## Basic Coaching Manual



## CONTENTS

Page
Introduction ..... 3
QLAA Coaches Code Of Ethics ..... 4
Training Guidelines ..... 5
Various Training Methods ..... 6
General Warm-Up ..... 7
Immediate Injury Management ..... 10
Sprints ..... 11
Hurdles ..... 14
Relays ..... 17
Middle Distance ..... 20
Race Walking ..... 23
Shot Put ..... 26
Discus ..... 30
Javelin ..... 33
Long Jump ..... 36
Triple Jump ..... 38
High Jump ..... 40
Acknowledgments ..... 42

## INTRODUCTION

This booklet gives basic coaching information for the use of parents and inexperienced coaches of young athletes in the six to fifteen age bracket. It is produced by the Queensland Little Athletics Association (QLAA) to assist Centre management committees, coaches and parents in the teaching and all round development of young athletes. Information on more advanced coaching techniques and training methods may be sought through the Australian Track and Field Coaches Association (ATFCA) or the many athletics coaching publications available.

Competition rules and officiating are covered in the "Rules of Competition Handbook" as issued by QLAA.
Copies of this manual may be purchased from QLAA. All enquiries should be directed to:

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## QLAA COACHES CODE OF ETHICS

Athletics is an individual sport where the athletes' own determination and achievements determine success or failure. However, most importantly it should be an enjoyable sport with fun being a major motivator. We as coaches play an important part in the overall development of the athletes under our control. We not only influence their all round physical and social development, but also help to motivate them. A successful coach invests more in the well being and interests of the athlete than their win-loss record. Therefore, it must be remembered that our main aim at all times should be to promote this great sport by all round capability and enjoyment. This will be most readily achieved by following the codes of ethics listed below:

- Be reasonable in your demands on the young athletes' time, energy and enthusiasm. Remember that they have other interests.
- Teach your athletes that rules of the sport are mutual agreements, which no one should evade or break.
- When coaching group athletes according to age, height skill and physical maturity whenever possible.
- Avoid over-attention to the talented athletes. The "just-average" athletes need and deserve equal time.
- Remember that children compete for fun and enjoyment and that winning is only part of their motivation. Never ridicule or yell at the children for making mistakes or losing in a competition.
- Ensure that equipment and facilities meet safety standards and are appropriate to the age and ability of the athletes.
- The scheduling and length of coaching practice times at competitions should take into consideration the maturity level of the children.
- Develop each athletes respect for the ability of opponents, as well as for the judgement of officials and opposing athletes.
- Follow the advice of a sports medicine physician when determining when an injured athlete is ready to compete or practice again.
- Remember that children need a coach they can respect. Be generous with your praise when it is deserved, and set a good example.
- Make a personal commitment to keep yourself informed on sound coaching principles and the principles of growth and development of children.

The best coaches are more interested in their athlete's well being than whether they win or lose!

## The Potential / Ability Of Each Child

Within each age group, give each child the same workload. You will find that some will put in more effort than others into their training, so it is important to advise them that although the opportunities for coaching/training are available it is up to themselves whether or not they take the advantage.

In group training / coaching never favour one athlete more than another. It is just as important to pick up and correct faults, give encouragement and praise where needed, to a child who has just started athletics, as it is to a champion. The best way to lose the confidence of a child is to ignore the fact that they are keen to learn.

## TRAINING GUIDELINES

## AUSTRALIAN TRACK AND FIELD COACHES ASSOCIATION (ATFCA) RECOMMENDATIONS FOR COACHES AND PARENTS

## Guidelines For Training

The ATFCA recommends that for children aged 6-9 years the emphasis should be on skill training and competition games / fun. For children aged 10 to 14 years the emphasis should be on general all round development (incorporating aerobic running, gymnastics, flexibility and basic skills) and general fun competition.

The ATFCA recommends the following in relation to training progressions and format of training sessions:

## General Guidelines For Training Progression

| Under 6-8 | 1 Competition | 1 Practice of 60 minutes |
| :---: | :---: | :---: |
| Under $9-10$ | 1 Competition | 1 Practice of 75 minutes |
| Under 11-12 | 1 Competition | 2 Practices of 75 minutes |
| Under 13-15 | 1 Competition | 2 Practices of 90 minutes |

## General Guidelines For Training Session (Practice Time)

60 minute session

- 10 minute Warm Up
- 15 minutes each (three different events)
- 5 minutes Cool Down

75 minute session

- 15 minutes Warm Up
- $2 \times 20$ minutes (two different events)
- $1 \times 15$ minutes (one event)
- 5 minutes Cool Down

90 minute session

- 20 minutes Warm Up
- 20 minutes each (three different events)
- 10 minutes Cool Down

NOTE: 2-5min recovery / change over periods are incorporated into event times.

## VARIOUS TRAINING METHODS

| Continuous Running: | This involves covering long distances at low speeds to help develop the body's ability <br> to take in and use oxygen. The "Talk Test" is a good guide as to how fast to run. <br> You could run with a friend and if you are not able to talk to your friend, because you <br> are out of breath then you are running too fast. |
| :--- | :--- |
| Fartlek: | Fartlek is short periods of fast running which are completed in a longer run. Between <br> each of the faster efforts there is slow recovery running. In a fartlek run there <br> should be variations in speed, distance and recovery depending upon the event and <br> athlete's fitness. |
| Hill Running: | Hill running sessions consist of a number of hard efforts performed up a hill with a jog <br> or a walk back recovery. Longer hills (eg. 200-400m) can be used to improve strength <br> and endurance. Shorter hills (eg. $50-80 \mathrm{~m})$ can be used to improve strength and <br> speed. |
| Interval Running: $\quad$Interval training is divided into phases of hard efforts and easy recovery efforts and is <br> decided by distances, speed, repetitions and recovery. The distance may vary from |  |
| 50m-1km. |  |
| Sprinting:Sprint training involves maximum speeds over short distances with long recoveries <br> between the fast efforts to ensure full recovery. Distances can vary from 30-150 <br> metres. |  |
| Circuit Training: $\quad$As a general rule, young athletes should not get involved with strength training <br> through the use of weights. Strength activities such as push-ups, sit-ups, etc can be <br> completed as the athlete uses their own body weight. |  |
| exercise. |  |

## ATFCA General Guidelines for Strength \& Conditioning

Strength and conditioning is an important part of an athlete's total development and strengthening exercises should be introduced early as part of the overall plan.

Athletes can perform body-weight training exercises up to the age of 12-13, at which time they can be introduced to light weight training and simple jumping activities.

Heavy loads on growing joints can create permanent damage and sometimes disfigurement of the bones. It is recommended that athletes do not start maximal weight training or advanced jumping activities until after puberty. These programs when commenced must be carefully monitored to avoid injury to the athlete.

## GENERAL WARM-UP

The intention of the following is not to show certain warm-up exercises for any specific athletic discipline. Rather, it is a basic guide to suitable general warm-up activities.

The more flexible an athlete is the better he/she can perform. All track and field events need some degree of joint mobility. Events such as hurdling, race walking and all field events are now taken for granted as requiring great joint mobility in specific joints. Longer distance runners and sprinters require very good hip and shoulder mobility.

## Terminology of Movement

- Flexion when the limb is bent
- Extension when the limb is straightened
- Abduction moving the limb away from the body
- Adduction moving the limb towards the body

Listed below are examples where mobility is useful in particular events.

## Sprints

Shoulders (backwards, upwards, for the upper arm)
Hips
(extension, flexion)
Ankles

## Hurdles

Shoulders (backwards, upwards, forwards, sideways)
Spine (torsion, flexion, side bending, combined)
Hips
(extension, flexion, rotation \& abduction)
Ankles

## Middle Distance

| Hips | (extension) |
| :--- | :--- |
| Ankles | (rotation, upwards, downwards) |

Using the muscles of the chest to allow deeper breathing.

