HEALTH AND PHYSICAL EDUCATION

Level

F	1	2	**3**	4	5	6	B6

*B*ouncing balls

Strands
Developing Concepts and Skills for Physical Activity
Enhancing Personal Development

Purpose

Students develop movement and coordination skills as they fulfil the requirements of different ball-control tasks. Using a variety of equipment, and working individually, with partners and in small groups, students explore the skill of bouncing. While participating in simple games for which they have developed or modified rules, students demonstrate their ball-control skills, communication skills and awareness of others.

Overview of activities

Activities in this module are based on a learner-centred approach with an emphasis on decision making and problem solving. As the following diagram shows, activities are sequenced in **fluency**, **flexibility**, **originality**, **elaboration**, **risk taking**, **complexity**, **curiosity** and **imagination** phases.

Fluency: Exploring a variety of techniques

▼

Flexibility: Different techniques, different bounces

▼

Originality: Bouncing skills in small-game situations

▼

Elaboration: Skill development and benefits

▼

Risk taking: Meeting new challenges

▼

Complexity: Maintaining ball control in structured-game situations

▼

Curiosity: Varying use of ball-control skills

▼

Imagination: New roles and situations

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Core learning outcomes

This module focuses on the following core learning outcomes from the Years 1 to 10 Health and Physical Education Syllabus:

Developing Concepts and Skills for Physical Activity

3.1 Students perform movement skills and sequences to meet the requirements of different physical activities and tasks.

3.2 Students observe rules and demonstrate an awareness of others in play and simple games.

Enhancing Personal Development

3.4 Students demonstrate communication, cooperation and decision-making skills to collaborate in social, team or group situations.

Core content

This module incorporates the following core content from the syllabus:

Developing Concepts and Skills for Physical Activity

- fundamental movement skills, in particular, locomotor, non-locomotor and manipulative skills;
- specialised skills for movement, in particular, individual games, sports and other physical activities;
- components of movement, in particular, body and space awareness, effort, and relationships with people and objects;

Enhancing Personal Development

- interpersonal skills in cooperation, making decisions, solving problems, and expressing feelings, ideas and emotions.

Assessment strategy

The following are examples of assessment tasks that provide opportunities for students to demonstrate the core learning outcomes identified in this module.

Developing Concepts and Skills for Physical Activity 3.1

- **Students perform movement skills and sequences that demonstrate control of different shapes and types of balls.**
  - Can the student demonstrate a movement sequence while maintaining ball control as he or she completes different tasks?
  - Can the student demonstrate a range of ball-control skills?
  - Can the student maintain control of balls of different shapes and types?

Developing Concepts and Skills for Physical Activity 3.2

- **Students play simple ball games to demonstrate their awareness of others and their ability to observe the games' rules.**
  - Does the student understand the rules of the game?
  - Does the student observe the rules of the game?
  - Does the student communicate and play cooperatively with others in the game?
  - Can the student position self in anticipation of and response to others' movements?
  - Can the student use the area for the game in a way that demonstrates an awareness of others?

Enhancing Personal Development 3.4

- **Students use communication, cooperation and decision-making skills as they participate in a variety of group activities involving ball-control skills.**
  - Does the student communicate effectively and appropriately with peers when performing a physical activity?
  - Does the student demonstrate cooperation skills when trying to meet the requirements of a physical activity?
  - Does the student participate in making group decisions through communicating and cooperating with others?

Background information

Williams's taxonomy of creative thought

R Resource Sheet 1

The activities in this module are organised according to Williams's taxonomy of creative thought (Forte & Schurr 1996). Using the taxonomy can help students develop knowledge and skills in creative ways. There are eight levels to the taxonomy that progress from a cognitive to an affective domain. The levels are fluency, flexibility, originality, elaboration, risk taking, complexity, curiosity and imagination. As well as prompting teachers to guide students through a hierarchical set of experiences that promote creative thinking, the taxonomy allows students to express and develop their creative processes in different ways. (See Resource Sheet 1 for an overview of the eight levels.)

Terminology

Activities in this module involve use of the following language in the context of Health and Physical Education:

angle	curiosity	imagination	risk taking
bounce	elaboration	non-preferred hand	slow
catch	fast	originality	speed
communicate	flexibility	pat	technique
complexity	fluency	preferred hand	
cooperate	height	return	

School authority policies

Teachers need to be aware of and observe school authority policies that may be relevant to this module.

