TOPIC 4
Movement skills

4.1 Overview

4.1.1 Introduction

Identifying different types of skills and the way in which they can be combined and manipulated assists your skill development. Understanding the elements that constitute a successful skill execution as well as the benefits of appropriate practice and feedback helps refinement. This topic explores the ways you can critique your skills as well as the ways you can enhance your performance through activity and game practice. Participating in gymnastics, game play and dance creates opportunities to plan, perform and evaluate different types of movement, with a focus on using feedback as a tool to improve your performance.

ESSENTIAL QUESTION

How do you improve movement skills, and what forms of measurement can be used to determine improvements?

SYLLABUS OUTCOMES

A student:
- refines, applies and transfers movement skills in a variety of dynamic physical activity contexts (PD4-4)
- transfers and adapts solutions to complex movement challenges (PD4-5)
- applies and refines interpersonal skills to assist themselves and others to interact respectfully and promote inclusion in a variety of games and contexts (PD4-10)
- demonstrates how movement skills and concepts can be transferred to enhance and perform movement sequences. (PD4-11)
4.2 Fundamental skills – non-locomotor

To successfully participate in games and sports, you need to develop the ability to perform specific skills. These more complex skills are often developed from fundamental skills, such as throwing, catching and jumping. Mastering the fundamental skills will enable you to participate in a wide range of physical activities.

4.2.1 Fundamental skills

Performing a skill correctly is important.

We learn to perform and refine many fundamental skills during our childhood. In playground games we practise balancing and jumping, while in Physical Education classes we may learn successful techniques to catch, throw and kick. A teacher or peer may give us feedback, which informs us of elements of the skill we are performing correctly and elements that we still need to improve. Having a checklist that describes how to perform the skill correctly may also help us.

How high can you jump? Is jumping ability an advantage in sport? Use the Best 50 Dunks weblink in the Resources tab to watch a clip showing some elite jumping. As part of this subtopic, we will be looking at ways to improve our ability to jump.

4.2.2 Fundamental movement skills

Fundamental movement skills are often referred to as basic motor skills. They are foundation skills that help develop movement patterns and allow for development of more complex skills, which are known as sports specific skills. For example, learning to throw, which is a fundamental movement skill, will assist you when learning to execute a javelin throw or a volleyball spike. Those who achieve competence in fundamental movement skills have more opportunities and are more likely to participate in a wide range of sports and physical activities.

In the Get skilled: get active weblink in the Resources tab, 12 fundamental movement skills have been identified. It is important to become proficient in these skills before progressing to more specialised movements. The static balance, for example, requires us to maintain our equilibrium while supporting our body weight on one leg. Through practice and as we gain an understanding of balance, our strength and body control increases. As we improve further, we can perform more complicated movements that require balance, such as the arabesque in gymnastics or standing on a skateboard.

Resources

Weblink: Best 50 Dunks
Weblink: Get skilled: get active
HEALTH FACT
Globally, 81 per cent of school-going adolescents need to participate in more physical activity to meet recommended guidelines. The United Nations Sustainable Development Goals (SDGs) are aiming for a 10 per cent reduction of physical inactivity by 2025.

During this subtopic, we will focus on six of the 12 fundamental skills. The six skills identified in this subtopic are **non-locomotor movements**; this means they are performed while stationary. An example is the catch. Providing the ball is thrown directly to us, our feet will remain in the same position while our arms extend to catch the ball. Some skills such as kicking, can be modified from a non-locomotor movement to a locomotor movement by adding a run up. While you may be able to kick from a stationary position, as you progress into a game or want to increase the distance of the kick, a run up is required. We will practise the following six non-locomotor fundamental movement skills.

| Non-locomotor fundamental movement skills |
|-----------------------------|-----------------------------|
| Static balance              | Vertical jump               |
| Overarm throw               | Kick                        |
| Catch                       | Two-hand strike             |

**DID YOU KNOW?**
Throwing is different to bowling. The elbow is bent and leads in a throw whereas it trails and remains relatively straight when bowling.

### 4.2 Activities
Try each of the following fundamental movement skills. Work your way through the drills and aim to improve the way you perform each skill.

**Warm-up — non-locomotor movements**
1. Try some of the following non-locomotor movements as part of your warm-up for the lesson.
The static balance

2. The static balance involves controlling your equilibrium while remaining stationary. A level of muscular strength is required to hold this position.

The technique for the static balance is:
- Stand on one foot while the other foot is off the ground and the arms are extended horizontally to the sides. The body should remain stationary for 10 seconds with the eyes focused directly ahead.
- When you feel comfortable balance on your preferred leg, alternate with the other leg.
- Extend this activity by trying to maintain balance as you slowly bend the knee of the leg on which you are standing.
- Finally, try the balance with your eyes closed.

The vertical jump

3. The technique for the vertical jump requires that you start with both feet on the ground and your body in a tall, straight position. Keeping the eyes focused ahead, slowly crouch while swinging your arms behind you. The arms then swing forward and upward and the legs extend, driving the body upward. At the height of the jump, the legs are straight and the arms are extended vertically. On landing, the knees bend as they absorb the body weight. The landing must be controlled with no indication of a shuffle to maintain balance.

To strengthen and improve your vertical jump, carry out the following drills.

(a) Practise the vertical jump while focusing on developing the correct technique. Try some jumps without any arm movement. How does this affect the height of your jump?
(b) Form shapes while jumping, such as a star or a tuck.
(c) Practise a vertical jump and incorporate a half twist. You will land facing the opposite direction.

The overarm throw

Equipment: Tennis balls, softballs

4. The overarm throw is the most common way of projecting an object. The skill is used in sports such as cricket and softball, and in activities such as javelin throwing.

The technique for the overarm throw is:
- Stand side-on to the target with feet spread well apart for balance.
- Hold the object in the fingers of the throwing arm.
- Put weight on the leg supporting the throwing arm.
- Transfer the weight forward and on to the foot opposite the throwing arm as the throw is made.
- Follow through with the throwing arm moving down and across the body.

To improve your throwing ability, carry out the following drills.

(a) Throw and catch in pairs using tennis balls and softballs.
(b) Practise target-throwing.
(c) Practise throws with the opposite hand.
The catch

**Equipment:** Variety of balls of different sizes (for example, tennis balls, table tennis balls)

5. The technique for the catch is:
   - Watch the object closely.
   - Position your body so the object can be caught in front of the body at about chest height.
   - Move your hands to meet the object.
   - Extend your fingers towards the object and slightly cup the palms of the hands.
   - Catch with the hands only.
   - Bend the elbows to absorb the force.

To improve your catching ability, carry out the following drills.
(a) On your own, toss a ball into the air and catch it. Focus on catching it using your hands only.
(b) In pairs, toss a ball to one another or throw it against a wall and catch.
(c) Catch balls thrown with variety, some high and some low.
(d) Close your eyes and throw a tennis ball from one hand to another.
(e) Make 10 catches with balls of varying sizes, such as a mixture of tennis balls, table tennis balls and softballs.

6. In softball and baseball, we need to learn how to catch with a glove. Use the Catch a fly ball weblink in the Resources tab to closely examine the technique for catching a fly ball using a glove.

The kick

**Equipment:** Soccer balls

7. The fundamental kicking skill is the placekick. This involves moving towards a stationary object and imparting a force by way of a kick. It can be practised as a non-locomotor skill (standing still and kicking) and a locomotor skill (a running approach to the kick). The technique for the stationary kick is:
   - Focus on the part of the ball where impact will be made.
   - Place the non-striking foot beside the ball.
   - Bend the kicking knee during the backswing.
   - Extend the arms for balance.
   - Swing through with the kicking leg.
   - Make contact with the ball on the top of the foot or laced area of the shoe.
   - Follow through in the direction of where you want the ball to go.

To improve the way you kick, carry out the following drills.
(a) Place the ball on the ground and kick to a target such as a goalpost.
(b) Perform placekicks using either foot.
(c) Try to placekick a long, low ball.
(d) Try to placekick a ball that swings right to left and vice versa.
The two-hand strike

Equipment: Softballs and softball bats, T-ball stands

8. The technique for the two-hand strike is:
   - Assume a wide stance and stand side-on to the direction of the hit.
   - Preferred hand grips above the non-preferred hand.
   - Keep the eyes on the back of the ball throughout the swing.
   - Swing the bat to shoulder height using a full shoulder turn.
   - Step forward with the hit.
   - Straighten the arms as contact is made.
   - Follow through around the body.

To practise and improve your two-hand strike, carry out the following drills.
(a) Practise hitting a stationary ball from a T-ball stand.
(b) Using foam or plastic balls, practise hitting a stationary ball using a golf club.
(c) Use a hockey stick to hit a ball into a hockey goal.

