GymSports NEW ZEALAND
Making movement matter

Skill Analysis & Coaching

INTRODUCTION

For athletes to perform well at any level of sport they must acquire a number of skills. Skill learning begins with mastery of the basic skills and techniques and progresses to applying those skills in increasingly competitive situations.

It is one of the coach's primary responsibilities to provide the athlete with opportunities to learn and practice skills in a positive and constructive environment. Appropriate skill learning, especially at the junior level, can set the platform for future potential elite performance.

One of the most important roles of the coach is skill analysis – the ability to look at an athlete, evaluate what is seen, and know what to do next. Skill analysis can be divided into three parts:

1. Observing the athlete performing a skill.
2. Analysing the effectiveness of the performance.
3. Detecting and correcting errors to improve the athlete's future performance.

The focus at Level One is on observing how the athlete actually performs the skill (skill observation). In order to analyse an athlete's performance effectively the coach needs to plan what to observe and how to observe it.

Upon completion of this module you will be better able to:

- **DIVIDE A SKILL INTO MEANINGFUL PHASES AND IDENTIFY THE KEY ELEMENTS WITHIN EACH PHASE**
- **DEVELOP AN OBSERVATION PLAN TO ANALYSE THE KEY ELEMENTS OF A SKILL**
- **UNDERSTAND THE SKILL/FEEDBACK LOOP AS A BASIS FOR SKILL LEARNING**
- **SELECT AND TEACH THE SIMPLE AND COMPLEX SKILLS IN YOUR SPORT**
- **UNDERSTAND AND IMPLEMENT A TGFU APPROACH TO COACHING**
- **GIVE EFFECTIVE FEEDBACK**

THE PURPOSE OF THE SKILL

Before the coach can observe and analyse a skill they should first identify the purpose of the skill. Sport skills can have a wide range of purposes, for example stopping an opponent (a rugby tackle), hitting a target (archery), scoring goals (a netball shot) and getting an opponent off balance (a well placed tennis shot). Understanding the purpose of the skill is important as it helps the coach know what parts of the skill to focus on.

Most skills can be divided into three phases:

1. The Preparatory Phase.
2. The Execution Phase.
3. The Follow-Through Phase.

THE PREPARATORY PHASE

The preparatory phase involves movements that get the athlete ready for the force-producing movements in the execution phase. For example, the backswing in striking actions such as golf or tennis, or recovery movements such as the arm recovery action in swimming.

THE EXECUTION PHASE

The execution phase can be divided into two parts:

1. The force-producing movements the athletes make to produce force for the impact or propulsion. For example, the forward motion of the tennis forehand shot.
2. The 'critical instant' is the point of contact (or the release) of the movement. For example, the moment of contact in a tennis serve between the ball and racquet, the actual release of the shot put or javelin, or the take-off in long jump. This is the point that determines the effectiveness of the skill.

Successful execution requires the athlete to apply the correct amount of force, in the correct direction and with precision timing. It is often difficult for the coach to observe and assess the movement within this phase, as the movement takes place very quickly.

THE FOLLOW-THROUGH PHASE

The follow-through refers to the body movements occurring after the execution phase. This phase is where the movement slows down after impact and the athlete prepares for the next action. For example, the high leg lift after kicking a goal in rugby, the path of the golf club after the ball is struck, or landing in gymnastics.

The follow-through is important in slowing the body parts down over a longer period of time, absorbing the forces produced and helping to prevent injuries.

Two practical examples:

THE GOLF SWING

- **Preparatory Phase**

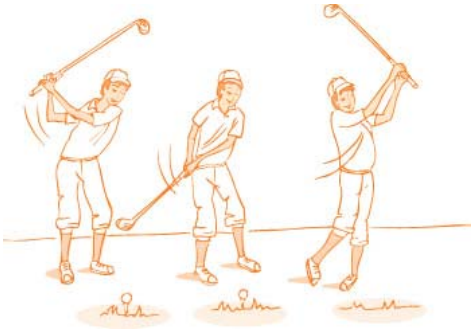
  The backswing of the club from the starting position.

