

Good Form Running (GFR) Grades 6-12 Lesson

Day 1 of 2

Objective: To teach the four steps of GFR through an introductory lesson and periodic reinforcement of LESSON EXTENSION ACTIVITIES throughout the school year.

Equipment Required: 4 cones, GFR Poster, metronome or music for beat, tennis shoe (marking the mid-foot with tape).

Optional Equipment: Coach's Eye App, videotaping device.

Introductory Activity - Videotape Students Running: This exercise can be used as a warm-up activity before the GFR instruction. The purpose is to define the running area as well as provide an icebreaker activity to GFR. Set 4 cones around the gym to form a "running track." On a signal, the students run 3 to 4 laps around the cones. If the class will be participating in the day two video analysis class session, videotape the students running on their final lap.

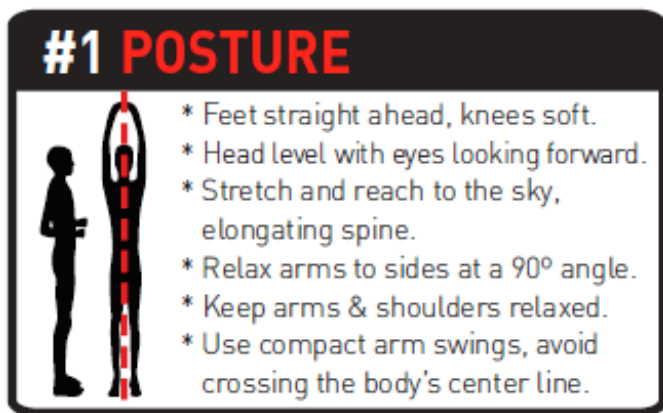
Teaching Hints:

- Do not explain to the students why they are being videotaped. They will run more naturally than if they are told they are being critiqued on their running form.
- Video the students running on a non-colored portion of the gym floor because viewing how the foot hits the ground is an important component of the video analysis.
- When videotaping, have the students run from point A to point B in the most direct path as possible because the student's entire body needs to be pictured in the video in order for optimal video analysis results.
- On the final lap, have the students run in a single file line so that it is possible to analyze students individually.

Instruction: The following are suggestions for implementing instruction:

Introduce students to GFR: Have the students spread out so they are able to comfortably run in place. Explain the benefits of GFR: Fewer injuries, less fatigue, run faster. Inform the students that the most important aspect of GFR is to "run light and run easy." Consider sharing with students how shock travels from a heel strike up the shin, into the knee, hip, and back with 3-6 times the runner's body weight. Proceed in teaching the four steps:

1. Posture (Reset):



Activity: Ask the students to stand with what they think is poor posture. Practice shoulders slouching. Walk in place with slouching shoulders. Stop and discuss good posture. Explain to students that when it comes to posture, we want our bodies standing tall. Have students stretch and reach to the sky so their bodies are as tall as they can be. Next, from the stretched and standing tall position, have students lower their arms to their sides at a 90-degree angle.

(Verbal Cue: "Posture-Reset").

Points to Emphasize With Students:

- Have the feet facing straight ahead, with knees bent slightly (can be referred to as "soft knees").
- Head should be level, with eyes looking forward. Tall posture/posture-reset.
- Arm movements should be easy, relaxed and natural (like tapping a drum). Arms should not cross the midline (can be referred to as "hands lead the way"). Relax arms to sides at a 90-degree angle.

Supportive Activity: Have students run around the running track and practice running using good posture. Every time the whistle blows, the students should reset their posture while running.

2. Mid-Foot:

#2 MID-FOOT



- * Contact ground midfoot first.
- * Entire foot lands softly and under hip line.
- * Run light, avoid pounding.
- * Landing on midfoot promotes a balanced running position minimizing friction (braking).