Applying your skills

9. Choose any game such as cricket or softball that includes at least two of the skills practised in this subtopic. Play the game using a modified format such as continuous cricket or T-ball.

on Resources

Weblink: Catch a fly ball

4.2 Check and challenge

Explain
1. Explain why it is important to improve our movement skills.
2. What is meant by “fundamental movement skill”? Provide an example to support your answer.
3. What is static balance? Identify three skills where static balance may be important.
4. Using examples, explain the difference between locomotor and non-locomotor skills.
5. The overarm throw and the two-hand strike are two fundamental skills. Identify other sports where similar movements are performed.
6. Describe the technique for the overarm throw.

4.3 Fundamental skills – locomotor

Skills such as running, leaping and dodging are basic skills that are the foundation of more complex skills found in games. Learning to do these skills properly will allow you to participate in a wide range of physical activities.

4.3.1 Different types of fundamental skills

Some fundamental skills require us to move rapidly. This set of fundamental skills requires that we learn to control our bodies during locomotor type movements. Mostly these relate to games where we need to beat
an opponent or reach a ball by sprinting, dodging or changing direction. However, these movements are also found in gymnastics, dance and many track and field activities.

4.3.2 Dynamic movement skills
We have already explored a range of movement skills that focus on balance, throwing, catching and kicking. In this subtopic, skills that are more dynamic will be targeted for development.

The sprint run is a skill that is required in most team sports. Like the dodge and leap, it requires development of dynamic balance, which refers to your ability to maintain your equilibrium while your body is moving. These skills require muscular power and coordination and are needed for success in activities like dance, gymnastic and field events in athletics. Similar movements are also required in games such as touch rugby or football and basketball.

During the lesson for this subtopic, you will be given an opportunity to improve your sprint run technique. Use the Improve your sprint weblink in the Resources tab to learn some valuable hints on how to improve your technique. Identify a few key points and keep them in mind when practising the sprinting activities.

4.3 Activities
Try each of the following fundamental movement skills. Work your way through the drills and aim to improve the way you perform each skill.

Warm-up — line locomotors
1. As part of your warm up, use line locomotors. Form groups of five or six and stand in a line with each person facing another’s shoulders. Use a variety of different jumps to progress down the allocated space. You must keep time with the jumps, so your group is synchronised. Try the following patterns.
   - Single small forward jumps, pushing off the ground as soon as your feet land
   - Two small forward jumps, one backward jump
TOPIC 4 Movement skills

107

• One jump forward, one to the left, one to the middle, one to the right and repeat
• One big jump forward, one on the spot and repeat
Create your own patterns with your group and show the rest of the class.

The sprint run

2. A proficient running technique allows a person to move faster, hold correct form and be more energy efficient.
The technique for the sprint run is:
• Keep the head steady and maintain eye focus directly ahead.
• Bend the elbows to 90 degrees while moving the arms forcefully.
• Maintain a slight forward lean with a high leg action.
• Move the opposite arm to the leg during each stride.
• Land on the balls of the feet.
To improve your sprint technique, carry out the following drills.
(a) Run slowly on the spot with only the balls of the feet touching the ground. Gradually increase the pace while focusing on the correct technique. Decrease speed and repeat.
(b) Sprint 15 metres, concentrating on keeping your knees high and pumping your arms. Jog for 15 metres then repeat.
(c) Compete in a set of relays. Sprint over a distance of 20 metres, handing a baton or other object to the next member of your team.
(d) Place objects at intervals along the track that must be picked up and dropped off during the sprint.

The hop

3. Hopping requires taking off from one foot and landing on the same foot while maintaining balance. Hopping is an essential skill in the track event of triple jump, as well as in dance.
The technique for the hop is:
• Stand balanced on your preferred leg and push off by straightening the leg.
• Swing the arms forward for momentum as the hop is made.
• Land on the ball of the foot that you pushed off.
• Keep the head steady and look forward.
To practise hopping movements, carry out the following drills.
(a) Practise single leg balances using either foot. Time yourself to see how long you can maintain your balance on each leg.
(b) Hop from the ground to a bench or box top. Try this with the other foot and see how many times you can do this.
(c) Form teams and conduct hopping relays over a 10-metre distance.
(d) Using a skipping rope, hop on one leg and then change to the other. Try to skip 10 times on one leg and then 10 times on the other leg.
The slide
4. The slide is a shuffle movement that takes a person further to their left or right while still facing forward. It is commonly used in dance and is a foundation movement for defensive footwork in games such as basketball and touch football.

The technique for the slide is:
• Begin facing forward with feet apart.
• Slide the left foot to the left and quickly draw the right foot close to it.
• Slide the left foot to the left again.
• Keep your weight on the balls of the feet.
• Keep the body facing forward throughout.
Practise the slide by working in pairs, facing one another. One person slides and the other person mirrors the movement.

The skip
5. Skipping is a fundamental skill requiring a succession of step-hop movements. It is commonly used to develop leg power for sprinting and can also be a good conditioning activity.

The technique for the skip is:
• Step-hop on one leg and repeat the movement on the other leg.
• Make contact with the ground on the ball of the foot.
• Show a sense of rhythm.
• Look forward and swing arms in opposition to the legs.

To improve your skipping technique, carry out the following drills.
(a) Form a circle and practise the skip as you follow the person ahead of you.
(b) Use a line relay to practise synchronised skipping.
(c) Place objects around a court or open space and see how many you can pick up in a designated time while skipping.

The leap
6. The leap involves a run, take-off and landing on the foot opposite to the one involved in the take-off. The movement is an essential part of the triple jump (the step) and is commonly used in gymnastics and as an athletic training drill to increase stride length.

The technique for the leap is:
• Begin with a run-up and bend the leg from which the leap is to be made.
• Keep eyes focussed forward throughout the leap.
• Have both legs straighten during flight.
• Ensure the position of the arms is opposite to the legs.
• Land on the ball of the foot.
• Bend at the knee to help control and absorb the force of landing.

To improve your leaping technique, carry out the following drills.
(a) Alternate short runs with leaps.
(b) Place markers on the ground to leap over.
(c) During short runs, call left or right to indicate the leg from which to leap.
The dodge

**Equipment:** Markers

7. The dodge is used to change direction while running. It is an important attacking skill in all football codes and other team games such as basketball.

The technique for the dodge is:
- Keep your eyes in the direction of travel throughout the dodge.
- Walk or jog forward.
- Slightly lower the body and step on to the left foot.
- Lean away from the left foot and push off it, resulting in a change of direction.
- Repeat, this time stepping off the right foot.

The dodge

To improve your dodge technique, carry out the following drills.
(a) Take two steps forward and then step sideways off the grounded foot. Go forward again and step off the other foot.
(b) Set up markers in a zig-zag formation across a field. Run through, stepping away from each marker as it is approached.
(c) Using two differently coloured markers, set a random pattern over a field. Step off your left foot as you approach one colour and your right as you approach the other colour.

Applying your skills

8. Choose a game that has at least two of the listed fundamental skills. Examples of games would be touch football and basketball. As you involve yourself in the activity, reflect on where, how often and in what situations you required these fundamental skills.

9. Various dances use some of these locomotor skills. Use the Heel and toe polka weblink in the Resources tab to watch the heel and toe polka in action and try this dance as part of your warm-up in class.

**Resources**

- Digital doc: Worksheet 4.1 Fundamental movement skills — peer and self-assessment (doc-29225)
- Weblink: Heel and toe polka

**4.3 Check and challenge**

**Explain**

1. Explain the difference between a skip and a slide.
2. Identify two points that might help your sprint action.
3. Explain how you could improve your ability to hop.
4. Compare a range of situations in sports (such as getting around an opponent in football) where a good sprint run is an advantage.
5. Describe the skip.
4.4 Specialised skills

Specialised skills are often sports specific skills and usually incorporate a number of smaller movements within a bigger movement, for example, bowling and batting in cricket. In this subtopic you will explore important skill components and learn ways to develop and improve the execution of some specialised skills.

4.4.1 What are specialised skills?

When you play sport, you use a combination of fundamental skills and skills that are specific to that sport. For example, when playing basketball you may dodge, which is a fundamental skill, and perform a lay-up, which is a sports specific skill. These specialised skills are often more complex and may require you to practise them in parts before you combine each element to form a whole skill.

Use the Slow motion swing weblink in the Resources tab to watch Adam Scott’s golf swing in slow motion and observe the specialised skill. What are the features of this skill execution that make it appealing and successful?

DID YOU KNOW?
Rafael Nadal started playing tennis when he was three. Even though Nadal writes with his right hand, his coach encouraged him to play tennis using his left hand as his dominant hand, as he thought this might be an advantage on court. He still plays this way today.

4.4.2 Developing specialised skills in cricket

Cricket is a popular activity played both recreationally and competitively by a large number of Australians — men and women, boys and girls. Regardless of your level of competition, learning and mastering many specialised skills such as batting and bowling will help you experience success in many facets of the game.
HEALTH FACT

Skin cancer affects thousands of Australians every year. Cricket Australia recognises the damage that exposure to the sun can cause and recommends that all cricket players and fans wear sunscreen and protective clothing when they compete in or come to matches.

