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12 Minutes to Fitness Functional Training Workshop
Harlandale ISD
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Workshop Objective

1. Help staff successfully implement the Movement Progressions and equipment, to maximize the movement literacy and movement strength potential of their students, athletes, and staff.

Overall workshop goal…

With an "eye" on the Guiding Principle, we will address the Essential Questions while respecting the Undeniable Truths, to Maximize Physical Potential.

Guiding Principle…

PHYSICAL EDUCATION IS (POTENTIALLY) THE MOST IMPORTANT SUBJECT IN SCHOOL.
Do you agree? Why or why not?

Essential Questions…

Students (workshop attendees) will keep considering…

1. How does this activity improve the *quality* of my life?
2. How does this activity extend the *quantity* of my life?
3. How does this activity relate to the things that are important to me?

Undeniable Truths…

1. There are 5 components to fitness.
2. The SAID principle (the common sense test).
3. We live and move in three planes of motion, mostly simultaneously.
   Don't be a sagittalsaurus (like I was) they are extinct.

Maximize Physical Potential…

The most effective way to maximize a person's physical potential is to focus on developing movement literacy and movement strength.

Movement Literacy is learning how to move, understanding its importance to personal well-being, and becoming competent in a variety of movement patterns.

Movement Strength adds a variety of resistances to those movements to develop structural integrity in all three planes of motion (forward, lateral, rotational).

Aside from all of the benefits of exercise, why invest in movement literacy and movement strength specifically?

A. Movement Literacy - Improving the quality of a person's movement IS ALWAYS RELEVANT. Think about it…do you want your students/athletes/staff/community to possess any of these physical attributes? Are they important to YOU?

1. Overall Strength
2. Posture / Alignment
3. Endurance (muscular and cardiovascular)
4. Agility
5. Mobility
6. Balance
7. Coordination
8. Rhythm
9. Resistance to injury
10. Enhances the brain - body connection

Movement Progression Implementation

The no-equipment Movement Progressions are designed to raise body temp., build core strength, improve mobility and balance, integrate cross-body movements, re-emphasize proper form for basic movements, and prepare the body for more vigorous activity.
Some ideas for usage…

1. Warm-ups / instant activities
2. Circuits
3. Cool-down (usually done in reverse order, so you finish with the balance move)

The program is called "12 Minutes to Fitness" because you can teach your class the 8 movements, which takes approx. 4 minutes, then do an 8 minute circuit using the circuit cards. Typically this is done with a 40:20 work to rest ratio. You may also choose to do a strength circuit involving pushing, pulling, rotation, and legs. If you do 3 rounds of those resistance exercises, you add another 12 minute block to the activity session.
The progressions contain the following eight categories…

1. **Balance**
2. **Mobility**
3. **Prone/ Side/ and Supine Strength Exercises**
4. **Squats / Lunges**

Coordination

5. **Movement – Arm Patterns**
6. **Movement – Foot Patterns**
7. **Combined Movements**
8. **Linear and Multi-Directional Movement**

B. Movement strength, done correctly, has these benefits…

1. Everything becomes easier when you are stronger. Everything.

2. Adding lean muscle mass helps keep your body composition in a healthy range.
   (1 lb. of muscle increases metabolism by 7%, which burns more calories during all activities).

   This helps you feel better, perform better, and look better. Anyone interested in those?

3. It IS possible to build muscle mass with functional resistance training, AND, it is CONNECTED muscle mass (including supporting muscles, connective tissue, and nerve endings) that has been formed in a meaningful, not artificially supported, fashion.

   What about a combination of "traditional" weight training and functional resistance training? Of course, we all need to do whatever type of training fits with our philosophy. However, if I've got an hour to work with a person to maximize their potential, I'm going to stick with what builds athleticism. For me, that means mostly unsupported resisted movements (95% of the time) using a variety of functional tools, stances, balance, mobility, and all three planes of motion.

   Training modalities need to honor the SAID Principle (**S**pecific **A**daptation to **I**mposed **D**emands).

   We need to ask ourselves, "are the demands we're imposing worth adapting to?"

For example, analyze the sport or activity you are training for. MOST of them take place largely on a single leg (any type of activity that involves running is a single leg activity) or involve a multitude of stances in a variety of foot positions.

Does your strength-training program prepare you or your athletes for this?

Don't forget to add 80-20 and single leg strength/power training in all 3 planes.