## Race Walking

| Shoulders | (abduction, backwards, upwards, elevation, depression, rotation) |
| :--- | :--- |
| Spine | (torsion \& sidebending, combined ) |
| Hips | (extension, flexion, rotation $\mathcal{\&}$ abduction ) |
| Ankles |  |

The body could be compared to a car engine. If one wants to achieve maximum performance in any event, the body's 'engine' needs to be properly warmed up.

Set out below is an example of a basic warm-up which all athletes, regardless of discipline, should include in each training session before proceeding to individual specialist events. However, coaches may find that for athletes U9 down a fun game involving a wide variety of large muscle movements can be as effective as a basic warm-up. For ideas on possible games refer to Play Training Manuals 1 and 2.

## Jogging

Two laps (minimum 800 metres ) continuous jog to adjust circulation and breathing to meet the extra demands ( approximately 5-10 minutes duration ).

## Stretching Exercises

(Approximately 12-15 minutes duration )
Static stretching starting from the head down.
The sketches below are a few examples of basic static stretching exercises which should be included in all warm-up sessions. Each stretch should be performed slowly, and once attaining the position indicated, the athlete should hold this position for between 6 and 10 seconds before relaxing. The stretch is then repeated, with $3-4$ repetitions being sufficient.

More specific exercises for specific muscles may need to be performed for the athletic discipline you are going to train in.


## Running Drills

(approximately 3.-5 minutes duration)
On the spot high knees ( 10 seconds)
$2 \times 50$ metres and $2 \times 80$ metres build ups

The basic training/competition workout can be broken up into three areas:-
1 warm up (20-25 mins)
2 training/competition period
3 warm down (5-10 mins)

## Dynamic / Continuous Warm Up

An alternative to the static stretching routine is the dynamic or continuous warm up. This type of warm up is designed to closely mimic the actions of the event, elevate body temperature and enhance joint mobility. Rarely do you seean athlete doing a standing quadricep stretch whilst in the act of running, walkng, jumping or throwing. Static stretches do have a place as they provide an athlete with the opportunity to increase flexibility.

A basic dynamic routine incorporates, but is not limited to, jogging, skipping, sprint drills, basic plyometrics, dynamic and static stretches. These are mixed together to form a routine that lasts 10 to 15 minutes.

## Warm Down

The warm-down should be basically the same as the warm-up, but on a reduced scale. The warm-down gradually brings the body back from a high intensity workload to rest, thus helping to rid the muscles used of lactic acid, the removal of which in turn prevents soreness and possible cramping.

Example of a warm-down programme would be, two or three of the listed static stretches choosing those in relation to the muscles used e.g. throws - mainly upper body, followed by a slow 400 metre jog.

## IMMEDIATE INJURY MANAGEMENT

## The Vital Importance of RICED

The cornerstone of all immediate sports injury management is RICED. This important method is used for all athletic injuries whether the child has suffered soft tissue bruising, tearing or broken a bone. All that you have to do to learn this basic treatment is to remember that the letters in the acronym stand for:

REST: Use of the injured part should stop the minute it is hurt and a sling or crutches used if necessary. This is essential because continued exercise, or extended physical activity, could extend the length of time the injury persists.

ICE: This decreases the bleeding from the injured blood vessels by causing them to contract. The more blood that collects in a wound, the longer it takes to heal.
COMPRESSION: This limits swelling which, if uncontrolled, could retard healing. Following damage to a tissue, blood and fluid from the surrounding tissues bleed into the damaged area and bloat the tissue (swelling). Swelling can be useful in some instances, particularly if the skin is broken and the area has been infected. Antibodies then collect in the swelling to kill the germs. But, if the skin has not been broken, antibodies may not be necessary and the swelling can delay healing.

ELEVATION: Elevation of the injured area above the level of the heart assists the return of blood to the heart by using gravity to help drain excess fluid from the damaged area.
DIAGNOSIS or DOCTOR: If the patient can move comfortably they should be taken to a doctor to be diagnosed. Many large carnivals have First Aid Officers (such as St John) at the grounds. If the athlete cannot move comfortably or has a suspected back or neck injury they should stay where they are and an ambulance should be called immediately.

## RICED: Step-By-Step Procedures

Because swelling usually starts within seconds of an injury, RICED treatment should start immediately. Do not wait for a doctor's advice.

First place a wet towel over the injured area. Then apply ice in the form of an ice pack, crushed ice in a wet towel or a packet of frozen vegetables. NEVER apply the ice directly to the skin, or in a plastic ice pack, because it can cause the skin to burn and become painful.
For compression, wrap an elastic bandage firmly over the ice around the injured part. Be careful not to wrap the area so tightly that you cut off the blood circulation. Signs of this are numbness, cramping and further pain. If any of these occur, immediately unwrap the injured area. Otherwise, leave the ice pack and the bandage in place for approximately 10 to 20 minutes repeat each hour.

Elevate the injured area so that it is above the level of the heart. Do not expect an athlete to hold an injured limb in the air, place a chair or other item under the limb for comfort. If the area continues to swell, or pain increases, immediately check with a doctor if you have not yet done so.

You can follow the RICED program for 48 to 72 fours. Further treatment depends on the type of injured tissue and a doctor's diagnosis.

## SPRINTS

## Safety Precautions

- Ensure athletes run in the same direction. Usually this is anti-clockwise.
- Athletes should move off the track at the end of each run.
- Athletes should wear suitable footwear. Spike footwear is available for the more experienced athlete.
- Look both ways before crossing the track.

Sprinting is running at or near maximum speed as long as possible. In Little Athletics, the events considered sprints depend on the age of the athlete. For the youngest children races up to 100 m are sprint races, while for the older athletes races up to and including 400 m are sprint events.

Speed is the basis of every athletics event, whether it be shot putting, high jumping or even distance running. It is, therefore, important that each athlete learns to sprint well because it will enhance their ability in every event.

Every individual has their own particular running action and to attempt to copy someone else can be a dangerous practice. Rather, technique work should be an enhancment of one's own particular movement pattern. Obviously, however, some aspects of the sprinting action are the same for all sprinters, and these correct points of tecnhique should be highlighted.

## Points Of Technique (ATFCA)

- Light quick movements.
- Upright carriage of head and trunk.
- Movement of the feet and limbs in a straight path.
- Use of short arm levers, pivoting about the shoulder joint.
- A high pick-up of the leading thigh.
- An extension of the support leg.
- Running 'tall' and with 'high hips'.
- A slight forward inclination of the trunk.
- Chin in, chest out, abdomen in, tail in, shoulders down, knees straight ahead, feet slightly apart and pointing forward.
- Relaxation throughout.








## Error Detection And Correction (ATFCA)

Error 1: $\quad$ Athlete running too upright - weight is behind the centre of gravity, thus causing stride to be wasted and detracting from forward speed.
Correction: Resistance running - harness, uphill (approx $20^{\circ}-40^{\circ}$ ), downhill (approx $10^{\circ}$ ). Distance 2060m

Error 2: $\quad$ Athlete patters, not gaining full extension of the leg in the drive. The back knee is usually bent.

Correction: Work on knee lift and bounding (bounding should not be used for young athletes under 11).
Error 3: Athlete uses an exaggerated arm swing or swings arms across body's mid-line. This causes unnecessary rotation (hips, legs and shoulders).

Correction: Emphasise backwards power-drive action. Drive through elbows, relax on forward swing.
Error 4: Tension seen in clenched fist, hunched shoulders, tight neck.
Correction: Practice relaxed. Smile when running.
Error 5: Bottom down, knees bent, inefficient stride.
Correction: Any technique drills which avoid this such as 'high knee drill', 'bottom flick drill', running with bean bag on head and keeping head high.

## Starts (ATFCA)

## Standing Start

The athletes must first decide which foot to put forward. Find which foot feels more comfortable in front by trying standing starts with each foot forward in turn. Generally the most powerful leg is placed in front. This leg is then the leg placed in front for the start. The take-off foot for jumps can also be used as the front leg for starts.

On the command "on your marks" move to start line, place one foot forward so that it is behind the line, not on or over it. Weight is on front foot, heel lifted on back foot, bend knees and the arms are relaxed by placing both hands comfortably on the front knee. Opposite hand to front leg should be on top (e.g. left foot forward = right hand on top).

