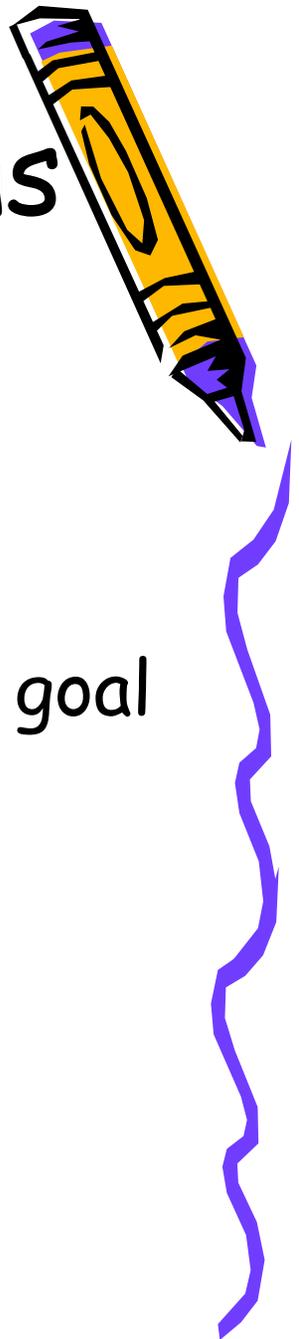
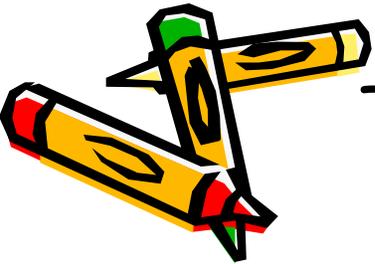


# How Children Acquire Skill

Dr. Ron Quinn  
Associate Professor  
Xavier University  
USYS National Instructor

# Primary Coaching Distinctions

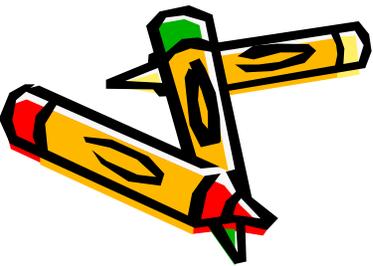
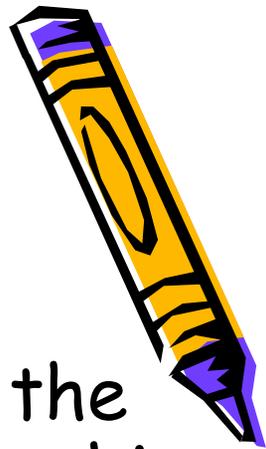
- Participation Sports Coach
  - Sports leadership
  - Sports teaching
  - Participation satisfaction primary goal
- Performance Sports Coach
  - Extensive preparation
  - Competition and result oriented
  - Intensive time commitment



# Coach - Centered Coaching

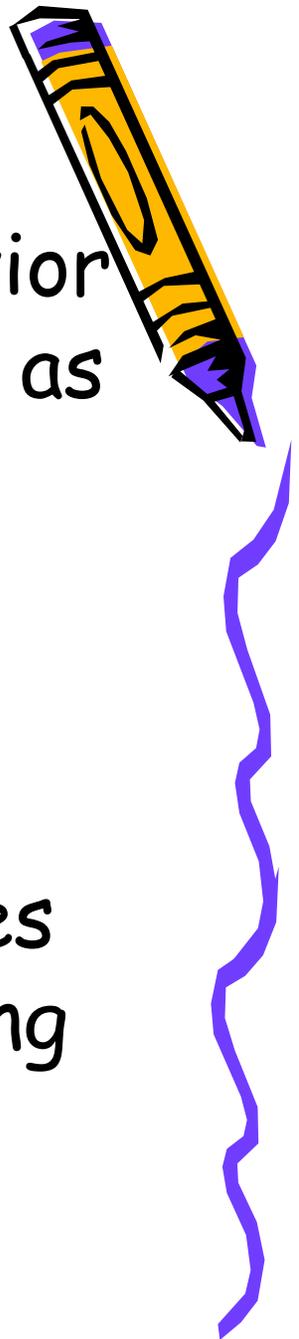
- Current Practices

- Coaches similar to leaders combine the power of their position with a leadership style.
- Creating a tendency for the coach to exploit their power by taking choice and control away from the athlete.
- Known as prescriptive or autocratic coaching.
- Kidman states this has mistakenly been viewed as an important element in coaching success. (p.12, 2001)

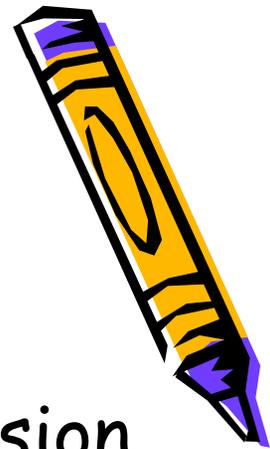


# A Prescriptive Coach-

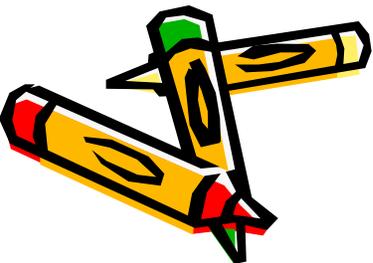
- Attempts to control athlete behavior in training and competition, as well as other aspects of the athletes life.
- Focus more on memorizing an appropriate response rather than understanding or problem solving.
- Athletes are viewed as commodities and become robotic in their thinking and actions.



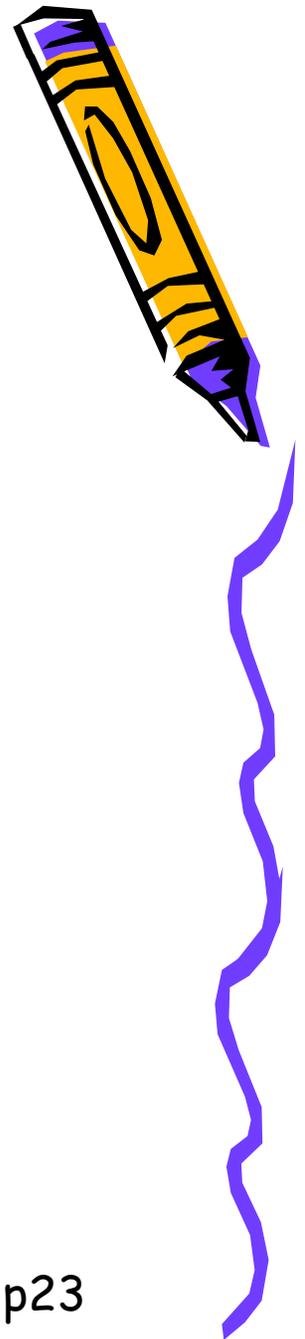
# A Athlete-Centered or Empowering Coach -



