Athletics Events

BROAD JUMP



Broad jump is a power event where strength (power) and technique are the main physical components for success. Many strong performers in broad jump have great impulses and achieve excellent scores on the vertical jump, as they are very similar in nature.

One important factor affecting broad jump is the weight of participants. It takes a lot more force to move a heavy body forward and up than a lighter one. Although technique can make the difference between a new personal best or not, power and lighter overall weight will always play a more important role than technique alone.

Skills required for broad jumps are listed in the basic skill (next page). These sheets can be used as a guide, and when all skills are marked "yes", progression to the next level can proceed. Broad jump is done at basic levels and when perfected, athletes are ready for more advanced intermediate skills.

Learning to transform power into flight time is key to broad jump skill acquisition.

Guidelines for using the skill sheet for broad jump;

- 1. SO athletes can't learn broad jump without proper take off angles and correct knee angle so spend time to develop these elements first.
- 2. When this is done (it can take more than 20 hours of practice) start working on flight components (arm and leg action).
- When this is acquired, combine the first 2 skills together for a basic broad jump. Follow each step of the skill sheet (next page) until all basic skills are acquired.

Athletics: Broad Jump Basic Skills

Basic Skill: Broad Jump	YES	NO	Comments
Sub Skills			
Foot placement (shoulder width)			
Forward lean (Take off 25° - 35°)			
Leg Drive (from 90° knee angle) Take off speed must be maximal			
Arm Drive (up full extension)			
Landing (reach forward)			
2 foot landing			
Jumps length = Height of athlete			
Adequate body weight (Lower mass to displace)			

When athletes achieve all "YES", they have acquired basic skills. Expectations are critical to skill acquisition.

20-hour acquisition

Skill Breakdown: Examples of priority elements to focus on during practice

Spend time on each one until acquired

1. Take off: Body position and forward angle (30°) – Leg and arm speed

- Maximal body displacement speed

2. Air form: Extension – arms and leg actions – Reach – High point - Eye

direction

3. Landing: Arm and feet forward - Center of gravity follow-through -

Extension

Practice one skill at a time, don't worry about jump quality, and complete as many correct ones as possible in a session. Basic performance expectations are achieved when athletes can broad jump **their height** with good technical skills.

SO athletes are visual learners, and therefore having a generic example or a video of correct motion will be of great value during skill acquisition. Also, slow down the demonstration when introducing a new skill, and use hands to guide movements when necessary.



Home training:

Broad jump is easy to practice at home and can be done inside or outside. Practicing broad jumps often at home (2-3 times per week) can not only improve technique but will also develop strength and power.

Because weight is important, home training must include good nutrition and endurance training three times a week. The following example includes endurance and strength training.

Home Practice: Broad jump example

(15' = 15 minutes)

15' Warm up and stretching

15 Broad jumps (take 30" rest in between)

10 to 30 minutes of running

5' cool down

Try to jump further every time you train.

Basic performance objectives for this event is:

· Broad Jump: Jumping your height.

Conclusion:

Impulse is the most important physical characteristics of these sports and impulse is directly related to power and body weight of athletes. Often sprinters and athletes with high vertical jumps will be natural candidates for board jump. Using the skill sheet is an excellent way to learn basic skills and encourages athletes to practice often. Broad jumps can be practiced throughout the year and the more time spent on training, the better each SO athlete will become.

Technique is necessary to increase jump distance but improvements in strength and power will be more important for long-term improvements. This is why fitness sessions such as Club Fit should be incorporated to broad jump training.

Weight control is an important part of success, good nutrition and endurance training at least three times per week are necessary to attain low body fat and diminishing the weight to be displaced while jumping. We are recommending body fat percentages of **25% for ladies and 15% for men** as a guideline, understanding that everyone is different.

Basic broad jump skills can easily be acquired in the 20-hour program especially if practicing at home. Combining long and broad jumps with sprint track events is a great combination and will lead to faster basic skill acquisition in all of them.