- **Execution Phase**

  The forward drive and moment of contact between the ball and the club.

- **Follow-Through**

  The deceleration and path of the club after striking the ball.



THE LONG JUMP

- **Preparatory Phase**

  The length and speed of the run-up to the take-off board.

- **Execution Phase**

  The take-off and flight through the air.

- **Follow-Through**

  The landing after the flight.

Coaches should be aware that all three of these movement phases are equally important to a successful skill performance. For example, close observation of the preparatory or follow-through phase will often provide the coach with excellent clues about the effectiveness of the execution phase and the cause of a poor performance.

Some sport skills however, may not fit neatly into these three phases. In this case the coach may devise or add their own phases. For example, the long jump may also be divided into: preliminary movements; run-up; take-off; flight; and landing.

IDENTIFY THE KEY ELEMENTS WITHIN EACH PHASE

Key elements are the important individual actions within a skill performance that influence the final outcome. Key elements should always be stated in terms of specific body movements and they must be observable by the coach.

The process of identifying these key elements can be simplified if we divide them into each of the three movement phases. For example, the key elements in the preparatory phase for a softball batter include:

- the feet being shoulder-width apart and parallel to the plate
- the knees flexed, and the upper body slightly bent
- the shoulders and hips lined up to the pitcher
- the hands held closely together, holding the bat at shoulder height so that there is only one pivot point on the bat.

It is important to remember that these key elements are general guidelines only and they may not suit everyone as every athlete has their own unique anatomy and sports history.

Some athletes can perform to a high level with a technique that is not biomechanically 'correct'. For example, Michael Johnson (1996 Olympic 200m and 400m champion) performs successfully with a relatively low knee lift and a very upright running stance. It would be a brave, but perhaps foolish coach, who tries to change his running style.

Another consideration in identifying the key elements is the stage of growth and development of the athlete. In general, younger athletes cannot be expected to perform a skill the same way an older, more experienced athlete can. Therefore, the key elements of any skill may vary to suit the athlete's stage of development.

For example, in the long jump, athletes in the foundation phase of development (5-11 yrs) could not be expected to strike the take-off board while running at maximal speed and in full stride. It would be more appropriate to expect this athlete to jump from a broader take-off area in front of the landing pit, with the jump measured from the point of take-off.

ANALYSE THE KEY ELEMENTS OF A SKILL

To analyse the skill performance successfully the coach needs to plan how they will observe the movement. The coach must decide what to look for and how, when and where to observe the skill performance or movement.

An observation plan consists of:

- identifying the purpose of the skill
- dividing the skill into the three movement phases

- creating a checklist of key elements for each movement phase
- choosing observation strategies, for example:

    - What angle(s) to observe from?
    - What to look at?
    - How many observations of the skill?

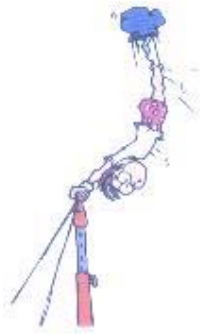
OBSERVATION STRATEGIES

WHAT ANGLE TO OBSERVE FROM?

Generally, the observation should be from a position at right angles to the general direction of the athlete's motion, and opposite the point of interest. However, observing the performance from multiple angles (e.g. side, front and back) is beneficial in giving the coach a number of different perspectives. If the performance covers some distance or moves in different directions, observations should be from various points.

WHAT TO LOOK AT?

For the first few observations, look at the whole movement in general to gain an overall impression of the skill performance. Then focus on one aspect of the movement at a time.



The outer extremities (i.e. arms and legs) usually move much faster than the body and can be difficult to observe. Start by focusing on the large, slower-moving parts and then work outwards. For example, with a sprinter, focus initially on the hip rotations, followed by the knee lift, and finally the foot actions.