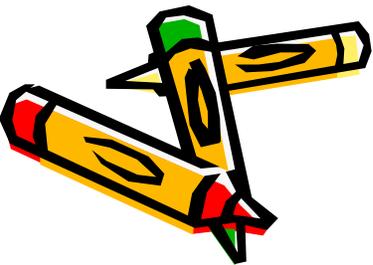
- Athletes gain & take ownership of decision making, knowledge, and development.
- Provides a sense of belonging and a shared sense of learning.
- Smoll & Smith (1989) suggest that no matter what coaching style is used, athletes respond better to supportive coaches rather than punitive coaches. (Kidman, p.13 2001)



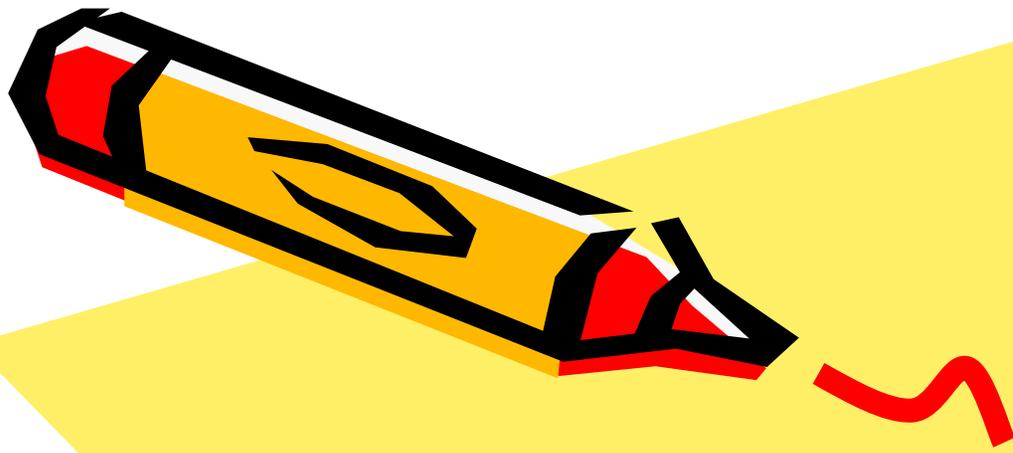
# Empowered athletes move through four stages



- Becoming self-aware
- Connecting and learning
- Taking action
- Contributing to their own learning



Arai (1997) as cited in Kidman (2005) p23



# Teaching Sport Skills

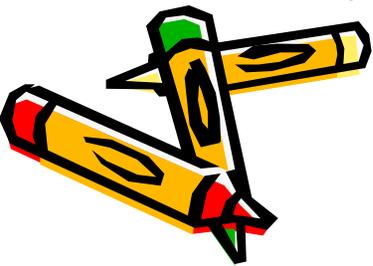
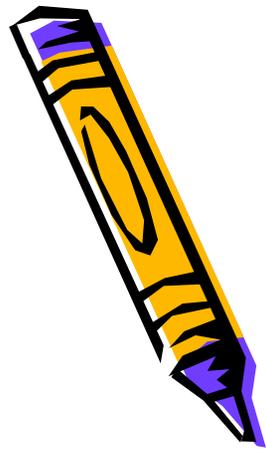
*Play may be the key to unlock many doors.*

Dr. Marianne Torbert, Leonard Gordon  
Institute for Human Growth Through Play,  
Temple University.



# FOUNDATIONS OF HUMAN MOVEMENT

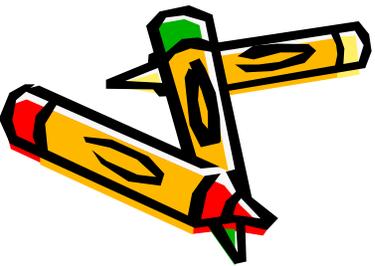
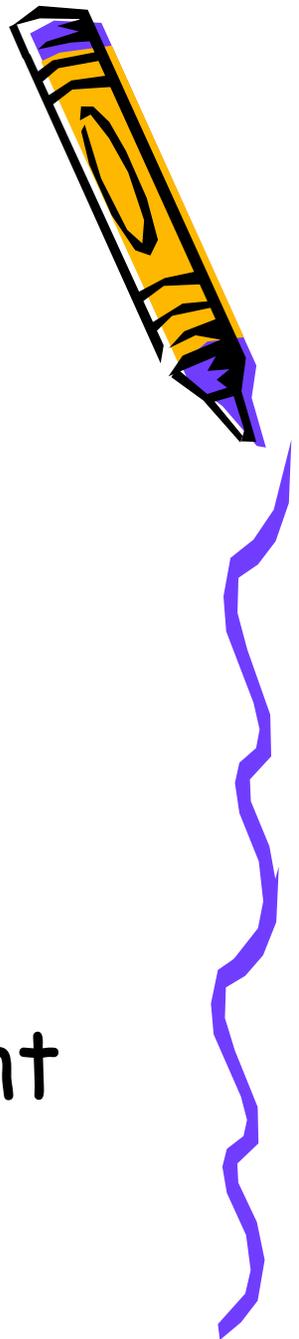
- Sensory Integration and Motor Development are the primary goals.
- Also realize that nothing happens to the human body in isolation. We experience life and our environment through all our senses - sight, touch, sound, taste and smell.
- Through movement experiences we primarily use visual and kinesthetic receptors.



# Primary Coaching Goals:

1. Trust
2. Autonomy
3. Initiative

- Trust
  - Reduce fear of failure
    - need consistency
  - Safe, secure environment
    - need familiarity



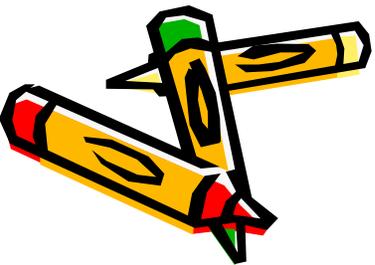
# AUTONOMY

- Independent
- Self-governing
- Self-reliant
- Self-determining
- Individual identity emerges
- Need opportunity to make choices
- Need opportunity to meet challenges
- Need opportunity to make decisions
- Need opportunity for self discovery through interaction with others
- Need opportunity to develop self-control and responsibility



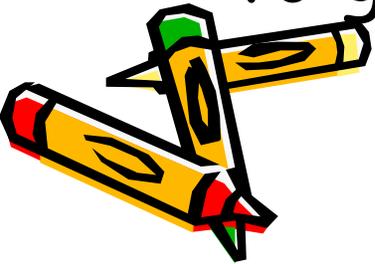
# INITIATIVE

- Once a child is grounded in *trust* and *autonomy*, then it becomes safe to assume more responsibility.
- Willingness to try new things
- Willingness to participate and contribute
- Willingness to take risks
- Perhaps assume a leadership role

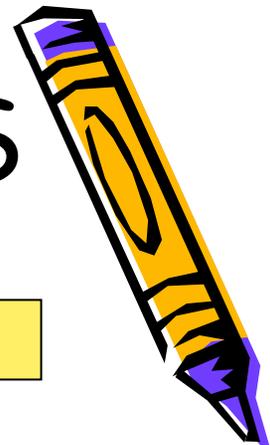


# Components of Skills

- Perceiving the relevant environmental features
- Deciding what to do and where and when to do it.
- Producing organized muscular activity to generate movements.