Lesson Plan Basic Skill Acquisition Program (weekly or monthly)

Sport	Athlete Name:
	Program Expectations
1- Weekly Practice (ttend all practices)
Day (S)	Time
Location	
"What the group is wo	king on":
2- Club Fit 100% atto	ndance (Including Functional Testing exercises)
Day	Time
Location	
"What you need to co	centrate on":
3- Basic Skill Develo	ment Homework (4 times per week - 1 hour per day)
Skill	
"Individual Home Pra	tice Objectives"

Athletics Events

LONG JUMP



Long jump is an event where strength (power), speed and technique are the main physical components for success. Many strong performers in long jumps are also excellent sprinters as take off speed is critical for distance as horizontal speed generate momentum and the higher this momentum will be in the air; the longer the jump will be.

One factor affecting flight time is the weight of participants. It takes a lot more force to move a heavy body forward and up than a lighter one. Long jump technique is important, but power, speed and lighter overall weight will always play a more important role than technique alone.

Skills required for long jump are listed in the basic skill (next page). These sheets can be used as a guide, and when all skills are marked "yes", progression to the next level can proceed.

Learning to transform power and speed into flight time is key to long jump.

Guidelines for using the skill sheet for long jump;

- 1. SO athletes can't learn long jump without proper run speed, so spend time to acquire correct run speed, consistent start point and exact foot placement for take off first.
- 2. When this is done (it can take more than 20 hours of practice) train the 3-step approach and jump with proper angle and technique.
- When this is acquired, combine approach and last 3 steps before starting the flight technique. Follow each step of the skill sheet until all basic skills are acquired.

*** Most Important Learning Concept for SO athletes ***

My numerous years of experience with skill acquisition in Special Olympics have shown that focus on results (external focus) while learning is many times more effective than focus on movements (internal focus). Most skills have "external" objectives such as distance to jump (relative to height), distance to fall line for take offs and percentages of successful correct tries instead of complicated technical instructions difficult to process for individuals with an intellectual disability. Follow the skill sheets with this in mind and use lots of demonstrations.

Athletics: Long Jump Basic Skills

Basic Skill: Long Jump 2 times body height

	YES	NO	Comments
Sub Skills;			
Establish always the same Starting mark 10/10 (Point of acceleration)			
Run speed (same as sprint) 20m on both			
Take off within 6 inches (of take off board) 5/5			
Take-off			
Leg and arm drive (up)			
Trajectory (20° at take off)			
Air position arm up			
Landing leg forward			
Jumps length = 2 times Height of athlete 5/5			
Adequate body weight (Lower mass to displace)			

When athletes achieve all "YES", they have acquired basic skills. Expectations are critical to skill acquisition.

20-hour acquisition

Skill Breakdown: Examples of priority elements to focus on during practice

Spend time on each one until acquired

- 1. Run speed: Always with same starting point Arm action Body position -Knees Head
- 2. Take off: Last 3 steps Foot plant Knee and arm action Body position
- 3. Air form: Extension Arms and leg actions Reach High point Eye direction
- 4. Landing: Arm and feet forward Center of gravity follow-through Extension

Practice one skill at a time, don't worry about jump quality, and complete as many correct ones as possible in a session. Basic performance expectations are achieved when athletes can **long jump twice their height** with good technical skills.

SO athletes are visual learners, and therefore having a generic example or a video of correct motion will be of great value during skill acquisition. Also, slow down the demonstration when introducing a new skill, and use hands to guide movements when necessary. Marking the approach with color lines can be of a great help to visual learners.

Home training:

Although long jump can be practiced at home, a soft landing base such as sand is required for a complete long jump. However each skill (identified above) can be practiced separately without having to execute a complete jump. Approaches from a measured position, last 3 steps with knee and arm take off and approach speed (running through) can easily be practiced at home. Practicing often at home (2-3 times per week) can not only improve technique but will also develop strength, power, running speed and lead to very consistent approaches and take offs.

Because weight is important, home training must include good nutrition and endurance training three times a week. The following example includes endurance and strength training.