A video camera can be a useful tool to 'capture' the movement. The skill performance can be replayed in slow motion, enabling the coach to identify exactly where faults occur. Using a video can help the coach develop their own observation and analytical abilities by directing them where to focus their live observations. Ideally, have a video monitor close by to observe the performance while the movement pattern is fresh in the minds of both the coach and the athlete.

HOW MANY OBSERVATIONS OF THE SKILL?

There is no set number of observations to perform for each skill. The number of observations required will depend on the skill of the athlete and your skill as an observer. Focus on a particular movement long enough to know that the movement pattern is

consistently repeated, and that you feel comfortable in being able to describe to yourself and the athlete what you see.

Be aware that with some activities fatigue will change the athlete's movement patterns, for example a fatigued swimmer will not lift their elbows as high out of the water in the arm recovery phase. In activities where fatigue influences performance, it is important to develop the observation plan carefully so as not to waste the athlete's energy – if possible use a video.

CAUSE AND EFFECT IN MOVEMENT OBSERVATION

Coaches are all too often tempted to correct the symptoms of the fault rather than the actual cause of the fault. For example, when a gymnast takes a step back on landing after a back somersault the coach may comment on their landing whereas the poor landing may have been due to not tucking tightly enough during flight or opening out too soon.

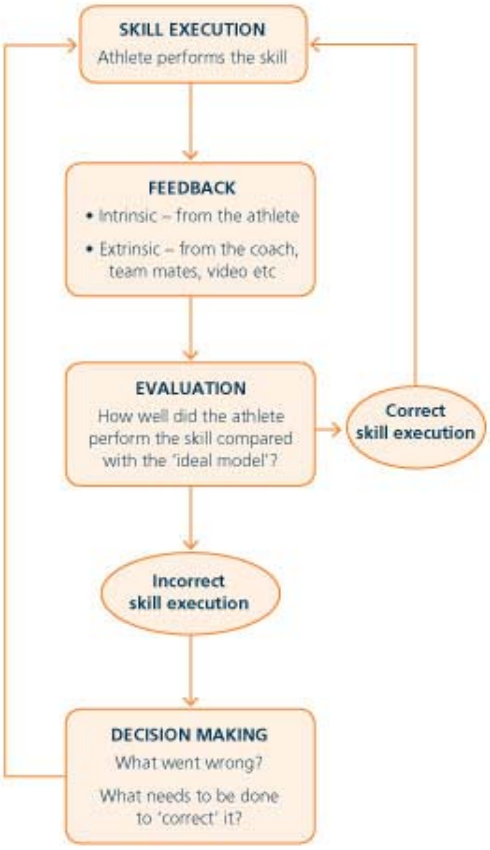
UNDERTAKING THE OBSERVATION – HELPFUL HINTS

- The coach should be aware of factors that can influence the skill performance. For example: athlete fatigue, excitement, nervousness; ground or weather conditions; knowledge of the performance required.
- Ensure that the skill selected to observe is performed in a manner closely related to the competition situation.
- The athletes should understand why you are undertaking this planned observation, as they too should be involved in and learn from this experience.
- It can be extremely beneficial to have a more experienced coach assist initially in observing and analysing movement skills. This will enable the learner coach to compare notes and develop confidence in their own observation and analytical abilities.
- Taking the time to develop a professional observation plan will assist the coach to develop a greater understanding of what 'skilled' performance is, as well as enhancing their overall observation skills.
- Evaluate the effectiveness of the observation plan and technique, and if necessary make modifications. Remember, athletes will only gain benefit from the systematic observation if the coach is able to provide appropriate feedback.

COACHING A SKILL

UNDERSTAND THE SKILL / FEEDBACK LOOP AS A BASIS FOR SKILL LEARNING

The skill/feedback loop demonstrates how feedback is processed when learning a skill. The model shown below is a simplified version of how each athlete uses feedback to assess whether or not they have has responded correctly and, if not, how they should respond correctly.



(Source: Hadfield/Chu Model, Department of Management Systems, Massey University, 1997.)