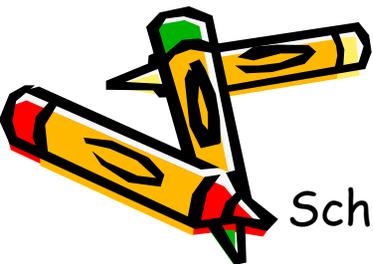
# SKILL CLASSIFICATIONS



## Open-Closed Skill Dimension

- Open Skills
  - Unpredictable environment
- Closed Skills
  - Predictable environment

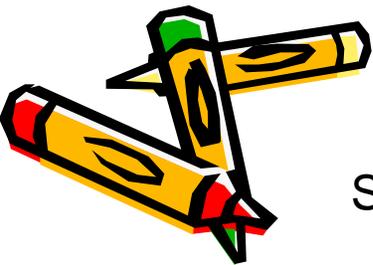
Closed skills	Open skills
Predictable environment	Unpredictable environment
Gymnastics Archery Typing	Walking a tightrope Steering a car Playing chess Playing tennis Wrestling Playing baseball Chasing a rabbit PLAYING SOCCER



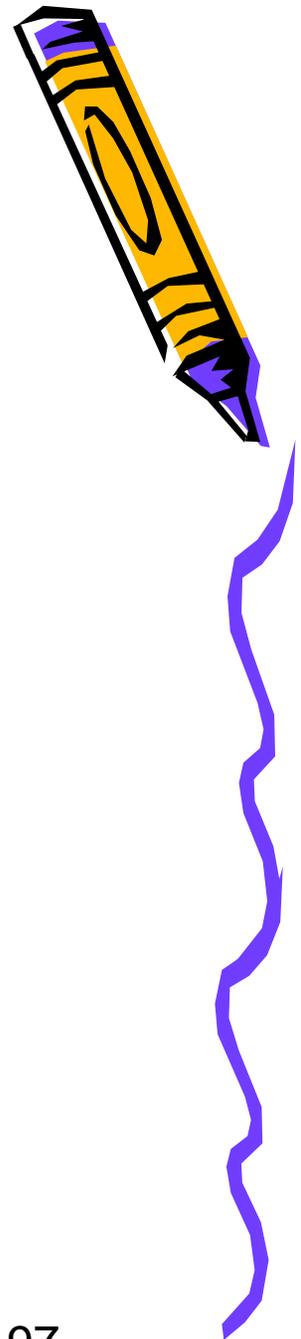
Schmidt, R. (1991) Motor Learning & Performance

# Preparation & Strategies for Designing Practice

- Stages of Learning
  - Verbal-Cognitive Stage
  - Motor Stage
  - Autonomous Stage

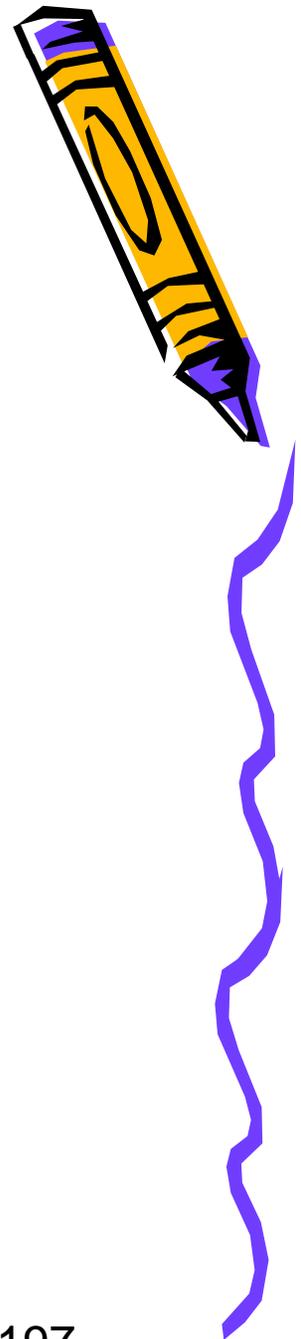
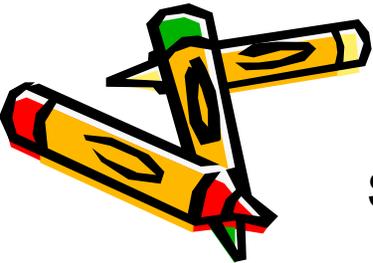


Schmidt, R. (1991) Motor Learning & Performance, p.171-197



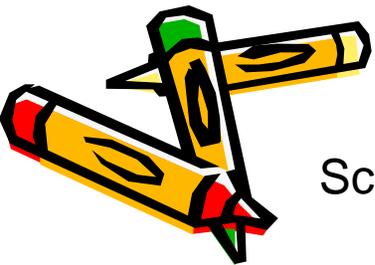
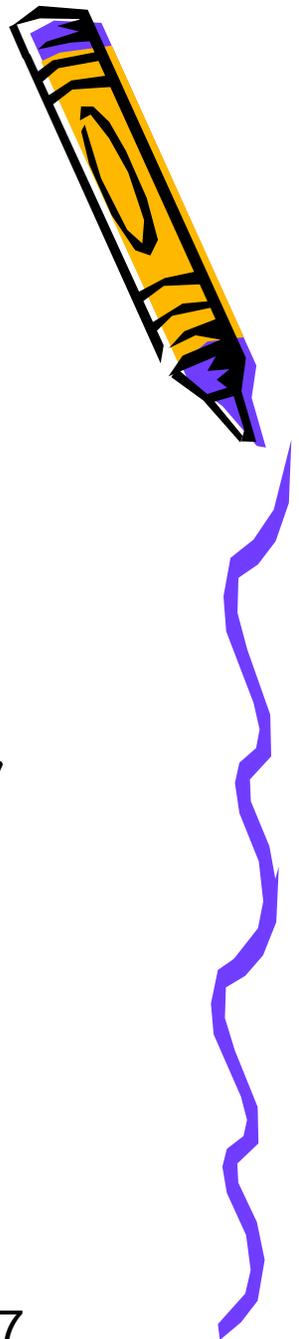
# Verbal-Cognitive Stage

- New task
- What type of questions are you asking yourself?
  - Overwhelmed by the number of decisions.
  - Where to stand, how to hold the racket, ready position, what do I do once I have the ball?
- Instructions hope to build on previous knowledge and experiences.