Safety policies are of particular relevance in 'Bouncing balls'. Some safety issues that teachers should consider are:

- including appropriate stretching exercises in warm-up and cool-down activities;
- ensuring the area for the activity is suitable — for example, flat, free of stones and loose objects, non-slippery, large enough for the number of students participating;
- ensuring students wear footwear and clothing appropriate for the activities;
- using balls of appropriate size and weight for students.

Social justice principles

This module provides opportunities for students to increase their understanding and appreciation of supportive environments and diversity. It includes activities that encourage students to recognise the disadvantages some individuals with disabilities may experience in participating in physical activities and suggest actions to support their participation.

Students with disabilities or learning difficulties may require some activities to be modified in order to optimise their participation and their ability to demonstrate the outcomes. Teachers should consult with parents/carers and specialist support staff to determine whether modification is necessary.

Support materials and references

Aussie Sport 1994, *Sport It! Towards 2000*, Tactical Directions, Canberra.

Forte, I. & Schurr, S. 1996, *Integrating Instruction in English: Strategies, Activities, Projects, Tools and Techniques*, Hawker Brownlow Education, Highett, Vic.

Harris, J. & Elbourn, J. 1997, *Teaching Health-Related Exercise at Key Stages 1 and 2*, Human Kinetics, Lower Mitcham, SA.

Lees, R. & Lees, A. 1994, *Personal Development, Health and Physical Education*, McGraw-Hill, Sydney.

Logsdon, B. J., Alleman, L. M., Straits, S., Belka, D. E. & Clark, C. 1997, *Physical Education Unit Plans for Grades 5–6: Learning Experiences in Games, Gymnastics, and Dance*, 2nd edn, Human Kinetics, Lower Mitcham, SA.

Virgilio, S. J. 1997, *Fitness Education for Children: A Team Approach*, Human Kinetics, Lower Mitcham, SA.

Activities

Getting started

Ensure that there are adequate numbers and varieties of balls for use in this module. Where possible, try to vary the surfaces on which the students bounce the balls to broaden their understanding and skill base.

It is important that students become familiar with the levels of Williams's taxonomy as you proceed through the module. By naming the levels, students will become more aware of the purpose of each activity. When students realise they are being encouraged to be creative, then they will participate creatively. Teachers could also use the names of the taxonomy's levels when encouraging students — for example, 'Peta and Chris are showing lots of originality in the way they are bouncing the ball'.

Encourage students to suggest what they would like to learn about the skills needed for bouncing balls. Use this feedback to modify activities.

Fluency

EXPLORING A VARIETY OF TECHNIQUES	Generating a range of ways to bounce a ball using their hands

▶ Students use their hands to pat bounce a large ball within a defined space. They use their hands in a variety of ways — for example, bouncing with the fingertips, palm of the hand, one hand, two hands, back of the hand, preferred hand, non-preferred hand, open hand and closed hand. Students note the degree of control they have when bouncing the ball in different ways and provide feedback on the easiest and most difficult ways of bouncing the ball. They suggest reasons for the varying degrees of ease they had in bouncing the ball in different ways.

Focus questions could include:
*   With which hand do you prefer to bounce the ball? Why?
*   Is it easier to bounce with one hand or two hands? Why?
*   Which is the most difficult way to bounce a ball? Why?

Teaching considerations

To develop students' creative thinking, do not model the correct bouncing techniques initially. Allow students time to explore.

Control of the ball comes from the pads of the fingers, which should be spread comfortably across the top of the ball.

Students could perform these actions while stationary and then while moving within a defined space. If moving, ask students how often they have to look at the ball and how often they need to look to where they are going.

R **Resource Sheet 2**

See Resource Sheet 2 for details of correct techniques for bouncing a ball while stationary and while moving.

Restrict students to bouncing the ball only up to waist height.

▶ Students repeat the activity, this time bouncing a variety of balls (for example, rounded, oval, large, small, fully inflated, slightly inflated, leather, foam or rubber balls) within a defined space.

Flexibility

DIFFERENT TECHNIQUES, DIFFERENT BOUNCES	**Using their hands to explore different techniques to make a ball bounce in different ways**

▶ Students choose a ball and experiment with using their hands to make the ball spin, and to force the ball to bounce forwards, backwards and sideways at various speeds and heights. After experimenting and determining the best technique for achieving these bounces, students share and demonstrate their techniques to their peers. They practise each other's techniques and communicate appropriate feedback.