SKILL EXECUTION

The athlete performs the skill. The motor (neuro) programme tells the muscular system which muscles to contract, and how and when to contract them to produce the desired response.

The skill execution is influenced by the athlete's previous learned experiences, stage of growth and development, fitness level, and degree of motivation.

FEEDBACK

The athlete may receive two types of feedback response:

- Intrinsic (internal) feedback.
- Extrinsic (external) feedback.

Intrinsic feedback is dependent on the athlete's ability to 'feel' the experience using sensory perception. If a skill was performed well, the athlete feels a sense of 'correctness'. If the skill was not executed as intended, the athlete experiences a feeling of 'error'.

The more experienced the athlete, the greater the accuracy in sensory evaluation. The ability to perceive what is correct in the early stages of learning a skill is less accurate because the athlete's memory has not been developed enough to be able to have a good perception of 'correctness'. The coach should ask the athlete specific questions about how the skill felt when executed to encourage the athlete to become more self-aware.

Extrinsic feedback is given by an external source such as the coach, other athletes or the spectators.
The coach needs to be able to identify the errors, provide the information (feedback) appropriately and specifically, and then give instructions for the correct execution of the skill.

Refer to the section at the end of this module for coaches' tips for giving effective feedback.

EVALUATION

After receiving both intrinsic and extrinsic feedback the athlete must then sort the information and evaluate their performance compared with the 'ideal model'.

Developing an athlete's ability for self-awareness is important in providing a source of internal control rather than the athlete always depending on external sources (e.g. you the coach) to evaluate the performance and tell them what to do.

Athletes may not have all the information about a situation, so it can be difficult for them to evaluate the feedback and make the appropriate decisions. The coach can assist this process by providing clear, precise feedback that is specific to the required performance and at a level that the athlete can understand.

Evaluation of the performance can also be limited by the coach's ability to give feedback and the athlete's ability to receive feedback (communication).

DECISION MAKING

If the skill execution was incorrect the athlete must process this information further to decide what went wrong, and what they can do to correct it.

One of the major limitations to performance improvement is the ability of athletes to make sound and appropriate decisions. By giving athletes opportunities to decide for him or herself how or what to do to fix their own errors or identify a correct performance, the coach enables the athletes to practice and improve their decision-making processes.

SELECT AND TEACH THE SIMPLE AND COMPLEX SKILLS IN YOUR GYMSPORT

Skill can be defined as the learned ability to bring about a pre-determined result with maximum certainty, and maximum efficiency. Technique refers to the way in which a skill is performed, the successful movement of the body to achieve a specific activity.

A skilled performance does not depend simply on the physical ability of the athlete and their technique, it also depends on the ability to think, interpret and select. It involves the athlete in decision-making.

SELECTING A SKILL

In selecting a skill to teach, coaches need to consider the following:

- What are the stages of learning and growth and development of each athlete?
- What skills are important for athletes to learn to have success performing them, to have fun and to be safe in your sport?
- What are the basic movements that underlie these skills?

SKILL ANALYSIS IN GYMNASTICS

KEY MUSCLE ACTIONS	
Body Postures ■ Dish ■ Straight ■ Arch ■ Side Arch	**Achieved by** ■ Isometric contraction Postures are seen In different types of elements In different ways: ■ Static (eg handstand) ■ Static eg. handstand ■ Dynamic or rotating (eg layout flyaway) ■ Momentary (eg flic flac)
Whole Body Actions ■ Forward/anterior - from arch to dish 'forward body snap' ■ Backward/posterior - from dish to arch 'backward body snap' ■ Lateral/sideways - any motion through a side arch position 'sideways body snap'	**Achieved by** ■ Whole body flexion / extension ■ A whole body snap Involving muscles and joints In the shoulders, back, trunk and hips. ■ Side body snap - skills Incorporating sideways movement &/or twist, eg. saltos, scissors on pommels.
Joint Actions ■ Shoulders ■ Hips	**Achieved by** ■ Flexion / extension ■ Raising and lowering the arms ■ piking and kipping actions ■ Abdduction / adduction at the shoulders ■ Raising and lowering the arms from the sides of the body, primarily on the rings