Activity: Have the students spread out so they are able to comfortably run in place. Explain where the mid-foot is (between the ball of the foot and the heel). Have the students march in place on their mid-foot. Then, have the students jump up and down on their heels. How does it feel? (Hurts, Hard, Pounding). Next, jump up and down on the toes. Discuss how this can become very tiring because it's using mostly the calf muscles. Finally, have the students run in place on their mid-foot, promoting balanced running and minimal pounding. To show how landing on the mid-foot can help with balance, have the students try balancing on only their heels, just their toes, and lastly mid-foot.

(Verbal Cue: "Soft feet").

Points To Emphasize with Students:

- Feet should contact the ground with mid-foot first.
- Feet should land softly and under the hip line.
- Run light, as if floating, to avoid pounding.

Supportive Activity: Have the students run around the running track and practice landing on their mid-foot. Again, every time the whistle blows, the students should reset their posture while running.

3. Cadence:

#3 CADENCE



- * Cadence target = 180 steps/min.
- * To find cadence: Jog for 1 min. counting number of times your right foot hits the ground. Goal is 90 foot strikes per foot (180 total).
- * 180 cadence promotes short, quick strides and midfoot strike.

Activity: Have the students spread out so they are able to comfortably run in place. Ask them to define the word "cadence." Explain that cadence means moving to a beat. Typically, most people run at a cadence of 150-160 steps per minute. To run with good form, we need to run at a cadence of 180 steps/min. Have students stand in place, moving their feet to the cadence of 180 steps/min. At this point, it is very important that students have a visual of what running at this cadence looks like. The instructor should demonstrate what it looks like to use a cadence of 180 steps/min, while running in place. The instructor should then move from a very slow running pace, to a more moderate speed, to a fast speed (all while maintaining the cadence of 180 steps/min). A demonstration of the "check mark" and how it is inefficient could be utilized here. Maintaining the cadence of 180 steps/min. will minimize the chance of heel striking.

Notice - cadence is a beat, not a speed.

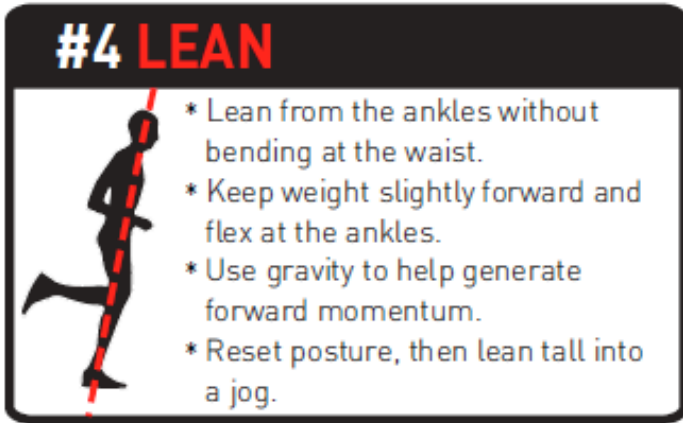
(Verbal Cues: "Moving to a beat" and/or repeat the phrase "short, short, short", to the beat of the cadence).

Points to Emphasize with Students:

- Short, light strides.
- Keeping a cadence of 180 steps/minute will force the foot to land more easily on the mid-foot underneath the body.

Supportive Activity: Have the students run two laps while listening to the metronome at 180 beats per minute. Some students may complain that 180 beats per minute is too fast. Consider having the students run two laps with the metronome at 200 beats per minute. Return the metronome to 180 beats per minute for the last two laps, so the students can experience how easy it can be.

4. Lean:



Activity: Have the students spread out so they are able to comfortably run in place. Have the students reset their posture so they are standing tall with their shoulders back. Next, have the students put their weight slightly forward by bending at their ankles not their waist. Have the students note how easy it is to fall forward when they lean from their ankles. This can be demonstrated by having them lean into a 3 or 4 step jog. Also, show the students how difficult it is to move forward into that 3 or 4 step jog when they are leaning back.

(Verbal Cue: "Let gravity do the work").

Points to Emphasize with Students:

- Use gravity to generate forward momentum.
- Reset posture, then lean tall (from the ankles) into a jog.
- Lean from the ankles without bending at the waist.
- Keep weight slightly forward and flex at the ankles.

