Clontarf GAA

Athletic Development in the Nursery

A coaching resource for introducing athletic development in the nursery in a structured and enjoyable format.

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Athletic Development in the Nursery

This is a brief introduction to Athletic Development in young children.

Athletic Development is the process improving fundamental movement skills so that they can reach their maximum potential in their chosen sport. I would like to stress at this point that athletic development is not strength and conditioning. The exercises laid out in this resource are purely to encourage children to develop techniques in some key areas that we have identified, which in turn will help them in their sporting careers.

The benefits of good athletic development include;

- Massive improvement in general athletic ability
- Injury prevention
- Excellent techniques to bring into strength and conditioning if so desired.

Our goal is to lay a pathway in athletic development which mentors can follow so that all children in the club receive relevant and age specific techniques to help them maximise their athletic potential.

Nursery Games

The techniques we are trying to improve initially are

- Squat
- Split squat
- Core strength
- Single Leg stability

Outlined in this resource are fun games which will help the children gain the techniques required for good athletic development. As a coach we should move onto the second game only when the first game has been mastered.

1. Squat



Above a baby shows flawless technique in the squat. It is a natural movement. We train ourselves out of these natural moves through sitting in chairs, couches, poor posture, etc. What we need to do is retrain the muscles to remember the correct technique.

Frog jumps

Activity

Children must pretend to be a frog and jump from a starting line to an end point. Children must sit down on their hunkers, keep their chest up and put their arms between their legs.

Goal

To encourage children to start to learning the proper squat technique.

Key teaching points

- Chest up Coach should be able to read writing (real or otherwise) on child's chest
- Weight on heels not toes
- When bent, knees do not pass the toes
- Feet shoulder width apart
- Back straight

Common errors

- Feet too far apart
- Break in the hips which send head/chest forward
- Knees way past toes
- Weight on toes

The key purpose of this game is to get the children to keep their chest up and keeping their weight on their heels.

A progression of this game would be to have the children frog jump around in a square and they would have to freeze on the coach's whistle. This would change things up and would have the kids moving in different directions instead of just going straight ahead.

Squat Tag

Activity

Children play a normal game of tag inside a square. When a child is caught, he/she must perform squats until he/she is 'freed' by another child.

Goal

To encourage children to start to learning the proper squat technique.

Key teaching points

- Chest up Coach should be able to read writing (real or otherwise) on child's chest
- Weight on heels not toes
- When bent, knees do not pass the toes

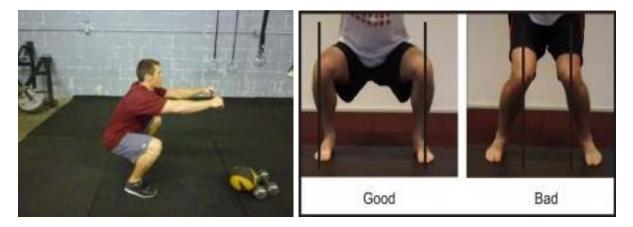
- Feet shoulder width apart
- Back straight
- Hands out in front to balance

Common errors

- Feet too far apart
- Break in the hips which send head/chest forward
- Knees way past toes
- Weight on toes
- Knees bow inwards

The goal of this exercise is to ensure as many children as possible have correct squat technique leaving the nursery. This will benefit them hugely as they progress in their sporting career.

A progression of this game would be to have the children carry footballs so that when they are caught, they must perform the squats with a ball held to their chest. This slightly increases the difficulty as they do not have their hands out in front to help balance.



Above on the left, see the squat demonstrated perfectly. Note the chest and head up, knees not past the toes, arms out for balance and back kept nice and straight. This is what we are aiming for. The picture on the right shows the common mistake a lot of people can make by bending their knees inwards.

2. Split Squat (which leads on to the Lunge)

Soldiers March

Activity

Children must move from starting line to finish line by moving with a 'Soldiers March'. The child must raise one knee above his waist, keeping his toe up and shin vertical. He/she must also alternate moving his/her arms, i.e. if right knee is up, left arm must also be up.

Goal

To introduce the first movement of the lunge. The aim is to have a right angle in the leg bend and also a right angle in the arm bend.

Key teaching points

- Chest and head up, back straight
- Knee comes above the waist
- Shin stays vertical
- Toe points up
- Opposite arm to leg comes up at right angle
- Big step forward

Common errors

- Same arm and leg raise up instead of opposite arm and leg
- Knee does not come above waist
- Toe points down
- Shin is not vertical



See above for perfect technique of 'Soldiers March'. Note high knees, opposite arm to leg, bend in arm at 90 degrees, chest up, shins vertical and toes up. This is a slow motion snap shot of someone running, which is part of what we are trying to achieve with this exercise. See below picture of Usain

Bolt, the world record holder in the 100m sprint, running at full speed. Notice any similarities to our game?



Split Squat Tag

Activity

Normal game of tag except when child is caught, he/she must perform split squats until another child goes under his/her legs to free them. They can then resume the game.

Goal

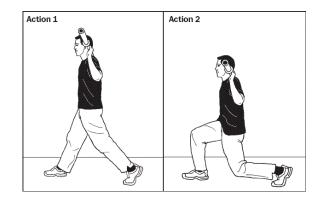
To have children perform the split squat perfectly, this is the next step in the lunge movement.

