



What is Learning?

Learning is a relatively permanent change in behaviour due to practice or experience. Learning cannot be observed directly, however, performance as a result of learning is directly observable.

[Learning Styles]

- Many of us learn in different ways.
- It is important for an instructor to recognize that different individuals learn in different ways.
- Three learning styles include auditory, tactile (kinesthetic) and visual.

Visual Learners

- These learners need to see the teacher's body language and facial expression to fully understand the content of a lesson.
- They tend to prefer sitting at the front of the classroom to avoid visual obstructions (e.g. people's heads).
- They may think in pictures and learn best from visual displays including: diagrams, illustrated text books, overhead transparencies, videos, flipcharts and hand-outs.
- During a lecture or classroom discussion, visual learners often prefer to take detailed notes to absorb the information.

Auditory Learners

- They learn best through verbal lectures, discussions, talking things through and listening to what others have to say.
- Auditory learners interpret the underlying meanings of speech through listening to tone of voice, pitch, speed and other nuances.
- Written information may have little meaning until it is heard.
- These learners often benefit from reading text aloud and using a recording device.

Kinesthetic Learners

- Tactile/Kinesthetic persons learn best through a hands-on approach, actively exploring the physical world around them.
- They may find it hard to sit still for long periods and may become distracted by their need for activity and exploration.
- Learning through doing, moving and touching.

Factors Affecting Learning

- **Motivation**

The greater the degree of motivation, the greater the likelihood that learning will take place

Example: athletic scholarship, winning, achieving a championship, acceptance into university/college (school), do not want to disappoint, like to please coach, work ethic

Factors Affecting Learning

- **Rewards :**

INTRINSIC – internalization of success

→ doing your best; work ethic

EXTRINSIC – tangible rewards

→ As the learner matures, the focus usually shifts from extrinsic to intrinsic rewards.

ex. money, scholarship,
prize of some kind



Goals

- Challenging and attainable goals will help to stimulate learning.
- Goals must be clearly stated; sub-goals may add a sense accomplishment and keep athletes motivated and focused.



Feedback and Reinforcement

- Practice alone does not contribute to learning.
- Feedback is required to provide information about technical correctness of the movement and the accuracy of the response.

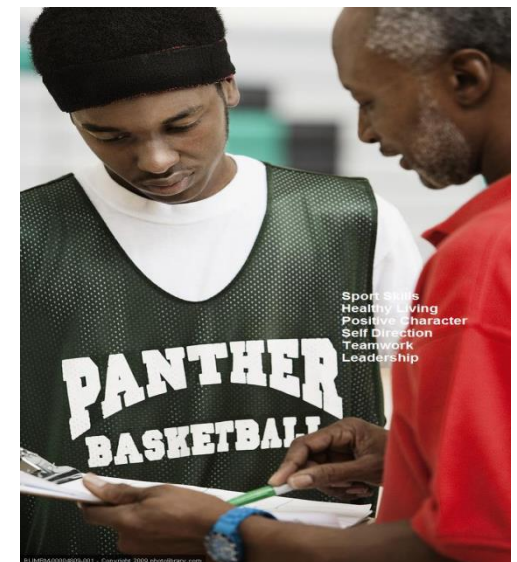
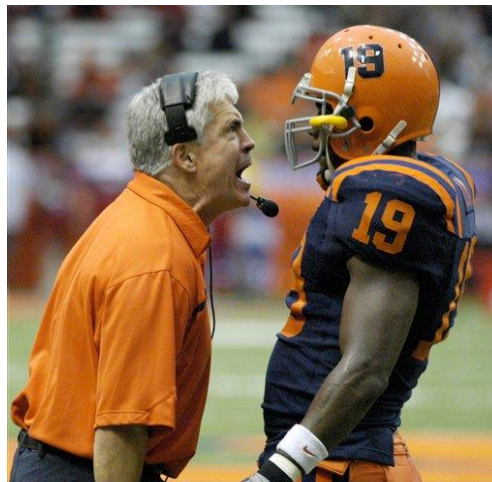
Feedback and Reinforcement

- Feedback should move from general to specific as the ability level increases.
- Reinforcement implies a strengthening of learning as a result of feedback.
- Positive, constructive feedback is most effective and should be used most frequently.



Feedback and Reinforcement

- Each coach has their own style in providing feedback to their athletes.
- Athlete respond differently to different styles as well.



[Stages of Skill Learning]

COGNITIVE LEARNING

- The individual understands the basics of playing the game.
- Large errors are usually committed.
- The learner talks themselves through the skill and must be completely focused on the task.
- Movements are slow, deliberate and lack timing.

[Stages of Skill Learning]

ASSOCIATIVE STAGE

- Individual elements of a skill are amalgamated into sub-units resulting in a smoother movement.
- Learners begin to refine skills and develop some awareness of the mistakes they are making.
- This leads to fewer and less pronounced errors.

[Stages of Skill Learning]

AUTONOMOUS STAGE

- The skill is performed without thinking about it; fast, smooth and coordinated.
- Performer can focus on accuracy and control.
- There is a greater level of self awareness.
- Athlete is more aware of mistakes they are making and how to correct them.

[Categories of Motor Skills]

- The **open/closed** distinction is important because it shows how much information must be processed in performing motor skills.
- These skills differ in terms of the environment in which the skills are performed and the goal of the skill.

[Open Movement Skills –]

- The performer must perceive the environment (area), decide the necessary action, execute the skill, evaluate the attempt and prepare for the next action within extremely limited time restrictions.



Closed Movement Skills -

- Performing a movement skill a particular way is the key to success.
- Technical correctness is the measure of success. The environment is unchanging.



Common Motor Learning Concepts

WHOLE VS. PART LEARNING

- The **whole method** refers to the process of learning the entire skill in one does.
- The **part method** involves learning the parts of the skill separately, then combining the parts to form a unified whole.

Common Motor Learning Concept 1: Whole vs. Part Learning

- Whole – learning how to swing a golf club by having them swing the club all at once.



- Part – learning how to swing a golf club by breaking down the skill into sections.



Common Motor Learning Concept 2: Blocked and Random Practice

- **Blocked practice** refers to taking all trials under the same conditions.
- Example: basketball – shooting the basketball from the same distance repeatedly.



Common Motor Learning Concept 2: Blocked and Random Practice

- **Random practice** refers to taking trials under varying conditions.
- Example: taking shots from a variety of different locations around the basket possibly with varying degrees of offensive pressure.



Common Motor Learning Concept 3: Massed and Distributed Practice

- **Massed Practice** involves taking attempts all at once.
- Example: taking 5 long jump attempts in a row – jump, go back to the starting area and go again, repeat several (5) times sequentially



Common Motor Learning Concept 3: Massed and Distributed Practice

- **Distributed practice** involves a substantial wait time between attempts.
- Example: taking a trial (long jump), going to the back of the line and waiting several minutes before getting your next turn.

Factors Affecting Skill Development

- Factors outside the control of the teacher/coach and the learner, can change rapidly, leading to errors in decision-making and subsequent actions.

Factors Affecting Skill Development (continued)

- Due to a wide range of factors affecting skill development, information can be misprocessed and even experienced competitors can make mistakes.
- Fatigue, nervousness, weather, poor motivation and distractions can all affect performance.

[What are the Key Elements?]

- Preliminary Movement
- Backswing or Recovery Movements
- Force Producing Movements
- Critical Instant
- Follow through