Supportive Activity: Have the students run two laps putting all four steps together. Run one lap bending at the waist. Run one lap leaning back. Run one lap with proper lean. Run one lap alternating between proper lean and leaning back. For example, start with proper lean, (whistle) lean back, (whistle) proper lean, (whistle) lean back, etc.

Closure Activity: Have the students repeat the introductory activity, but this time emphasize the four simple steps of GFR. Videotaping the students the second time while using GFR is only essential for those classes participating in the day two video analysis class session.

Closure: Gather students back as a group near the Good Form Running Poster. Ask students, "How did Good Form Running feel?" Review with students that our purpose today was to provide a fun learning experience and introduce students to a better way to run (running faster, easier and injury free). When learning and focusing on proper mechanics, GFR helps runners of all ages and abilities achieve these goals. Ask students, "What are the 4 simple steps of GFR?" 1) Posture 2) Mid-Foot 3) Cadence 4) Lean.

Good Form Running (GFR) Grades 6-12 Lesson

Day 2 of 2

Objective: To reinforce the four steps of GFR through video analysis.

Equipment Required: GFR worksheet, pencils, TV/video camera set-up, computer access to the Internet.

Introductory Activity-GFR Worksheet: This exercise can be used as a warm-up activity before the video analysis. Its purpose is to reemphasize GFR techniques learned in the day one GFR lesson. Furthermore, the purpose is to remind students of common mistakes made by runners.

Pass out the worksheet to the students. For each of the four runners displayed on the worksheet, have the students write which of the GFR steps are being exhibited and which of the GFR steps are not being exhibited. Finally, have the students choose which runner they believe displays the best form.

Teaching hints: Ask the students why they picked runner number 3. Ask them why they didn't pick the other runners.

Instruction: The following are suggestions for implementing instruction:

1. Watch Video Clip: On the Playmaker's GFR website, utilize GFR sample videos to demonstrate GFR in action. While playing videos, periodically pause to show the runners using all four of the GFR steps. Consider sharing background details about GFR (see *History of Good Form Running* below).

History of Good Form Running: Curt Munson and John Benedict, co-owners of Playmakers, started Good Form Running™ (GFR) after discovering that a few simple changes in their running form could have a significant positive impact. They began testing the basic tenants of GFR with the Playmakers staff early in 2006 and by April of that year, the first GFR clinic opened to the public. Since 2006, they have experienced dramatic results by teaching these form principles to hundreds of runners and walkers. They believe that GFR is the most important development in their careers in the sporting goods industry. Grant Robison, ten-time All-American and Olympian, joined the Playmakers staff in 2006 and immediately became involved with the development of GFR. Having spent much of his career injured, Grant found that his mechanics were inefficient and needed improvement. Since incorporating GFR into his training regimen, Grant has been injury-free.

GFR is the product of years of teaching clinics, reading books and articles, and studying other running form philosophies, not to mention numerous years of learning through trial and error. Instead of a complex biomechanical analysis, GFR focuses on four essential points: posture, mid-foot, cadence, and lean. With simplicity as a primary focus, GFR has reached thousands of runners since 2006. In 2010, GFR partnered with New Balance. This partnership has made GFR available to a worldwide audience.

The creators of GFR believe that helping people learn to run light and easy creates much less friction on the shoes that they wear, allowing their shoes to last longer. More importantly, learning to run light and run easy with the four points of GFR results in less friction on our bodies, which leads to better health.

Points to Emphasize with Students while Showing Video Clips:

- Posture
- Lean
- Landing mid-foot
- Make note of how little head movement there is with the Kenyans compared to other competitors.
- Although it's difficult to see 180 steps per minute, the runners are using a cadence of over 200 steps per minute.

