



Your P.E.T. Project ***Physical Education Technology***

Presented By:
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Your P.E.T. Project – Physical Education Technology

Description: We love our P.E.T.'s -- and wouldn't it be great to download effective physical education lesson plans, quality activity videos, authentic assessment tools, and more, for FREE? Walk your dog to this session and “pick up” all this and more. Rated RR for Really Relevant.

Rationale: This presentation discusses ways to get started with relevant technology tools that can enhance learning and assessment.

Content Outline: This presentation will provide practical ideas and activities that teachers will be able to use as soon as they return to their classes. This session is action packed and full of fun. Each attendee will leave with free 10-day access so they can download the presentation's lessons and assessment tools, watch them on video, and then try them with their students on Monday.

Attendees will:

- Participate in activities using technology tools and solutions.
- Discuss and discover online technology tools.
- Leave with at least 3 new ideas/activities/strategies!

PET Project Essentials

1. Computer with High Speed Internet
Laptop is preferable
2. SPARKfamily.org Membership
3. iPod (or other MP3 player) with Sound System
Video iPod is preferable
4. Pedometers
Step-Only pedometers are perfect
5. Heart Rate Monitors or Pulse Trackers
The less complicated the better

Essential (If your budget allows.)

1. iPad or (other Tablet)
2. LCD Projector
3. ExerGaming System
4. Digital Camera with Video

Favorite Websites

www.sparkfamily.org
www.sparkpe.org
www.pecentral.org
www.presidentschallenge.org
www.fitnessgram.net
www.mypyramid.gov
www.exergamelab.org
www.exergamenetwork.org
www.donorschoose.org
www.livestrong.com



- **Moodle:** Stands for Modular Object Oriented Dynamic Learning Environment. Moodle supports e-learning. Visit moodle.sandi.net/course/view.php?id=1308 and see how Dennis Gildehaus (dgildehaus@sandi.net) of San Diego Unified uses Moodle for his program at Pacific Beach Middle School.
- **QR Codes:** A QR code is like a bar code. People can use their cell phones to scan and connect to a website. You could upload a YouTube video of a certain skill being taught, then create a QR code for it (this is easier than it sounds). Scanning the code brings the student to it - nice outside of PE reinforcement. See the idea here: www.thephysicaleducator.com/index.php/?s=qr+code
- **Websites:** Of course there's SPARK at www.sparkpe.org and sparkfamily.org and PE Central (pecentral.com) for free resources. But try going to www.mypyramid.gov and see where students can obtain their nutritional requirements. Have them research and print out online menus with nutritional information from fast food and other restaurants. Then students pretend to "eat" at the various restaurants using the nutritional info on the menus to make good choices.
- **Google Earth:** Use Google Earth (www.google.com/earth/index.html) to zoom in and show students the countries and cultures where dances, games, and sports originate from.
- **YouTube:** At the beginning of a new unit or learning theme, use YouTube to show students a quick 5 minute clip introducing and showing footage of the sport or activity you are going to be teaching them. They get fired up!
- **Garage Band:** Have students use Garage Band (www.apple.com/ilife/garageband/) to dub in the lines to a created line or square dance over instrumental music. Dan Delager (dddejager@yahoo.com) of Churchill Middle School in Carmichael, CA and a fellow teacher videotaped a group of middle school students performing a Square Dance to a Miley Cyrus song. Instead of, "Put your hands up," they changed the words to, "Put your right hand up and do a right hand star." Dan says this was an awesome activity!
- **Webinars:** Have you thought of hosting one to orient/introduce your program to your parents during the first week of school? Or inform other departments in your district of the innovative things happening your program? Or update your school community on your program's successes and/or special events - and recognize student achievement?
- **iPods, iPads, & iTunes:** Whether you have a Nano budget or have the iTouch with funding, there's an iPod or iPad to help you manage your classes and motivate pumping hearts. There are also great assessment tools optimized for iPad at www.sparkfamily.org. Learn more through videos and support documents from the Apple experts at www.apple.com/support/ipod/
- **iPad Apps:** Create custom music mixes and intervals, learn new fitness exercises, show students how the beating heart works. It's safe to say, "There's an app for that." Check physical education-based app reviews at www.sparkfamily.org.