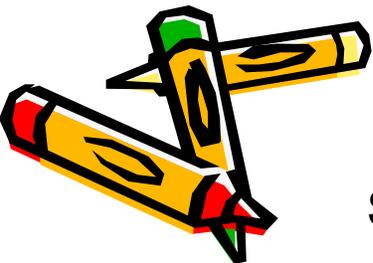
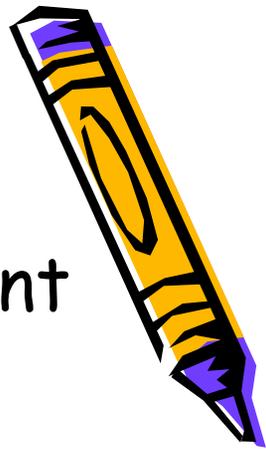
# Verbal-Cognitive Stage

- Characterized by a great deal of self-talk.
- Demands a great deal of attention preventing the processing of simultaneous activities.
- Such as a technique selection coupled by a tactical decision.



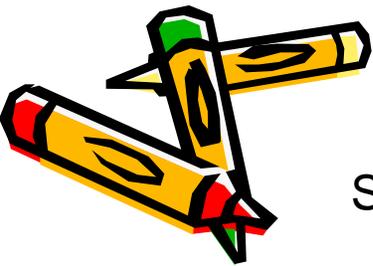
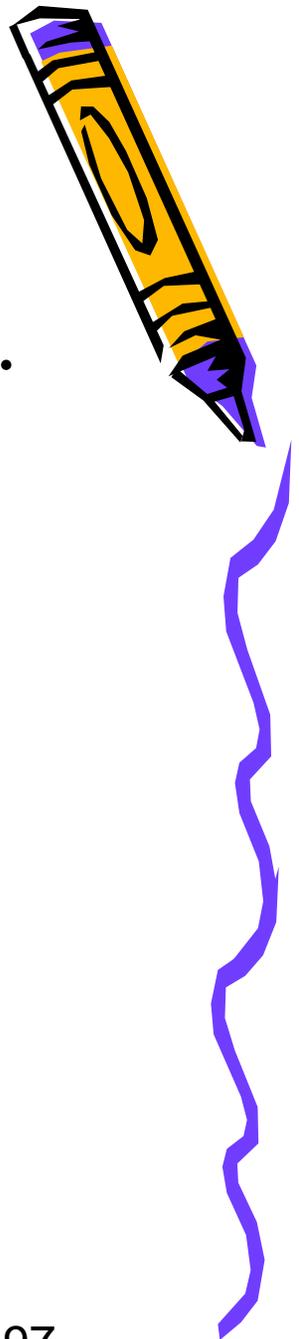
# Motor Stage

- Focus is on organizing an effect movement pattern.
- Self-talk lessens.
- Through trial and error and repeated trials, movement becomes more efficient.
- Performer discovers certain environmental cues.
- Anticipation begins to develop.
- Last much longer than the Verbal-Cognitive stage.

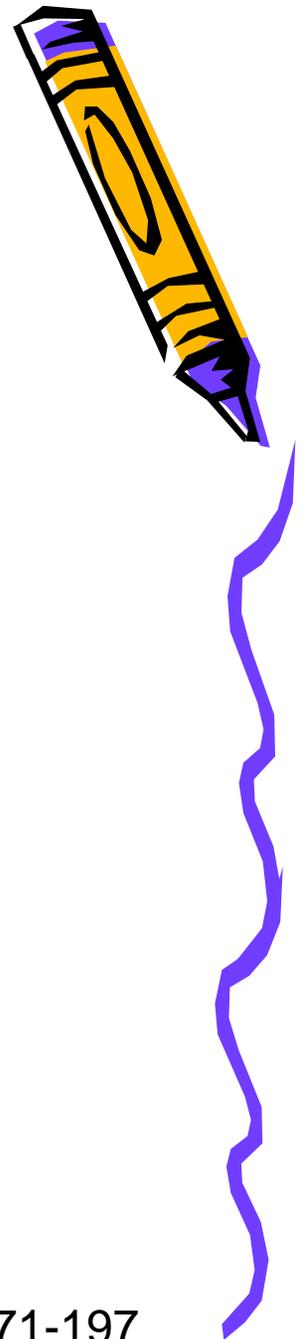


# Autonomous Stage

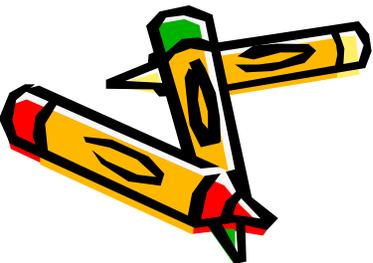
- Motor program is well developed.
- Able to program longer movement sequences.
- Attention demands greatly reduced.
- The movement and sensory analysis become automatic.



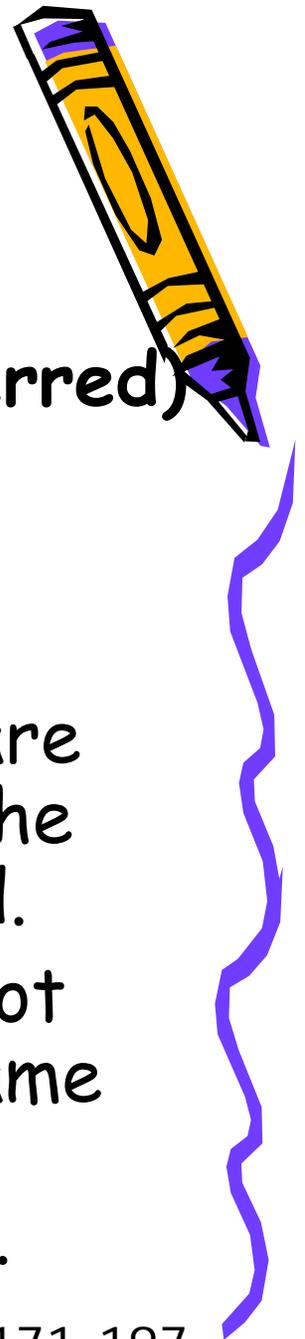
# Basic Principles of Practice



- Learning vs. performing during practice.
- Goal 1 - performing well
- Goal 2 - learning
- Are goals 1 & 2 compatible or in conflict?