Batting

Elements of the skills you have previously investigated can be transferred into these more specialised skills. The two-handed strike, a fundamental movement skill, forms the basis from which you can learn the batting skill in cricket. Some elements are similar, such as the grip with two hands and others such as hitting the ball with an upright bat, will be different.

The technique for the front foot drive in cricket is:

- Lift the bat straight back towards the stumps.
- Step towards the ball with the front foot.
- Lean towards the ball, ensuring the front elbow is bent.
- Hit the ball with an upright bat.
- Keep the head over the front foot, watching where the ball makes contact with the bat.
- Bring the bat through, allowing the arms to roll over in the follow-through.

Observe the figures closely to get a better feel for what you need to do. As with any learning process, as you practise you will make mistakes. Ask for feedback to help you correct these errors and as you learn and become more confident, you will be able to perform the skill naturally and with fewer errors.

The front foot drive in cricket

In the front foot drive, the bat is vertical at the point of contact.
4.4 Activities

Practising the front foot drive

**Equipment:** One cricket bat and tennis ball per pair

1. Have one person stand on the opposite side of the batter. Drop a ball to a point about one stride’s length in front of the batter, allowing them to drive the ball to a target.

The front foot drive in action

**Equipment:** Chalk or a hula hoop, tennis balls, cricket bats

2. Draw a circle about two metres in front of the batter. Throw the ball to the circle and have the batter move forward and drive the ball.

Continuous cricket

**Equipment:** Cricket or softball bat, softball or soft cricket ball, set of cricket stumps and a softball base, oval or cricket field

3. The drive, which you have just practised, is the most common stroke required in continuous cricket. Read the following description and then play a game of continuous cricket to get a feel of your skill in action.

Play in two teams of 8 to 12 players. The batting team sits behind the restraining line, while the fielding team covers areas where the ball could be hit. The fielding team provides a wicket-keeper and bowler, both of whom rotate to fielding positions after each over.

The ball can be bowled overarm or underarm at the stumps. The batter attempts to hit the ball and score a run by dropping the bat, running around the marker and returning to the crease. The batter is out if the bowler hits the stumps, the batter hits the stumps with the bat or the ball is caught on the full. On completing the run, the batter must pick up the bat and continue with the innings. However, the bowler does not need to wait until the batter is ready — bowling may commence at any time when the bowler is set. When a batter is out, the bat is dropped and the new batter must get to the crease as soon as possible. The winning team is the team that gains the highest number of runs.
4.4 Check and challenge

Explain

1. In your own words, define the word ‘skill’.
2. Describe what is meant by a skilful person.
3. Explain the difference between fundamental and specialised skills.
4. Describe the most important points to remember when learning the front foot drive in cricket.
5. Discuss why some skills are more difficult to learn than others.
6. The activity ‘Practising the front foot drive’ is an example of isolating a skill. Discuss why some skills are better learned in isolation.
7. Evaluate your results in using the forward drive in a game of continuous cricket. If you experienced difficulty, suggest why this happened and develop strategies to address these difficulties.
8. Identify five skills important in other games or activities that require considerable development for success (such as a golf swing). Choose one skill and describe the action in detail.
9. How would you help a beginner who had never seen the skill identified in question 8 to visualise it?
10. Explain how practice improves the way we execute skills.
4.5 Manipulative skills

Manipulative skills require the use of objects such as balls, bats, clubs and racquets in order to play the game or participate in the activity. In this subtopic you will develop some of the manipulative skills you might require when playing your favourite games.

4.5.1 Developing manipulative skills

Most games require considerable manipulative skill. Very good players show high levels of control over objects and a level of skill that is achieved only through extensive practice. Some sports where manipulative skills are particularly important include tennis, golf, hockey, volleyball and basketball.

Successful manipulation of objects requires good hand–eye or foot–eye coordination. We not only need to focus on the object, for example, a ball being thrown, but also develop a feel for the movement required to control the object, (for example, the catch). How can we improve our manipulative ability?

Hockey involves high-level manipulative skills.

Use the Harlem Globetrotters ball control weblink in the Resources tab to watch the Harlem Globetrotters and observe the level of manipulative skill involved. As a class, discuss how and why people are able to achieve this level of skill.

**Resources**

- **Weblink**: Harlem Globetrotters ball control
DID YOU KNOW?
Golf is the only sport that has been played on the moon. On 6 February 1971, Alan Shepard swung his club — he had to do it one handed because of his thick gloves and restricting space suit — in order to send the ball, as he claims, ‘miles and miles and miles’.

4.5.2 Manipulative skills in games
Many games require us to control, manipulate and sometimes project objects in a particular way. A basketball, for example, needs to be controlled during the dribble before being passed to another player who may shoot for the basket. Objects used in athletics, such as the discus and javelin, need to be controlled in a certain manner; otherwise, the throw can be dangerous. Gaining control and learning to manipulate objects comes from learning about the skill and practising the action.

In most cases, we need to spend time developing a feel for the skill by practising lead-up activities, just as we would when learning specialised skills. As our control develops, we are able to take on more complex skills. For example, when we learn to dribble a hockey ball using a hockey stick, we begin with a straight dribble. However, as our control develops, markers can be spaced on the field that require us to incorporate ball control while dodging to change direction.

During the lesson for this subtopic, we will initially practise activities that will improve our manipulative abilities. We will then explore a more complex skill: the lay-up in basketball.

To successfully manipulate objects, we need to gain balance and control.

DID YOU KNOW?
There are 336 dimples on a regulation golf ball. The dimples assist the ball in ‘catching’ air while it is spinning backwards; this aids its ability to gain altitude and ultimately increases the distance travelled. A ball without dimples would be lucky to travel half the distance!
4.5 Activities

Fun ways to improve manipulative ability

**Equipment**: Hockey sticks, softball bats and gloves, assortment of balls

1. Use the figures as a guide when practising the following important manipulative skills.

   - **Hockey stick bounce**. Make 10 consecutive bounces of a hockey ball on a hockey stick.
   - **Around the waist**. Circle the basketball around the waist clockwise 20 times then anti-clockwise 20 times.
   - **Soccer ball bounce**. Bounce a soccer ball for 10 seconds using any part of the body except the hands so the ball does not touch the ground.
   - **Pass and catch**. In pairs, make successive passes and catches of a football as quickly as possible.
   - **Basketball spin**. Spin the ball on the tip of your finger.
   - **Catching with a glove**. Have the softball thrown to you so you catch with a glove.
   - **Figure eight pass**. Pass the ball around and between the legs in a figure eight pattern.
   - **Throw and hit**. Throw a softball up and try to hit it with a bat before it hits the ground.

The lay-up in basketball

**Equipment**: Basketball, court

2. The technique for a right-hand lay-up is outlined below and illustrated in the figure that follows.

   - Stand with your feet apart, just outside the key.
   - As the ball is passed to you, leap and catch it, landing on your right foot (for a right-handed shooter).
   - Step onto your left foot while leaning slightly forward.
   - Leap from your left foot towards the basket while rotating your right hand behind and underneath the ball.
   - At the height of the jump, ‘lay’ the ball against the backboard so it drops softly into the basket.
   - Land on your left foot, then your right and bend your knees to absorb the force.
1. Gather ball and land on right foot.
2. Step onto the left foot.
3. Leap toward the basket.
4. Lay ball against backboard.

Now develop the lay-up by practising:
- individually and without a ball
- in pairs and with the ball being caught at the beginning of the lay-up (see figure: left-handed and left side shown — reverse footwork and shooting hand if approaching from the right side.)
- in small groups with the ball being dribbled leading into the lay-up.

The lay-up set up from a pass

1. Jump onto left foot catching the ball as you leave the ground.
2. Land on left foot.
3. Step on to right foot.
4. Jump.
5. Shoot.
Lay-up drills

**Equipment:** Basketball, court

3. Use the following drill to practise the lay-up in groups within the class. Players line up in three lines as illustrated in the figure below.

```
A lay-up drill
```

```
key
- Run
- Pass
- Dribble
```

i. A passes to D and runs behind F.
ii. D dribbles to the basket, executes a lay-up and goes behind I.
iii. G rebounds, passes to B and goes behind C.
iv. B passes to E and so the drill continues.

Try adding another ball as your control and execution improve.

4. Use the **Basketball drills** weblink in the Resources tab to observe many animated basketball drills.
   (a) In small groups, choose a drill and practise it. Take turns to show your drill to others in the class.
   (b) Have all class groups practise each of the drills.

---

**Resources**

- eLesson: Golf swing (eles-0755)
- Digital doc: Work sheet 4.2 Identifying types of movement skill (doc-29226)
- Weblink: Basketball drills

---

**4.5 Check and challenge**

**Explain**

1. Explain what is meant by the term ‘manipulate’.
2. Explain why it is important to improve manipulative ability.
3. Discuss how manipulation skills can be improved.
4. Outline the basic technique for the lay-up in basketball.
5. Identify skills in this subtopic that you could practise to improve your general manipulative abilities.