Focus questions could include:
• **How did you bounce the ball to make it spin, bounce high, bounce low or bounce quickly?**
• **Can you explain how you did each of these things?**

Teaching considerations

Model appropriate techniques if students are having difficulty finding the best technique themselves.

Limit students to an area of personal space rather than allowing them to move freely.

▶ Students bounce two similar or two different balls at once or alternately in a defined space. Students experiment with different techniques for doing this. They share and demonstrate their techniques to their peers, practise each other's techniques and communicate appropriate feedback.

▶ Students bounce different types of balls while following a path or walking along the outline of a shape — for example, square, triangle, circle. As well as walking while bouncing, students can do each of the activities while hopping, skipping, jogging and so on. Students suggest alternative methods for bouncing the balls with control in each of these situations.
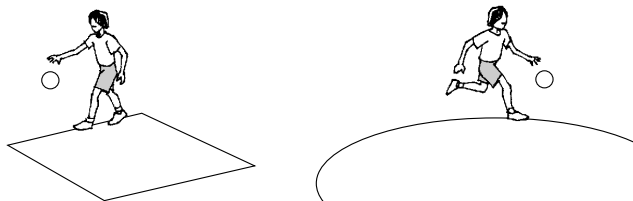
Originality

BOUNCING SKILLS IN SMALL-GAME SITUATIONS	**Investigating controlling a bouncing ball using different parts of the body in small-game situations**

▶ Students use a part of their body below the waist (for example, foot, calf, knee, heel) to control a bouncing ball. They must be able to generate the bounce and maintain control using the body part.

▶ Students generate original ways to bounce and control a ball using a part of their body above their waist, such as an elbow, the head or a shoulder. They practise these techniques and then share them with a partner.

▶ Students play a game of follow-the-leader where they move under, over and around obstacles while maintaining control of a bouncing ball. Control could be with the preferred hand, non-preferred hand, both hands, closed hands or some other alternative.

Teaching considerations

Ensure students create paths that are inclusive of all students in the class or group. Highlight safety issues.

Look for originality and improved ball control as students perform these activities.

Students will have opportunities to communicate ideas and cooperate with each other as they perform this activity.

▶ Students play a version of handball in an area with four squares (see diagram below). They create their own rules, ensuring that they are fair for all students. Students can modify their rules to allow for more bounces, extra touches, use of other body parts and so on.
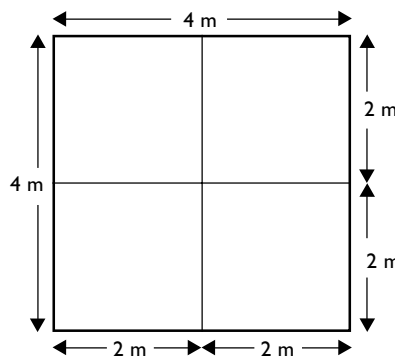
Handball court

▶ Students practise bouncing a ball upwards into the air using their hands. They investigate alternative ways of bouncing upwards and decide which they find easiest. They explain how they have had to change their action to bounce the ball upwards efficiently — for example, using their fingers, palms, fists or wrists, or altering hand position. Students play a game of modified volleyball (mini-volley). They work together to discuss possible rules, make decisions on which rules are fair for everyone, communicate these rules to others, and then practise the bouncing skills required for the game.

Teaching considerations

R **Resource Sheet 2**

See Resource Sheet 2 for details of correct techniques for bouncing upwards with an overhand action and using the forearms.

Students may wish to modify their rules to allow for a bounce on the ground, lowering the net, two touches by the same person or a minimum of three players from each side touching the ball before volleying over the net.

Suggest to students that they can show their awareness of others by encouraging, communicating and supporting team members during the game.

Elaboration

SKILL DEVELOPMENT AND BENEFITS	Elaborating on the skills required for, and benefits of participating in, ball-bouncing activities

▶ Working in pairs, students bounce a ball to each other in a variety of ways such as making the ball bounce a specific number of times, with spin, under an object (for example, a rope), through an object (for example, a hanging hoop), and over an object (for example, a chair). Each pair can also use different types of balls and different parts of the body to perform these activities. They explain how their actions demonstrate their improving skills.

▶ Working in pairs, each student bounces a ball simultaneously to his or her partner in a variety of ways, such as in the previous activity. Students could also try:

- having one partner bounce the ball low while the other bounces the ball high;
- having one of the pair start with two balls;
- using two different types of balls.

Students communicate with their partners to determine the techniques they will use.