<u>Main Benefits of Movement Strength Training With This Equipment</u>

1. Involves multiple strength systems (integrated, not isolated) at the same time, like real life movements (it honors the S.A.I.D. Principle AND the 5 components of health-related fitness).
2. Integrated training increases metabolism and gives you a better return on your time investment.
3. Self-spotting, self-regulated, less intimidating, everyone succeeds AND is challenged.
4. Allows you to add strength circuits to every lesson, and the equipment doesn't take up space.
5. Since it focuses on movement, the exercise combinations are virtually limitless.
6. Helps EVERYONE who uses it reach whatever fitness / strength goals they have – RELEVANT.
7. Builds balanced strength (helps non-dominant side catch up to dominant side).

The **ABC Ladder** is not only great for building agility, balance, coordination, but it also enhances the BRAIN-BODY connection.

Focus on four main movement principles…

1. Quiet feet
2. Arms "spinter-like" in opposition
3. Rhythmic coordination
4. Posture ("eyes up" – make the movement "real")

Students / Athletes will progress using that same 1-2-3-4 manner, as they…

1. Get the foot pattern right
2. Add the arms
3. Move in a smooth rhythm BEFORE adding speed
4. Keep their eyes up and posture "real", as much as possible

*If they are struggling with a particular move, have them practice without the ladder (move over a central "spot", or travel down a line on the floor).

Ladder Progressions

Level 1	Forward simple movements (one-in, two-in, slalom)
Level 2	Lateral simple movements (two-in, one-in)
Level 3	Forward transverse movements (shuffle, cross-shuffle)
Level 4	Backward simple movements (one-in, two-in, slalom)
Level 5	Lateral complex movements (ali-shuffle two-in and one-in, left and right "ins")
Level 6	Backward transverse movements (transverse slalom, shuffle, cross-shuffle)
Level 7	Forward complex movements (hop-step, step hop)
Level 8	Backward complex movements (hop-step, step-hop)
Level 9	Arm / Foot Pattern Combos from Movement Progressions
Level 10	Add Reaction and Objects (change on signal, add medicine balls or mini-bands)

Other Applications – make it activity-specific by adding amplitude and balance

Intro to Mini-Band

The mini-band is a great tool for hip strength and mobility.
The four basic positions for usage are…

1. Around the ankles
2. Around the front of the feet or insteps
3. Around one ankle and the other forefoot / instep
4. Around the knees
5. Around wrists for shoulder stability. Start on the wall with these moves, then go to kneeling plane, inclined plane, or "mountain top" position.

Working the outside of the hips is the easiest and most common method of movement.
REMEMBER to also focus on the hip flexors, adductors, and glutes/hamstrings, to get well-rounded hip mobility and strength.

Intro to the Power Push-up

The Power Push-up allows you to overload the core, and the "pushing" movement system.

Progressions for the Power Push-up…

1. Kneeling plane hold
2. Inclined plane hold
3. Kneeling push-ups
4. Halvesey push-ups (go down from toes, push up from knees)
5. Inclined plane push-ups
6. Different hand patterns (wide, staggered, close)

You can also use different tubing strengths, and different back-strap lengths to modify the tension.

Using the Power Jump Rope

The Power Jump Rope is weighted nicely, but the plastic segments can hurt when a student misses a jump and the rope hits their body.
Give the students the option of turning the rope on either side of their body instead of jumping over it. They will get more cardio work by jumping continuously and not have to stop/re-start after missing a jump.

Use the foot patterns from the Movement Progression cards to give the students new challenges for jumping.

If you have enough ropes for the whole class, give them a jump rope rhythm challenge by having them jump rope on the beat of an entire song, counting the # of stops/misses.

Intro to Circuit Trainer Band

The Circuit Trainer band allows you to train pushing, pulling, and core, but especially to perform resisted movement training. It can be used individually, with a partner, or in a group or team setting.

Safety and usage

-check the band for holes
-make sure the "connector" is between the two waist belts, as it is the weakest part of the tube
-get into the waist belt so it can act as a safety strap when pushing, pulling or rotating
-foam handles are for grabbing onto when doing strength moves
-only use the band to add resistance, don't change the mechanics of the movement

TRY TO MATCH UP PARTNERS ACCORDING TO SIZE AND/OR STRENGTH.

Progressions for partner strength moves…

1. One partner is "holding" (working stabilization by just holding their arms out), the other is pushing or pulling or rotating.

2. Mirrored movement - EX. One person is pushing, the other is "returning" to the start position. *** For core / rotational movements, MIRRORED is the most effective method of resistance.