Omnikin® Tag Ball

SPARKfamily.org GYM Activities

Ready...

- 2-4 Omnikin® Balls (33" – 48")

Set...

- Students lock arms with a partner and scatter in the activity area.
- 2 or more pairs are designated as "Taggers" and begin with an Omnikin® Ball.

GO!

1. The object of Tag Ball is to roll the ball and tag another group by touching them with the ball.
2. Lock elbows with a partner and spread out inside the boundaries.
3. The group with the ball is it and unlocks their arms.
4. When tagged you and your partner get the ball.
5. One variation is to have the game continue until the music stops or a freeze signal is given.

GYM Connection

Every heartbeat pumping in your students' fitness zones is pumping nutrient-rich blood to the brain. This creates a class full of ready and active learners. Getting smart is fun!

Movement prepares the brain for optimal learning – Physical activity and exercise change the learning state into one appropriate for retention and retrieval of memory by moving blood, oxygen, and glucose to the brain. During exercise the body/brain goes into a homeostatic state more conducive to learning by balancing brain chemicals, hormones, electricity, and system functions. Learning readiness declines when the body/brain is out of balance due to lack of physical activity.

Aerobic fitness aids cognition – Researchers found that subjects who were the most aerobically fit had the fastest cognitive responses, measured by reaction time, the speed that subjects processed information, memory span, and problem solving. Aerobic activity not only increases blood flow to the brain, but also speeds recall and reasoning skills.

Exercise reduces stress – Research suggests that mental stress and anxiety can rob the brain and body of adequate oxygen by interrupting normal breathing patterns. However, studies also indicate that proper breathing exercises can enhance oxygen flow, thereby reducing heart rate and anxiety. Students who exercise in active physical education classes can reduce stress and anxiety naturally.



Prep

- Music (interval) and player (optional)
- 1 heart rate monitor per student (optional)



Set

- Students on designated roll-call numbers.
- Play music.



Teach

1. *Aerobic Basics* is the warm-up for our fitness activities today.
2. As you arrive, move to your roll-call numbers and begin moving.
3. **Aerobic Basic Exercises** - Do each of these until the signal to change. (*Allow 30 seconds each and extend as it becomes easier.*)
 - **Knee Taps** – Lift your knees up to your palms held hip-high, alternating L and R.
 - **Imaginary Jump Rope** - Pretend you are jumping rope. Get as tricky as you like!
 - **Jumping Jacks** – Jump to straddle and back on beat, with arms straight moving up and back.
 - **Mountain Climbers** – Put hands on ground and form a wide, inverse “V” with your body. Move to lunge your legs, alternating front foot.
 - **Push-ups** – From your knees or your feet.

ASAP EXTENSIONS

- * **1 – Get in the Zone**
Check your heart rate, working to get and stay in Zone 3. (*See Fitness Activity: Gotta Have Heart for details.*)
- * **2 – Student Routines**
(*Students submit routines with 5 - 10 exercises to be performed during roll-call.*)

STANDARDS ADDRESSED

NASPE

- #3, 4 Aerobic capacity
- #5, 6 Cooperation, enjoyment

Your State (Write in here)