2. Watch and critique first run without GFR: Show students the video of them running from the day one lesson plan. Pause the video on each runner to analyze each student's form. This gives each student quality individual feedback about how they can improve their form. Explain that the purpose of the activity is to critique only their running form. Most of the critiquing will be centered around posture, landing on the mid-foot, and lean (it is difficult to see 180 steps/minute on the video, however, if there are runners landing with a "check mark" this can lead to discussion about how 180 steps/minute can help the runners land on the mid-foot). The teacher should analyze the first 5-10 students to demonstrate to the rest of the class how to properly and positively critique the runners. After the first 5-10 students have been analyzed, the teacher should encourage student involvement by using one, or all, of the following supportive activities.

Student GFR Analysis Activities:

- Ask volunteer students to help critique.
- Use backside of GFR worksheet and have students write a short analysis.
- Have students use the "Fist to Five" technique to rate certain GFR steps.
- Pair students together to have them discuss the form of the runners.

3. Watch and critique second run with GFR: Show students the second video from the first lesson. Depending on how much time is left of the class period, teachers can either pause the video on each runner again, or simply play the video. It will be easy to notice the improved form.

Closure: Ask students to respond to some or all of the following questions: What were some of the reoccurring tendencies you saw in the first video? What changes did you see from the first video to the second video? How can GFR impact you in this gym class? How can GFR impact you as an athlete? How can GFR impact you after you graduate from high school? After the discussion has concluded, pass out the Playmakers and GFR materials.

Lesson Extension Activities: GFR should be incorporated into all games and activities at this level; however, to more profoundly reinforce GFR skills, it is recommended that extension activities continue to be introduced to physical education classes throughout the year. The following are some activities that may add greater depth and understanding as well as provide motivation and reinforcement to the continued success of the GFR student.

1. Good Form Running Laps

- Materials: Four cones, metronome set for 180 beats per minute.
- Description: This activity could be done periodically at the beginning of class. Set out four cones around the gym to form a track (or place four cones around the track outside). On a signal, students run for a designated period of time around the cones. Each cone should represent one of the four GFR steps. The first cone should be the visual cue to focus on posture. When the students run past the second cone they should focus on landing mid-foot. The metronome can be placed at the third cone where students should focus on cadence as they run past. Finally, as students run past the fourth and final cone, they should focus on their lean.

2. Chain Run

- Materials: None
- Description: Students must stay in a straight line, running at a cadence of 180 beats per minute. The last person in the line must sprint to the front (maintaining the 180 beats per minute, just at a quicker pace). The students must cooperate and work as a team to maintain a constant pace so every "caboose" runner can reach the front of the line.

3. Partner Run

- Materials: None
- Description: Have the students choose a partner, or assign the students a partner. One partner watches and critiques the other using a 2-minute run around the cones using good form. At the end of both partner runs, the students get together and discuss what they can do to improve their form and then finish with one more 2 minute run each. This is helpful in improving form but also gives students ownership in the activity.

Additional Materials to Supplement GFR:

- Digital Metronome: (Suggested metronome: DM 50 Seiko. A clip-on metronome with a clear and loud beat. Approx. \$25).
- Athletic shoe (marking the mid-foot with tape).
- iPhone, iPad, iFlip camera or other digital camera to record students running (for critiquing, tracking progress, as a pre/post assessment)
- Search Pandora or iTunes for songs with 180 beats per minute. Use when practicing GFR to stay on cadence. See

sample link for suggestions: <http://running.about.com/od/musicforrunning/a/Running-Songs-At-180-Bpm.htm>

- iPhone and iPad Apps:
 1. Pro Metronome (for cadence)
 2. Coach's Eye (for video taping and critiquing students' running form)
 3. Cadence Run DJ (searches your iTunes library for songs with 180 BPM)
- GFR Running Form Worksheet

Lesson created and piloted by:

Andrew Chapin, Physical Education Teacher, Mason High School, Mason Public Schools

Steve Chase, Physical Education Teacher, Chippewa Middle School, Okemos Public Schools

Kelley Foltz, Certified Personal Trainer and GFR Coach

Which runner shows the best form?

Briefly describe each runner below:



41

2.

3.

4

[illegible]