On the command "set" weight transfers further over front foot, take body forward, bend both arms with opposite arm to front foot forward.

On "gun", push off on front foot, use arms and legs vigorously.
Major problems may include:

- going into 'set' position when 'on your marks'
- putting same arm as front foot forward.
- lifting the front foot on the "gun". This means that the weight was not forward.


## Crouch Start

A perfect start is one which gives the quickest response to the gun and the maximum forward velocity and continuing acceleration by force application from both legs. A crouch start is most effective when used in conjunction with a set of running spikes and starting blocks.


Find which foot feels more comfortable in front by trying standing starts with each foot forward in turn.
Set Up:
Kneel with both knees one foot length behind the start line. Move the leg you want to the rear until the knee is as far back as the toes of the front foot. There should be one to two fist widths between front foot and adjacent knee.

On the command 'on your marks' enter the set up position as suggested above and drop hands shoulder width apart close behind the starting line with thumb and forefinger of each hand close to the line. The shoulders should be high so that the arms are straight. Each hand is a high 'bridge' with the hands no further than shoulder width apart. Ensure the rear foreleg is at right angles to the start line.

On the command 'set' simply roll the shoulders over the hands. Raise the hips until they are slightly higher than the shoulders. Do not rush. The angle of the front knee is at least 90 degrees, and the rear knee 120 degrees. The head should sit comfortably, eyes looking about 25 cm in front of the starting line.

On 'gun' the athlete drives the rear leg and hips forward. Arms move vigorously. The athlete should be aware of the need to drive the hips forward and not upward.

Major problems may include:

- Front foot too close to the line making forward drive difficult.
- Sitting back with centre of gravity behind front foot.
- Knees splayed, and not in direction of travel.
- Back leg too bent or too straight in 'set'.


## Starting Blocks

A set of starting blocks generally has two detachable foot pads which are locked onto a centre bar. The foot pads can be adjusted forward or backward on the bar. The angles of the pads can aslo be adjusted up or down to suit each athlete.

To set up a set of starting blocks the athlete assumes the set up / "on your marks" postion of the crouch start. One foot pad is placed behind each of the feet so that the pad is wedged into the gap between the athletes raised foot and the ground. Then the athlete stands up. The bar is then placed in the centre of these pads at a distance from the start line which can be measured by the athlete (e.g. hand spans, foot width) and the pads are locked onto the bar. Adjustments to the position of the pads can be made in either the "on your marks" or "set" positions to suit the comfort level of the athlete.

NOTE: Each athlete will have different settings so the procedure must be repeated for each athelte.

## HURDLES

Because of its technical and energy demands, hurdles is an exciting and challenging group of events. The technical component of hurdling is clearly much greater than in sprinting, yet the concept of the hurdles race must be one of a sprint.

## Safety

When hurdling or practicing for the hurdles, always make sure you attempt to clear the hurdle so that if you accidently knock it, it will fall down. A hurdle is generally only designed to fall down in one direction only. Even though you may use a collapisible hurdle which can fall in both directions it is worthwhile stressing that all hurdles are not built that way. Designating a direction of travel over the hurdles proir to the start of each session may overcome this.

## Establishing The Hurdling Concept

The sprint hurdles, generally, have a rhythm of three strides between each hurdle. However, younger children may find this difficult and may initially require a fourth (or more) stride. This highlights the importance of youngsters being taught to hurdle with both legs. It is possible from the very outset to have athletes sprinting over $30-40 \mathrm{~m}$ with a low barrier (e.g. skipping rope) used as a hurdle. Very quickly the barriers can be raised in height with the athletes always endeavouring to concentrate on sprinting rather than 'jumping over barriers'. At the same time, the barriers can be gradually increased in their distance apart.

## Terminology

Lead leg: Leg to clear the hurdle first (leading the body over)
Trail leg: Leg to clear the hurdle last (trailing behind the body)

## Hurdles Learning Drills

NOTE: These drills should be completed with both legs, such that an athlete can lead and trail with either.

## Lead Leg Drills

1. EXECUTION: Stand on the other side of the hurdle with the take-off leg on the outside. Pick up the knee of the leading leg very fast and then thrust the heel (toe upwards) across the hurdle and, in a continuous movement, sweep the leg down to land high up on the toes (under the body's line of centre of gravity). May be performed with one to five little steps between suitably spaced hurdles.

AIM: $\quad$ To acquire the correct pick up of the knee of the leading leg and continuous lead leg action.
2. EXECUTION: From a standing position begin to over-balance forward, pick up the free leg fast and high and extend it, to rest the foot against the wall. At the same time, lean well forward and touch the wall with the 'opposite' hand, keeping the shoulders parallel to the wall. Stand at a distance from the wall which allows full extension of the supporting leg.

AIM: Improvement of take-off action; basic leading leg action.

## Trail Leg Drills

3. EXECUTION: With the hands supported and trunk leaning forward, perform a continuous rotary action of the trail leg over a hurdle placed at the side, slightly behind the foot resting on the ground.
AIM: $\quad$ To increase mobility and acquire a correct rear leg action.
4. EXECUTION: Stand behind and to the side of a hurdle, with the leading leg on the outside. Lean forward slightly and drive off to place the leading foot to the side and a little way ahead of the hurdle. As the take-off leg completes its drive bring it through, well flexed, in a rhythmic, rotary movement over the hurdle. This may be performed with one to five short steps between suitably placed hurdles.

AIM: $\quad$ To get the feel of drive from the take-off leg and acquire a fast, 'complete' rear leg action.

## Rhythm Drills

5. EXECUTION: In normal running, accentuate the drive on every fourth contact (three strides). Emphasise extension of the take-off leg with simultaneous pick up of the leading leg (well bent) with toes lifted towards the knee, restart the running and repeat the cycle. The same with check marks on the ground or any similar sort of reference points.

AIM: Introduction to the rhythm of hurdling, accentuating the action of 'attack' and the feeling of clearing an obstacle. Take-off and landing on check marks.
6. EXECUTION: The leading leg is picked up, well flexed, and is then extended as it sweeps down the other side of the hurdle. The take-off leg is brought through well flexed. This drill can also be performed with one to five short steps between suitably spaced hurdles. The clearance should be fast but the approach should not be hurried.
AIM: "Grooving in" or getting a feel for the complete movement.


## The Technical Model (British Athletic Federation)

The dynamics of the whole hurdling model may be considered as three phases blending into each other in sequence.

## LEADING LEG

Action at take-off Picked up well flexed knee and hip in line with the running action.

## "FAST KNEE"

## Action across

Knee opens naturally, never deliberately, with the thought already of grounding the foot quickly.

## "UP-DOWN-FAST"

## Action off/from

Leg strikes back and down-with the feeling of pushing the hip into the next stride.
"STRIKE THE GROUND AWAY"

TRAILING LEG

## Action at take-off

 Vigorously extends to drive the athlete into the hurdle.
## "DRIVE AT"

## Action across

The well flexed knee is pulled sharply toward the arm pit (frog-like) - ankle cocked - heel in tight.
"KNEE HIGH: HEEL IN"

## Action off/from

Knee- still flexed, pulled across the chest -heel still in tight.
"PULL ACROSS"

TRUNK

Action at take-off Square - but leaned into the lead leg thigh and hurdle.
"DIP"

## Action across

Shoulders and trunk balanced and square.
"PRESS FORWARD"
Action off/from
Lean off the hurdle into the sprint.
"LEAN INTO SPRINT"

## ARMS

## Action at take-off

 Leading elbow aimed across hurdle. Other wrist never further back than hip."REACH ACROSS"

## Action across

Leading elbow pulled down and back. Other arm punched through.
"FAST ARMS"
Action off/from
Arms move into vigorous 'sprinting'.
"SPRINTING ARMS"

## Six Technique Suggestions

## AVOID:

1. Straightening the leading leg too soon.
2. Incomplete drive at take-off.
3. Taking off too close to the hurdle causing a jump rather than a thrust across.
4. Over-flexing the leading leg on landing.
5. Leaning back on landing.
6. A weak first stride away from the hurdle.

