Teaching Skills

When teaching powerlifting skills to Special Olympics athletes, increased emphasis should be given to the following:

- Teaching for transfer
- Conditions that will produce the most retention
- The type of teaching cues employed
- The nature of the learning environment

It is extremely important for the coach to determine to what extent the athlete is able to transfer from one task to the next. If he or she can only learn specifics, then each new task will require a review of basic information to achieve success. This must be recognized to avoid negative results. With the athlete who can generalize concepts and principles, this review may not prove necessary. The importance of recognizing each athlete's learning potential cannot be overstressed. Progress and results will vary greatly from one athlete to another.

An emphasis must be placed, particularly during the initial stages of instruction, on the acquisition of effective work methods and habits. These will often determine the ultimate success or failure of the task. Due to some athletes' lower level of retention; they must be constantly reminded of materials and concepts presented through review. It cannot be taken for granted that all of the instruction will be retained from week to week.

Repetition is essential for the Special Olympics athlete to learn each of the powerlifts. Repeat correct form as often as possible. Break up the lifting into separate movements if necessary. Remember walking is a pretty complex series of movements and much more difficult than squatting, deadlifting, or benchpressing. Your athletes learned to walk with repetition, and they can learn to lift correctly with repetition. Make sure to use no weight or very light weight when teaching correct form.

It may be necessary to develop a base level of muscle tone and strength in athletes who are deficient in these areas. This may require use of machines to develop muscle tone and strength before moving on to the more complex exercises with free weights. Never hurry the athlete toward competition. It may take four to five months of progressive training before the athlete is ready for competition.

- Visual information and physical prompting and assistance are more effective than excessive verbal cues when coaching Special Olympics athletes.
- Too many words may confuse athletes over a short period of time and bore them during longer explanations. However, an athlete who is having difficulty with a specific motor task often can benefit greatly from a well-time, succinct verbal cue.
- When training your athletes, develop very simple verbal and appropriate tactile (touching) cues. Develop a series of tactile and verbal cues that can be used to get the athlete "set" for the lift. Examples include touching the chin in the squat and deadlift to keep the head up along with pulling back gently on the belt to keep the hips back. When instructing an athlete in the deadlift, an effective way to prevent the athlete from rounding the bar is to place one hand on the shoulder and pull back while pushing in with the other hand on the lower back. To get the athlete to put the bar at the correct location on the chest in the bench press, touch the place on the chest where the athlete should place the bar. During training sessions, you may be effective using the verbal cue "stop" when the bar is at chest and again when the athlete's arms are at full extension so the athlete will learn to wait for the referee's signals ("press" and "rack" at these two positions).
- Training videos have also proven effective in teaching powerlifting skills. Video offers clear, visual information without an excess of lengthy verbal explanations. If video is used, the coach should align the Special Olympics athlete with the screen so that the athlete can see the image and mimic the powerlifting positions of the model athlete being displayed on the video screen.

- When presenting concepts, it is best to go from simpler tasks to the more complex. It is for this reason that lead-up activities are vital prior to teaching the more difficult exercise movements. More will be achieved when a training session is broken up into a number of partial tasks rather than when the complete task is practiced over and over. An example is teaching each part of the competitive lift with its separate command, one step at a time. The bench press involves the three commands of "start," "press" and "rack" so each would be covered separately before moving on to working the complete lift with each command.

Warming Up and Stretching

The correct sequence of preparation for exercise is warming up, stretching, exercising, stretching, and cooling down. The importance of warming up prior to exercise cannot be stressed enough.

- From a physiological aspect, warm-up prepares the muscles, nervous system, tendons, ligaments, and cardiovascular system by raising the body temperature.
- From a psychological aspect, warm-up helps prepare the athlete mentally by beginning the concentration necessary to complete the exercise routine or weight training workout.
- Further, warm-up reduces injury, since warm muscles and their connectors are more flexible and easily stretched.

The three types of warm-up are *passive*, *general*, and *specific*.

- ***Passive*** warm-up increases the body temperature by external means. For example, a warm shower or heat lamp are passive warm-ups.
- ***General*** warm-up occurs when the athlete perform s major muscle group movements not associated with the activity about to be done. For example, jogging and rope jumping are two common forms of general warm-up.
- ***Specific*** warm-up mimics the specific event to be done and is most important for the actual event: for example, doing squats or bench presses with no weight or a stick or with light resistance.