Home Practice: Long jump example (15' = 15 minutes)

15' Warm up and stretching

7 approaches from marked distance to take off board without jumping (Focus on speed and distance to the take off board)

10 3-step take off (Focus on hand and knee action at take off)

10' to 30' of running

5' cool down

Basic performance for this event is:

• Long jump: Jumping twice your height. If an athlete measure five feet then basic jump performance is at ten feet.

Conclusion:

Speed and power are most important physical characteristics of this sport. Often sprinters and athletes with high vertical jumps will be natural candidates for long jump. Using the skill sheet is an excellent way to learn basic skills and encourages athletes to practice often. The more time spent on training, the better each SO athlete will become.

Technique is necessary to increase jump distance but improvements in speed and power will be more important for long-term improvements.

Weight control is an important part of success, good nutrition and endurance training at least three times per week are necessary to attain low body fat and

diminishing the weight to be displaced while jumping. We are recommending body fat percentages of **25% for ladies and 15% for men** as a guideline, understanding that everyone is different.

Basic jumping skills can easily be acquired in the 20-hour program especially if practicing at home often. Because speed and power are required in some sports more than others, combining long and broad jumps with sprint track events is a great combination and will lead to faster basic skill acquisition in all of them.

Lesson Plan Basic Skill Acquisition Program (weekly or monthly)

Sport	Athlete Name:
	Program Expectations
1- Weekly Practice (atte	nd all practices)
Day (S)	Time
Location	
"What the group is working	ng on":
2- Club Fit 100% attenda	nnce (Including Functional Testing exercises)
Day	Time
Location	
"What you need to concen	trate on":
3- Basic Skill Developme	ent Homework (4 times per week - 1 hour per day)
Skill	
"Individual Home Practice	e Objectives"

ATHLETICS FIELD EVENTS

HIGH JUMP



Although high jump could be an excellent field event for many SO athletes, equipment required to high jump makes this activity less accessible. Unless a gymnasium or a track can be found where semi-permanent high jump equipment is already set up, time and effort to create the necessary environment will take a lot of preparation before and after practices. Few SO programs and coaches train for high jump for these reasons.

The ability to transfer forward momentum into vertical flight is key to high jump. The aim of each athlete is to lift their center of gravity over the bar, which is why tall and light athletes have a definite advantage. Taller athletes have a higher center of gravity and will naturally jump higher than shorter one, and lifting a lighter weight over the bar requires less forces than lifting a heavier load characteristic of bigger athletes. There is not much an athlete can do about how tall they are, but being lean is an important part of high jumping and correct nutrition and exercise can make a significant difference.

Lifting the center of gravity over the bar require strength, speed and technique. Without strength (power), a bar set very close to hip level (where the center of gravity is) will be difficult to jump over, the more power, the higher athletes will be jumping.

Technical skills are important in high jump in order to maximize lift. Basic technique usually involves jumping over the bar with an arched back, (commonly referred to as the Fosbury Flop). It consists of an approach, take off, rotation over the bar and landing.

Skills required for this technique are listed in the high jump basic skill section of this book. These sheets can be used as a guide, and when all skills are marked "yes" and athletes can consistently jump one foot (30.5 cm) higher than their center of gravity using the Fosbury Flop technique, they are ready for more advanced intermediate skills.

Guidelines for using the skill sheet (next page) for high jump;

- 1. SO athletes can't learn high jump without proper approach to the bar, so spend time to acquire correct run speed, consistent start point and exact foot placement for take off first.
- 2. When this is done (it can take more than 20 hours of practice) start the last 3-step approach and jump with proper angle and technique.
- 3. When this is acquired, combine running approach and last 3 steps before learning air skills.
- 4. Follow each step of the skill sheet until all basic skills are acquired. Progress will be mostly dependent on how many focused training sessions an athlete does.

*** Most Important Learning Concept for SO athletes ***

My numerous years of experience with skill acquisition in Special Olympics have shown that focus on results (external focus) while learning is many times more effective than focus on movements (internal focus). Most skills have "external" objectives such as height to jump (according to individual centre of gravity) and percentages of successful correct tries instead of complicated technical instructions difficult to process for individuals with an intellectual disability. Follow the skill sheets with this in mind and use lots of demonstrations.