## AIM TO:

1. Bring the lead leg up well flexed and thrust the hip forward.
2. Pick up the take-off leg as a result of the drive rather than just 'pulling it off' the ground.
3. Shorten flight time by keeping low over the hurdle.
4. Keep the ankle firm on landing and make an active re-entry into running.
5. Keep the trunk leaning forward slightly in order to run away from the hurdle.
6. Use both arms and 'free' leg to make a strong, fast first stride.

## RELAYS

Unlike other athletics disciplines, the relay is a team event. As such, it requires the cooperation of every team member for development of its technical component. The relays are often largely ignored by many centres, with teams thrown together on the weekend prior to relay competitions. To be successful a relay team must be able to progress through each change-over without slowing. The most common relays are shuttle and circular, using four runners.

## Shuttle Relay

Shuttle relays represent an excellent introduction to relay racing for youngsters. It is also an appropriate method for fun games such as dress-up relays.

The shuttle relay is set-up with two members of a team stnding at one end of a set distance (generally 70 m ) with the other two at the alternate end (in a straight line). The first athlete sprints towards the second athlete who in turn carries the baton to the third. The third runner sprints and hands the baton onto the fourth runner who completes the race.

Passing Method - The athlete receiving the baton should hold their arms outstretched at shoulder height. The athlete should make large V's with both hands. The hand with which they wish to carry the baton is placed on the bottom with the other hand placed on top. The hands should make a large pouch and the baton should be placed in the middle of the pouch, where the base of the thumbs align.

To aid in the smooth passing, all members of the team shoud stand on the same side of the lane (e.g.right hand side of the lane) to allow the incoming runner half of the lane to pass their team mate without interferring with other teams.

## Circular Relay

The circular relay requires four athletes to carry the baton around a set distance as quickly as possible. The first three members of each team must pass the baton within a twenty metre changeover zone. The final runner (the anchor runer) does not pass the baton and must carry it across the finish line. All runners must carry the baton. If the baton is dropped it must be recovered by the athlete who dropped it.

## $4 \times 100 m$

Passing Method - As previously stressed, the influencing factor in competitive relay racing is the speed of the baton. It must be passed efficiently and safely from one runner to the next. The passing in sprint relays takes place with a 'Non-visual' method. In this method, once the outgoing runner has started running they continue to accelerate and do not look back. The outgoing runner relies upon the incoming runner (the person with the baton) to execute the passing action. This must be made in a 20 m change-over zone. The outgoing runner may use all or part of the 20 m changeover zone. An additional 10 m acceleration zone can be used for those athletes who need a longer distance to generate speed.

NOTE: The baton must only be exchanged in the changeover zone. If exchanged in the acceleration zone the team will be disqualified. It is the position of the baton which is the determining factor in the exchange (i.e. the baton must be in the changeover zone on exchange).


The passing action is performed by using alternate hands between runners. The first runner carries the baton in their right hand and hands over to the left hand of the second runner. The second runner keeps it in this hand and transfers it to the right hand of the third runner, who hands over to the left hand of the fourth runner. The bend runners carry the baton in their right hands and run the shortest possible distance by keeping to the inside of their lanes. Those running on the straights carry the baton in their left hand and run on the outer side of their lanes. This effectively keeps the baton travelling along the centre of the lane.


The outgoing runner may take up their position with the same foot forward as in the sprint start position and may even support themselves on one arm in a semi-crouch start position. However, it is recommended that the athlete places the foot forward which allows the best view of the check mark and the incoming runner.

## Changeover Practice

- Start from a standing position and arrange team into correct positions (right hand, left hand, right hand, left hand changes) in a straight line. They should be an arms length apart.
- Have all runners start with arm back, palm up, looking forward. The person with the baton swings it down into the hand of the person in front. This continues down the line. Reset positions and repeat.
- As above, however athlete now simulate running with arms only. On an audiblle call from the person with the baton, a hand comes back behind at hip height with palm up, ready to receive the baton. Once received, swing both arms a few times to simulate running and continue down the line.
- As above, however all athletes start walking together. The baton is passed down the line (from the audible call from the person with the baton). When it reaches the last runner, they place it on the ground and continue walking. First runner picks up the baton when they get to it and continues to pass it down the line with a downward pass.
- As above, however athletes now progress from a walk to a jog.
- Practice changes at full speed in respective zones. These changes can only be done at full speed to allow for accurate check marks (the point at which the runner start moving when the incoming runner with the baton reaches it). Allow adequate rest and recovery between trials.


## $4 \times 200 m$

In this event, clean baton changes is again essential. Unlike the $4 \times 100 \mathrm{~m}$ relay this event is not run entirely in lanes. The first lap ( 400 m ) and that part of the second lap up to the 'breakline' after the first bend will be run in lanes. The first runner will commence from the $4 \times 400 \mathrm{~m}$ stagger start. The second runner commences from the transition area at the 200 m stagger. The third runner commences from the transition area at the 800 m stagger at the finish line area. This runner crosses to the inside lane at the 'breakline'. The fourth runner commences from the transition area at the 200 m strart on the inside lane. A 10 metre acceleartion zone can be used in this race.

## $4 \times 400 m$

The change-over in the long relay does not require such perfect timing. However, practice is still required in order to minimise time loss and the risk of collisions between runners. It is the responsibility of the outgoing runner to time the start so that they and the incoming runner will be running at the same speed at the moment of exchange. This baton change is visual, with the receiver looking back to watch the incoming runner place the baton in his hand. The baton should be taken in the left hand and changed to the right during the race.

## 4 x Medley

In this relay a combination of distances are used. The order in which they are run is $2 \times 200 \mathrm{~m}, 1 \times 400 \mathrm{~m}, 1 \mathrm{x}$ 800 m . The first lap $(400 \mathrm{~m})$ and that part of the second lap up to the 'breakline' after the first bend will be run in lanes. The first runner will commence from the $4 \times 400 \mathrm{~m}$ stagger start. The second runner commences from the transition area at the 200 m stagger. The third runner commences from the transition area at the 800 m stagger at the finish line area. This runner crosses to the inside lane at the 'breakline' (100m around the curve). The fourth runner commences from the transition area at the 200 m strart on the inside lane. A 10 metre acceleartion zone can be used in this race.

## Starting

The first athlete may start from a crouch start. The baton should be fully extended (the baton may cross over the start line) and gripped firmly in one of three ways (shown below) between the thumb and fingers. The athlete should use whichever grip is most comfortable.


## MIDDLE DISTANCE

The discipline of middle distance running, for Little Athletics, refers to track events of 800 metres and 1500 metres. Events of this distance are not beyond the capabilities of young athletes provided a correct and sensible training process is applied.

The aim of coahing middle distance is to provide the basic skills in technique, and the level of specific fitness required to perform at long distance with confidence, while maximising the novice athletes' natural ability. To achieve these aims, a combination of the following four methods may be required. When using these training methods keep in mind "if technique drops, training session stops". The th athlete is running technically incorrect they are only learning to run poorly.

## Safety

- Train on soft surfaces (grass) whenever possible.
- Correct footwear is essential to prevent injury.
- Be aware of athletes under excessive stress. Lighten the training load if necessary.
- Gradual training loads are more successful.
- Athletes of similar ability should train in groups.
- Train to race, don't race to train.
- Encourage rather than criticise.


## Endurance Training

WHY This training provides the endurance base required by all distance runners. In other words, it increases stamina, thus allowing the athlete to cover the distance comfortably.

HOW It increases heart/lung capacity via long even tempo runs over a set distance or within a set time. The pace required is best described as one at which athletes may converse with one another whilst running. A gradual increase in exercise time may be used until the maximum time is attained.

WHERE Soft, grassy surfaces are the most suitable. Hard surfaces, such as roadways are to be avoided as injuries may occur. Parklands, gently undulating, are an ideal venue. School and football ovals are also suitable.

