

# Developing skills in sport

## Forms of guidance

Mary Shepherd explains how coaches can use visual, verbal, manual and mechanical guidance to develop skills

Anyone who wants to become an elite performer in any sport needs to become skilful at the techniques involved. Coaches can encourage learners to develop the correct technical model using different forms of guidance. This is an umbrella term for the visual, verbal, manual and mechanical methods a coach may use to help a performer learn motor skills. This article explains these methods and applies them to a range of sporting examples.

### Key terms

**Elite performer** A sportsperson who performs to the highest standard. They compete at a representative level and can be amateur or professional.

**Motor skills** A physical skill that involves body movement.

### Visual guidance

Visual guidance is the most commonly used form of guidance. This is perhaps due to vision being of paramount importance in successful motor-skill production. Live

demonstration of the skill is especially beneficial for cognitive learners who are seeing the action for the first time.

Visual guidance allows beginners to gain a mental-image of the subroutines involved in the skill. The order and sequence of the subroutines can be shown, as well as the timing elements of the task. Demonstrations are good for teaching ballistic skills, which are difficult to break down into their component parts. For example, a demonstration of a golf swing helps the learner to see the important subroutines of the skill. The learner can see exactly how the body position changes throughout the swing, as well as the path of the golf club.

Demonstrations can be presented by a coach or a peer. For these demonstrations to be effective, it is essential that they are accurate, relevant and clearly seen by the performer. Learners will generally try to copy what they see,

### Key terms

**Subroutines** The component parts of the motor programme, such as the preparation, execution, result and recovery stages of a skill.

**Ballistic skill** A skill that is fast-moving and dynamic.

### Key term

**Bandura's model of social learning** A theory of learning proposed by the psychologist Bandura, whereby a performance is copied if the learner pays attention to the demonstration, can remember the demonstration, is physically capable of reproducing the demonstration and is motivated to do so.

so that care should be taken to show the correct technical model. It may be necessary to repeat the demonstration from different angles and at different speeds so that the learner can gain a better idea of the required actions.

### Bandura's model

Bandura's model of social learning is based on observation of behaviour. His research suggests that demonstrations need to be attractive to the learner in order for the learner to pay attention to them in the first instance. If the demonstration is visually powerful and performed by a role model, the learner is more likely to replicate it.

Pictures and images can also be used to show the subroutines of a skill. However, DVD footage can be more beneficial, as sports skills are largely dynamic in nature. Showing learners slow-motion footage and using the freeze-frame facility are also valuable forms of visual guidance.

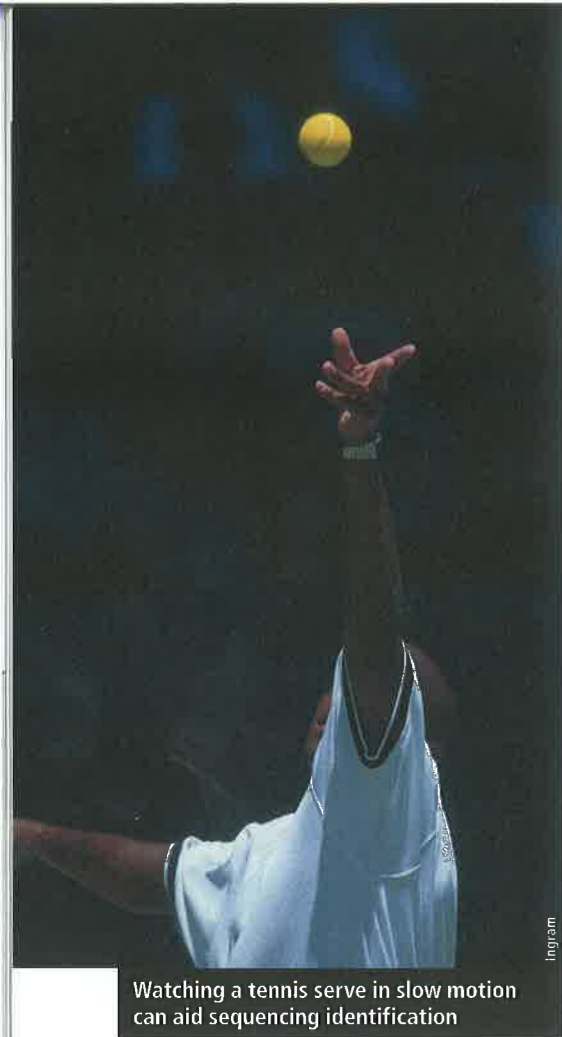
Take tennis as an example. If a learner can see a serve in slow motion, it aids the identification of the sequencing involved in the skill: from the preparatory toss up and back swing to the execution of the forward swing and contact, and finally the follow-through used in the recovery phase of this ballistic and complex skill.

### Verbal guidance

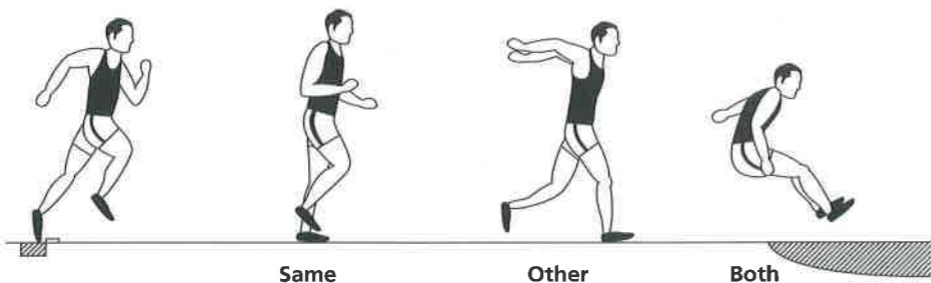
While visual guidance undoubtedly helps a performer to learn a skill, verbal guidance can also be advantageous. Verbal guidance is when a coach explains the techniques required for performing a task. The explanation