**Evaluate**

6. Develop and outline a drill that could be used to improve control in a hockey dribble.
7. Discuss when manipulation of objects is essential in gymnastics.
8. Assess the importance of the senses in developing manipulation skills.
4.6 Body control and awareness

Skill development requires much more than physical actions such as striking and catching. Equally important is the development of a sense of awareness, of where your body and its parts are in relation to objects, such as surrounding players or pieces of equipment, and the environment.

4.6.1 Body control
Our awareness of where our body is in space is referred to as kinaesthetic sense. The importance of body control and awareness is evident in activities that require considerable coordination between arms and legs, such as yoga and the butterfly swimming style. Effective body control can involve different capabilities depending on the activity; for example, a handstand requires good coordination, strength and balance.

DID YOU KNOW?
Yoga may have existed for over 5000 years. It is an ancient form of meditation that uses breathing, mental exercises and physical activity to achieve a closer connection between the body, the mind and the spirit. Yoga is an increasingly popular form of physical activity across all age groups. Ida Herbert from Canada, holds the Guinness World Record as the oldest living yoga instructor; she retired from instructing at the age of 97!

4.6.2 Body awareness
The ability to perform a skill largely depends on:
- the way we visualise it in our mind
- our ability to use the required parts of the body to make the picture work
- our brain sending messages to the right parts of the body at the appropriate time.
When we see a skill demonstrated or described to us, we assemble the pictures of it in our mind. Our pictures may be a little different from those of the person next to us because we all see things differently. This is why some of us may need to ask questions following an explanation or see a physical demonstration. Visualising the skill correctly is important to coordinate our mind and body when practising.

When we know what to do, we have a good chance of executing the skill correctly. To do this, messages from our senses (primarily touch, sight and sound) are gathered with our mental pictures and transmitted to the brain, where they are processed before being sent to the muscles. The parts of the body such as trunk, arms and legs respond and the movement is attempted. As we continue to practise the motion, we become better at it because our feel for what is required develops; the messages to and from our brain become more refined and specific. Gradually, our body control improves and we become aware of where our body parts should be during the various stages of the movement. The more skilled we become, the more body control and awareness we have.

4.6 Activities

Gymnastics routine

**Equipment:** Gym mats

1. Use the line locomotors warm-up from the subtopic 4.3 Activities, then practise the gymnastic skills and movements that you can identify in the figures. These will develop your body control and awareness. As a class, discuss the movements you could not recognise and try to describe how you might perform them.

Use the [Gymnastics safety](#) weblink in the Resources tab to learn some important safety guidelines before you begin practising.

Timing and sequencing can be developed by practising gymnastic routines.

- Start
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- Finish
- 14.
- 15.
Stand on your hands

**Equipment:** Gym mats

2. Begin by trying the simpler bunny jump, then use the activities below to progress to the handstand as you become more confident.

**Bunny jump**
Squat as low as possible and place your hands flat on the floor in front of you. Jump to tuck your feet to your bottom then return to a squat.

**Wedge touch**
Begin with feet shoulder-width apart and hands flat on the floor in front of a wedge leaning against a wall. Jump your bottom towards the wedge and legs out straight to a straddle then return to your starting position. Aim to get your back to touch the wedge momentarily, extending contact as improvement progresses.

**Handstand**
Place hands shoulder-width apart, fingers forward on a firm surface. Push the shoulders as far over the hands as possible, then walk the hips up and kick up to the inverted position.

Create a routine

**Equipment** Gym mats

3. As a class, brainstorm activities that could be included in a simple gymnastics routine that requires locomotion and movement around a floor area. The routine should focus on movements that require body control and body awareness, for example, the role of the arms in a static balance. Use the following script as a guide to assemble your routine, being very specific about the direction of movement and the level of control required. Complete the script and perform the routine.

- Begin with a static balance, which must be held for 10 seconds.
- Walk five steps forward, jump and turn to the right and then balance on one foot and one hand for five seconds with the free arm and hand extended as horizontally as possible.
- Roll to the right and then ...
- Discuss whether the exercise made you more aware of the importance of body parts in movement. Why or why not?

**on Resources**

**Weblink:** Gymnastics safety

---

**4.6 Check and challenge**

**Explain**

1. What does the ability to perform a skill largely depend on?
2. How does practice increase our body control?
3. (a) Explain why body control is important in sports like gymnastics and diving.
   (b) Use the Slow motion diving weblink in the Resources tab to watch a diving clip. What areas of the body does a diver need to be aware of?
4. Why might you need to ask a question about performing a skill when the person next to you does not?
5. Assess the importance of the senses in developing body control skills.
6. Explain the importance of the kinaesthetic sense in body awareness and explain how it is important for a skill such as the javelin throw.
7. List five activities where body control is evident. For each of these activities, list some of the muscle areas used to maintain body control.
4.7 Practice

Your skills are developed through practice. This requires repetition of movement and gradual refinement of technique supported by motivation for improvement.

4.7.1 Importance of practice

Practice is the process of repeating a skill, or parts of a skill, in a variety of environments. Fundamental skills may be practised as a whole skill, while specialised skills may be broken into parts. Skills practised in isolation help us focus on mastering elements of performance, while practising with peers or opponents opens the environment and exposes us to more variables and conditions of performance. This not only enhances our ability to perform the skill under pressure but challenges our anticipation and decision-making skills.

4.7.2 Practice and feedback

Elite athletes often spend hours each week practising a skill to perfect it. At this level, they have a strong internal or intrinsic feel for the skill and they are able to make minor adjustments to their technique based on this internal feedback. Often this feedback is kinaesthetic, messages sent to the brain about position and movement of the muscles and joints. As we learn and develop a skill we rely on feedback from external sources such as verbal cues from a coach or our peers, or our vision — watching a tennis serve fall outside the required zone informs us that we need to make changes to our technique.

All practice should incorporate feedback. By regularly assessing our skill level, we can learn which areas we are improving and which require further attention. As we gather feedback we make modifications to our performance. This process is repeated as we practise, and our skill level improves, as seen in the following diagram.
Practice and feedback lead to fewer errors and increasing skill level.

When playing team sports, it is important to practise the skills of the game both individually and as a team. By practising alone, you can improve and refine fundamental skills such as kicking, sprinting and jumping. When your team practises together it is easier to improve your timing, communication and anticipation, as well as skills like throwing and catching. Team practice is also great for building connections and friendships between the players, which not only makes the activity more fun but also improves the chances of success as the team members learn to play together.

**DID YOU KNOW?**
Overarm bowling in cricket was only made legal in 1835, at least 200 years after the first recorded match.

### 4.7 Activities

**Throwing in cricket to improve accuracy**

**Equipment:** Cricket balls, a target (for example, a strong wall or stumps)

1. The overarm throw in cricket is very important as it can be made from anywhere in the field. Before we try throwing as far as we can, we need to learn to throw accurately. To practise the overarm throw, it is important to start with the correct technique.
   - Pick up the ball and position the first and second fingers across the seam. The remaining fingers and thumb are placed underneath the ball as shown in figure (a) on the next page.
   - Stand side-on to the target and spread the feet well apart for balance.
   - Beginning in front of the body, take the throwing arm down, back and up in a wide arc as shown in figure (b).
   - Lead the throw with the bent elbow of the throwing arm and transfer the weight with the throw.
   - Snap the wrist with the release of the ball and follow through with the throwing arm moving down and across the body.
Practise in pairs, keeping accuracy and correct technique in mind. One person should practise the throw while the other person stands by the target and rolls the ball back, either to the right or left of their partner. The thrower must move to the ball, pick it up and return it using an overarm throw. Each partner should take a turn in each role and provide feedback to the thrower.

(a) Gripping the cricket ball for the overarm throw

1. Assume a side-on-to-target position.
2. Make a wide arc.
3. Lead with elbow.
4. Snap fingers backwards and downwards.
5. Follow through.

(b) The overarm throw in cricket

Throwing in cricket to throw for distance

**Equipment:** Cricket balls, markers

2. Set out markers at varying distances and, in pairs, practise using the overarm throw as outlined in activity 1, this time aiming to achieve the greatest distance. Each partner should take a turn at throwing and observing the throw of their partner. After observing, students should provide their partner with helpful and constructive feedback on their skills, recognising those areas that are already good and those that require more practice; for example, they might be achieving good distance but displaying incorrect technique by failing to stand side-on to the target or not snapping the wrist on release.

Team practice

3. Think of a team sport you enjoy and create a plan for a team practice. You will need to consider a warm-up and cool-down as well as which skills your team will be practising. Some skills, such as throwing and catching, might be practised in pairs; others, such as a minor game, with half or all the team. Consider how many times each activity should be repeated (should the ball be passed 10 times or more?) and whether or not certain players will need to practise some skills more than others (for example, attackers will need to practise scoring more often while defenders will need to focus more on blocking and disrupting). Begin with easier activities and increase the difficulty level throughout the session.

4. Use the Netball drills weblink in the Resources tab to watch a more complicated netball training session. Could you think of a more difficult activity like this for your practice plan?