Focus questions could include:

- **How are you going to bounce a ball low/high?**
- **How can you and your partner bounce a ball to each other at the same time and maintain control?**

Teaching consideration

Resource Sheet 2

See Resource Sheet 2 for details of the correct technique for bounce passing.

▶ Working in pairs, students put together a sequence of ball-control activities that demonstrate their improving skills. They explain the skills they are demonstrating and how their skills are improving. For example, students may bounce balls to each other using their right hand, followed by both hands, followed by their left hand, followed by their fingertips. Once they have worked in pairs, they form groups of three and then four to complete the same activity. Students communicate and work cooperatively during the activity.

▶ Students consider games where bouncing a ball is an integral part of the game. They identify the type of bouncing used in these games. Examples may include handball, Australian football and basketball. Students choose one of these games or develop their own game to practise ball bouncing and control skills. Students determine the rules of the game and discuss how they can show an awareness of members of their own team and the opposition team.

Teaching considerations

Examples of how students can show an awareness of others when playing include:
*   moving into spaces to receive or intercept the ball;
*   dodging to avoid contact with others;
*   communicating with others;
*   cooperating with team members;
*   moving into positions to support a player with the ball.

Students should remind each other of the rules on which they agreed, when appropriate.

▶ In groups, students investigate how to make their school environment more supportive of students with disabilities in terms of participation in ball games. Students could interview peers, administrators and interest groups and then develop a plan for improving opportunities for students with disabilities to participate in ball games. The plan should be based on decisions agreed to by all those involved.

Risk taking

MEETING NEW CHALLENGES	Participating in new challenges that further develop ball control

▶ Students walk along a bench or form while pat bouncing a ball either:
*   on the bench;
*   on the ground to the side of the bench;
*   on the bench and ground alternately.

Students can bounce the ball on both sides of the bench alternately to promote cross-body movements.

▶ Working in pairs, students tie one of their legs to one of their partner's legs, as in a three-legged race. They move along a path or through an obstacle course bouncing a ball between them — that is, they take turns to pat bounce the ball.

Possible focus questions include:
*   **How can you keep bouncing the ball while moving over a bench?**
*   **How do you share the bouncing of the ball while moving under a railing?**
*   **Over which part of the obstacle course will each of you bounce the ball?**
*   **How will you decide who will be first to go under, over or between obstacles?**

Teaching considerations

Ensure the path is appropriate and safe for students to follow.

Where necessary, model how to move through the course. Discuss strategies for sharing the bouncing of the ball, moving through the course and solving any problems students may encounter — for example, how to move together while bouncing a ball and stepping over an obstacle.

Complexity

MAINTAINING BALL CONTROL IN STRUCTURED-GAME SITUATIONS	Building structure into a situation involving maintaining ball control

▶ Students form groups of four and work cooperatively to bounce a ball to each group member in turn. To do this they number off, one to four. Number one bounces the ball to number two, who bounces it to number three, who bounces it to number four, who bounces it to number one. The sequence is repeated. As students become familiar with the sequence, the group size can increase. Add more balls to make the activity more complex. The ball must always be bounced in the same sequence.
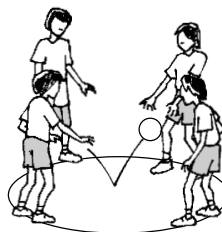
▶ Students play a two-versus-one game in a small grid (approximately 5 m x 5 m). The team of two aim to keep a bouncing ball from the other player. The single player attempts to gain possession of the ball as the opposing team members bounce it to each other. Students set some rules for the game — for example, the ball must be kept bouncing; the ball must be bounced, not passed, between team members; the single player cannot touch either member of the opposing team. A medium-sized ball is recommended.

Curiosity

VARYING USE OF BALL-CONTROL SKILLS	Varying use of ball-control skills to match the type of game and equipment

▶ Students experiment with trying to get an oval ball to bounce and return to them. After practising this, they explain how and why a ball of this shape can be made to bounce back.

Teaching consideration

Resource Sheet 2

See Resource Sheet 2 for details of the correct technique for bouncing oval balls.

▶ Students change the rules of a game that involves a lot of ball bouncing (for example, basketball) and discuss how ball-control skills may need to change as a result of the rule change. For example, if the sidelines were walls like a squash court so there was no area that was 'out', and players could bounce the ball off the wall as well as the floor, players would need to develop skills for bouncing and catching off a wall. Students could try this and provide feedback on how these skills are different to those needed for bouncing off the ground.