# Blocked & Random Practice



- **Blocked**
- Practicing one skill completely before moving onto the next.
- Drill type of approach where technique is repeated over and over with minimal interruption.
- **Random (preferred)**
- Order of task presentation is randomized.
- Various tasks are mixed across the practice period.
- Athlete does not practice the same task on two separate trials.



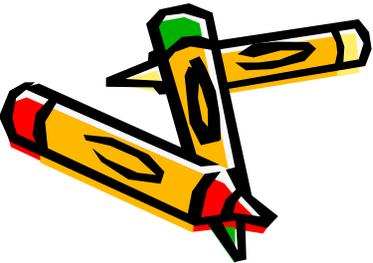
# Drills versus Game/Activities

## ■ *Drills*

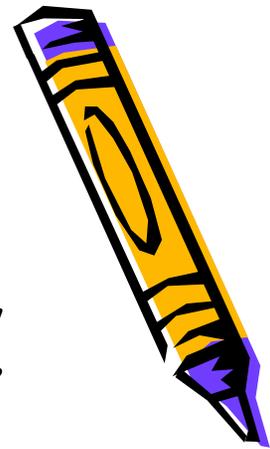
- Static
- Military
- Lines
- Boring
- No Thought
- Age Inappropriate

## ■ *Game/Activity*

- Dynamic
- Unstructured
- Free Movement
- Fun
- Decision Making
- Age Appropriate



# Did You Know



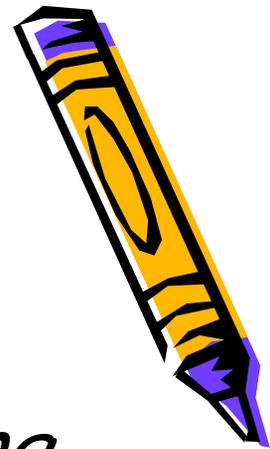
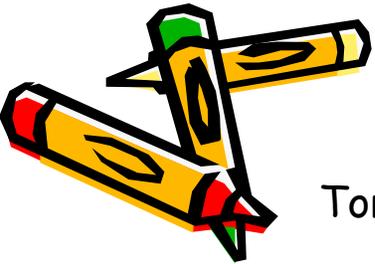
- *No one is destined to be unskilled.*
- *Understanding the keys to the mechanics of sport and play can greatly increase your success; at the same time it can reduce the time normally required to improve your skills.*



Torbert, M., (1982). *Secrets to Success in Sport & Play*. Prentice-Hall, Inc.

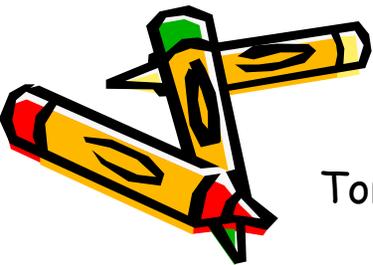
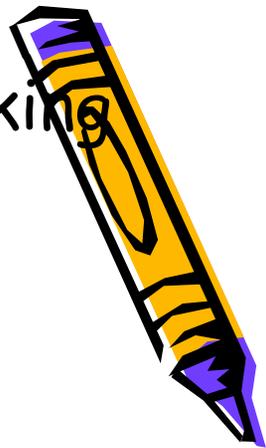
# Teaching & Learning

- *Remember that feelings are important to learning and changing.*
- Nothing happens in isolation.
- *Don't invest your identity in instant success. Mistakes are also a vital part of learning.*
- *Try to recognize improvement - even when it may seem minimal.*



# Building a learning progression - Encourage Thinking

- *Ask players to tell you about similarities between old and new activities.*
- *Ask players to relate mechanical principles to the objective of a particular known skill.*
- *Ask participants to relate principles to the objective of an unknown or new skill.*
- *Ask players to make decisions about how to do something based upon their "growing" understanding.*



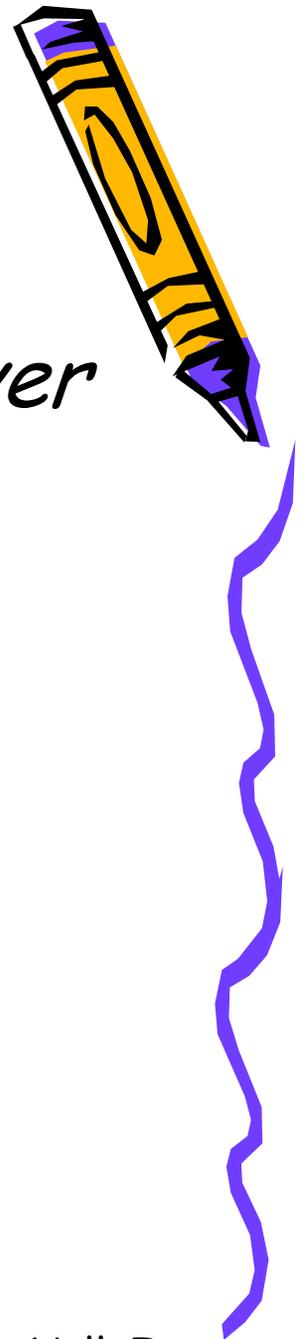
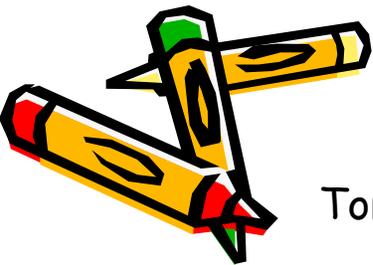
# Principles of Balance