**Resources**

**Weblink:** Netball drills
4.7 Check and challenge

Explain
1. Explain how practising alone enhances your technique.
2. Explain why it is important to practise as a team.
3. How many times a week should a team get together for practice?
4. (a) Explain why feedback should always be included in a practice session.
   (b) How well do you think a team would operate if they did not practise regularly? Give reasons for your answer.

4.8 Safety

There are risks involved in every physical activity. Some, for example diving, surfing or gymnastics, have higher risk and many safety steps need to be taken to ensure safe participation. This should not prevent you from trying the activity, but simply act as a factor to consider before and while undertaking them.

4.8.1 Avoiding injury

When playing sport or pursuing physical activity for recreation, we are exposed to some risks that may increase the chance of injury. Fortunately, most accidents related to physical activity can be avoided. By being aware of situations in which accidents most commonly happen, knowing the risk factors and taking measures to minimise or remove the risk, we can enhance our enjoyment of physical activity.

Ensuring safety is everyone’s responsibility, teachers and students alike. Use the Safety in gymnastics weblink in the Resources tab to read ways to enhance safety. Identify some additional measures in gymnastic lessons to avoid injury.

Weblink: Safety in gymnastics

4.8.2 Safety in physical activity

We learn skills for use in many different environments. While at the pool, we learn to swim, dive and rescue others. On a football field, we learn to sidestep and tackle. In gymnastics, where there are a variety of apparatus, learning skills can be quite challenging. Including safety checks and advice for safe behaviour can promote an environment in which injury risk is minimised.

No matter what sport we play, accidents may happen. Usually, accidents are the result of:
• lack of knowledge — for example, not being able to identify a rip in the surf
• an unsafe environment — such as holes in fields or faulty equipment
• lack of skill — for example, letting go of a bat while striking, causing injury to the catcher
• unsafe behaviours — for example, attempting a somersault without mastering the basic skill of falling, tucking and rolling
• unsafe attitudes — for example, a lack of concern for others’ safety.
DID YOU KNOW?
Professional and recreational ice hockey players need to wear many pieces of protective equipment to minimise the chance of injury. This includes but is not limited to: gloves, chest protectors, mouth guards, face shields and shoulder pads. These help protect their bodies if they fall on the ice, hit the barriers of the rink, make contact with other players or are hit with equipment such as the puck or a stick.

There are a number of simple measures that we can take to ensure safety during physical activity. The first relates to being aware of the rules of games and playing within them. Rules are designed to promote safety. Some examples are:

- **Rugby League.** You are not allowed to tackle above the shoulders.
- **softball.** The catcher must wear a protective face mask.
- **basketball.** Contact is to be avoided; intentional contact (fouls) are penalised and, in serious cases, the player is removed from the court.

The second measure is to practise safe behaviour. Although you should challenge yourself to improve, ensure you stay within your physical capabilities. If you are not sure, ask a teacher or coach. For example, don’t try a handspring in gymnastics if you have difficulty with a forward roll. When learning most skills, there is progression of sub-skills that you need to master as a foundation for the major skill. Progression can be compared to climbing a stairway. You can’t go straight to the top; you use each step to make your way up.

Thirdly, listen to and take note of what the teacher, instructor or coach says about the activity. For field activities like discus, javelin and shot put, there are set procedures for observing, carrying, throwing and retrieving. For example, a javelin must always be carried vertically; that is, with the point facing the ground. If carried horizontally, there is a risk that somebody walking behind will unknowingly be hurt with the tail end of the javelin.

Finally, work on your fitness to ensure you are capable of the tasks. Always do your warm-up properly, particularly the stretching exercises. Participate in activity outside of school to help build endurance, strength and confidence.

HEALTH FACT
Royal Life Saving Australia proposes that all children should be able to swim 50 metres continuously as well as float for two minutes by the end of primary school.

Ensuring safety in physical activity is everyone’s responsibility.
4.8 Activities

Safety posters
Aquatics, athletics, dance, games and gymnastics are some of the activities in which you will participate while developing your physical activity skills. In each of these movement contexts, there is a risk of injury, particularly if safety precautions are not taken.
1. (a) Divide the class into five groups and allocate one of the movement areas — aquatics, athletics, dance, games or gymnastics — to each.
   (b) Within each group, assess risky elements or potential for danger and compile a list of issues that relate to safe behaviour. You may want to use the internet or printed references to ensure all areas — such as warm-ups and the checking and handling of equipment — are included.
   Safety rules such as wearing head protection in softball, carrying javelins, diving into swimming pools and having spotters in gymnastics also need to be included. Use the Bike riding safety check weblink to see a sample for bike riding that focuses on a pre-ride equipment check.
   (c) Create an infographic or fact sheet that outlines the safety risks and procedures for your activity. Distribute a poster to each person in the class and spend time before each new activity ensuring all students are aware of the safety issues.

Creating safe environments
2. (a) In pairs, survey your school environment in terms of safety risks in physical activity. You will need to cover fields, playgrounds, courts, gyms, wickets, practice nets and any other general play areas. Look for issues such as potholes, glass, rusty support structures, faulty equipment, exposed sprinkler heads. Also consider sun safety and the risk of prolonged exposure.
   (b) As a class, compile one list of all the risks identified. Brainstorm solutions that address the list of concerns.

4.8 Check and challenge

Explain
1. Explain why safety is important for skill development.
2. Choose a team game. Explain how the safety of players can be improved.

Elaborate
3. There will be considerable variation in swimming ability in your class. Suggest procedures that should be followed (for example, no diving, avoiding deep areas if not confident) to ensure the safety of everyone.
4. Describe ways of ensuring that your class is ‘sun safe’ during outdoor physical activity at school.

Evaluate
5. Use the Safety review weblink in the Resources tab to review what you have learned about safety. Note any important points you have missed.
4.9 Testing and evaluating skill development

To improve skills, you need to evaluate your performance, identify elements that need work and create an action plan to help achieve your goals. While it is helpful to use the same technique to evaluate, this is not always possible and so you should reflect on the various ways in which you can review your skill execution.

4.9.1 Different ways of testing and evaluating skill development

There are many ways of observing, testing and evaluating skill development. When considering sports-based skills we may observe ourselves or others undertaking skills in isolation or within a game. Other skills, such as throwing the javelin, may be assessed by comparing our results over time. Gymnastics or dance competitions, where we are given a score based on the opinion of a judge can be more challenging to determine if we have improved. Often, we have an internal feeling about the way we execute skills, based on our previous experience and knowledge.

Use the Soccer ball control weblink in the Resources tab to watch a demonstration of soccer ball control. How would you rate the level of skill and control? As a class, discuss how you arrived at this conclusion. What criteria did you use to rate the demonstration?

4.9.2 Testing and measuring skill

Skills tests can use a range of test items to assess how well a person can perform a skill. The process of using these test items, should inform us about what we need to work on to improve. When using any form of assessment, a plan or goals for the assessment should be created. The observer should have an area of focus and have a high level of knowledge about the skill. During the observation, areas of strength should be noted as well as elements to improve. This should then be communicated with strategies to assist skill development.

Modern devices such as smartphones allow us to observe skill in a more sophisticated manner. Through appropriate planning and recording of the skill, we can replay the performance, pausing on each element for a thorough critique. This allows us to visualise the skill more accurately and with more precision. Using a slow-motion feature or a sports app such as Hudl Technique or Dartfish can further enhance observation.

Above all, skills tests provide us with the opportunity to isolate a skill, assess it and work out methods for improving our performance.
4.9.3 Checklists

Checklists or rubrics are a useful tool when evaluating skill development. Checklists are a list of criteria we check against when we are observing a performance or a skill. This helps document the observation because if we relied on memory alone, we may not be as accurate in our assessment. For example, when assessing the freestyle stroke in swimming, we may want to check that the breathing action is being performed correctly. When observing the swimmer’s breathing, a tick is placed in the relevant box, indicating whether the skill is being performed correctly. At the end of the performance, we can use the information to help the swimmer improve the skills that were demonstrated incorrectly.

4.9.4 Subjective evaluation

Some sports and activities may be difficult to judge because they are based on opinion. While most judges will be well trained in the assessment process, consistency can be challenging.

Judgements based on our opinions of performance are called subjective evaluations. Think about how you might judge a figure skating routine. Did you like it or did it not appeal to you? Opinions will vary from one person to the next and from group to group. Some people may rate a performance as excellent because of its technical difficulty whereas others may have disliked the choreography from an aesthetic perspective. This is why judges should evaluate a performance using a range of strict criteria and not personal feelings. Our needs, likes, dislikes, interests, culture, peer group and upbringing all influence our opinions and are reflected in the way we judge a performance.

**DID YOU KNOW?**

In 1928, Peter Desjardins became the first Olympic diver to be awarded a perfect score of 10.0.
HEALTH FACT

Your legs contain the largest and strongest muscles in the body. Because much of what we do involves moving from one place to another, they are engaged more often than other muscles.

### 4.9 Activities

**Throwing accuracy test**

**Equipment:** Basketballs/netballs, target

1. Draw an inner and outer circle and a line six metres back from the target. Allow students 50 throws — 25 with the right hand and 25 with the left. Two points are awarded for a hit to the inner circle, one point for the outer circle and none for completely outside the circles. Record points gained for left and right hands separately.