SKILL ANALYSIS 'IDEAL MODEL'

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IDEAL MODEL

DOMINANT MOVEMENT PATTERNS					
Landings	Statics	Spring	Locomotion	Rotation	Swing

KEY MUSCLE ACTIONS

BODY POSTURES

Dish	Arch	Straight	Side arch
			

WHOLE BODY ACTIONS

Forward body snap

Backward body snap

Sideways body snap

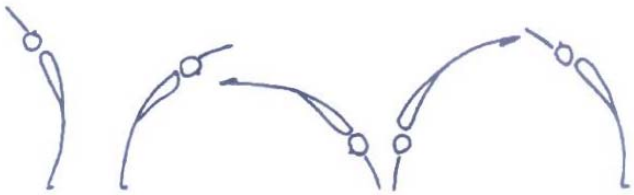
JOINT ACTIONS

HIPS	SHOULDERS	
Flexion (pike, close hips) 	**Flexion** (open angle, raise arms) 	**Abduction** (arms away from the body) 
Extension (open hips) 	**Extension** (close angle, lower arms,)  (also includes rear lift of the arms	**Adduction** (bring arms towards body) 

Proforma #1 "Ideal Model"

SKILL ANALYSIS 'FLYSPRING EXAMPLE'

<<FLYSPRING>>



IDEAL MODEL

DOMINANT MOVEMENT PATTERNS

Landings	Statics	Spring	Locomotion	Rotation	Swing

KEY MUSCLE ACTIONS

BODY POSTURES

Dish	Arch	Straight	Side arch
			

WHOLE BODY ACTIONS

		
Forward body snap	Backward body snap	Sideways body snap

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Flexion (pike, close hips) 	**Flexion** (open angle, raise arms) 	**Adduction** (bring arms towards body) 
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SKILL DEVELOPMENT IN GYMNASTICS:

UNDERSTANDING comes when…	The gymnast has – • A clear mental picture /feeling for the postures required. • Kinesthetic or self awareness – knowing what the body is doing and where it is in relation to the apparatus/ground.
PERFORMANCE comes when…	Physical preparation, which includes – • Flexibility • Strength • Speed and power • Muscular endurance

CLASSIFYING MOTOR SKILLS

SIMPLE AND COMPLEX SKILLS

A simple skill is one that can be learned with very little practice and has few parts to it. It can be taught as a whole activity.

A complex skill takes more time and effort to acquire because a number of different movements make up the skill.

OPEN AND CLOSED SKILLS

This refers to the predictability of the skill performance and environment. A closed skill is one where the options are few and largely constant. For example, a golf swing, weightlifting or a basketball free throw.

An open skill is one where there are a number of variables, which demand the player's attention.
The environment is constantly changing and unpredictable and there is limited time to make decisions and produce the actions required of a skilled performance. For example, in passing the ball in soccer the player must be aware of both opponents and teammates as well as kicking the ball.

WAYS OF TEACHING A SKILL

TEACHING GAMES FOR UNDERSTANDING

Teaching Games for Understanding (TGFU) is a useful approach that enhances skill and technique and transfers practice into competitive-like situations. Games set realistic problems in practice for athletes and coaches to solve.

TGFU provides an athlete centred approach to training sessions with learning in context and motivation enhanced through challenges. A TGFU approach is beneficial to all

gymsports as it enhances mental preparation, sport specific fitness, social interactions and decision making opportunities.

Technique & Skill

Technique is defined as the basic movement pattern(s) needed to perform. Skill is the ability of the athlete to use physical technique and apply it to various situations. To be great performers, athletes must have good technique and good skill. A coach's role in enhancing skill and technique is to provide opportunities to practice in competition-like situations that transfer into the competition itself.

In TGFU, athletes are still encouraged to learn the fundamentals (techniques) of the sport, but are provided with interesting ways to practice these fundamentals through games. Athletes are more motivated by the activity (game) and tend to spend more time perfecting the skill or technique.