- *Keep your weight centered over your base of support.*

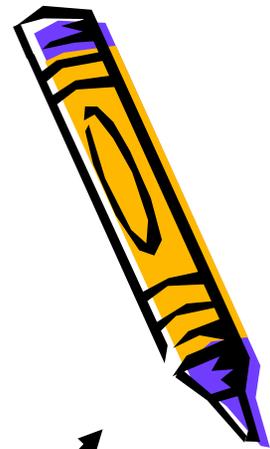
**C of G**



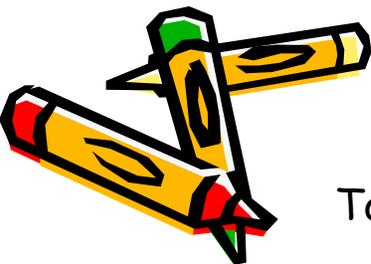
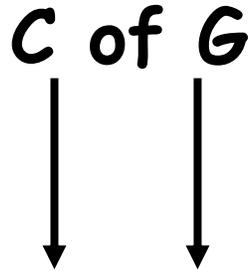
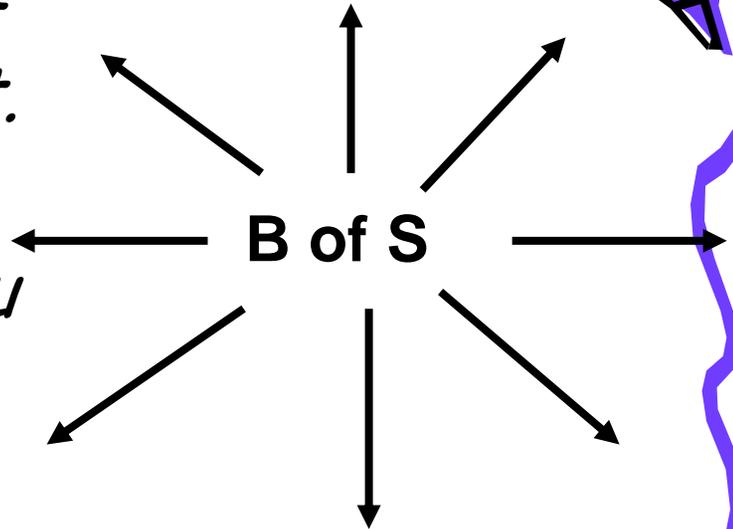
**B of S**



# Principles of Balance

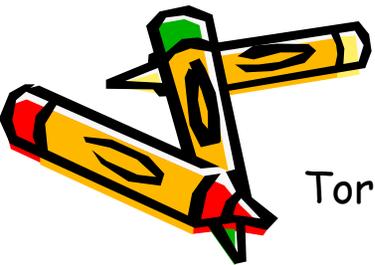
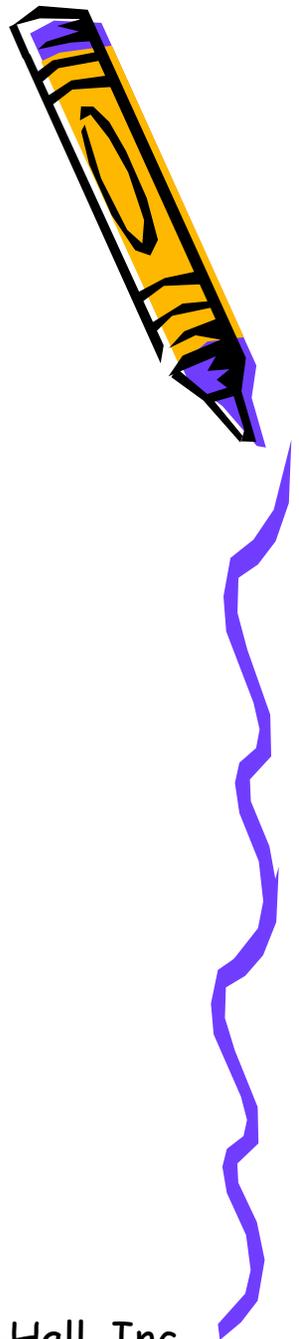


- *Increase the size of your foundation (base of support) - for example, spread your feet.*
- *Lower your weight (center of gravity) for example, bend your knees.*



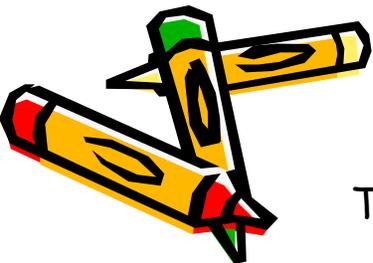
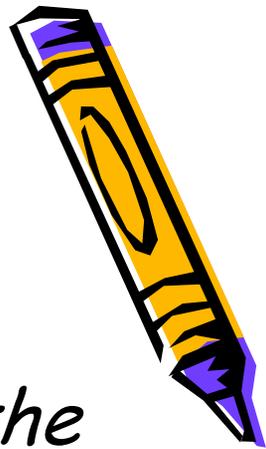
# Initiating Movement

- Getting ready to move
  - Are you physiologically ready?
  - Are you anatomically ready?
  - Stretch reflex response



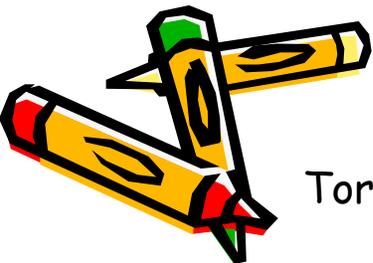
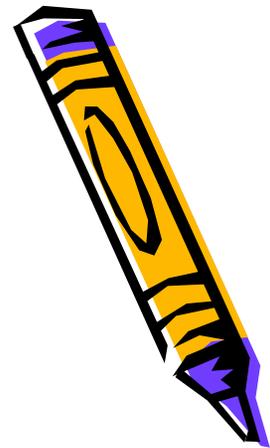
# Maximum Force Development

- *Opposition (involving opposite sides of the upper and lower body)*
- *Fully stretching the involved muscles before using them, by actions such as full backswing and the full trunk rotation.*
- *Weight transfer*
- *Follow-through*



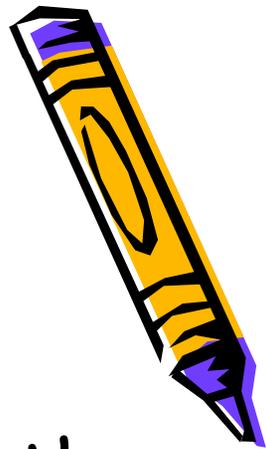
# ABSORBING FORCE

- *Giving or spreading the force.*



Torbert, M., (1982). *Secrets to Success in Sport & Play*. Prentice-Hall, Inc.