Skills tests, such as wall throwing for accuracy, gives us a general idea of how well skills are being performed.

---

**Brick wall**

**Targets**

2 1 0 2 1 0

6 m

---

**Speed test**

**Equipment:** Tape measure, stopwatches

2. Perform the speed test described below.

(a) Measure a 50-metre straight line on flat ground.
(b) Form pairs. Choose who will be the first runner and who will be the first timekeeper.
(c) Have a general warm-up with an emphasis on leg stretches.
(d) Practise ‘on your mark’, ‘set’ and ‘go’, allowing about two seconds between ‘set’ and ‘go’.
(e) Practise starting the stopwatch on the ‘go’ movement, that is, the first movement forward.
(f) The runners should now go to the starting line and the timekeepers to the finish line.
(g) Start the runners and time them over the full distance.
(h) Allow three runs and select the best time.
(i) The runners and timekeepers should swap between each run to allow time for recovery, and repeat steps d–h.
(j) Take the best time for each person.

3. Use the table 4.1 to evaluate your performance.

---

**TABLE 4.1  Speed rating**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>≤ 7.0</td>
<td>≤ 7.5</td>
</tr>
<tr>
<td>Good</td>
<td>7.1–7.4</td>
<td>7.6–8.2</td>
</tr>
<tr>
<td>Average</td>
<td>7.5–8.3</td>
<td>8.3–8.9</td>
</tr>
<tr>
<td>Fair</td>
<td>8.4–8.9</td>
<td>9.0–9.4</td>
</tr>
<tr>
<td>Poor</td>
<td>≥ 9.0</td>
<td>≥ 9.5</td>
</tr>
</tbody>
</table>
Tennis evaluation

**Equipment:** Tennis racquets, balls

4. Set up an observation plan, using a device to record the skills. The slow-motion feature on a phone would be appropriate or an app such as Hudl Technique.

(a) Perform each of the following 10 times:
• forehand
• backhand
• serve and volley.

(a) Using the replay function on your device, evaluate each skill using the tennis skills checklist. You can download the **Tennis skills checklist** worksheet in the Resources tab.

### Assessing skill development in tennis

<table>
<thead>
<tr>
<th>Picture of skill</th>
<th>Teaching points</th>
</tr>
</thead>
</table>
| Forehand         | • Eyes on the ball
                  | • Stands side on to target
                  | • Steps forward with opposite foot when hitting                               |
|                  | • Follow through around body                                                      |
|                  | Successful Needs work                                                             |
| Backhand         | • Eyes on the ball
                  | • Dominant hand below non-dominant hand on grip                                 |
|                  | • Step forward when hitting                                                       |
|                  | • Follow through around body                                                      |
|                  | Successful Needs work                                                             |
| Serve            | • Preparation position with foot at service line                                  |
|                  | • Ball toss as racquet comes behind body                                          |
|                  | • Racquet head up and behind with bent elbow                                       |
|                  | • Ball is hit with extended arm so that it travels over the net                   |
|                  | Successful Needs work                                                             |
| Volley           | • Feet shoulder width apart                                                       |
|                  | • Eyes on the ball                                                                 |
|                  | • Short backswing                                                                 |
|                  | • Racquet head above wrist on contact                                              |
|                  | Successful Needs work                                                             |

Performer: ___________________________  Observer: ___________________________

Directions: Watch the performer and identify one successful element and one that needs work.
Swimming evaluation

5. (a) Set up an observation plan; use a device to record the skill or watch your peer with the checklist below, which details four recommendations for freestyle and backstroke. Having a device to record and replay will assist this process.

(b) Perform at least 25 metres of each stroke.

(c) Give feedback on the checklist, identifying which elements are performed well and which need improvement in the observation column.

<table>
<thead>
<tr>
<th>TABLE 4.2 Swimming skill checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freestyle</strong></td>
</tr>
<tr>
<td>Hand enters water with fingertips and elbows higher than wrist</td>
</tr>
<tr>
<td>Arm fully extended once entering water</td>
</tr>
<tr>
<td>Head in neutral position and moves only slightly when breathing — body remains straight</td>
</tr>
<tr>
<td>Body moves in straight line down the pool</td>
</tr>
</tbody>
</table>

6. To identify more elements of focus in these two strokes, as well as for breaststroke and butterfly, use the Swimming — improve your technique weblink in the Resources tab.

**Resources**

- Weblink: Swimming — improve your technique
- Digital doc: Worksheet 4.4 Tennis skills checklist (doc-29393)

**4.9 Check and challenge**

**Explain**

1. Explain why it is important to measure skill learning.
2. Explain the role of feedback in improving the way we perform skills.
3. What is a checklist? How might it be used to measure skill?
4. Explain why speed is an advantage in most sports.
5. Discuss common faults in many players’ technique when serving a tennis ball.
6. Recommend ways to improve serving technique in tennis.

**Evaluate**

8. Were you satisfied with your swimming critique? Why or why not? Consider activities you could undertake to improve. Where might speed be important in everyday life?
4.10 Let’s dance

In this subtopic you will learn about the many different styles and benefits of dancing. Learning about these styles will expose you to some of the many techniques used in dance.

4.10.1 Importance of dance

Dance is an important part of every physical education program. Becoming familiar with steps and movements of a few different dances can open our eyes to different cultures and help us appreciate ways of having fun we may not have considered before.

Use the **How to jive** weblink in the Resources tab to learn about a lively ballroom dance style.

4.10.2 Why dance?

Dance is part of every culture. It provides enjoyment through social interaction, the opportunity to learn new movement skills and be creative. Movement is the language of dance. We need to stay in time with music while moving to steps we have learned or movements we are developing. All forms of dance require the development of basic skills such as balance and timing, together with the need to memorise the steps. This is best achieved through repetition of the required movements.

Dance can be quite aerobic. Repetition of movement and sustained activity helps the circulatory system, strengthens bones and improves muscle tone, flexibility and endurance. It also helps reduce stress and muscle tension.

There are many personal and social benefits associated with dance. It’s a great way to meet other people, make new friends and work together with someone to achieve a goal. It can also improve confidence and encourage feelings of wellbeing.

Bush dance is a traditional form of Australian dance. Experiencing bush dance provides opportunities for fun and enjoyment in a social context. Once we learn some basic steps, it is easy to learn a range of dances. There are many other styles from which we could choose, for example, Greek dance, hip hop or tap dance.

In recent years, the popularity of many of the traditional forms of dance has increased, their appeal being driven by their athleticism and easy adaptation to contemporary music. Dance Easy and Dance Sport programs, popularised by television productions such as *So You Think You Can Dance*, have brought these styles of dance into favour, particularly with young people.
4.10 Activities

Locate appropriate bush dance music and enjoy the following dances.

Heel and toe polka

**Equipment:** Music

1. Follow the directions in table 4.3 to learn the heel and toe polka.

**TABLE 4.3 The heel and toe polka**

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make a circle formation (standing on inside) facing partners</td>
<td>1. Make a circle formation (standing on outside) facing partners</td>
</tr>
<tr>
<td>2. Left foot: heel and toe, heel and toe, slide four steps anticlockwise direction</td>
<td>2. Right foot: heel and toe, heel and toe, slide four steps clockwise direction</td>
</tr>
<tr>
<td>3. Right foot: heel and toe, heel and toe, slide four steps clockwise direction</td>
<td>3. Left foot: heel and toe, heel and toe, slide four steps anticlockwise direction</td>
</tr>
<tr>
<td>4. Three right-hand claps with partner. Three left-hand claps. Three both-hand claps.</td>
<td>4. Three right-hand claps with partner. Three left-hand claps. Three both-hand claps.</td>
</tr>
<tr>
<td>5. Three slaps to own knees with both hands</td>
<td>5. Three slaps to own knees with both hands</td>
</tr>
<tr>
<td>6. Hold partner’s right hand and swing arms (4 beats)</td>
<td>6. Hold partner’s right hand and swing arms (4 beats)</td>
</tr>
<tr>
<td>7. Inside partner remains where they are while outside partner moves anticlockwise to new partner (4 beats)</td>
<td>7. Move anticlockwise to new partner (4 beats), while inside partner remains where they are</td>
</tr>
<tr>
<td>8. Repeat sequence with new partner</td>
<td>8. Repeat sequence with new partner</td>
</tr>
</tbody>
</table>
Circle formation for the heel and toe polka

**Stockyard**

*Equipment:* Music

1. (a) Circle, all facing towards the centre, in partners.
2. (b) All join hands, take four steps towards the centre of the circle and four steps back.
3. (c) Repeat movement.
4. (d) Swing partner (16 beats). See below.
5. (e) Promenade partner, anticlockwise, for 16 steps. See below.
6. (f) Swing partner (16 beats).
7. (g) Begin again. When you reach step 4 (swing partner), boy/girl should first progress to a new partner, when they turn to their partner on his left.