For athletes to learn skill or technique, coaches need to have an ability to observe and analyse and then provide appropriate feedback. Some of the challenges faced when observing and analysing are how to observe execution of movement, knowing what to look for, where to look from and finding the best ways to help athletes enhance skill or technique. There is much to observe and analyse and many environmental factors, such as the mood of the athlete, the weather and the state of the facilities and equipment, that may influence athletes' performances. Often instant decisions must be made as to how to change the game/activity or how to make it easier or harder, so that the athletes can learn more efficiently.

TGFU is also a beneficial approach for physical fitness and dealing with pressure. The games are often enjoyable and fun and, as athletes want to play them, the intrinsic motivation is high and the athletes 'play hard', so that sport specific fitness is an outcome.

As for pressure, the games can be set up to mirror competition. The intensity and the scoring system contribute to the athlete working in pressure situations. The nature of the games provides situations where athletes have to make decisions under pressure. This practice in pressure situations provides some transfer into real competition.

SELF-AWARENESS THROUGH TGFU

After receiving intrinsic and extrinsic feedback in a game, the athlete must then sort the information and evaluate their performance compared with an 'ideal model'. Developing an athlete's self-awareness is important in providing a source of internal control rather than the athlete depending on external sources (e.g. you the coach) to evaluate the performance and tell them what to do. The ultimate athlete is one who is independent and has personal responsibility because he/she owns his/her performance.

Athletes may not have all the information about a situation, so it can be difficult for them to evaluate the feedback and make the appropriate decisions. The coach can assist this process by asking questions that encourages self-awareness of the required performance at a level the athlete can understand.

SELECTING A GAME TO WORK ON A SKILL

In selecting a game, coaches need to consider the following:

- What are the stages of learning and growth and development of each athlete?
- What skills are important for athletes to learn to have success, to have fun and to be safe in your gymsport? (Tactical, physical, mental, decision making).
- What are the basic movements that underlie these skills?

WAYS OF TEACHING A SKILL THROUGH TGFU

- **Whole Or Part Learning**

A skill may be taught in its entirety (whole learning) or broken down into parts (part learning). To enable long term learning, it is important to teach the whole (as TGFU does), then enable the athlete to be aware of the parts that he/she needs to work on (using coachable moments to help athletes during a game or activity).

- **Chaining**

This involves breaking a skill down into progressive part teaching. Each part is taught and practiced on its own and the parts are added in their correct sequence. Chaining is adopted when a skill is complex and needs to be taught in a particular order. A good example of chaining is when a gymnast is learning a new routine, learning each part and progressively adding on.

- **Massed Or Distributed Practice**

Massed practice is where the coach has their athletes continuously practice a skill without any breaks until the skill has been learned. In a distributed practice, the athletes may learn the skill in short, frequent practice sessions interspersed with rests or alternative skill activities.

Massed practice is more suitable for highly skilled or highly motivated athletes.

Distributed practice is the most effective for improving performance particularly with younger athletes, as the breaks between sessions reduce boredom and recharge the athletes' energy and powers of concentration. TGFU is a great example of distributed practice.

- **Blocked vs Random**

Blocked practice is comprised of repetitive drills, whereby athletes have a number of turns at doing a skill, e.g. cartwheel on beam. Blocked practice is known to have limited transfer into the actual competitive situation, but can be used to practice a technique that needs some work.

In random practice, athletes practice various techniques randomly. In TGFU, all techniques and skills are practiced randomly because athletes must respond to others' movements. In a game situation, every movement is different. No two situations are exactly alike. Athletes have an opportunity to put into their memories many different responses and therefore gain more experiences that they can draw on in competition. Random or variable practice also promotes 'learning from mistakes'.

- **Mental Or Physical Practice**

Physical practice of a skill is necessary for improved skill performance and is what most athletes are accustomed to. Mental practice can also be used by picturing the performance in one's mind. This can be done using mental imagery, viewing the performance (live or on video), and reading or listening to instructions.

