# Planning for Improvement: Profile of a Practice Analysis

*by Gary D. Sinclair, PhD*

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Practice is at the heart of skill development, and many factors must be considered when practice conditions are being planned. The lay person defines the teaching of sports skills as showing someone how to do something, then standing back and watching it being done. Obviously, the process is far more complicated -- or many of us would be out of a job. That complex sports skills are not mastered easily indicates the important role that the well-prepared coach can and should play in the guidance offered to athletes.

Detailed pre-planned instruction is not a new concept; however, we too often fail to be systematic in this endeavour. As a result of motor learning research into learning conditions, the design of instruction is now considered a science. Consequently, the improvement of our athletes' performance depends upon our ability to increase our coaching effectiveness. It has been said that coaches can be classified into three categories: those who make things happen, those who watch things happen and those who wonder what happened. Carefully thought-out plans, consistent with the most advanced knowledge about the characteristics of skill and the nature of learners and learning environments, are the hallmark of coaches who make things happen.

## Characteristics of Skill

To plan for skill development, we must first define the characteristics of the outcome that we are trying to produce. That is, we must describe skill acquisition as it progresses sequentially from the fundamental skills of the sport to the highly specialized game skills. To do this, we need a framework or taxonomy that will guide us in both identifying the current skill level of our athletes and planning for their improvement.

Jewett, Jones, Luneke, and Robinson (1971) developed a seven-level taxonomy that is a systematic practical description of skill progression (see Table 1).

**A classification of skill progression is necessary for the coach to identify the current skill level of athletes and plan for their improvement.**

Every athlete deserves the opportunity to improve as much as possible and as quickly as possible. The framework of Jewett et al. provides a sound basis for planning the instructional environment to fit the development needs of the athlete.

## The Practice Environment is the Key

The most crucial element in practice planning and drill design is an awareness of what one is trying to achieve. The environment is the key, and we must be aware of what the environment requires the athlete to do and the potential of the drill to produce game-like responses. Check your practice plan -- what have you asked your athletes to do? Using a profile sheet such as that illustrated in Figure 1, assess each of your drills within the framework of progressive skill levels. Do the drills require the athletes to vary their actions or improvise during their responses, or do they merely require them to refine (groove) previously learned moves?

If your analysis produces a profile which resembles that described in Figure 1 for drills used in a baseball/softball practice, your selection of drills focused, intentionally or unintentionally, on fundamental skills and did not provide the opportunity for progression. This prevents the athlete's progress and delays, if not inhibits, the acquisition of highly specialized game skills. Such a practice plan might be appropriate for a particular group on a specific day. But if the structuring persists, the athlete will encounter unavoidable developmental lags, and in many cases the coach, although ultimately responsible, will be critical

of the athlete for the arrested progress. In addition, the athlete will probably become bored and frustrated when game success does not result from the time spent in practice. However, the unrest created can be easily avoided.

**The actual game requirements and the present developmental needs of the athlete determine the selection of drills.**

The purpose of such an analytical profile is to have the coach develop an awareness of and a sensitivity to the limits of every drill and thus consistently contribute to the development of the athlete as a skillful and versatile mover capable of making decisions. The athlete should not be programmed for mediocrity. Ask yourself if drills are selected because they "keep them busy" or if they are related to actual game requirements and the present developmental needs of the athlete. For example, dribbling around cones (e.g., in soccer, field hockey, or basketball) is a good drill for someone at the patterning or adapting level of skill but is counterproductive at higher levels where variation and improvisation are necessary. Are your athletes engaged in productive activity that is contributing to their needs? Is the learning situation focusing upon the critical element or is it incidentally touching upon it (e.g., hoping that dribbling around cones in practice will enhance ball control in a game when pressure checking must be contended with).