**Swinging**

**Promenade**
Virginia reel

**Equipment:** Music

3. (a) In *longways sets* of six couples, skip four steps toward one another and four steps away. See figure (a).
   (b) Skip in, join right hands, turn with your partner and return to place.
   (c) Skip in, left-hand turn with your partner and return to place.
   (d) *Do-si-do* left. *Do-si-do* right. See figure (b).

   (b) *Do-si-do*

   (e) Skip in, join both hands, circle and return.
   (f) Head couple skips in, joins hands and side skips to the head of the set and back (16 beats).
   (g) *Reel the set:* The head couple join right elbows and spin. The couple then splits, using their left elbows to spin with the next boy/girl in line, before re-joining right elbows in the middle. Continue this progression to the end of the line and back again. See figure (c).
   (h) *Cast off* and repeat the dance. See figure (d).

   (c) *Reel the set*

   (d) *Cast off*
Waves of Bondi

**Equipment:** Music

4. (a) Skip in, bow and skip out (eight beats).
(b) Skip in and change places with your partner (repeat).
(c) Repeat steps 2 and 3.
(d) Skip in, join hands and swing (16 beats).
(e) Cast off (16 beats).
(f) Make waves (32 beats) as shown.

Choreography

5. Why not create your own dance? Use the Be a choreographer weblink in the Resources tab to watch a video on how to create your own dance.

---

**4.10 Check and challenge**

**Explain**

1. Explain the benefits of dance.
2. Which of the Australian bush dances did you enjoy most? Identify factors that contributed to this selection.
3. Explain what is meant by a longways set.
4. Research a popular dance other than heel and toe polka. Suggest why this dance has appeal.

---

**4.11 Games**

Games are activities that promote skill development and execution by setting goals or desired outcomes and conditions under which skills are performed. Often, they are competitive and incorporate team work. Playing games gives you the opportunity to communicate and develop attacking and defending strategies.

**4.11.1 Skill development**

Once you can demonstrate a level of success in fundamental and specialised skills, including them within a game will enhance your ability to perform them in a variety of conditions. This helps retention of skill as well as the ability to transfer skills between sports. Many games can be modified; that is, the rules can be simplified, equipment altered or the field size reduced to help you learn and practise certain skills in the context of the game.
DID YOU KNOW?
Soccer is the world’s most popular sport. It is played by more than 2.56 billion people in more than 140 countries. That’s around four per cent of the human population.

The activities that follow all have a focus. By using problem-solving exercises, such as the one illustrated in the figure below, you can find ways to use your skills on the field. As you become familiar with how certain techniques work, you will find that you can relate the basic principles to many games. The game-sense approach then allows us to develop skills that apply to many games, and, as a result, we will readily learn and enjoy sports.

As game sense develops, many similar activities become easier to learn.

Focus skill: passing

Tactical problem:
- Two teams
- Each team must make 10 passes before attempting a soccer-style goal.
- Only 10 steps with ball are allowed.
- Attempt a goal from within circle.
4.11 Activities
Simplified soccer

**Equipment**: Soccer ball, court, markers
1. Two equal teams line up along the goal lines, facing one another. The goal lines are about 25 metres apart. The soccer ball is placed in the centre between the two teams. Players in each team are given the numbers 1, 2, 3, and so on. When the teacher calls a number, both students with that number run forward and try to kick the ball past the opponents’ goal line. It is not allowed for the ball to be kicked higher than the players’ heads. When the ball is kicked, teams try to prevent the ball crossing the goal line by defending their space, either trapping it with their feet or kicking it. It is not allowed for the ball to be touched by the hands. When a goal is scored, teams reassemble and a new number is called. The winning team is the one scoring the most number of goals within a set time period. This game can develop into soccer. Many specialised skills are involved in soccer, including dribbling, passing, trapping and heading.

**Set-up for simplified soccer**
**T-ball**

**Equipment:** T-ball stand, softball, softball bat, four bases, softball gloves, face mask, helmets, a softball diamond with bases about 15 metres apart

2. Create teams of 10–12 players each. The batting team assembles in batting order well away from the T-ball stand. The fielding team occupies the bases and various places in between. The batter places the ball on the T-ball stand, hits it into the infield (within the dashed lines of the diagram below) and attempts to run around the bases and back to home base. The batter is out if the ball is hit out of the field of play, caught on the full or they are tagged with the ball before getting to a base. If the batter chooses to wait on a base, they must remain there until the next batter makes contact with the ball on the T-ball stand.

Batters must run on a straight line between bases. They can return to a base if the ball reaches the base ahead of them first, providing the base does not become occupied by one of their own team in the meantime. If the runner is forced from a base, they are out if the ball reaches that base before they get there. If the runner is free — that is, the base to which they are running is unoccupied — the runner must be tagged. The winning team is the team scoring the most number of runs.

T-ball has many of the skills required in softball but is much easier to play because the hit involves a ball that is stationary. In softball, the pitched ball is moving rapidly towards the batter and the hit requires good timing and anticipation.

---

**Modified hockey**

**Equipment:** Hockey sticks, soft foam ball, bucket, court

3. (a) Devise a game where players must use a hockey stick to get a soft foam ball into a bucket at the far end of a court. Develop rules as a class that ensure the safety of all participants, including how far off the ground the stick may be lifted, how to block a player getting to the ball, the use of feet to control/dribble the ball and how far it may be dribbled.

(b) As a team, brainstorm ways you can focus on attacking skills such as achieving and retaining possession. Consider how you are going to position your players to ensure there are always options available to receive the ball.

(c) Discuss the game as a class, identifying skills you may need to play the game effectively.
(d) Play the game.
This activity can be modified for all invasion games. Consider using a ball to throw into a goal in the pool, similar to water polo. Follow the steps above: create rules, consider safety and develop strategies as an attacking team. As you play the game you will need to discuss modifications to enhance the experience. Thinking about how to improve a game requires careful thought and strong communication within the team.

4.11 Check and challenge

Explain

1. Choose two sports where passing is important and discuss how what you have learned in one might assist developing the skill in the other.
2. (a) When you played simplified soccer, describe the tactics your team used to prevent the ball crossing the line.
   (b) As an attacker, what type of pass worked best when a defender was in the way? Why?
3. In modified hockey, explain how the rules generated by the class assisted in promoting the learning experience.
4. Discuss the importance of field placements in hockey and T-ball.
5. Investigate another small-sided game that could be used to develop attacking skills. Devise a drill that could be used to assist. Use the Small-sided soccer weblink in the Resources tab to help you.

Resources

Weblink: Small-sided soccer

4.12 Gym fun

Gymnastics is an enjoyable activity that helps build core strength, flexibility and awareness of the way your body moves in space. Some types of gymnastics require effective team work and communication. In this subtopic you will explore safe gymnastics practice as well some of the positive effects of gymnastics.

4.12.1 Gymnastics

Most of our team sports focus on cardiorespiratory endurance, developed mainly through running and jogging. Gymnastic activities target development of this as well as strengthening all major muscle groups including those of the back, arms and shoulders. Different types of gymnastics including acrobatics, trampoline, rhythmic and artistic gymnastics will target different muscle groups.

Use the So you want to do gymnastics weblink in the Resources tab to watch some gymnastic movements and routines at an Olympic level. Note the level of strength, skill and precision required to perform at this elite level.
4.12.2 Gymnastic skills

As we develop gymnastic skills, we not only strengthen our muscles and joints, but also learn to manipulate parts of our bodies. Gymnastics also helps us develop important fitness components such as balance, power, strength, agility and flexibility. Important gymnastic skills relate to locomotion, balance, rotation, springing, landing and flight. Before beginning any gymnastic activities, be sure you are warmed up, stretched and have plenty of mats or padding. Also, do not progress to new activities without teacher guidance.

As with all new skills, you may find some activities challenging initially. However, the real benefit is in the practice, not necessarily perfecting the movement. Once we can perform a skill such as a handstand, we feel a sense of accomplishment. We then try to improve the way we do it. Each time we practise, the supporting muscles become stronger and we refine our movement patterns. Having core strength enables us to move more efficiently and effectively and may reduce our risk of injury.

A range of rhythmic gymnastics exercises that will prepare you for the lesson are illustrated in activity 1 of this subtopic. The two activities that follow demonstrate a variety of balance exercises. This will require that you work with a partner or in a small group. These activities will develop your strength and balance. A number of rotation activities follow. It is important that progression is gradual and that you focus on good form and safe technique.

Choices should be made regarding vault, mini-trampoline and balance beam activities. Much will depend on the equipment available, the ability of the group and the need for safety. The movements should be studied carefully and attempted only under teacher guidance.

DID YOU KNOW?
At the 1976 Olympic Games in Montreal, 14-year-old Romanian Nadia Comaneci became an Olympic legend when she scored a total of seven perfect 10 scores in gymnastics. Before 1976, no male or female had ever received a perfect score in any Olympic gymnastics event.