Mental practice is often learned implicitly in TGFU, as athletes increase their

concentration because they are focused on an enjoyable task. They are also motivated to learn because of the context of the learning environment.

A combination of both physical and mental practice makes for the most effective learning.

FACTORS THAT AFFECT THE ABILITY OF AN ATHLETE TO LEARN NEW SKILLS

- Stage of growth and development.
- Physical capacity.
- Facilities and equipment.
- Experience playing the sport.

GIVING AN EFFECTIVE DEMONSTRATION OF SKILL

The purpose of a demonstration is to increase the athletes' understanding of the skill by providing an accurate model from which to learn.

For athletes to make appropriate decisions on how to execute skills, coaches need to provide an explanation and a demonstration so that athletes can learn and practice. An effective skill demonstration requires careful planning by the coach. Consider the following:

WHY IS THE SKILL IMPORTANT?

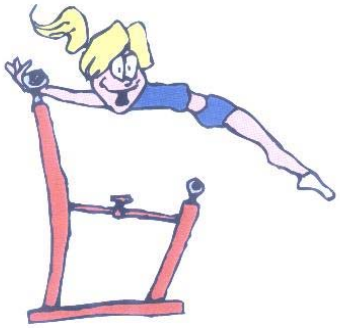
Understanding the importance of the skill in the context of the sport and competition will assist both the coach and athlete in teaching and learning the skill.

HOW WILL THE SKILL BE DEMONSTRATED AND EXPLAINED?

Select an appropriate method of teaching the skill, taking into account the type of skill and the experience and ability of the athletes. Generally, it is recommended that the whole skill be demonstrated first to show the athletes what the skill will look like when performed correctly, then broken down into various skill components (whole-part-whole).

Remember athletes need to be able to observe the demonstration at different angles. Show both left- and right-handed ways to execute the skill.

Make a note in your session plan of two to three teaching points and some key words or phrases used to emphasise important parts of the skill. Keep the instructions simple and avoid the use of jargon where possible. Athletes should be asked to concentrate on only one or two aspects of the skill at any one time.



WHO WILL DEMONSTRATE THE SKILL?

It is important that whoever is chosen to demonstrate can perform the skill correctly. Coaches will often demonstrate skills themselves, but they can also use athletes to demonstrate, sports persons from outside the team, or even use videotapes.

Choose athletes with a range of skills to demonstrate. Asking the 'star' of the team to demonstrate all the time can be discouraging for the less skilled and the learners. For most athletes, being chosen to demonstrate is seen as a reward for good performance. Be aware however, that some athletes find this embarrassing – as a coach you should respect their feelings.

HOW WILL YOU KNOW THE ATHLETES UNDERSTOOD THE DEMONSTRATION?

The best approach would be to let them try the activity first. Ask specific questions after the demonstration has been given. Avoid simply asking "Did you understand?" as athletes tend to nod a yes response whether they think they understand or not. Ask specific points about the demonstration and get the athletes to 'show you' what they have learned. Their responses to questions and the way they perform the skill will tell you whether they understood or not.

If an athlete has not understood the demonstration or, after a series of sessions they have not yet grasped the concept, it is up to the coach to modify the information and / or the teaching method to assist the athlete's understanding. Everybody learns differently and it is one of the coach's roles as a teacher to find a teaching method that suits the athlete's learning.

PLAN FOR A SKILL PRACTICE

When planning a skill practice there are number of practical considerations for the coach:

THE TRAINING ENVIRONMENT

Consider the number of athletes you have, the amount of space available, what equipment there is, and any possible safety hazards, e.g. wet floors or uneven surfaces

etc.

Ensure that there is enough equipment for all the athletes to practice with. Keeping the equipment well maintained will save both time and money – there is nothing worse than arriving at training and finding all the balls are flat or a piece of essential equipment is broken. Adapt the activities and equipment to meet the athletes' developmental needs and to suit the skill practice. For example, in cricket, try using harder balls for the more skilled and softer balls for the less skilled athletes.