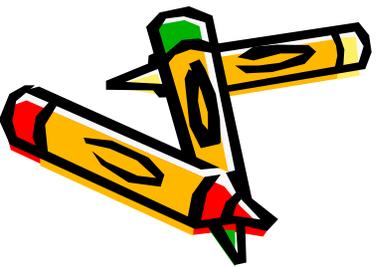
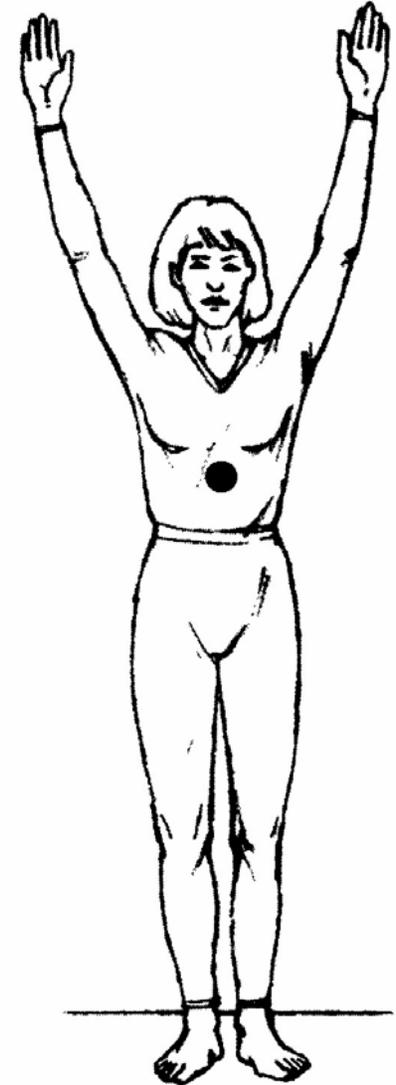
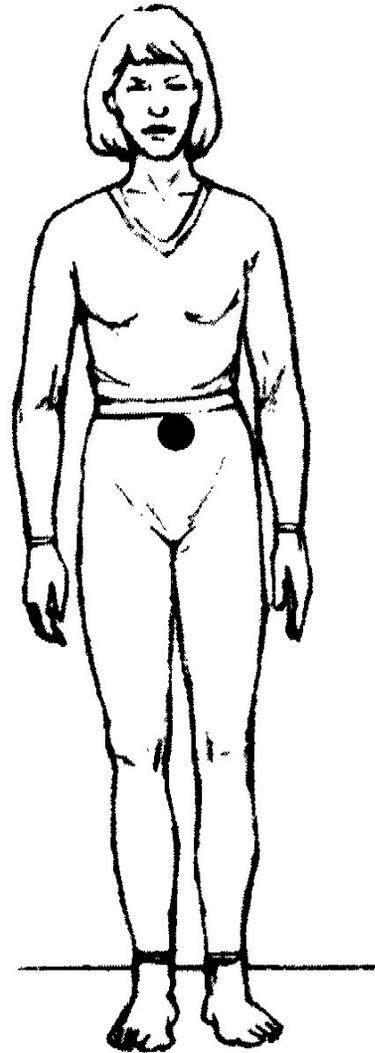
# The Human Body as a Projectile



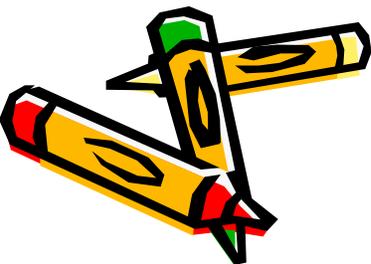
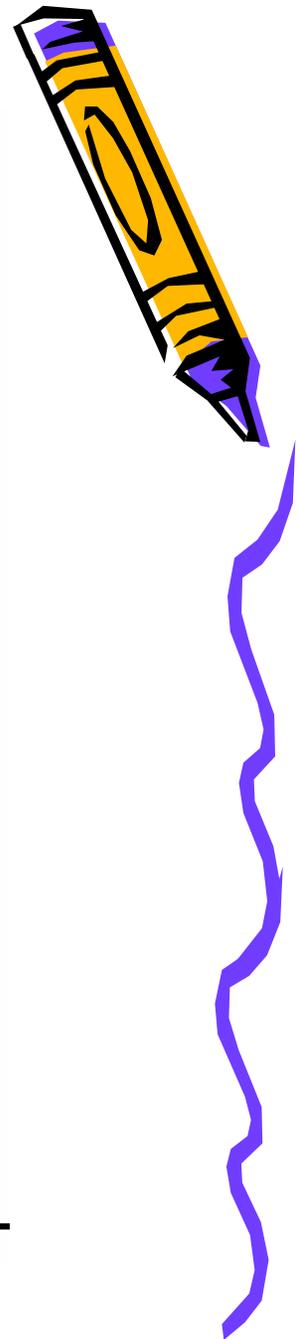
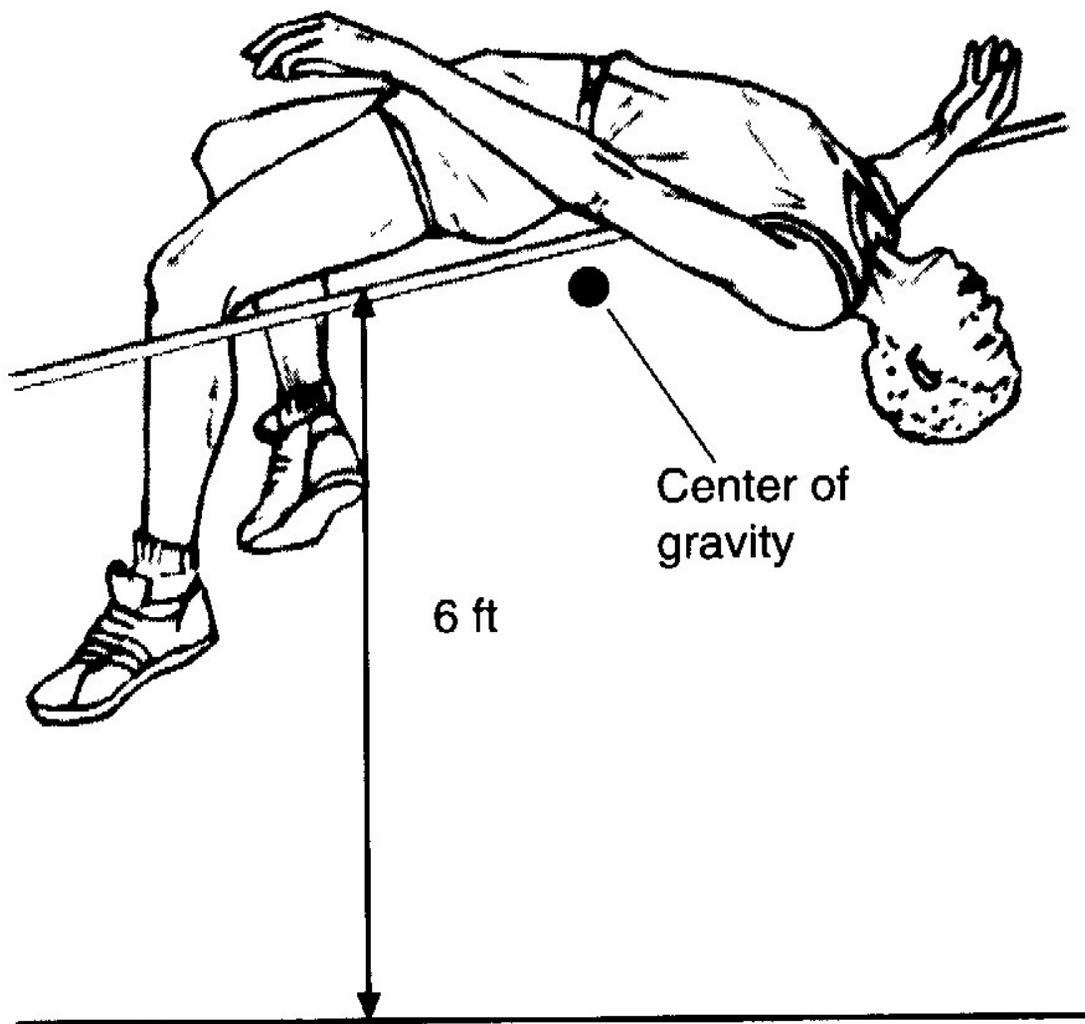
- Once your body leaves the ground the path of the center of gravity cannot be changed.
- You can however, modify your body parts around your center of gravity while you are in the air.