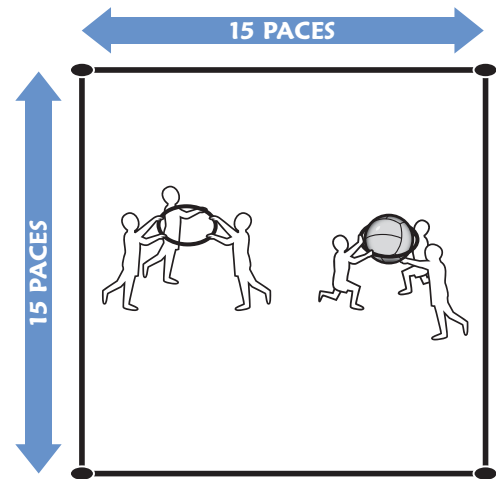


Prep

- 4 spot markers per 6 students (for boundaries)
- 2 hoops per 6 students
- 1 OMNIKIN® UltraBall or Kin-Ball® (36" or larger) per 6 students

Set

- Create small (15X15 paces) grid per group of 6.
- Form 2 groups of 3 in each grid; each group holds a hoop, Kin-Ball® starts in 1 of the hoops.



Teach

1. Today you are going to play *Kin-Ball® Cooperative Golf*. It is a lead-up game to *Kin-Ball® Sport* – a game that originated in French-speaking Canada. The object of *Kin-Ball® Cooperative Golf* is to serve the ball into the other group’s hoop and score a “hole-in-1.”
2. On signal, the Receiving Group (with the empty hoop) moves 10 paces away from the Kin-Ball®.
3. Serving Group (with Kin-Ball® balanced in hoop) drops to 1 knee, hoop held high overhead. The serve is made when the Server (1 player), lets go of the hoop and punches ball toward the target hoop. To do that, close both hands into fists with thumbs up, and join hands at thumbs so knuckles touch each other. Keep wrists strong and punch from low to high, hitting ball with front, flat surface of knuckles.
4. Receiving Group moves together to catch the Kin-Ball® in their hoop.
5. Switch roles and repeat in the other direction. Rotate Servers each round.
6. (Allow plenty of time for students to play.)
7. **Cues**
 - Work together to move your hoop to the ball.
 - Server, serve the ball up with a punch from low to high, hands together and strong.
8. **Challenges**
 - How many “hole-in-1” catches can your group make before the signal?
 - How many serves can your group make before the signal?
9. **Think About...**
 - What other sport uses a skill similar to the Kin-Ball® serve?
 - How can the volleyball skills you have learned be used to help you learn the Kin-Ball® serve?

KIN-BALL® COOPERATIVE GOLF

EXTENSIONS

Pedometer Check

(Need 1 pedometer per student.) Wear a pedometer while playing. How many steps can you take during the lesson? Compare your results to other games you've played.

Heart Rate Check

(Need 1 heart rate monitor per student.) Wear a heart rate monitor while playing. What was your average heart rate during the lesson? Compare your results to other games you've played.



WELLNESS INTEGRATION

Golf is a great way to add activity minutes to your day, but when you're learning it can get frustrating fast. Even pro-golfers can get pretty frustrated. Captain and Crew is a great way to keep golf fun. Play with 2 to 4 crew members. Knock the balls toward the hole. The closest to the hole is the captain. Everyone else moves their ball to where the Captain is. Now, everyone shoots from the closest spot.



STANDARDS ADDRESSED

NASPE

#1, 2 Underhand serving pattern, catching

#3, 4 Upper body strength

#5, 6 Communication/cooperation, appreciation of diversity, accepting challenges

Your State (Write in here)



TEACHING TIPS

- Teach a 2-handed straight punch to avoid injuries to wrists, arms and hands.
- Emphasize cooperation and communication between the Serving and Receiving Groups.