## Effective Use of Time

**Valuable practice time will be wasted if the drill selected is not appropriate to the skill level of the athlete.**

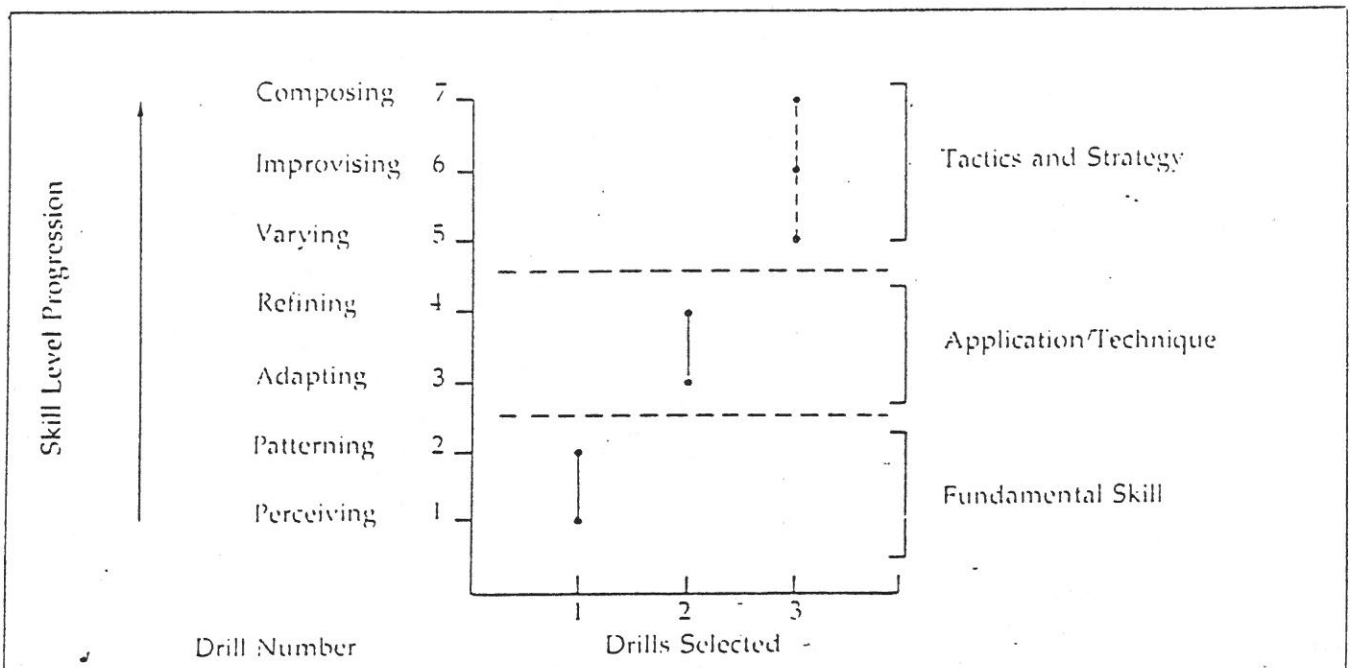
The profile of a practice analysis must be taken one step further. The relationship of the skill range of the drill to the skill range of the athlete, the "goodness of fit," must be considered. If the "goodness of fit" is poor, valuable time will be wasted in practice as the drill prescribed will not be meeting the needs of the group. The appropriateness of the experience is crucial, for situations that are either too easy or too difficult not only waste time but create an unhappy team atmosphere.

## Skill Range of the Drill

Each drill must be designed or selected with an eye to its contribution to skill development. For example, does it require the athlete to vary (level 5) performance, does it merely contribute to the refining (level 4) of a well-patterned (level 2) move, or does it present problem-solving situations that require improvisation (level 6) for success? In all probability, each drill designed develops more than one skill category -- a fact of which the coach must be aware.