## Event Specific Training

WHY Allows the athlete to cover the race distance faster.
HOW By repeated runs over short distances at almost maximum pace. The total distance of both runs and recovery, plus the speed factor, are akin to race conditions. Rest periods are needed between runs and, generally, consist of a slow walk back to the start.

WHERE Flat surfaces. A marked and laned athletic oval is most suitable.

## Technique Specific To Event

WHY Correct running technique for distance events allows the athlete to use available energy more efficiently.

HOW By running economically, with smooth rhythmical strides and by even pacing throughout the race. Relaxation during running is most important.

WHERE During centre competition days - sessions on technique training and fault correction. During centre races - observation under race conditions often highlights faults in technique.

## Tactics

START Begin fast and confidently to prevent interference and being cut off during the first 50 metres.

DURING RACE Try to maintain contact with leaders, stay on the pace or just off it - practice leading and running in the pack during club competition. Avoid being pocketed throughout the event. Run as close as possible to the inside of the track to cover the minimum amount of ground.

PASSING Generally try to pass on straights rather than on bends. Avoid sharp passing bursts. Try for smooth build up when passing. Passing on the exit of bends is acceptable.

FINISHING Put maximum effort into finishing. Finishing effort should be applied just prior to or entering the last straight. A technique similar to the sprinting action may be employed when finishing.

The result of coaching should be an athlete who can complete an $800 / 1500$ metre event at a reasonable speed with an improvement in technique, be tactically correct, with minimal fatigue while enjoying a speedy recovery .

## Technique Tips For Middle Distance

## Foot Strike

- Contact just behind ball of foot.
- Centre of gravity directly over support foot.
- Slight bend of the knee brings centre of gravity more forward over the support leg.
- Let heel touches the ground so that the entire foot is in contact with ground.


## Push Off

- (Newton's third law of motion - for every action their is an equal and opposite reaction), Therefore, the harder you push the ground backwards the harder the ground pushes you forward. Thus, an increase in stride length can be obtained without strectching the lead leg out in front at landing.
- Make sure foot plant is directly backwards and forwards.


## Follow Through

- Support leg fully extended as you roll off big toe.
- Bring thigh forward and upward quickly to increase forward drive of body.


## Knee Lift

- If knee lift is too high you may bound up and down instead of moving forward.
- If knee lift is too low shorter stride will result.


## Arm and Leg Synchronisation

- Arms are carried low with the hands lightly clenched. Arms balance the body and determine leg speeed. The faster the arms go, the faster the legs will go. Hands should just cross the body to an imaginary centre line, with little movement of the shoulders


## Hands and Wrist

- Hold hands loosely, closed tight clenched hand causes tension in the upper body.
- At the bottom of arm swing, lightly flicking the wrist may aid relaxation.


## Hips

- Keep relaxed. Stiff hips causes tightening of the lower body.


## Shoulders

- Do not stoop over or run too erect.
- Check when getting tired that arms do not come up causing shoulders to raise too high which restricts breathing and arm drive.
- Keep shoulders natural and chest out in front.


## Head and Chin

- Head too high strains neck muscles.
- Head too low throws shoulders forward restricting arm swing.
- The mouth should be relaxed.


## Rhythm

- Rhythm ties the whole running style together.
- The timing unites the technique with movement.


## RACE WALKING

## Definition Of Race Walking (taken from the IAAF Competition Rules 2006-2007)

Race Walking is a progression of steps so taken that the walker makes contact with the ground, so that no visible (to the human eye) loss of contact occurs. The advancing leg shall be straightened (i.e. not bent at the knee) from the moment of first contact with the ground until the vertical upright position.

For further information about the rules of Race Walking, refer to the IAAF Handbook or the QLAA Competition Handbook.

## Most Important

The most important function of the coach of young walkers is to emphasise the absolute and complete necessity for TECHNIQUE to be the prime concern and NOT the winning of races. This message must also be passed on to the parents. The technique must be mastered first.

## Technique

Develop each child's own technique, by watching each walker in action. Each walker has their own individual movements and these should be encouraged, or discouraged, as necessary.

The ideal technique for a walker should concentrate on the following points:
1 Of prime importance to a race walker is perfect posture. Degeneration of posture leads to a breakdown in technique which can lead to a rule infringement. Intially, the athlete should be encouraged to keep a straight posture. As they get older, and stronger, athletes should then be encouraged to hold $3-5^{0}$ lean from the ankles. Leaning from the hips should be discouraged at all times.

2 An athlete's shoulders should be kept low and relaxed. The arms are driven toward the midline of the body and carried at a $90^{\circ}$ angle. They should be kept close to the body at all times.


3 An athlete's hips need to be flexible to allow the walker the best chance of a good stride length. The hips should not be excessively swayed from side to side (lateral hip drive) as this can:

- Reduce speed
- Shorten stride length
- Affect balance
- Possibly contribute to injury

Instead, hip rotation should be in a backward-forward rotation, rather than a side to side rotation. Athletes with poor hip and lower back mobility risk losing ground contact when their speed becomes greater than their hips can accommodate.
(a)

(b)

(a) Double Support Phase - Drive-off straight rear leg, front leg knee straightening at heel contact.
(b) Single Support Phase - Emphasis here on straight support knee/leg and hips.

4 The action of the feet during the phases is extremely important for the leg action to be successful. Both feet must travel in a straightline with full extension and flexion at the ankle joint. The leading foot should make a sound heel contact and pulling the toes towards the shin will ensure a longer and more powerful stride.

5 Many young athletes walk with their bottoms protruding, therefore, causing a curved lower back (lumbar lordosis). This is a distinct disadvantage as it reduces the forward flexion of the thigh as the leg moves forward. It, thus, causes the stride to be shortened. This is corrected by rotating the pelvis forwards and upwards.

6 A walker's speed will be determined by stride length (how long) and stride frequency (how fast). Strides should be smooth and rhythmic with at least one foot in contact with the ground at all times. The knee should be straight upon contact with the ground and remain straight until the vertical position. A strong drive from the rear leg should be encouraged.

## Walking Mobility Drills

- Walking at a steady pace with arms crossed behind hips and pressure placed on hips and hands.
- 
- Walking at a steady pace along a marked lane line with the feet alternatively falling on either edge of the line.
- 
- Walking 'on the spot' to develop arm and leg co-ordination.


Walking the line

- Walking 'on the spot' with arm action only.
- Walking at a steady pace without excessive shoulder movement. Raise arms and join hands in front of the body. Keep arms still.
- Walking on the backs of the heels without letting the forefoot touch the ground to emphasise the heel touchdown - short distances 10-15m.
- Walking at a moderate speed with long strides emphasising the horizontal rotation of the hips.
- Walking at a moderate speed in a snaking path.
- Walking slowly, with shorter than normal strides, and by rotating the hips, place the left foot to the right side and the right foot to the left side of a straight line.
- Lollipops - Working over $30-40 \mathrm{~m}$, race walk very fast with minute strides almost placing the heel of the advancing foot on the toes of the drive foot.
- Walking at a moderate speed in a figure eight path. This has the same effect as the figure six but requires greater control.
- With arms stretched straight out to the side at shoulder level, keeping the arms on a steady even plane, take medium strides with feet crossing either side of a straight line.
- With correct posture and keeping the legs straight, on a flight of stairs with only the toes on the steps, use vertical movement of the hips, combined with mobility and strength of the ankles to climb stairs.
- Walking with feet crossing either side of a straight line, hold one arm straight out to the side of your body. Make a circle with the other arm in motion, keeping it close to the side of the head as you rotate. Rotation should always be in co-ordination with leg movement. The arms can be rotated in a forwards or backwards motion.
- As above, but rotate both arms in a circular motion, remembering to keep them close to the side of the head. The arms can be rotated in a forwards or backwards motion.
- At a moderate speed, take two consecutive steps either side of the line. The upper body should remain in a normal position.


## SHOT PUT

## Safety

- A group under instruction should be small, easily and effectively controlled.
- Make sure no one is in the general area of the line of the throw (i.e. in the sector area).
- Throwers waiting their turn should stand well behind the circle.
- After making a throw never run after the implement but retrieve it when directed.
- CARRY IT BACK - IT MUST NEVER BE THROWN BACK.


