreation programs, school-based programs and center-based programs. To monitor coaches and staff, they offer a Coach Evaluation form. There is also a spectrum of ways to measure pro-social behavior outcomes and health outcomes through various tools.

Key Points/Recommendations:

Tools:

- Quality Assessment tool (QAT)
- Coach Evaluation Form

To measure health outcomes -

Counting: Number of hour in active programming, attendance

Internally Crafted Tools: Youth Surveys, Parent Surveys, Coaching Surveys, Teacher Surveys, Focus groups

Most significant change: What's the most significant change you've noticed about yourself because of the program?

Validated Self-Report: Physical Activity Questionnaire, California Healthy Kids (physical activity and health)

Mechanical Measurement: Fitness Gram-PACER/Cooper Test, Accelerometer Data, Fitness Gram-BMI

To measure pro-social behavior outcomes –

Counting: # of helping behaviors, # disciplinary issues

Internally Crafted Tool: High Impact Attributes (self-awareness, positive identity, situational awareness, Plan B thinking, future focus, discipline, social confidence, pro-social connections)

Most Significant Change: What's the most significant change you've noticed about yourself because of the program?

Validated Self-Report: Youth Risk Behavior Survey (YRBS), Youth Experience Survey (YES), CA Healthy Kids (resilience and youth dev)

Mechanical Measurement: School Report Card/test scores, police/juvenile court records, mental health assessment

California Healthy Kids Survey: <http://chks.wested.org/>

Fitness Gram: <http://www.presidentialyouthfitnessprogram.org/resources/index.shtml>

Youth Risk Behavior Survey: http://www.cdc.gov/healthyyouth/yrbs/questionnaire_rationale.htm

Youth Experience Survey: <http://www.youthdev.illinois.edu/yesinstrument.htm>