*Any positional change  
of the body relocates  
the center of gravity  
within the body*

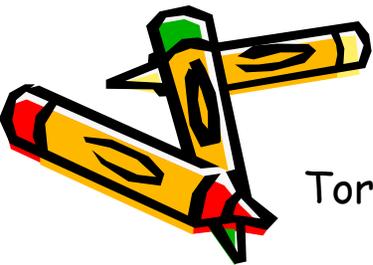
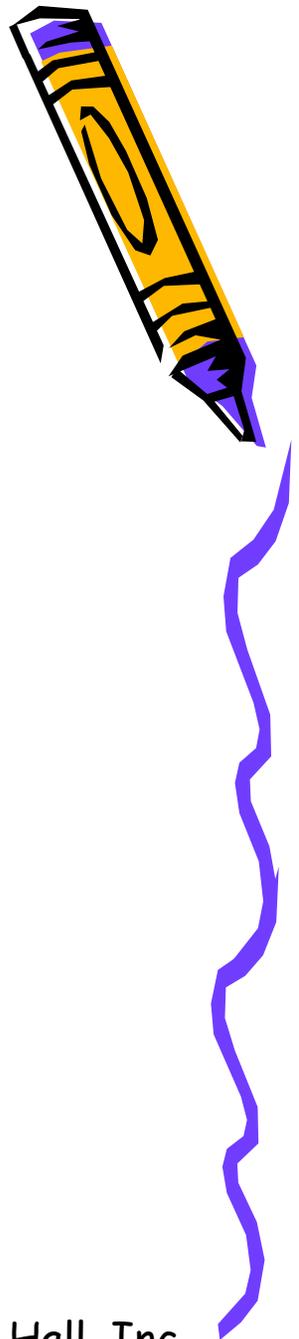


# Fosbury Flop



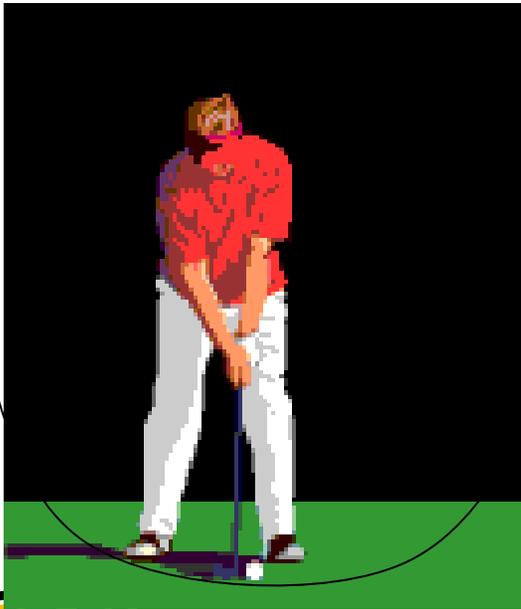
# Direction & Accuracy

- Direction is the application of force.
- Accuracy is the combination of force, timing, form, and direction.



# Factors that affect direction & accuracy

- Timing & flattening the swinging arc
  - Transferring weight
  - Leading with sequential body parts
  - Moving forward over a bent knee
  - Reaching out in the desired direction during follow-through

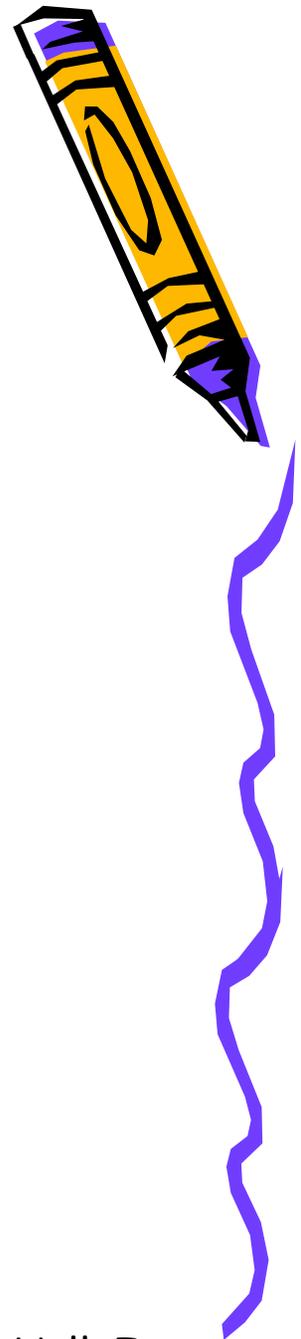
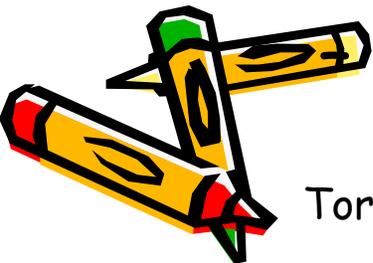


Torbert, M., (1982). *Secrets to Success in Sport & Play*. Prentice-Hall, Inc.

# The Athlete's Body

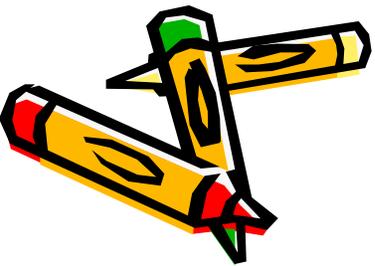
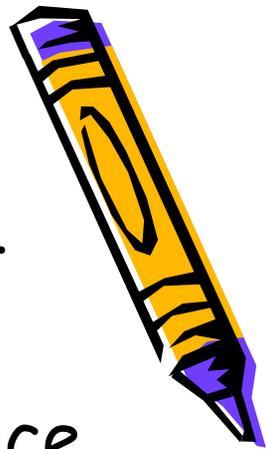
- Factors that can negatively affect their ability to execute directional control:
  - *Inability to stabilize or set body parts that create a foundation against which moving parts can push or pull;*
  - *Lack of good balance*
  - *Excessive tension*

*Extraneous movements*



# Summary

- The ability to acquire specific movement skills in the context of an ever changing environment, like soccer requires, patience, time, and a comfort level to take risks and make many mistakes.
- We must move from our thinking from, "this child doesn't have it, to this child will need more time."
- Soccer participation should be a life-time pursuit.



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