

Skill Analysis & Improvement

as part of a training program

Integral Aspect of a Training Program

- Skill analysis and improvement is an important part of a training program because the outcome of competition is often determined by the efficiency of an individual's or team's skill execution
- Skill improvement combines with fitness, tactical and mental skill improvement to allow an individual or team to reach their potential
- Skill analysis and improvement can identify and eliminate injuries caused by technique faults
- Skill analysis enables comparison between pre and post skills training performance i.e. assessment of skills training program



Skill Analysis

- **Definition:** the observation and evaluation of skill execution in comparison with a predetermined set of criteria e.g. checklist, rubric
- Skill analysis allows for the identification and corrections of technical weaknesses and can also be used to monitor and evaluate technique improvements



Observation Strategies

- **Observation Schedules** are checklists, or rubrics, that detail the features of an ideal performance of a skill. An athlete's performance is compared to this.
- **Video analysis** can enhance the use of observation schedules as it allows for the repeated viewing of an athlete's performance and the use of slow motion and pausing
- **Biomechanical analysis** using high speed cameras, force platforms and computers can provide very accurate and specific data for technique analysis.



Skill Instruction Strategies

4 Steps

Step 1 – Introducing the skill to be learned

- Gain the attention of the athlete
- Organize the athletes in a way that will enable them to see and hear
- Describe the skill and its relevance

Step 2 – Demonstrate and Explain the Skill

Allows the athletes to create a mental picture of the skill, which should be demonstrated at normal speed

- The demonstrator should be competent at the skill and positioned in a way that enables the athletes to have an optimal view of the demonstration
- Explanations should be simple and brief whilst highlighting the key points and must match the demonstration

Step 3 – Practice the Skill

- Motivating and challenging tasks should be undertaken by students soon after Step 2
- Practice drills need to be well planned and to consider
 - - the complexity of the skill
 - - maximum participation
 - - key words and phrases
 - - allow for success



Step 4 – Correct Errors

- Compare actual performance with desired performance
- Inform athlete on how they can correct errors by providing specific, extrinsic feedback

Skill Improvement Strategies

- **Whole or Part Practice** – whether a skill should be practiced in its entirety or broken down into parts is mainly determined by its complexity.
- **Simple skills** e.g. throwing, catching should be practiced by the whole method.
- **Complex skills** e.g. basketball lay-up, tennis serve should be practiced by part methods such as **shaping** or **chaining**



Skill Improvement Strategies cont.

- **Types of Practice**— whether a skill should be practiced in one or a variety of different contexts
- **Massed Practice** – involves sessions with limited breaks or rest periods. It is effective for simple skills. Eg set shots, golf putting. It is repetitive so learners need to be motivated.
- **Distributed Practice** – involves using breaks between practice sets to allow for rest, mental rehearsal or practising another skill. Eg gymnastic skills or other complex skills



Skill Improvement Strategies

cont

- Fixed Practice – involves repeating the same skill to reinforce learning. Works well for discrete and closed skills ie skills that are always performed in the same way.
- Varied Practice – involves using a mixture of massed and distributed practices within the one session. Open skills are best practised using this method.

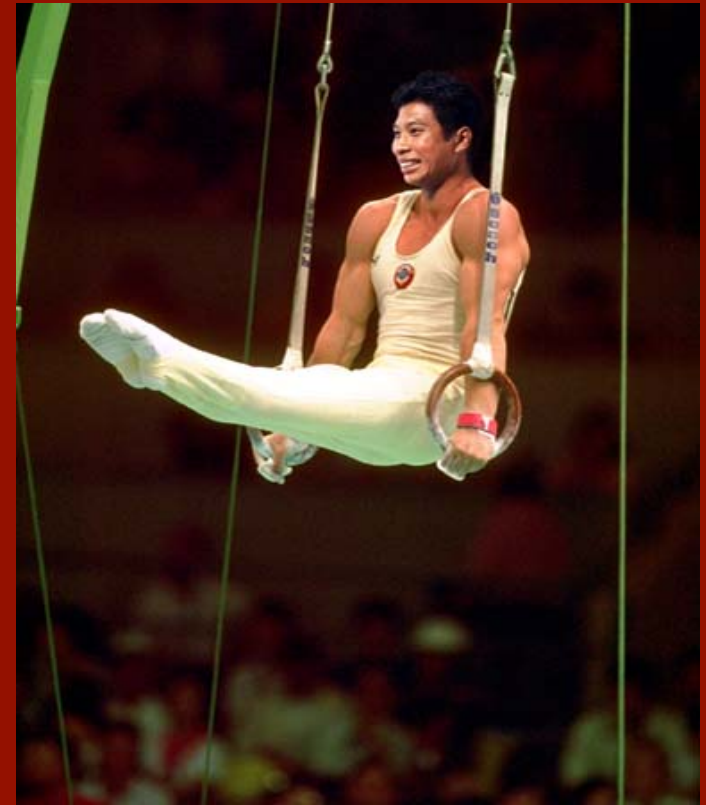
Skill Improvement Strategies cont.

- Practice to emphasise accuracy or speed – is based on the nature of the activity and the proficiency of the performer.
- Practice for performers at the cognitive stage of learning and for skills that mainly require accuracy e.g. archery, should emphasise accuracy
- Practice for performers at the associative and autonomous stages of learning and for skills that require speed e.g. fast bowling and sprint starts, should emphasise speed



Skill Improvement Strategies cont.

- **Mental or Physical Practice**
- All skills need to be practiced physically but mental practice (visualisation) can be used to supplement physical practice in the following situations
- When an athlete is injured
- For predetermined sequences of movement e.g. gymnastics routines
- To develop self-confidence and concentration
- Prior to executing closed skills e.g. free throw shooting, set shots at goal



Advanced Skill Improvement Strategies

- **Specificity of Training** – use open and dynamic drills to simulate match situation
- **Overload Training** – combine fitness work with skill training so that skills are practiced under fatigue and pressure
- **Cue Recognition** – use dynamic, random practice to train recognition of relevant cues and appropriate decision making e.g. 1 on 2, 2 on 3