3. Opposed movement – Partners are pushing or pulling at the same time.

4. Opposed movement adding a squat.

5. Mirrored movement adding a lunge.

6. Opposed movement adding a lunge.

7. "Posting" – One partner stands sideways with their arms extended working on core stabilization, and the other partner pushes, pulls, or rotates.

8. One partner stands sideways (not moving), the other moves forward/backward while pushing or pulling.

9. One partner moves along laterally while the other moves forward/backward, laterally, or diagonally while pushing or pulling.

10. One partner "holding" while the other is pushing or pulling AND both partners moving forward/backward, laterally, or diagonally.

11. Both partners pushing or pulling while moving forward/backward, laterally, or diagonally.

Progressions for partner locomotor moves…

1. One partner is the "post" (stands sideways, feet wide, low base) the other partner moves forward/backward, laterally, diagonally out and back 8-10 feet.

2. "You go, I go" – One partner posts, the other performs 2-4 reps of a movement then becomes the post while the first partner does 2-4 reps. Keep repeating this pattern for a set amount of time.

3. "Moving Anchor" – one partner faces sideways and does lateral steps or shuffles while the other partner performs a movement across the gym / field. Both partners are moving in the same direction.

4. Mirrored movements across the gym / field. The partners face the same way while moving.

5. Opposed movements across the gym / field. Partners face opposite ways while moving in the same direction.

6. Moving Anchor with specialized movement. Partners are across from each other. One partner moves along, while the partner performs a more complex movement laterally across the gym / field. (Ex. backpedals, cross over steps, or combos)

Using the Center Ring – each person needs their own Circuit Trainer band.

1. Try to balance the tension by having the heavier bands placed in different spots around the center ring, so you don't have one side of the group pulling the other side off balance.

2. Depending on the size of the athletes you are working with, try to limit the # of people you clip into the center ring to 12.

3. Clip the band into the ring by either using the small felt loop that circles the band, or the waist belt.

4. Movements need to be coordinated by the coach, or a designated athlete, calling out the movement sequence. Example: For the two broad jumps with small rappel jumps on the return, the coach would call …"Jump…jump…in, two, three, and"

5. Use a cone or some other marker under the center ring to prevent the group from "drifting" to one side of the gym or field while moving.

Quick Reference Guide

1. Use the Movement Progressions to build a movement foundation (use all the themes), or to work specifically on a movement theme (focusing on balance or mobility, for example).

2. Begin "loading" the movements when they master them "unloaded". (Squat form must not change when a bar or sandbag is added)

When Adding Tubing or Other Equipment

1. **SAFETY** is the first priority.
   A. Check the tubing for holes.
   B. Do NOT let the user stretch the tubing out too far.
   C. Make sure SAFETY STRAPS are used.
   D. Proper FORM & CONTROL must be maintained if adding speed to the movement.

2. **SUCCESS** is the second priority. Begin with the easiest version of the exercise before slowly move up the progression scale.

The Progression Scale

1. Move your starting position (closer or farther from the wall) to change resistance.

2. Change your base of support (wide to narrow to balance).

3. Do the movement in all three planes (sagittal, frontal, transverse).

4. Use a single arm (unilateral training).

5. Combine two or more movement systems (ex. Squat and row)

12 Minutes to Fitness Terms / Concepts

Balance
Mobility
Coordination
Rhythm
Base of support
Center of gravity
Progression
Overload
Specificity – the S.A.I.D. principle
Muscle imbalances
Injury prevention
Muscular strength
Muscular endurance
Cardiorespiratory endurance
Body composition
Three planes of movement
Forward
Lateral
Rotational
Sagittal
Frontal
Transverse
Stability
Alignment
Posture
Neutral
Symmetric
Asymmetric
Brain-body connection
Cross-body movement
BDNF – Brain Derived Neurotropic Factor
Peer coaching / assessment
Analysis of movement for activities they enjoy
Loco-motor movements (march, skip, shuffle, jump, hop, bound, etc.)
H.I.I.T. – High Intensity Interval Training
Prone
Supine
Patterns
Parallel
Staggered
Split
Cross-over
Mirrored
Opposed
Alternating
Non-Alternating
Hinge
Pivot
Proximal
Distal
Anterior
Posterior
Superior
Inferior
Acceleration
Deceleration
Attenuation of force
Power
Speed
Agility
Flexion
Extension
Adduction
Abduction
80-20
Squat
Lunge
Linear
Multi-directional
Core
Synergy
Serape effect
Horizontal
Vertical
Diagonal
Perpendicular
Plane / Plank
FITT Principle