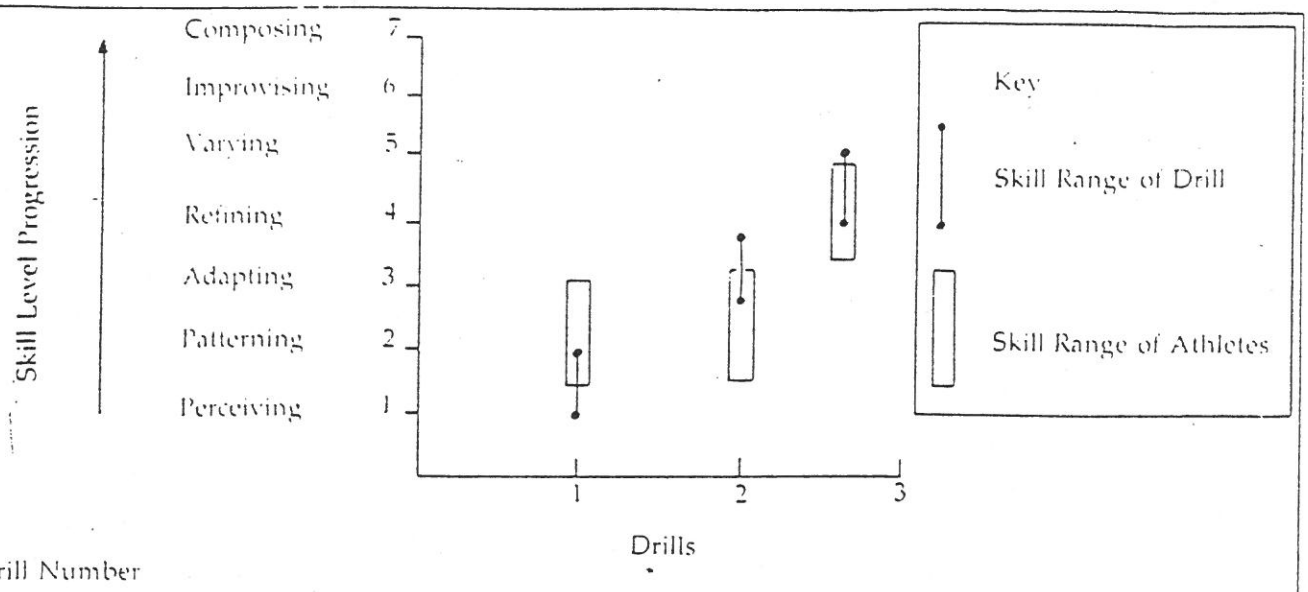
**Select drills that contribute to the skill development of the athlete.**

The skill demands of three progressive dribbling drills that are appropriate for such sports as soccer, field hockey, or basketball are illustrated in Figure 2. Drill 1 merely requires the athlete to travel in a straight line from point A to point B and back; the athlete requires only a perceiving (level 1) or a patterning (level 2) level of ability to succeed. When obstacles are placed




1. Dribble in a straight line from point A to point B and back.
2. Dribble around stationary obstacles from point A to point B and back.
3. Dribble around moving obstacles (other athletes) from point A to point B and back.

Figure 2. Analysis of dribbling drill variations and their contribution to skill progression in soccer, field hockey, or basketball.




1. Athletes are only capable of the basic patterning movements of catching then throwing but are expected to catch balls of different levels and accuracy and then throw with speed and accuracy. Only one quarter of the group are having their needs met here. Goodness of fit = 25%.

2. Athletes are ready to move in various directions and catch a ball but are restricted to catching (in formation) throws of different levels and accuracy. Approximately one quarter of the group are having their needs met here. Goodness of fit = 25%.

3. Athletes are capable of moving in various directions and catching and are expected to move to the ball, catch it, and in the same motion throw to a designated spot. Approximately three-quarters of the group are having their needs met and an achievable challenge is presented. Goodness of fit = 75%.

Figure 3. "Goodness of fit" between drill requirements and athletes' present skill level in baseball softball.

between points A and B (drill 2), the skill level required for success escalates to levels 3 and 4 for the athlete must now adapt and refine the movement. If the obstacles are athletes who initiate the controlled interference motions toward the dribbler (drill 3), then practice at level 5 (varying) and even 6 and 7 (improvising and composing) can be created.

### Skill Range of the Athlete

In addition to the skill range of the drill, the coach must consider the skill range of the athlete. Analysis of the "goodness of fit" can then be made and the contribution of the drill to progression determined.

**To provide a challenging practice environment, the skill range of the drill selected should slightly exceed the skill level of the athlete.**

If the two ranges coincide perfectly, the drill is appropriate for the skill level (see Figure 3). Over- or under-shooting usually occurs, but if the skill range of the athlete exceeds the skill range of the drill (drill 1) or vice-versa (drill 2), practice time is wasted and the practice design needs attention. Ideally, the drill requirements should regularly slightly exceed the ability of the group (drill 3) to present an environment that is both challenging and conducive to growth.


### Summary

To produce skillful and versatile players capable of making appropriate decisions, coaches must be aware of the potential of the drills that they design. Theoretically sound teaching and planning concepts produce effective practice experiences rather than just "things to do."