## ALL INTRUCTIONS ARE GIVEN FOR RIGHTHANDED THROWERS

The shot can be a very demanding discipline; not only is it energy sapping, it is also very technical. Learning correct technique is important irrespective of what stage of development the athlete is at.

Co-ordination development in children differs between individuals, therefore technique instruction should progress according to the co-ordination ability of the individual.

It is very important, especially with young children, that they are taught the correct basic technique and are not allowed to just copy other children.

ONCE A CHILD LEARNS A BAD HABIT IT IS MUCH HARDER TO GET OUT OF IT THAN IT WAS TO GET INTO IT.

## Holding The Shot

Place the shot on the three fingers of the throwing hand allowing the shot to come to rest a the base of the three longest fingers. Use the thumb and little finger to provide support.


NOTE: The spread of the fingers will vary with the size and strength of the athlete. Too wide a spread of the three fingers will lead to injury to the hand. If the fingers are not spread it will make it difficult for the thrower to control the implement.

## The Basic Putting Action

Place both feet facing the stop board, comfortably apart with the toes of the left foot against the front of the circle and the right foot slighty back.


Push the shot into the neck, nestled under the lower jaw. At no time may the hand be dropped nor may the shot be taken behind the line of the shoulder.

Pull the right shoulder slighty back, rotating the torso to the side, causing a "twist" between the upper and lower body. The right elbow is kept high at the level of the shoulders.

The left forearm should be across the front of the body in a relaxed position.
The right shoulder is punched forward in a fast action and the arm is extened forcefully to push the shot away, whilst the left forearm is pulled back bent to the side of the body at shoulder height, and braced there.


The elbow must never "lead" the hand (or get in advance of the shot) when the shot is being pushed out. The positioning and use of the elbow are critical in the throw.

NOTE: It is recommended that Under 7's do not progress past this putting action.

## The Basic Standing Throw



Place the feet in position as shown. The feet must be comfortably apart, approximately a width and a half of the shoulders. Correct positioning of the feet is essential for a good put.

Place the shot in position as described before in the Basic Putting Action.
Rotate the shoulders to face the rear of the circle, bending the right knee. The left arm is relaxed across the body and the left leg is only slightly flexed.

Rise onto the balls of both feet and initiate a pivoting action with the right
 foot to drive the right knee and hip around and upwards to the front of the circle. This will give a rotational action of the upper tunk and shoulders. The athlete must be encouraged to push up "tall" to release the shot, otherwise a bowling action can become a problem with the body leaning down to the left side.

The left arm is pulled across the body in an upwards motion and braced when the hips are facing the front. Maximum power comes from the drive of the right leg and hips. At the completion of the throw, the toes of the left foot should be against the stop board facing the direction of the throw.

Release the shot as described in the basic putting action.
NOTE: It is recommended that Under 8's and Under 9's do not progress past this putting action. and they maintain the technique for approximately 4 to 6 months to enable them to a achieve good results.

## The Shift Action

Stand at the back of the circle, facing the back.
Place the left foot back towards the centre of the circle with the left knee slightly flexed, weight over bent right leg.

Place the shot in position. Left arm is relaxed.
Bend right knee.
To commence the following move, transfer the body weight to the left foot as the athlete starts to move backwards by pushing off on the right leg. The right leg is stepped and landed in the middle of the circle,
foot pointing to the rear of the circle. The left leg is then quickly extended backwards and slightly off centre from the middle of the stop-board, finishing in the standing throw position.
NOTE: It is recommended that Under 10's, Under 11's and Under 12's do not progress past this putting action.

## The O'Brien Style

NOTE: This is an advanced technique which requires strength and exceptional balance. The power position standing throw and shift action should be performed confidently before this technique is attempted.

Facing the rear of the circle, adopt a crouching position at the back of the circle.
The body weight should be supported by a flexed right leg.
With the right knee flexed the left leg is raised and driven toward the the stopboard. The right leg follows in a driving action, landing with the right foot in the centre of the circle and the left near the stopboard slightly to the left of centre (the power position).

It may be easier to get a powerful drive to the stopboard by pre-tensioing the left leg by first contracting it, bringing it in toward the body. Pull the left leg in toward the body before 'exploding' it back toward the stopboard.


Position of Feet


Putting direction

## Points to Remember

- Keep the left arm relaxed at the commencement of the throw.
- The back is kept as straight as possible up until the final delivery action.
- The hips should face the direction of the throw at the completion of delivery.
- The shoulder must never be in front of the hips during the throw as this will cause early release and loss of distance.
- The shoulders should be level at the time of delivery. This will avoid dropping the left shoulder.
- The elbow should be behind the shot during the delivery.
- With the "shift" all movement must be one continuous action and is to be executed with maximum speed.
- The action of the put is initiated by the right leg and hips, followed by the shoulders and finally
- the arms.
- In the "shift" the body must be kept low until the left foot has landed at the front of the circle. This will ensure that the right knee remains "bent" to provide the drive for the delivery action.


## DISCUS

Discus is a technical, yet, explosive event. Even with expert coaching it may take a considerable time for a child to become a competent thrower. This must be clearly understood by coaches and parents in centres.

## Safety

- A group under instructions should be small, easily and effectively controlled.
- Make sure no one is in the general area of the line of the throw (i.e. in the sector area)
- Throwers waiting their turn should stand well behind the circle, preferably behind a safety net (Minimum height 2 metres. HART Sport have suitable netting/cages available).
- After making a throw never run after the implement but retrieve it on direction.
- CARRY IT BACK - IT MUST NEVER BE THROWN BACK.


## ALL INTRUCTIONS ARE GIVEN FOR RIGHTHANDED THROWERS

## Holding The Discus

"Hang" the arm by the side of the child with the elbow straight and the palm facing the leg.
Curl the tips of the fingers up and place the edge of the discus on the tips of the fingers with the "flat" or "back" of the discus resting against the palm. The thumb rests against the "back" of the discus, not curled over the edge of it.


Swing the arm by the side, facing the outside part of the leg. Swing the arm backwards of the leg. Swing the arm backwards and forwards (a pendulum action), keeping the palm facing the leg. The discus should stay in the hand due to the pressure against the fingers.

## Rolling The Discus

Hold the discus vertically, as described above, with the arm swinging by the side of the leg, and then, using an action like a lawn bowler delivering his bowl, by pushing with the forefinger, roll the discus along the

ground on its edge. The discus should roll off the forefinger in a clockwise manner, when viewed from the right hand side of the thrower.

## The Underarm Throw

With the opposite leg to the throwing arm forward, using the same action, but instead of rolling the discus along the ground throw it forward slightly in the air.

NOTE: It is recommended that Under 7's remain on skill games of rolling or with a "forward underarm" throw until this action has been mastered.

## Simple Standing Throw

Place the left foot at the front of the circle with the toes on an imaginary line drawn through the centre of the circle in the direction of throw. The right foot is placed so that the heel of the foot is on the same line. Feet should be about one and a half shoulder width apart. The hips and shoulders are side on to the throwing area.

Hold the discus in the "ready" position out in front of the left hand side of the body. Wind the throwing arm back. Then drive the hips around and forward with a pivoting action on the ball of the right foot. This should be completed in one action.


No more than one "wind up" to be used before throwing.
Release the discus ensuring it leaves off the forefinger of the throwing hand at shoulder level. It is important that coaches realise that many athletes try to throw by spinning the discus out of the back of their hand. The left arm is pulled across the body. in the plane of the shoulders and close to the body. The throwing arm must be fully extended and kept at shoulder height at all times, right up to the point of release.

NOTE: It is recommended that Under 8's do not progress past this action.

## Advanced Standing Throw

Place feet in position as previously detailed.
Hold the discus in the "ready" position. Swing the discus back with the throwing arm relaxed and shoulders straight and as an extension to the line of the shoulders. At this point the body weight should be over the right foot with the right knee slightly bent. The left leg is nearly straight i.e. the knee is slightly flexed. Back is straight.