Imagination

NEW ROLES AND SITUATIONS	Adopting roles while identifying, changing or modifying ball-control activities to suit a given situation

▶ Students adopt the role of coach as they discuss how they would choose players for a game that requires good ball control. Students list the ball-control skills the players should have. Their responses may list skills such as:

- bouncing a ball with either hand individually;
- changing directions while controlling a bouncing ball;
- bouncing a ball low or quickly;
- accurately bouncing a ball to a partner.

▶ Students create a game that involves ball control, in particular, bouncing skills, and that meets other criteria set by the teacher. The teacher places conditions on the game in relation to the number of players, size of court and rules to guide students in their planning. Once they have planned the game, students share it with their peers and explain how the game requires players to use a variety of ball-control skills. The game should reflect a degree of creativity in its structure — for example, court dimensions, rules, skills to be used. Students describe their game to their peers and then demonstrate how it is played.

Teaching considerations

Teachers could set criteria with regards to the number of players, size of playing area and safety rules.

The games students create should have realistic goals and rules and must be inclusive of all students.

▶ Students reflect on the skills they have learned during the module, the way they have learned these skills, and what they enjoyed about their learning. They offer suggestions for improving their learning in the future.

BOUNCING BALLS • MIDDLE PRIMARY

Williams's taxonomy of creative thought

The eight levels of Williams's taxonomy of creative thought are:

- **Fluency**

  Students are encouraged to generate ideas, suggestions, choices and solutions for specific situations.

- **Flexibility**

  Students look for alternative ways, materials and systems to manage or solve a specific problem.

- **Originality**

  Students seek new methods, ideas and solutions when responding to a situation.

- **Elaboration**

  Students extract further meaning, clarification and possibilities from situations with which they are familiar.

- **Risk taking**

  Students take considered chances, attempt new challenges and trial new ideas when dealing with unfamiliar situations.

- **Complexity**

  Students establish a process or structure to provide order in an unstructured situation.

- **Curiosity**

  Students are prompted to look for new options, question choices and consider outcomes in a given situation.

- **Imagination**

  Students visualise new opportunities and construct images and pictures that go beyond practical limitations.

Source: Adapted from Forte, I. & Schurr, S. 1996, *Integrating Instruction in English: Strategies, Activities, Projects, Tools and Techniques*, Hawker Brownlow Education, Highett, Vic., pp. 42–49.

Ball-control skills

Bouncing a large, rounded ball while stationary
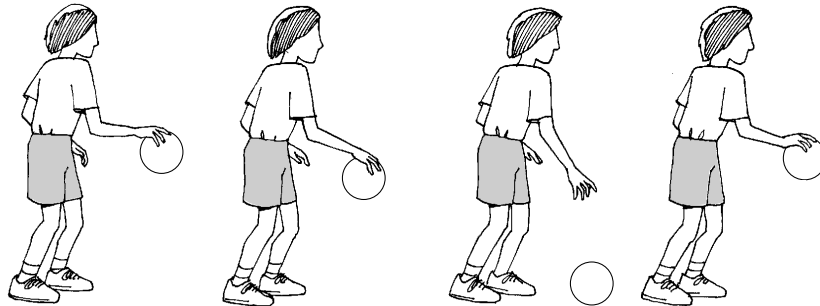
1. Spread your fingers comfortably over the top of the ball.
2. Bend your knees and lean forward over the ball. Keep your head up and try not to look at the ball all the time.
3. Push the ball toward the ground with the pads of your fingers. The ball should bounce up to waist level each time. Follow the ball with your hand and meet it with your palm and fingers as it rises.
4. Push the ball downwards again using the fingertips and a wrist action. Do not hit the ball.

Bouncing a large, round ball while moving
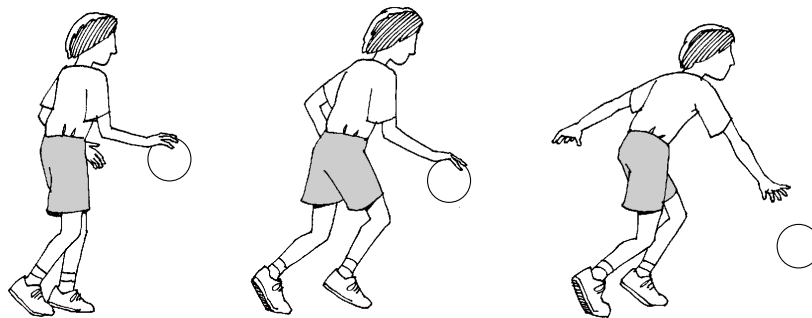
1. Use your fingers to push the ball downward and forward with your fingers.
2. As the ball bounces, step forward.
3. Meet the rising ball with your fingertips and push it downward and forward again.
4. Try to watch where you are going and to look at the ball only occasionally.

