

Connecting ISD 622's Elementary Physical Education to the Classroom

THIS ISSUE

Exercise and The Brain
ADD & ADHA

Pediatric Exercise Physiology
Children Are Not Small Adults

Best Practice
Play-Teach-Play

Basketball
An Aerobic Team Sport
Eye Hand Coordination

FYI
The Hula-Hoop Teaching Secret

Activity Of The Month
Partner Soccer Pin Guard

By The Numbers
Smoking Statistics

15 Million
Dollars per day spent by the tobacco industry on advertisement.

50 Percent
The percent of long term smokers who will die from smoking.

25 Percent
The percent of heart disease(s) deaths directly related to smoking.

150 Billion
Dollars in cost per year attributed to smoking -related diseases.

4000
The number of toxic or carcinogenic chemicals have been found in tobacco smoke.

1200
The number of deaths per day caused by smoking.

Exercise And The Brain: ADD/ADHD

It appears that ADD/ADHD is on the rise (or at least its diagnosis). This means that we will have more kids with this label in our classes. One of the best studies on ADHD (Mayo Clinic) studied 5,718 kids (1976-1982) concluded that 7.4 percent had ADHD, and suggested that the prevalence might be as high as 16 percent. Research is showing that movement is a great a tool to help these children. The interesting fact is that exercise affects ADHD in similar ways that most of the drugs that are prescribed to children. ADHD drugs elevate dopamine and norepinephrine levels in children, bringing back a balance to an overactive cerebellum. It just so happens that exercise (*a combination of aerobic and focus-intensive motor skills*) also stimulates increased levels of these two chemicals in the cerebellum. *Remember the gym is always available for you to send down your active kids if they need to burn some energy and put their cerebellums back in balance.*

Some reminders about teaching children with ADD/ADHD are:

- Remember you are teaching students who have a disability. Many have additional learning disabilities.
- ADHD students learn better in a very structured environment.
- ADD/ADHD students are not motivated as much by the consequences of their negative behavior as they are by the rewards for positive behavior.
- Students with ADD/ADHD are easily discouraged.
- Students with ADD/ADHD can do well with appropriate management.
- Your efforts with ADD/ADHD students will not detract from the learning experience of other students, but enhance it.

Best Practice: Play-Teach-Play

Another method is Play-Teach-Play. Children rarely see the longtime benefits of practicing a skill. It is hard for them to make the connection between practice today and proficiency several days, weeks, and years down the road (*presentism*). Thus, they want to play, not practice skills. This means they are often reluctant to pay attention to instruction and demonstrations. Play-Teach-Play has two main advantages. It heightens the children's interest because the instruction/demonstration can be related to the game they have just played. The theory is that once the children have experienced their own skill abilities (*or lack thereof*) and understand how practice and learning will enhance their abilities, they will be motivated to listen, learn and practice in preparation for their return

to play. Additionally, practice is generally within the context where the skill will actually be used. This also allows the practice tasks to take on more meaning and become more motivating to the children. Note: This method is best used with intermediate and older-aged children. Beginning movers who have no concept of the game and how it is played or the skills necessary to play the game will have a difficult time with this technique.

FYI: The Hula-Hoop Secret: The Bigger The Better: When teaching kids how to hula-hoop the key is the size and weight of the hoop, not so much the hip action or technique. The hoops we are accustomed to using are way too small and light. Big and heavy hoops are easier to hula. If you can't find big/heavy hoops, try wrapping the smaller lighter hoops with duct tape. This will help.

Pediatric Exercise Physiology:

Children seem to grow almost overnight. An interesting observation centers around so called growth-spurts. These spurts are real. And, some children get some-what pudgy just prior to *spurting*. Developmentally, children grow in six ways:

- Cephalocaudal (head to foot)
- Proximal to distal (spine to appendages)
- Flexion to extension (curled to straight)
- Involuntary to voluntary (reflex to controlled)
- General to specific (gross motor to fine motor)
- Homo-lateral to contra-lateral (both limbs on one side of the body moving together to movements of opposition)

Basketball: An Aerobic Team Sport

Basketball is one of only a few team sports that is truly aerobic. As such it fits perfectly into ISD 622's vision as a lifetime, fitness, wellness, and health developmental activity. Basketball requires the development of cardiorespiratory endurance and the fundamental motor skills of balance, agility, and general forms of locomotion such as jumping, running, and slide stepping. It is an eye-hand coordination activity and stresses the essential sports/motor skills of hand dribbling, catching, passing/throwing, and basket-shooting. The skills of hand dribbling, chest passing, catching, and the type of shooting (*two handed vs one handed*) are *optionally* assessed skills. The basic team sport strategies of *space* and *support* are two cognitive essentials that play a major role in instruction.

Basketball was invented in 1891 by Dr. James Naismith. The game got its name from the two half-bushel peach baskets that were attached to the gymnasium balcony. The peach baskets were attached 10 feet above the floor and established a measurement that remains in use today. The original game began with 13 basic rules that are the foundation of the modern game. Women's basketball competition began in 1892. A metal ring with a netted bag was used in place of the peach basket in 1893. Nets without bottoms were not introduced until 1894. Originally the game was played with 9 players (*Dr. Naismith had 18 students in his class*). Five players on a team has been the standard since 1895. The first college game was played in 1869 between Chicago and Iowa. The first professional game was in 1898. The NBA was formed in June of 1946. The WNBA was formed in 1997.

Activity Of The Month: Partner Soccer Pin Guard.

Partner Soccer Pin Guard is a great soccer and fitness development activity that the kids love.

Skills: Kick, foot dribble, foot trap, and blocking skills (*no hands*).

Equipment: 25-50 Nerf-type soccer balls.

Goals: To have fun with this soccer/fitness activity. To develop identified soccer skills. To work cooperatively with a teammate. To develop aerobic fitness.

Activity Description: Children partner-up and share *one* bowling pin. The objective of the game is for partners to take turns being either the *pin-guarder* and/or the *run-a-rounder*. Pin guarders stay by the pin and use blocking skills (*no hands*) to prevent a kicked ball from knocking their pin over. Run-a-rounders move around the gym and use their soccer skills of kicking, foot dribble, and foot trap, and try to get close to an opponents pin and kick the ball knocking it over. When a pin is knocked-over the guarders performs 10 jumping jacks (*or some other predetermined exercise*), re-stands the pin, and begins playing again. Guarders and run-a-rounders periodically change roles.

For more detailed information and game variations please contact your building physical education specialist.