Key teaching points

- Toes point forward
- Wide stance
- Front knee does not go over toes
- Chest and head up
- Back straight
- Back knee bends very low, i.e. both legs when bent are close to right angles
- Right leg forward, left arm bends at right angle, and vice versa

Common errors

- Feet too close together
- Front knee goes over toes
- Chest forward
- Head down
- Back knee does not come down far enough



Above the split squat is being performed with a bar on his back. The bar is not necessary for our purpose and it is important to remember that we must work on both legs and not just one. We should encourage the child to use his/her arms as they learned in the soldiers march game. Our goal is for the child to be able to perform a split squat so that as they progress they can move onto the lunge easily.

3. Core Strength

Core stability relates to the bodily region bounded by the abdominal wall, the pelvis, the lower back and the diaphragm and its ability to stabilise the body during movement. Whenever a person moves, to lift something or simply to move from one position to another, the core region is tensed first. This tension is usually made unconsciously and in conjunction with a change in breathing pattern. An example to try is to sit in a chair and to reach forward over a table to pick up a cup. This movement is first accompanied by a tension in the core region of the abdomen and can be felt by placing one hand on the abdomen as the movement is made. Core Strength is vital in sport, especially in football and hurling, as the stronger the core, the stronger the transfer of energy throughout the body.

Bridges and Rivers

Activity

Children play a normal game of tag except when caught they must form a 'bridge'. He/she must hold this bridge until one of the other children, or 'river' crawls under him/her. The child is then free to run again.

Goal

To introduce children to engaging their core muscles in a fun way.

Key teaching points

- Arms straight
- Straight line from head to ankle
- No bend in knees
- Feet can be together or shoulder width apart

• Bridge should look like the extended part of a push up

Common errors

- Hips break, i.e. bum up in the air
- Not keeping a straight line between head and feet, i.e. lowering the hips
- Bending the arms
- Bending the knees



See above on the left, a child demonstrates perfect bridge technique. Note the straight line from head to feet. This ensures the core muscles are engaged. On the right see poor technique. Note the hips lowered, knees slightly bent.

Tug O' War

Activity

Children pair up with someone of roughly equal size. One child lies on ground, holds the ball, while the second child stands over them. On the whistle the second child has to try and pull the ball from the kid lying on the ground using only their hands. Obviously this game must be supervised correctly to ensure no children hurt each other.

Goal

For children on the ground to engage core muscles while holding the ball.

Key teaching points

- Children on ground lay flat
- Just use arms to protect ball

Common errors

- Protecting ball with legs
- Rolling over on ball to protect it



See above a demonstration of children fighting for ball using only their arms. This is what we want to achieve except for one child to be on the ground with the other standing over.

4. Single Leg Stability

Single leg stability is massively important in our sports. Think about it, everything we do when in motion is single leg based. Jumping, landing, running, kicking, everything is based on one leg. This is why it is so important to work on stability from a young age. The immediate benefits will be that a child will be steadier on their feet for kicking, especially in their bad foot, while the long term benefits include a host of benefits, most of all injury prevention.



See the picture above left of two players challenging each other in the air. Note how both of them have left the ground using only one leg and are obviously going to land on one leg also. The picture on the right is of a player kicking the ball, again note only one leg on the ground.

Flamingo Walks

Activity

Children must hold one knee up, hold out their arms and hop from a starting point to a finish point. Basically the children must hop from one line to the next. It is very important that we work on both legs in this so that the children develop in a balanced way.

Goal

To improve the child's single leg stability

Key teaching points

- Chest up
- Back straight
- No bend in hips
- Whichever leg is off the ground, make sure knee is at least waist height
- Landing leg is slightly bent to facilitate soft landing which is key in injury prevention

Common errors

- Looking down at feet, which brings chest forward and breaks hips
- Switching legs before course is done
- Not raising leg high enough
- Keeping standing leg straight on landing



See an example above of a single leg hop. Note the knee bend on his right leg on landing and the left knee is waist high through jump. We are not looking for this type of height in the jump; this is merely an illustration of the technique we are looking for.

Hop Tag

Activity

This is a normal game of tag except all children must hop instead of run. When caught they must stand on one leg until they are freed by another child. Coach must make sure to play this game using both legs so as not to cause an imbalance.

Goal

To encourage a child's single leg stability not just in a forward motion but in all directions.

Key teaching points

- Chest up
- Back straight
- No bend in hips
- Whichever leg is off the ground, make sure knee is at least waist height
- Landing leg is slightly bent to facilitate soft landing which is key in injury prevention
- Child stays on one leg when caught

Common errors

- Looking down at feet, which brings chest forward and breaks hips
- Switching legs before course is done
- Not raising leg high enough
- Keeping standing leg straight on landing

The times for this game can start off very small so that children do not get too tired on one leg. The time can be gradually increased as the children develop.

Conclusion

I must emphasise that this resource is only to provide coaches with a base so that they can begin to implement athletic development in the nursery. I would recommend that one of the above exercises takes up only one or two minutes of a station. Six to eight minutes of athletic development work per week is loads to start with. We should not take away from the skill development work that has made the nursery into the success that it is. This is purely to put the foundation in place so that it can be built upon throughout the children's sporting life.

The most important thing is that we get the techniques right. There is no point in playing the games if the children have the wrong techniques. *Remember, practice does not make perfect, perfect practice makes perfect.*