NOTES

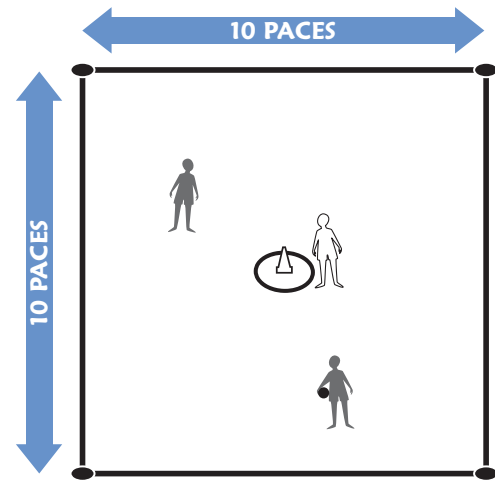


Prep

- 4 spot markers per 3 students (for boundaries)
- 1 6" foamball per 3 students
- 1 hoop per 3 students
- 1 large cone per 3 students

Set

- Create medium (10X10 paces) grids per group of 3.
- Place a large cone inside a hoop in center of each grid.
- Form groups of 3; place 1 group and 1 ball per grid.



Teach

1. *2-on-1 Just for Fun* is a great lead-up game for *Team Handball*. The object is for 1 player to defend the cone, while 2 offensive players work together to hit the cone with an underhand throw.
2. **The Rules**
 - Offense starts with the ball on outer edge of grid.
 - Defender must stand outside hoop and cannot touch cone.
 - Offense can move and pass around Defender but cannot enter the hoop or touch the cone or Defender.
 - If cone is hit, reset it in the center of the hoop and continue play.
 - Offense scores 1 point each time cone is hit.
3. Play until signal. Switch roles. (*Play 1-2 minutes before switching.*)
4. **Cues**
 - Offense, spread apart to make it harder for the Defender to cover throws.
 - Defense, move quickly. Watch the thrower's core to avoid getting faked.
5. **Challenges**
 - Offense, how many times can you score before the signal?
 - Defense, how few hits can you allow?
6. **Think About...**
 - Which offensive strategies did you use in this game?
 - Defensive strategies?
 - Were the strategies you used effective?

2-ON-1 JUST FOR FUN

EXTENSIONS

Pedometer Check

(Need 1 pedometer per student.) Wear a pedometer while playing. How many steps can you take during the lesson? Compare your results to other games you've played.

Heart Rate Check

(Need 1 heart rate monitor per student.) Wear a heart rate monitor while playing. What was your average heart rate during the lesson? Compare your results to other games you've played.



WELLNESS INTEGRATION

People do a lot of crazy things just for fun. Like jumping out of airplanes, climbing steep rock walls, and flying down snow-covered mountains with slippery sticks on their feet. No matter what you do for fun, make sure you focus on safety. Start with the basics and learn proper technique, use the correct equipment, follow safety rules and instructions, and stick with a buddy. Have fun, but please stay in one piece.



STANDARDS ADDRESSED

NASPE

#1, 2 Passing, receiving, throwing, defending

#3, 4 Aerobic capacity

#5, 6 Team play, cooperation, sportsmanship, appreciation of diversity, accepting challenges

Your State (Write in here)



TEACHING TIPS

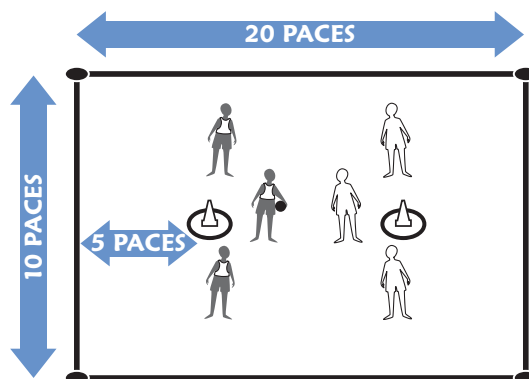
- Use music to increase enjoyment and motivation.
- Pre-plan so a single class is organized in the same format from the beginning to end. (Fewer transitions=more practice and activity time.)

NOTES



Prep

- 4 spot markers per 6 students (for boundaries)
- 2 tall cones per 6 students
- 2 hoops per 6 students
- 1 pinnie per 2 students
- 1 6" foamball per 6 students



Set

- Create long, narrow (20X10 paces) grid per group of 6.
- From the center of each endline, take 5 paces toward the center of the grid and place 1 tall cone in the center of a hoop.
- Form groups of 3; 2 groups and 1 ball per grid. Pinnies begin on Offense.

