

LESSON 13: OLYMPIC TRAINING AND POWERLIFTING

Grade-Level Outcomes

Primary Outcomes

Fitness activities: Demonstrates competency in 1 or more specialized skills in health-related fitness activities. (S1.H3.L1)

Movement concepts, principles & knowledge: Uses movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill. (S2.H2.L1)

Fitness knowledge: Demonstrates appropriate technique on resistance-training machines and with free weights. (S3.H7.L1)

Safety: Applies best practices for participating safely in physical activity, exercise and dance (e.g., injury prevention, proper alignment, hydration, use of equipment, implementation of rules, sun protection). (S4.H5.L1)

Embedded Outcomes

Working with others: Accepts others' ideas, cultural diversity and body types by engaging in cooperative and collaborative movement projects. (S4.H4.L2)

Fitness knowledge: Identifies the different energy systems used in a selected physical activity (e.g., adenosine triphosphate and phosphocreatine, anaerobic glycolysis, aerobic). (S3.H8.L2)

Lesson Objectives

The learner will:

- discuss the movement concepts and principles of powerlifting and Olympic lifting.
- practice and demonstrate proper technique and safety when working in a group setting in the power cages and during explosive lifting.
- demonstrate proper technique during one specialized skill or portion of a power or Olympic lift.

Equipment and Materials

- Several sections of PVC pipe, 6 feet long, or broom handles 6 feet long
- Weight lifting bar
- Weightlifting straps
- Weightlifting belts

Introduction

We are moving into Olympic and powerlifting events today. Because you are learning new lifting techniques, you will not be spending time on your personal resistance-training workouts. Olympic lifts and power lifts are the universal means to measure strength and conditioning. I have saved these lifts for the end so that those of you who have never participated in this type of exercise have now had several weeks of weight resistance training to prepare you. At the end of this portion of the module, you will have the choice to use the bumper plates to test your technique on three of the lifts, or for those of you more experienced in lifting, you can choose to be evaluated on how well you max out on three of the lifts.

Instructional Task: Class Discussion

■ PRACTICE TASK

Provide a PowerPoint on the differences between powerlifting and Olympic-style lifting.

Guiding questions for students:

- What is meant by the term *powerlifting*?
- How does that differ from Olympic-style lifting?
- How can a person relate powerlifting and Olympic lifting to everyday living?

Extension

The discussion can move into CrossFit and functional lifting exercises.

EMBEDDED OUTCOME: S4.H4.I2. Emphasize that performing the activities in powerlifting isn't always about the highest weight, but about how fast you can move the weight you are working with. Your ability to do that may depend on your experience and body type.

What to Look For

- Can students identify any power lifts?
- Can students identify any CrossFit activities?

Instructional Task: Pre-powerlifting Exercises

■ PRACTICE TASK

Demonstrate the squat and shoulder mobility assessment protocol. All students must pass these tests before weight can be added to any particular exercise.

After a warm-up including dynamic stretching, have students perform the assessments one at a time for pass or fail. The primary assessments for Olympic lifting include the squat and shoulder mobility protocol: overhead wall touch, overhead squat, overhead squat with elevated heel, body-weight squat, hurdle hip assessment, lunge assessment, shoulder mobility assessment 2, active straight-leg raise, trunk stability push-up, and rotary stability. If students cannot complete the assessment successfully, have them perform the flexibility and strengthening exercises associated with each assessment tool.

Extension

Once students pass the assessment, they can begin to practice with a PVC pipe (or broomstick) or bar.

Student Choices/Differentiation

- Students with experience in power lifts can provide peer support to less experienced students on technique.
- Students may review a video clip on protocol.

What to Look For

Students perform the assessments using the pass/fail scoring protocol and notify you if they are not successful.

Instructional Task: Powerlifting and Olympic Lifting Exercises

■ PRACTICE TASK

Briefly review the rules of the gym and gym etiquette when using free weights, including spotting technique.

In groups of four, students practice performing each series on a separate day (this portion of the module may take up to five days to finish). The three major lifts for this section are the clean, jerk, and snatch. Using the guidebook, students must demonstrate each step of each lift before moving to the next step (e.g., the jerk series includes press behind the neck, press, push press from behind the neck, push press, power jerk from behind the neck, power jerk in front of the neck, and split jerk).

Extensions

- Students who master proper technique with full ROM may add weight to each successive set.
- Have students use a device to record their partners' lifting technique. Peers evaluate each other's technique and provide feedback. Provide a checklist of critical features to guide their assessment.
- Students cool down with their static stretching routines.

Student Choices/Differentiation

- Students may choose to use a kettlebell or dumbbell instead.
- Students must stay with the bar or PVC pipe until you observe correct, consistent technique.
- Students choose their groups.

What to Look For

- Students achieve proper technique in each lift stage before moving to the next stage.
 - Group members demonstrate proper spotting technique.
-

Formal and Informal Assessments

- Teacher observation of lifting technique
- Peer evaluations

Closure

- For some of you, this was an intense way to exercise. If you were not familiar with these types of lifts, I hope you can see how they could be useful to you in everyday movements.
- Although some of you will be reluctant to perform these exercises later in life, I still want you to consider implementing them into your workout programs for the year.
- Next class, you will work on a plan for skill-related fitness.

Reflection

- Did the less-experienced students enjoy the total-body lifting movements associated with powerlifting?
- Were students able to provide an accurate assessment of their peers' movements?

Homework

- Log your physical activity outside of class. Include a reflection on how you felt about the powerlifting techniques we tried today.
- Read the summary on the school's physical education website of the different energy systems used in physical activity. Come to class prepared to discuss how these relate to resistance training. (Embedded outcome: S3.H8.L2)

Resources

Randolph, D. (2015). *Ultimate Olympic weightlifting: A complete guide from beginning to gold medal*. Berkeley, CA: Ulysses Press.

Internet keyword search: "CrossFit," "powerlifting techniques," "Olympic lifting techniques"