Push forward with the right leg in a pivoting action on the ball of the foot. This can best be achieved by turning the ankle out whilst straightening the leg at the same time. Simultaneously, drive the hips forward so that they face the throwing area. Hips are followed by the shoulders and finally the throwing arm releases the discus at shoulder height.

Release the discus ensuring that it comes off the forefinger last and NOT out of the back of the hand.
Ensure that RIGHT LEG and HIP DRIVE are being achieved by pivoting action of the ball of the right foot towards the front of circle. At the point of release the thrower must transfer body weight to left leg. The left leg must finish in an upright position. This is achieved by locking the muscles of the left leg. This will create a hip snap. The LEFT arm should be pulled close across the body in the plane of the shoulders

NOTE: It is recommended that Under 9's do not progress past this action.

## ½ Rotation

Walking Around: The child stands at the back of the circle facing sideways to the direction of the throw, with feet comfortably apart and toes on the centre line.

At this point in time most of the body weight should be on the left foot. Pushing off with the right foot, turn anti-clockwise pivoting on the ball of the left foot. The ball of the right foot at approximately 3 o'clock. Continue pivoting on the ball of the right foot thus completing a 180 degree turn. Swing the left leg right around towards the front of the circle. The athlete is now in the power position or standing throw position ready to throw


NOTE: It is recommended that Under 10's and Under 11's do not progress past this action.

## The Full Rotation

NOTE: Throwers should only attempt this advanced method after showing a competent $1 / 2$ Rotation


The full turn is simply an advanced form of the half turn. The thrower begins facing the rear of the circle. The thrower turns to the left, taking a running step to the middle of the circle with the right leg. From this position the left leg is swung around toward the front of the circle. The thrower is now in the power position.


5.


11.

10.


## Points To Remember

- The discus rests across the end joints of the fingers.
- The thumb DOES NOT 'hold' the discus. It balances it by resting on the back of the discus.
- The discus rolls off the forefinger in a clockwise manner when viewed from the right hand side. N.B. The discus that spins the fastest goes the farthest.
- Keep the throwing arm at shoulder level when making all throws except the underarm throw.
- Ensure that drive is coming from the right leg and hips.
- Hips should be forward before the shoulder and throwing arm.
- Keep movements in a continuous action.
- A centre line can be draw on the circle to practise discus drills. Practise drills on a straight line before attempting a throw in the circle.
- The left arm should be bent across the body and at shoulder level when the discus is released. NOTE - dropping the left shoulder and arm will create a "bowling" action as in a cricket bowl and the discus will not fly correctly.
- The best pivoting action is achieved by keeping the body weight over a bent right leg when the right ball of the foot is in the centre of the circle directly under the body.


## JAVELIN

Before any javelin throwing is attempted, strict safety precautions must be taught and these MUST be adhered to at all times. The javelin can be a very dangerous implement. Because it is double ended, the tail end can be a danger to anyone running toward a javelin speared in the ground or anyone standing behind. Of course, the pointed end can also be very dangerous to those in front.

Like the other throws, javelin is a very technical event and it will take the children a considerable time to be competent with the throw. It is recommended that each step shown in this manual should be handled satisfactorily by the child before attempting the next step.

## Safety

- All throwing must be done under strict adult supervision.
- Limit size of the group to a number that can be controlled easily and effectively.
- Javelins should always be carried vertically.
- Under no circumstances, unless actually making a throw, should anyone (adult or child) run with a javelin.
- There must be no-one in the general area of the line of the throw i.e. in the sector area.
- The child must remain behind the arc line (the line depicting the front of the run-up) after making a throw. An athlete must not run immediately out to retrieve the implement. They may retrieve, by walking, only on instruction.
- All throwers waiting must remain outside the run-up area.
- The implement must be carried back after the completition of the throw. It must never be thrown back.
- The thumb should be placed over the rear tip of the javelin whilst retieving from the ground.


## ALL INSTRUCTIONS ARE GIVEN FOR RIGHTHANDED THROWERS

## The Grip

While there are three ways of holding the javelin, only one is recommended for Little Athletics.
'The thumb and index finger'


The javelin is gripped at the back of the binding. The thumb and index finger rest at the back of the grip creating a locking action. The other fingers should be wrapped comfortably around the binding. The shaft lays along the palm of the hand. The easiest way to achieve this is to get the athlete to run their thumb and index finger down the shaft until they reach the back of the binding. They then comfortably wrap the other three fingers around the binding.


## The Standing Throw

Place the feet apart, a long walking stride distance, with the right foot behind the left at an angle between $45^{\circ}$ and $90^{\circ}$.

The throwing arm should be straight back, at or just above the shoulder height, with the palm facing upwards, under the javelin. The shoulder and torso are turned to the right at approximately 45 degrees and the left arm is bent across the body.

It is important for the throw to commence with the right foot pivoting towards the direction of the throw. This will bring the hips, torso and shoulders around in an upward action and create a slight arch of the back.

To achieve this, the right hip is pushed forward and up by the thrusting of the right leg.
The elbow must pass over the shoulder close to the eye/nose level.
At delivery, the body weight passes over the left foot and the throwing arm finishes high to 'follow' the javelin.

NOTE : It is recommended that all throwers are competent with this method before progressing to the 3 step throw.

## The Three Step Rhythm

Drill: use a softball to practise this action before using a javelin.
Stand with feet together and throwing arm fully extended with torso slighty turned to 45 degrees to the direction of the throw. Stand approximately 6 metres back from the arc line.

Commence the run with the left foot. Then take a forward cross step with the right foot. It is important that this cross step passes in front of the left leg rather than behind it. A backward cross step may result in serious injury when performed with a long fast approach.

The right foot lands turned to the right between $45^{\circ}$ and $90^{\circ}$. The final left stride lands with the left heel planted firmly on the ground. The javelin is pulled through and released at this point. The right foot should follow through. It is planted heavily after the throw to stop the body continuing over the arc line (recovery step).

Encourage children to count steps.
Once the athlete can complete a smooth 3 step run-up, additional approach steps can be added to increase the speed at release.



11


THE JAVELIN THROW
*Please Note: In picture 7 the throwing arm should be straight, NOT bent.

## Points to Remember

- The action of the javelin is a long pull rather than a throw.
- Movements throughout the run-up and delivery must be fluid.
- Using the thumb and index the athlete must grip behind the binding on the shaft and use nongripping fingers to hold the implement on the binding.
- The javelin must be delivered from the shoulder or the upper part of the arm.
- The action of the throw is legs, hips, shoulders, elbow then javelin.
- Safety precautions MUST BE ADHERED TO AT ALL TIMES.


## LONG JUMP

This event is probably one of the oldest in track and field and one of the most natural one to compete in. It consists of running toward a sand pit, jumping into the air from either a mat or board and landing in the landing area.


## Safety Precautions

- The pit must be well dug, turned over and free of foreign objects for every session of jumping. The usual filling for the pit is sand. The sand should be the same level as the top of the board.
- The run up surface must be firm and even.
- The take off area must be able to withstand the full force of an athletes foot and be such that that the athletes shoes will grip and not slip on the surface.
- Take off boards should be flush with the surface and the mats should be fixed firmly to the ground.
- Athletes should wear suitable shoes with good heel support and shock protection.
- Ensure that pronged rakes, forks and shovels are left outside the landing area with the prongs in the ground when unused.
- If an injury is sustained, stop immediately and seek treatment.


## Points Of Technique

- The approach (approximately 10-16 running strides) aims to achieve maximum speed at the take off board or mat.
- The approach run must be controlled and accurate.
- The jumper aims to speed up over the last four or five strides.
- Take off foot strikes the take off area (board or mat) in advance of the body.
- The jumper drives the free leg (bent at the knee) into the air and arms are used to assist and stabilise the movement into the air.
- The movement of the legs show a large split range at the hips.
- The thighs are lifted to get legs shooting out for the landing.
- Legs bend at the hips and knees to allow body to pass over heels when landing.