Flexibility is the ability to move a joint through the full range of movement it is designed to do. Hold stretches from 10 to 20 seconds, repeating as necessary. Do not bounce while stretching. The stretching exercises illustrated here are safe, easy, and increase flexibility.

Partner stretching is a fun way for athletes to work through what is sometimes the most tedious part of the workout. Variations of the stretches can be done with other athletes or a coach with excellent results. As with the individual stretching, it is important that the athlete (or coach) does not bounce when stretching. Caution should be used, and the athletes should not stretch beyond their limits.

Training for Muscle Balance

For every push exercise, a pull exercise should be performed. Balance of opposite muscle groups will help prevent injuries in short-term as well as long-term training. Training for balance will also prevent the over work of one group of muscles or the wear on joints that occurs from the lack of balanced muscle training.

- For balanced shoulders (one of the areas of the body most vulnerable to injury), make sure bent rows or low pulls are done regularly to balance the push exercises such as the bench press and incline bench press.
- Leg curls and stiff-legged deadlifts should be done to balance the work done with the front of the thighs from squatting.
- Crunches and bent leg sit-ups should be performed to balance the work done with the lower back from squats and deadlifts.

High Risk Exercises

Some weight training exercises may have a relatively high degree of risk or hazard and should only be done with extreme care or not at all.

- Dips or behind-the-neck presses place a high degree of stress on the shoulder joint and should be avoided.
- Behind-the-neck press places the neck and shoulders in a vulnerable positions.
- Bench squats place a high amount of stress on the spine and should also be avoided.
- Negatives and overloads place a lot of stress on the athletes ’joints, ligaments, and muscles and should not be done. These exercises are generally overrated when considering the risks and long-term problems they can create.

Stretching

Flexibility is critical to an athlete's optimal performance in both training and competition. Flexibility is achieved through stretching. Stretching follows an easy aerobic jog at the start of a training session or competition.

Begin with an easy stretch to the point of tension, and hold this position for 15-30 seconds until the pull lessens. When the tension eases, slowly move further into the stretch until tension is again felt. Hold this new position for an additional 15 seconds. Each stretch should be repeated 4-5 times on each side of the body.

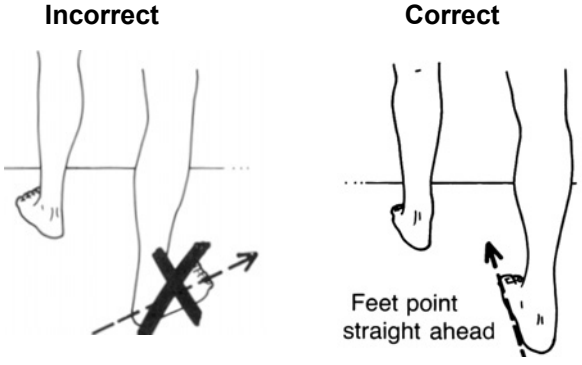
It is also important to continue to breathe while stretching. As you lean into the stretch, exhale. Once the stretching point is reached, keep inhaling and exhaling while holding the stretch. Stretching should be a part of everyone's daily life. Regular, daily stretching has been demonstrated to have the following effects:

- Increase the length of the muscle-tendon unit
- Increase joint range of motion
- Reduce muscle tension
- Develop body awareness
- Promote increased circulation
- Make you feel good

Some athletes, like those with Down Syndrome, may have low muscle tone that makes them appear more flexible. Be careful not to allow these athletes to stretch beyond a normal, safe range. Several stretches are dangerous to perform for all athletes, and should never be part of a safe stretching program. These unsafe stretches include the following:

- Neck Backward Bending
- Trunk Backward Bending
- Spinal Roll

Stretching is effective only if the stretch is performed accurately. Athletes need to focus on correct body positioning and alignment. Take the calf stretch, for example. Many athletes do not keep the feet forward, in the direction that they are running.



This Coaching Guide will focus on some basic stretches for major muscle groups and will start at the top of the body and work our way to the legs and feet.