(continued)

Ball-control skills *(continued)*

Bouncing upwards with an overhand action

1. Place your hands over the top of a ball on the ground. Form a triangle with your thumbs and forefingers and spread your other fingers so that you can pick up the ball.
2. Raise your arms so your hands are in front of your face and you are looking upwards through the triangle.
3. Place your feet shoulder-width apart with one foot in front of the other and knees bent.
4. Push upwards with your legs and straighten your arms to push the ball into the air.
5. Let your arms follow the ball. As the ball drops back into your hands, allow your arms and legs to 'give' until you are back in the starting position before pushing the ball back into the air.

Bouncing upwards using the forearms
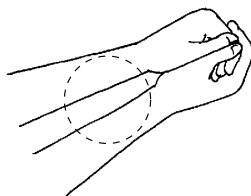
1. Extend your arms in front of your body with your palms up.
2. Lay the fingers of your preferred hand across the palm of the other hand and bring your thumbs together.
3. Extend your wrists towards the ground and straighten your arms, keeping them relaxed.
4. Place feet shoulder-width apart with one foot in front of the other, knees bent and arms extended forward.
5. As the ball comes to you, allow it to hit your arms then push upwards with your legs to rebound the ball into the air. The arms act like a backboard to rebound the ball. It is not necessary to swing your arms at the ball.

To start practising this bounce, students will need to toss the ball straight up for themselves or receive a ball tossed gently by another player.

(continued)

## Ball-control skills *(continued)*

Bounce pass
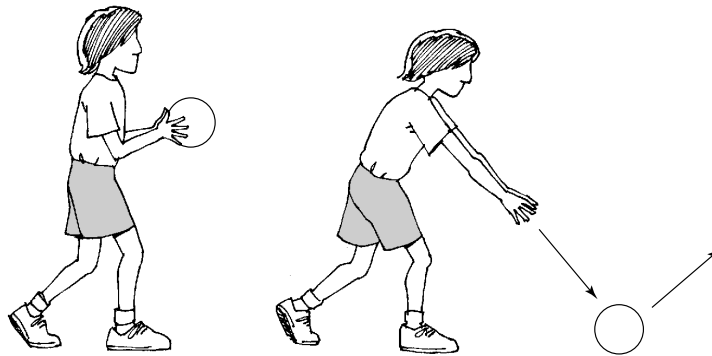
1. Hold the ball in both hands, ensuring your fingers are spread behind and to the sides of the ball.
2. Step forward to transfer weight to the front foot.
3. Push the ball downward and forward to the ground so that it bounces about two-thirds of the way to your partner. This will keep the bounce at a height that it can be caught.

Bouncing an oval ball
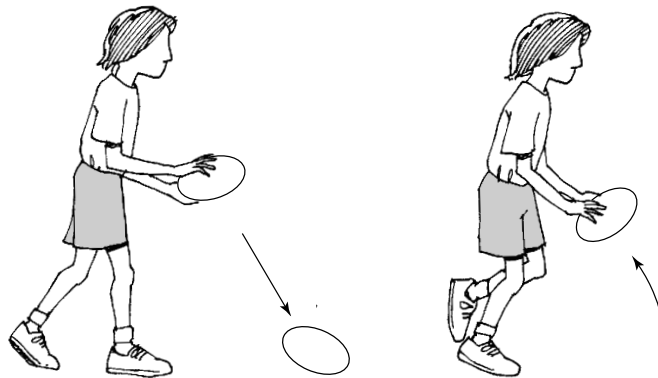
1. Hold the ball with the lace upwards and your bouncing hand on the top of the ball.
2. Push the ball down to the ground far enough in front of you so that it will come back to you and so that it hits the ground at an angle of 45 degrees.

Acknowledgments

Grateful acknowledgment is made to the following organisation for granting permission to use copyright material:

This sourcebook module should be read in conjunction with the following Queensland School Curriculum Council materials:

Years 1 to 10 Health and Physical Education Syllabus
Years 1 to 10 Health and Physical Education Sourcebook: Guidelines
Health and Physical Education Initial In-service Materials

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