## Teaching The Long Jump

- To start the jumper must work out which leg he or she jumps from. To do this tell the athlete to run and jump into the air. The leg that they take off from into the air is their take off leg. This is the foot that strikes the take off area (board or mat) first.
- It is essential for the athlete to jump from one foot to land on two. Start by jumping from two feet to two feet into the pit. Introduce standing on one foot and jumping onto two feet. Alternate legs and practice on both legs.
- Once the concept of jumping from one foot to two feet is grasped then take one step and jump. To do this place your right foot forward (for a left foot take off - reverse for right foot take off) and take one quick step onto your left and leap into the air, landing on two feet.
- Slowly introduce 3 and 5 steps. Emphasise a controlled run in a 'tall' position, taking off on one foot and landing on two feet.
- Introduce jumping for height of five steps. Hold a flexi bar or something similar at a height in the pit that the athlete tries to jump over. Set height at an easy (low) heights to start and then progressively raise bar higher. Emphasise quick steps and a high knee drive.
- Establishing a run up. This is very important and is essential for the athlete to master a quick, controlled and accurate run up every time. A simple way to start is to have the athlete stand in the middle of the take off area (board or mat and run as fast as they can to a predetermined marker 15 - 25 metres from the take off area.


Example (2) measuring from board.
Start run-up from within marker, e.g.
(3)



- The athlete runs at a steady pace, keeping sprinting form and the coach counts the steps. Once the athlete has reached top speed, usually 10-16 strides depending on age and ability of athlete, the coach places a marker and this is the starting position for the run up while the athlete continues to run to the predetermined marker. Many coaches of young children use Age $+/-1$ or 2 as a guide for the length of the run-up.
NOTE: Whatever speed the athlete runs their run up out at, is the same speed they must run when returning toward the pit.
- Practice the run up to have it fast, controlled and accurate.


## TRIPLE JUMP

This event is more commonly known as the 'Hop, Step and Jump' or the Hop, Skip and Jump". However, it isn't three separate jumps, the triple jump is one continuous jump consisting of three sections or phases. A Hop, a Step and then a Jump.

NOTE: The triple jump is a very demanding event for a young body. When doing multiple jumping, use sparingily and monitor carefully. This event should only be done in moderation with caution taken when coaching this event.



## Safety

- The pit must be well dug, turned over and free of foreign objects for every session of jumping. The usual filling for the pit is sand.
- The run up surface must be firm and even.
- The take off area must be able to withstand the full force of an athletes foot and be such that that the athletes shoes will grip and not slip on the surface.
- Take off take off area (board or mat) should be flush with the surface and the mats should be fixed firmly to the ground.
- Athletes should wear suitable shoes with good heel support and shock protection.
- Ensure that pronged rakes, forks and shovels are left outside the landing area with the prongs in the ground when unused.
- If an injury is sustained, stop immediately and seek treatment.


## Points Of Technique

- The take off foot can be either foot. The sequence that must be adhered to is "HOP" to the same foot, "STEP" to the other or opposite foot, and "JUMP" to both feet.
- Aim for an even rhythm and approximately even distances throughout the three phases.
- Approach run must be fast, controlled and accurate. This is to ensure maximum speed at the take off board.
- The athlete runs off the take off area (board or mat), they do not jump off.
- The knee of the hopping leg is brought through flexed and high.
- The body is kept upright in the hop and step phases.
- The hop landing is flat footed as is the step landing.
- The knee is held high in the step to create a feeling of floating through the air.
- Drive the free leg and arms high into the air for the jump take off.
- The hop and step landings must be 'active', with the landing leg moving in a backwards direction.



## Teaching The Triple Jump

- The athlete stands on a lane line on their take off foot. Refer to the long jump section on how to determine the take off foot.
- The athlete hops onto the next lane line onto the same foot and balances there on the one foot. If the distance is too great, reduce the distance to $1 / 2$ a lane line.
- They then "step" onto the next lane line onto their other (opposite) foot, and balances there on that foot.
- The athlete then jumps onto the next lane line, landing with both feet.
- Repeat this several times to get the feel and the rhythm of the jumping sequence. Emphasise the active landing, upright body position and an even rhythm for the jump.
- Steadily increase the distance between the lines (i.e. 1.5 lane lines, 2 lane lines) and transfer to the run up on the pit. The athlete then has three to five stides run in completes the hop, step and jump into the pit.

- Slowly increase the distance and run up length as the athlete progressively gets better.
- The athlete now jumps from the relevant take off area (board or mat) so that they can make the pit safely and attempts the triple jump from a full run. Refer to the long jump section for development of a run up.


## HIGH JUMP

In Little Athletics, the two styles of clearance predominately used are the scissors technique and the Fosbury Flop. The scissors technique is used by athletes of any age as it contains all the essential components of the high jump take off and is easy to teach to large groups. As the scissors technique is the basic style, this will be only technique covered by this manual. The Fosbury flop can only be used by athletes in the under 12 age group and above. The fosbury flop technique should only be coached by those with relevant accreditation for this event.

## Safety Precautions

- The run up surface must be firm and even.
- The cross bar must be circular in cross section with a maximum weight of 2.0 kg . An elastic flexi bar is recommended for teaching and training young athletes.
- The landing area must be safe. If it is not a single unit it must be tied or strapped so that no gaps can develop.
- The landing area should measure not less than five (5) metres $x$ three (3) metres $\times 200$ milimetres (maximum depth) for the scissors technique and five (5) metres (3) metres $\times 375-450$ milimetres for fosbury flop technique.


NOTE: The uprights and landing area should be designed so that there is a gap of at least 10 centimetres between them. This avoids dissplacement of the crossbar through movement of the landing area which can knock the uprights.

- Scissors jumping should only be conducted on scissors mats and similarly the flop technique should only be conducted on fosbury flop mats.
- Athletes should wear suitable shoes with good heel protection.
- If an injury is sustained, stop immediately and seek treatment.


## Scissors

This technique is a safe and natural one that most beginners should start with. Basically the athlete runs toward the bar in a straight line, jumps in the air, leading with the leg that is closest to the bar and clears the bar in an upright position. Once over the bar the athlete lands on his or her feet.


## Points Of Technique

- The approach run should be 8-10 steps. These follow a straight line which is approximately $25^{\circ}$ to $30^{\circ}$ to the bar.
- The jumper accelerates through the last three strides and runs off the ground.
- The take off foot is the farthest from the bar, the leg closest to the bar is the free swinging leg. This free swinging leg is the one that goes over the bar first.
- The take off foot is flat footed and supports the jumpers weight.
- The free swinging leg, swings up and over the bar.
- The inside shoulder is not dropped towards the bar. Upper body is held 'tall'.
- Clearance is completed by lifting the take off leg over the mid point of the bar, whilst the free swinging leg is pushed down onto the landing area. This creates the 'scissors' action of the legs.
- The jumper lands on their feet, not their bottom.


## Teaching The Scissors

- To start the jumper must work out which leg he or she prefers to jump from. To do this tell the athlete to run and jump into the air (not onto the mats). The leg that they take off from is their take off leg. If they jump into the air on their right foot (right foot take off) then they approach the bar from the left hand side (when looking at the mats). If they are a left foot take off, they approach the mats from the right hand side.
- From a standing position use the scissor action to step sideways over a line (e.g. lane line) on the ground or a flexi bar placed on the ground. Emphasise that it is the leg that is closest to the bar that goes over the bar first. Watch that the athlete stays 'tall' and does not slouch forward or lean backward.
- Attempt from both sides to work out the most natural and comfortable for the athlete.
- Walk three steps and jump over the line or bar on the ground. Emphasise keeping 'tall'.
- Raise the bar or jump over a marker dome or witches hat, something with height that gives the feeling of jumping over an obstacle. Emphasise keeping 'tall' with high hips and upright trunk.
- Move to mats (scissor mats) and have the athlete walk three steps (in a straight line) and step onto the mats.
- Introduce a bar at a low height (same height as the top of the mats) and repeat above step.
- Progressively extend run up to 6, 8, and 10 steps from the take off point. Increase speed of run in and raise the bar progressively. Emphasise fast last three strides and staying "tall" and upright over bar.


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