Athletics: High Jump Basic Skills

Basic Skill: High Jump (1 foot 30.5cm higher than center of gravity)

	YES	NO	Comments
Sub Skills (3 strides approach) To	be rep	eated v	vith success 4/5 times
Proper acceleration			
Proper velocity			
Curved approach			
Take off 1 arm length away			
Drive leading knee up			
Chin up – Body tall			
Arm and leg reach for the sky			
Rotation over bar (bungee) (On top of box)			
Landing (From top of box)			
Complete Jump Height = 1 foot (30.5 cm) Over center of gravity of Athlete			
Suggested maximum 25% ladies and 15% men Body Fat			

When athletes achieve all "YES", they have acquired basic skills. Expectations are critical to skill acquisition.

20-hour acquisition

Skill Breakdown: Examples of priority elements to focus on during practice

Spend time on each one until acquired

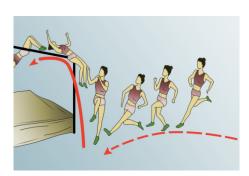
1. Approach: Arm action – Body position – Curved path – Exact steps count

2. Take-off: Last 3 steps – Head turn - Foot plant – Knee and arm action – Body position

 Rotation: Body position and forward angle – Arm reach – Eye on the bar - Leg and arm action – Back arch – Horizontal displacement – Height over bar

4. Landing: Eye on the bar – Feet up

It is important to practice one skill at a time, without worrying about jump quality. For example, if practicing "takeoffs", a practice is set up only for take offs. The last three steps are practiced with head direction, knee and arm action motions.





SO athletes are visual learners. Having a generic example or a video of correct motion will be of great value during skill acquisition. Slow down the demonstration when introducing a new skill, and use hands to guide movements when necessary. Using color markers on the ground for approach and takeoff can facilitate acquisition.

Basic performance objectives for this event:

- High jump: Fosbury flop with bar set one foot (30.5 cm) over center of gravity.
- Use flexible "bungee" instead of a bar to develop basic skills

 Each part of the jump can be practiced individually. For example, standing on a box to learn rotation or landing allows the athletes to learn each element one at a time.

Home training:

High jump home training involves training to increase strength (power) and develop good endurance (technical skills are too specific and require adequate equipment). Practicing vertical and broad jumps, having good nutrition and endurance training will considerably help high jump results.

Attending every possible fitness sessions (such as Club Fit described in a later chapter) will also be advantageous.

Home Practice: High jump example

(15' = 15 minutes)

15' Warm up and stretching

8 Broad jumps (rest 30 seconds in between each jump)

8 Vertical jumps on both legs (rest 30 seconds in between each jump)

8 3-step approaches with vertical jump on one leg (impulse leg)

10' to 30' of running

5' cool down

Try always to jump further and higher. Make marks on wall to record vertical progression.

Conclusion:

Very few SO athletes participate in high jump, and therefore this is an opportunity for success if training facilities can be arranged. Using the skill sheet is an excellent way to learn basic high jump skills and encourage athletes to practice often if possible. Tall and light athletes will always have a natural advantage over shorter and heavier ones. We recommend body fat percentages of **25% for ladies and 15% for men** as a guideline, understanding that everyone is different. Strength and low body weight are required in high jump, and will also help performance in many other sports. High jump and training for this event promotes healthy living, which is another reason why high jump is such an attractive sport.

Basic jumping skills can easily be acquired in a 20-hour focused skill program.

Lesson Plan Basic Skill Acquisition Program (weekly or monthly)

Sport	Athlete Name:
	Program Expectations
1- Weekly Practice (atte	nd all practices)
Day (S)	Time
Location	
"What the group is workin	ng on":
2- Club Fit 100% attenda	nnce (Including Functional Testing exercises)
Day	Time
Location	
"What you need to concen	trate on":
3- Basic Skill Developme	ent Homework (4 times per week - 1 hour per day)
Skill	
"Individual Home Practice	e Objectives"