ASSESSMENT REQUIREMENTS

1. Develop and implement written plans for your next 5 coaching sessions. Your plans should demonstrate the acquisition or reinforcement of basic skills and techniques that progress to more complex skill development.
    - The practical delivery of these sessions must be evaluated by your GymSport officer or another approved coach.
2. Choose a specific skill from your gymsport and divide it into meaningful phases or actions. Identify the purpose of each phase or action. Examine the examples below of observation plans and develop your own observation plan for this skill.
3. Make a list of the different skills required for your gymsport (at the level you are coaching). Begin with the more simple skills progressing to the more complex. List the body posture and actions most commonly required in performing those skills
4. Select a complex skill from your gymsport and plan how you would teach the skill using the whole-part-whole method.
5. Using a TGFU approach provide appropriate games or activities to develop six (6) skills or techniques required for your gymsport.

SKILL OBSERVATION PLAN

SPORT: **SPECIFIC SKILL:**

Meaningful Phase/Action	Main purpose of phase or action	Key elements	Observation strategy
e.g. the flight phase (long jump)	• To reduce forward body rotation through use of 'sail' or 'hitchkick' technique. • To get the body into an optimum position for landing.	1. Legs and arms extended prior to landing. 2. Knees flex at impact. 3. Body levers over ankles to land forward of feet.	• View from the side (perpendicular to midpoint) and from the front.

SAMPLE OBSERVATION PLAN – VOLLEYBALL

Coach / Observer: Tom Harrison

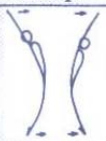
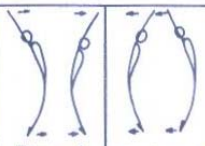
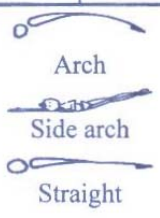
Date: 2 July 2002

Specific skill to be observed: The Forearm Pass

Athlete: Sandra Smith

PHASE/ACTION	KEY ELEMENTS	COMMENTS
Preparatory Phase	1. Feet are stride or parallel position 2. Feet about shoulder-width apart 3. Knees bent, hips low, and back straight 4. Hands out in front of body	Knees need to be bent a little more
Execution Phase	1. Moves under ball 2. Arms extended together from shoulder 3. Forms a firm 'platform' (even, flat surface)	Need to contact the ball on the forearm and not on the wrist
Follow-Through	1. Weight transfers forward towards target 2. Hands stay below shoulders 3. Legs fully extended after contact with ball 4. Moves in direction of ball	

Skill Analysis - Examples

Skill / Family of skills	Body Postures *(write or draw)*		Whole Body Actions *(write or draw)*	Joint Actions *(write or draw)*	DMP's / mechanical forces *(key words only)*
1. Handspring (Floor)	 Arch	 Dish	 Backward body snap	• Shoulder elevation	• Spring • Rotation
2. Handspring (Vault)	 *Arch*	 *Straight*	 *Forward body snap*	• *Shoulder elevation*	• *Spring* • *Rotation*
3. Swing in hang (ie below the bar) **(top grip)**	 *Arch*	 *Dish*	 *Forward body snap*		• *Swing*
4. Flyaway	 Arch	 Dish	 Forward body snap	• ***Shoulder flexion (opening) after Forward body snap***	• Swing • Rotation (also includes flight phase and • Landing)
5. Tkachev	 Arch	 Dish	 Forward body snap; Backward body snap	• Shoulder flexion (opening) and Hip extension (opening) immediately before bar release	• Swing • Rotation • Counter rotation (also includes flight phase and Regrasp)
6. Twisting salto	 Arch Side arch Straight		 ***Side body snap, from arch to side arch, to side arch to straight***	• ***Shoulder elevation on take-off*** • ***Shoulder extension (closing) to initiate twist***	• ***Rotation - transverse (salto) - longitudinal (twist)***

• ***Table #2 "Skill Analysis - completed"***