Upper Body

Chest Stretch

- Raise arms at sides of body
- Pull hands back as far as possible for 20 seconds
- Feel the stretch in the chest
- Repeat

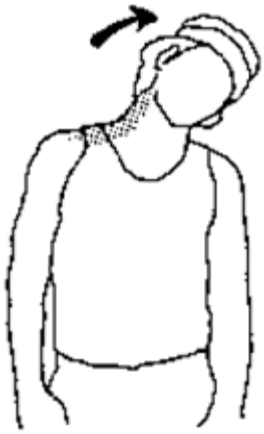
Side Stretch

- Keep knees slightly flexed
- Stand or sit with arms overhead
- Hold elbow with hand of opposite arm
- Pull elbow behind head gently as you slowly lean to side until mild stretch is felt
- Hold 10 to 15 seconds
- Repeat on other side

Arm Circles

- Swing arms forward in large circles
- Repeat going forward and backward

Neck Stretch



- Roll the neck from shoulder to shoulder with chin touching body at all times
- Do not perform full circles as they may hyperextend the neck
- Tell athlete to roll neck to right, center and left; never have the athlete roll neck backward

Shoulder Stretch

- Sit on floor with left leg straight out in front
- Bend right leg, cross right foot over, place outside left knee
- Bend left elbow and rest it outside right knee
- Place right hand behind hips on floor
- Turn head over right shoulder; rotate upper body right
- Hold 10 to 15 seconds
- Repeat on other side
- Breathe slowly

Lower Body

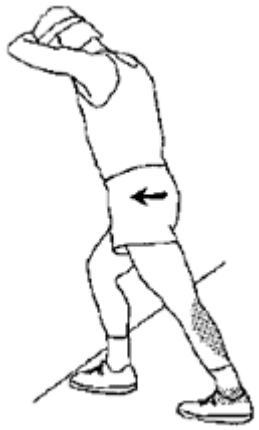
Standing Quad Stretch

- Stand with foot flat on ground
- Bend knee toward buttock while grasping ankle with hand
- Pull foot directly toward buttock
- Do not twist knee
- Stretch can be done standing alone or balancing with partner, fence and/or wall
- If pain is felt in knees during stretch and foot is pointing out to the side, point foot back to relieve stress

Forward Bend

- Stand, arms outstretched overhead
- Slowly bend at waist
- Bring hands to ankle or level without strain

Calf Stretch



- Bend forward leg slightly
- Bend ankle of back leg
- Athlete may also stand facing a wall/fence
- Bend both knees to ease strain

Low Back & Glutes

Side Straddle Stretch

- Stand with feet flat on the ground
- Lean body to one side, bending knee slightly
- Keep opposite leg straight
- Repeat with other leg

Hurdle Stretch

- Sit on floor, legs straight out at sides
- Bend left leg in at knee
- Slowly bend forward from hips toward foot of straight leg until you feel slight stretch
- Do not dip head forward at start of stretch
- Hold this developmental stretch 10 to 20 seconds
- Repeat on other side
- Position foot of straight leg upright, ankles and toes relaxed
- Use a towel if you cannot easily reach your feet

Hip Stretch

- Lie on floor, legs straight
- Bend left knee, extend left arm straight out from side
- Use right hand to pull knee across body
- Turn head toward left arm
- Keep shoulders flat on floor, feet and ankles relaxed
- Hold for 10 to 20 seconds
- Stretch both sides

Stretching - Quick Reference Guidelines

Start Relaxed

Do not begin until athletes are relaxed and muscles are warm

Be Systematic

Start at the top of body and work your way down

Progress from General to Specific

Start general, then move into event-specific exercises

Easy Stretching before Developmental

Make slow, progressive stretches

Do not bounce or jerk to stretch farther

Use Variety

Make it fun

Use different exercises to work the same muscles

Breathe Naturally

Do not hold your breath

Stay calm and relaxed

Allow for Individual Differences

Athletes start and progress at different levels

Stretch Regularly

Always include time for warm-up and cool-down

Stretch at home

Cool-Down

The cool-down is as important as the warm-up; however, it is often ignored. Stopping an activity abruptly may cause pooling of the blood and slow the removal of waste products in the athlete's body. It may also cause cramps, soreness and other problems for Special Olympics athletes. The cool-down gradually reduces the body temperature and heart rate and speeds the recovery process before the next training session or competitive experience. The cool-down is also a good time for the coach and athlete to talk about the session or competition. Note that cool-down is also a good time to do stretching. Muscles are warm and receptive to stretching movements.

Activity	Purpose	Time (minimum)
Slow aerobic jog	Lowers body temperature Gradually lowers heart rate	5 minutes
Light stretching	Removes waste from muscles	5 minutes