Teach

1. Today you will learn another lead-in for *Team Handball* called *Defenders of the Cone*. The object is to knock over the other group's cone with an underhand throw.
2. **The Rules**
 - Play begins with pinnie group on Offense and passing ball from their endline.
 - To score, the ball must knock the cone over from an underhand throw.
 - Principle of 3s in effect:
 - o 3 passes must be made before a shot
 - o Defense must stay 3 paces away from Offense
 - o Offense has 3 seconds to pass/shoot/dribble
 - o Only 3 steps/dribbles are allowed
 - All players play both offense and defense. There is no Goalie.
 - Ball may not be kicked. Physical contact with others is not allowed.
 - Ball changes possession if it is knocked down or intercepted by a Defender; if it is hit/ thrown out of bounds.
 - After a score, groups switch roles and the new Offense passes in from their endline.
3. **Cues**
 - Offense: move to open space, give and go, look up the field, and take shots.
 - Defense: mark the Offensive player nearest you; block passing lanes; pressure the ball.
4. **Challenges**
 - How many times can you score after all players in your group have touched the ball?
 - Defense, how few scores can you allow?
5. **Think About...**
 - Which skills and strategies are used that are similar to other sports that we play?
 - Which offensive and defensive strategies did your team use while playing?

DEFENDERS OF THE CONE

EXTENSIONS



Add a Cone

(Need additional hoop and cone per group.) Let's challenge the Defense by adding a 2nd cone for each group to defend.



Overhand Action

Now we'll add an overhand shot to our game. This will allow you to shoot accurately from longer distances.



WELLNESS INTEGRATION

What is "skill transfer" – you ask? Great question! Skill transfer is the ability to learn a skill used in one task, sport, or job, then use it to perform well in another new task. Here's why it's important to wellness. We don't have time to try and learn every activity on the globe – but you might get an opportunity in the future to try something new. The skills you're learning now can transfer to future activities – just like passing in basketball transfers to passing in team handball.



STANDARDS ADDRESSED

NASPE

- #1, 2 Passing, receiving, throwing, defending
- #2 Strategy transfer
- #3, 4 Aerobic capacity
- #5, 6 Team play, cooperation, sportsmanship, appreciation of diversity, accepting challenges

Your State (Write in here)



TEACHING TIPS

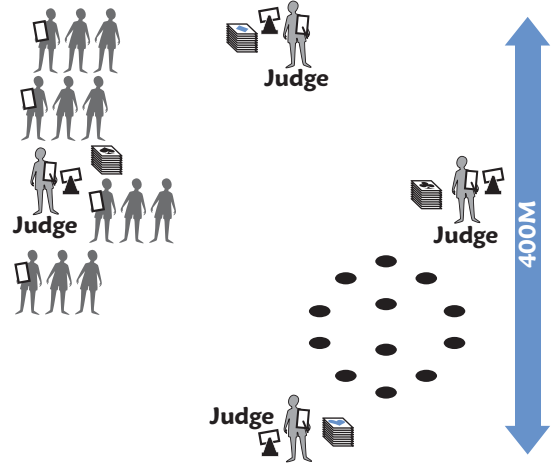
- Teach students to settle disagreements before going to the teacher (e.g., use Rock, Paper, Scissors).
- Pinnies Rule: Group wearing pinnies begins on Offense.

NOTES



Prep

- 4 cones (1 each for 4 stations)
- *Poker Adventure Race Skill Cards: Push-Ups, Rock Hop, Jumping Jacks, Curl-Ups (SPARKfamily.org)*
- 1 *Poker Adventure Race Task Card* per 3 students
- 1 spot marker per student (for Rock Hop)
- 2 decks of playing cards per 12 students
- 4 Shoulder Folders (optional)



Set

- Create a large (400M) loop, placing 4 cones equal distant for the tasks around the loop. See *Poker Adventure Race Task Card* for task details.
- Create 4 stations, 1 at each cone using Shoulder Folders with *Poker Adventure Race Skill Cards* placed in each. See *Poker Adventure Race Task Card* for task details.
- Place 1 Judge at each of the stations and provide each with a stack of playing cards.
- Allow students to create Adventure Racing Groups of 3-4. Provide each group with a *Poker Adventure Race Task Card*.