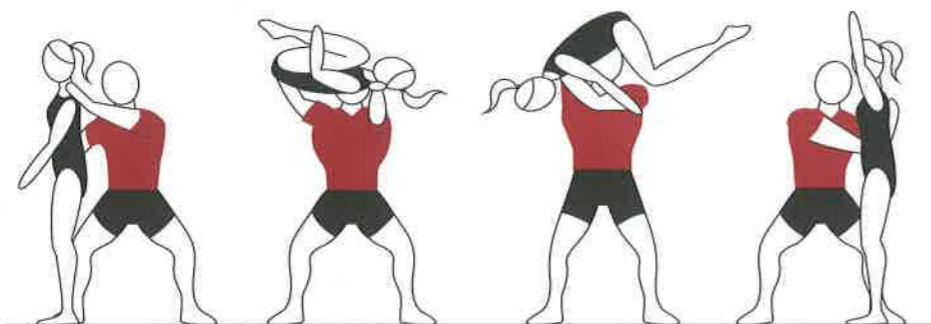
A demonstration of a golf swing will allow the learner to see the important subroutines



Watching a tennis serve in slow motion can aid sequencing identification



**Figure 1** Learning triple-jump footwork. The 'hop phase', which involves the athlete landing on their take-off foot, is referred to as 'same'. Next, the 'step phase', which requires the athlete to land on their opposite foot, is named 'other'. Finally, the 'jump phase' is referred to as 'both', because the athlete lands on both feet in the triple jump pit.



**Figure 2** The coach physically guides the trampolinist over during a back somersault in order to secure her landing.

should summarise the pertinent points of the skill and is particularly helpful if the phrase is memorable:

- A running coach might want to emphasise the importance of the correct 'hammering' arm action in sprinting. The open palm is driven up to the temples and then back down to the hip. The coach tells his performer to remember 'pockets to sockets'.
- A throwing coach might reiterate the need to put the shot from the fingers (i.e. held in the metacarpals and *not* in

the heel of the hand) and keep it close to the body by encouraging the athlete to have a 'clean palm, dirty neck'.

- A jumping coach might help novice triple jumpers to remember the tricky footwork requirements with the phrase 'same, other, both' (Figure 1).

It is important for the coach to remember to keep explanations of technique brief and simple. Learners should not be overloaded with long or wordy explanations of how to perform a skill. The simpler the explanation, the

more likely they will be to retain the information. Short explanations also help prevent tedium.

### Manual guidance

In some cases it is necessary for a coach to offer manual guidance. This is where the coach physically uses their hands to support the performer while they produce the skill. This is particularly helpful in dangerous tasks, such as gymnastic moves and somersaults on the trampoline (Figure 2), where errors in technique could cause injury.

Using the appropriate support gives the performer confidence and allows them to attempt the entire skill even if they cannot do each part independently. In order to ensure that the performer does not become reliant on assistance,

### Key term

**Kinaesthetic** The intrinsic feeling generated by producing a movement.

### Exam tips

Caution should be exercised when you give examples of verbal guidance in your exam answers. Students commonly confuse **verbal guidance** with **feedback** and **reinforcement**. Verbal guidance, feedback and reinforcement are all spoken words from the coach to the performer but there are subtle differences between them:

- **Verbal guidance** is an explanation of technique. For example, a coach might say 'one, two, sticky glue' to help a beginner learn the landing/pivot foot technique in netball.
- **Feedback** is information given about how the technique was performed, so the coach might say: 'You landed using the one-two action, but to pivot you need to go up onto the ball of your landing foot.'
- A coach would use **reinforcement** to affect the likelihood of a player performing the correct footwork action again, for example: 'Well done! That was perfect footwork.'



Arm bands are an example of mechanical guidance

coaches should gradually remove their support. It is also important for the learner to acquire a true **kinaesthetic** feel for the skill.

### Mechanical guidance

A similar form of guidance to manual guidance is mechanical guidance. This is where a coach uses a piece of apparatus

to assist the learner in attempting the skill, as the learner does not yet have full mastery of the task. For example:

- arm bands allow non-swimmers to practise the leg and arm action needed to swim
- stabilisers allow novice cyclists to learn to pedal and steer even if they cannot balance the bike independently

### Key term

**Proprioceptive feedback** The internal sensory information on muscular movement, detected by the medulla in the brain.

These pieces of equipment offer safety and a sense of security for the performer. As in manual guidance, it is important to progressively wean the performer off the support in order to allow them to develop their own **proprioceptive feedback**.

In conclusion, the different forms of guidance play an important role in the learning of motor skills. A performer may need all four or a particular combination, depending on their skill level and the task performed.

Mary Shepherd is a PE teacher at Greenhead College, Huddersfield and an experienced examiner.



magazinesonline

## Getting the most from your magazine?

### Use the free online resources

Register today for free revision exercises, weblinks, podcasts and lots more linked to the articles in each issue.

- Go to [www.philipallan.co.uk/magazinesonline](http://www.philipallan.co.uk/magazinesonline)
- Register your details, with a user name and password of your choice
- Log in with your code and keyword from the back cover of this issue

### Subscribe to the online archives

Subscriptions to the online archives of back issues are available for all our A-level magazines. Go to [www.philipallan.co.uk/magazines](http://www.philipallan.co.uk/magazines) for:

- 100s of articles from digital versions of back issues
- Simple, accessible and comprehensive search
- Unlimited access for staff and students, with weblinks you can add to your VLE
- Annual subscriptions for everyone to share, **from as little as £64!**

Register today at [www.philipallan.co.uk/magazinesonline](http://www.philipallan.co.uk/magazinesonline)