In addition to a thorough knowledge of the sport involved, the coach must understand the general characteristics of skill and its sequential course of development. This permits the coach to optimize practice time and insure that the drills designed will stimulate skill development at the level appropriate to the athletes' needs.



### References

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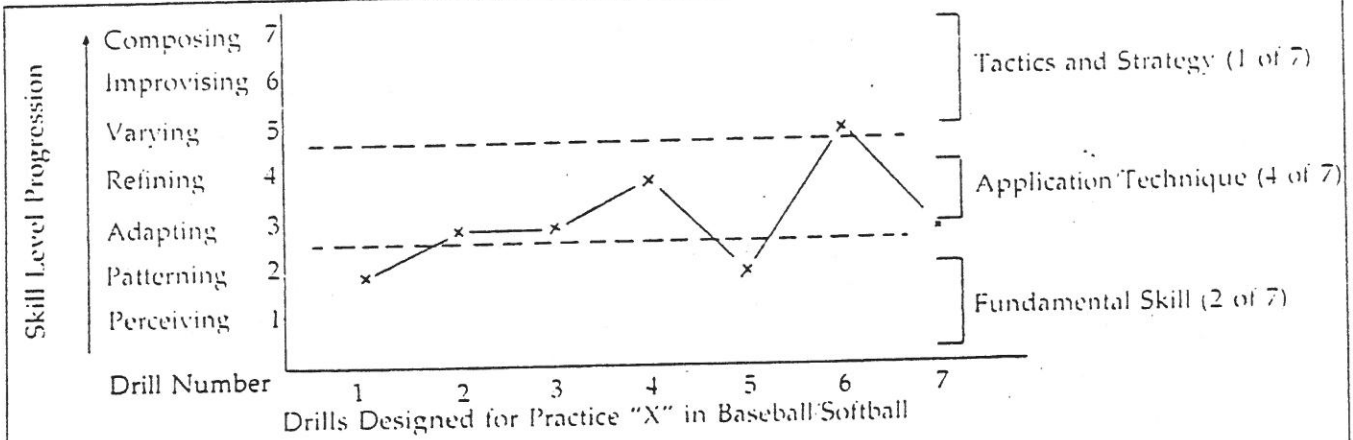
### For the Coach -- Recall and Insight

1. *How many levels of skill development are there?*
2. *Identify the three general stages of skill development.*
3. *What are the general characteristics of skill at each level of development?*
4. *What are the implications of a skill development framework for the design of a practice?*

Table 1
Jewett et al.'s Taxonomy of Skill Levels
(with examples from soccer)

| | | |
|---|---|---|
| 1. | Perceiving | Athlete demonstrates awareness of movement positions, stances, patterns, and skills. Athlete can identify or recognize the skill required (e.g., replicates a kicking pattern). Neither distance nor accuracy is focused upon. |
| 2. | Patterning | Athlete demonstrates the ability to execute the parts of the skill in the proper order or sequence (e.g., the kicking pattern is executed focusing upon the force, point of contact, and follow-through). |
| 3. | Adapting | Athlete can modify or adapt a patterned movement to meet changing situations (e.g., adjust position to control and kick an oncoming ball). |
| 4. | Refining | Athlete has acquired smooth, efficient control of the skill and demonstrates precision in game-like situations (e.g., the pattern of the kick is performed smoothly with the same force and accuracy each time). |
| 5. | Varying | Athlete develops options that may be unique or novel and performs specific movements (e.g., kicks from varying distances and positions from the goal). |
| 6. | Improvising | Athlete initiates novel movements or combinations of movements. Stimulated by the demands of the situation, the athlete shows "flair" (e.g., modifies pass patterns to take advantage of opponents' ill-placed positions). |
| 7. | Composing | Athlete creates unique movement designs or patterns (e.g., designs an offensive move -- kick at goal -- responding to a set pattern of the team's play). |

*Note.* Adapted from Jewett et al. (1971).




Drills Designed for Practice "X" in Baseball/Softball

1. Catching pattern practice.
2. Catching throws of different levels and accuracy.
3. Catch and continue pattern into a throw.
4. Move in various directions to catch.
5. Throwing pattern practice.
6. Move to ball, catch and throw (single-motion) to a spot.
7. Catching throws of various speeds.

Figure 1. Profile of skill level developed by drills used in baseball softball.