Teach

1. Today you will use your cooperative skills and improve your fitness in an Adventure Race. The object is to collect as many playing cards as possible and have the best 5-card poker hand at the end of the time limit (*simplify by making the object to collect as many cards of the same suit as possible*). Give each group member a role before the race.
2. **The Rules**
 - Follow instructions on *Poker Adventure Race Task Card*.
 - Groups must stay together the entire race.
 - On your 1st loop you must run around without stopping at any stations.
 - After your 1st loop, you will continue, completing all Task Stations for each of the loops made.
 - Get a playing card at each station.
 - Complete as many loops as possible in the time limit.
3. **Think About...**
 - When did your group cooperate and communicate?
 - Did everyone in your group have a role? What was it?
 - How did you encourage each other?

POKER ADVENTURE RACE

EXTENSIONS

Double 1 Task

Every loop your group must perform double the repetitions needed for either the Jumping Jacks, Push-Ups or Curl-Ups Stations. Your group can change the Double-Up Station every loop.

Pedometer

(Need 1 pedometer per 3 students.) One group member wears a pedometer. Your group will receive 1 extra playing card for every 1000 steps on the pedometer.



WELLNESS INTEGRATION

All members of an Adventure Racing Group have to do their jobs to be successful. The same goes for personal wellness. Three key players include:

- 1) Physical Activity – Get at least 60 minutes a day.
- 2) Nutrition – Eat whole foods like fruits, vegetables, whole grains, and lean proteins. Limit empty foods like soda and candy.
- 3) Rest – Get at least 8 hours of sleep a night.



STANDARDS ADDRESSED

NASPE

#1, 2 Exercise techniques

#3, 4 Muscular strength and endurance, cardiovascular fitness

#5, 6 Cooperation, encouragement, following rules, social interaction

Your State (Write in here)



TEACHING TIPS

- Have a discussion with the class before the activity on how you can hear and see people showing appreciation toward each other. Encourage them to practice this skill during the activity.
- Modify tasks depending on student needs.
- Encourage everyone to jog in place while reading or strategizing.

NOTES

3-MINUTE HEART RATE RECOVERY ASSESSMENT

Prep

- 1 jump rope per student
- 3-Minute HRR Assessment Music and player (*SPARKfamily.org*)
- SPARKfit Heart Rate Monitor Log (*SPARKfamily.org*)

Set

- Use the same activity area as for the rest of the lesson.
- Scatter students in activity area, each with a jump rope.

Teach

1. Recovery heart rate is an important indicator of overall cardiovascular health. Today you will complete a *3-Minute Heart Rate Recovery Assessment* and record the result in your fitness portfolio.
2. Stand with the jump rope in ready position, prepare for a 2-foot basic jump.
3. When the music begins keep pace with the beat. As the beat's tempo increases, your jumping pace becomes faster.
4. After 2-minutes of jumping a signal prompts you to stop jumping and record your heart rate, that number is your peak rate.
5. Breathe deeply and concentrate on slowing your heart rate for 1 minute. On signal, record your 1-minute recovery rate.
6. Subtract your recovery rate from your peak rate. This is your *1-Minute Heart Rate Recovery Score*.
7. A normal, healthy recovery score is ≥ 18 (*Source: American Heart Association*).

- **See the SPARK website for free resources: www.sparkpe.org**
- **Call SPARK to inquire about hosting a workshop or attending an Institute: 1-800 SPARK PE**
- **Write SPARK with any questions: spark@sparkpe.org**