4.12.3 Other benefits of gymnastics

Gymnastics has many benefits other than the development of the fitness components just mentioned. You will be surprised just how much it improves your confidence, particularly as you are gradually able to master new movements, many of which you might not have expected you could do.

Gymnastics also improves your teamwork skills. Development of gymnastic skill requires assistance, cooperation and often a need to ‘spot’ or aid others in performing movements. Peer feedback is another important
factor that helps develop your skills. Because of this, a sense of trust in and reliance on fellow peers develops. Helping others is a ‘feel good’ experience. It enhances our sense of care and responsibility. The balance activities shown in activity 2 of this subtopic are examples of skills that cannot be developed in isolation. You will discover that there is much more to these types of activities than simple balancing.

Finally, gymnastics helps develop our body awareness. As we perform movements, we become more aware of space and how our body is using it. We become conscious of how our body parts relate to each other and their dependence on one another for skilful execution, giving us kinaesthetic feedback. For example, where are the arms placed in a cartwheel, and what is the role of the legs to enable good hand position to be achieved? Consideration of such things broadens our spatial awareness as well helping our skill development.

HEALTH FACT
Cardiovascular disease affects 21.5 per cent of the Australian population over 18. A balanced diet, regular exercise (such as gymnastics) and not smoking are the best measures to prevent the onset of the disease.

4.12 Activities
Let’s warm up
1. Follow a general-purpose warm-up with some stretching exercises. Then practise some of the rhythmic gymnastics skills illustrated in the figures below. Use the Gymnastics safety weblink in the Resources tab to learn some important safety guidelines before you begin.

Rhythmic gymnastics skills

1. 2. 3. 4. 5. 6.
Two-person balances

2. Balance activities can be lots of fun because they challenge our abilities and, in most cases, we get to work with others. The figures below show a number of two-person balances. Form pairs (choose someone of approximately equal size) and work your way through the balances illustrated. Once you have completed a balance, alternate positions within the balance. Focus on maintaining strength and displaying good form (that is, good to look at). Aim to hold each balance for at least five seconds.

Two-person balances can be fun and challenging.

Single, double and multiple balances

3. The balances shown in the figures 1–4 on the next page use single, double and multiple formations. Try them only if and when allowed by the teacher.

1. Arabesque. Balance on one leg, lean forward and spread arms to assist balance. Work in groups.
2. Crouch balance. Place knees on elbows and balance on hands.
3. Two-person balance. Try these and then create your own.
4. Three-person balance. Try this and then create your own.

As you create your own, ask a peer or teacher to take a photo of the creation. Use this to critique your body position to make necessary adjustments. Create a collaboration of class creations that you can all attempt and critique.
Balancing skills

1. 2. 3(a). 3(b). 3(c). 4.

Rotation activities

4. The following activities progressively become more difficult. They are to be performed under teacher guidance. You should be confident in your ability to perform one activity before moving on to the next.
   • Forward roll. Place hands on the mat, shoulder width apart and fingers forward. Drop your chin onto your chest, push off, roll on your shoulders and let the motion carry you onto your feet.

Forward roll

• Forward roll straddle. As you come out of the forward roll, straddle your legs, reach forward and roll up onto your feet.

Forward roll straddle

• Forward roll walkout. As you roll forward, stretch out with one leg and rise up to a balanced position.
• **Forward roll walkout.** Perform a forward roll and then walk out and lean forward to an arabesque.

• **Cartwheel.** Place one hand on the mat and, while moving directly down the mat, swing your other hand over followed by each leg in turn.

• **Sequences**
  (a) **Sequence 1.** Move from an arabesque to forward roll.
  (b) **Sequence 2.** Perform a forward roll into a forward roll straddle into a backward roll.
  (c) **Sequences 3–7.** Create five sequences, each containing at least three different gymnastic floor skills.
  (d) Demonstrate your sequences to the class.
Beginner vaults

5. The following vaults can be performed on the short box. Be very careful when practising. Only perform vaults under direct teacher supervision and do not move onto the next skill until you are confident. Focus on performing movements with good form — that is, quality of flight, straight legs where required and demonstrating balance on landing.

• Jump to the box, then jump off.

Beginner short box skill

• Jump between two people sitting on the box, pushing from their shoulders.

Consider everyone’s safety when several people are involved.
• Place your hands on the box and bring your feet in between them (through vault).

Through vault

Mini-trampoline
6. Under direct teacher supervision, practise the following skills. When approaching the trampoline, the approach needs to be slow and the final movement is a jump; that is, push off from one foot to both feet.

Mini-trampoline/beat board skills focusing on springing, flight and landing

Balance beam
7. In pairs, practise each of the balance beam skills shown on the next page. Ensure your partner is working beside you as a spotter at all times and is prepared to steady you should you lose balance. Once again, focus on control and good form.
Weblink: Gymnastics safety

### 4.12 Check and challenge

**Explain**

1. Explain the benefits of gymnastics.
2. Gymnastic skills challenge our abilities. Describe two balance activities that challenged you and how you overcame the problems encountered.
3. Many gymnastic skills develop balance and precision. Identify two skills that fit this description and explain why.
4. Why is safety important in gymnastics?
4.13 Review

4.13.1 Summary

- Fundamental skills form the basis from which specialised skills are developed.
- Non-locomotor movements are performed in a stationary position whereas skills that require us to control our body while moving from one place to another are called locomotor movements.
- Mastering fundamental skills will enable you to participate in a wide range of physical activities.
- Specialised skills are sports-specific skills and usually incorporate a number of smaller movements within a bigger movement. Cricket, softball and basketball are examples of sports that include a range of specialised skills.
- Elements of skills can be transferred; for example, the two-handed strike can assist learning to bat in cricket.
- Manipulative skills involve controlling pieces of equipment with precision and require good hand-eye coordination. The lay-up in basketball is an example of a manipulative skill because it involves catching, aligning and shooting.
- Skills are developed through practice, usually in the form of drills. Once learned, they need to be developed in modified games.
- Practising with peers exposes us to more conditions of performance, which enhances our ability to perform the skill under pressure.
- Practice and feedback leads to fewer errors and improved skill level.
- Taking measures to minimise or remove risk can help avoid injury and enhance our enjoyment of physical activity.
- Using a device to record and observe performance allows us to replay and pause elements of the skill for a more thorough critique.
- Dancing is an enjoyable recreational or competitive activity that provides opportunity for social interaction.
- There are many contrasting styles of dance.
- Modifications, rules and strategies can be created to enhance skill development. Once created they can be applied to various sports; for example, a rule requiring all team members to have possession before going for goal in hockey can be applied to water polo.
- Gymnastic skills involve locomotion, balance, rotation, springing, landing and flight and help develop coordination and kinaesthetic awareness.

ESSENTIAL QUESTION

How do you improve movement skills, and what forms of measurement can be used to determine improvements?

Evaluate your initial response to the essential question after having studied this topic.
4.13.2 Key terms

- **agility** the ability to change direction quickly with speed and control
- **balance** the ability to control our centre of gravity while stationary or moving
- **body control** the ability to coordinate movements with precision
- **dynamic balance** the ability to maintain balance while moving
- **flexibility** the degree of movement around a joint
- **fundamental movement skills** the foundation skills of movement
- **kinaesthetic sense** awareness of where our body and its parts are in relation to objects, such as surrounding players or pieces of equipment, and the environment
- **manipulative skill** the ability to control objects with precision
- **non-locomotor movements** requiring little or no movement
- **power** the ability of the muscles to contract rapidly
- **strength** the ability of muscles to exert force
- **subjective evaluation** a judgement based on our own feelings or impressions
- **sub-skill** a smaller part of a major skill

4.13 Check and challenge

To answer questions online and to receive immediate feedback and sample responses for every question, go to your learnON title at www.jacplus.com.au. Note: Question numbers may vary slightly.

**Key terms quiz**

**Multiple choice quiz**

**Check your understanding**

1. Explain the difference between fundamental and specialised skills.
2. Outline the technique for the front foot drive in cricket.
3. Investigate one other skill in cricket and explain how it is performed.
4. Using examples, describe what is meant by manipulative skills.
5. Explain the technique for the lay-up.
6. Provide examples of ways to improve manipulative ability.
7. Using examples, discuss the importance of practice in developing skill.
8. Identify factors that are important in movement skill development.
9. Describe a skills test commonly used to measure physical skills.
10. Outline the role of a checklist in assessing skill development.
11. Identify activities where subjective evaluation is an important way of collecting information for skill development.
12. Discuss how assessment of the tennis serve would differ from assessment of a dance performance.
13. Identify two important areas of focus when swimming freestyle and backstroke.
14. Outline the steps for one Australian bush dance.
15. Describe activities that would be helpful for a warm-up in gymnastics.
16. Why is balance important? Identify three activities that would assist in the development of balance.
17. Describe one rotation movement and describe how the skill is performed.

**Resources**

- Digital doc: Worksheet 4.5 Key terms quiz (doc-29228)
- Digital doc: Worksheet 4.6 Multiple choice quiz (doc-29229)
- Digital doc: Key terms glossary (doc-29230)