Motor learning: speed, accuracy, skill retention, skill acquisition

PracticePractice is the most important variable for learning. Practicing in a specific environment often leads to better performance. Benefits of PracticeDevelops capability to perform a skill. Improved perceptual skills. Improved attention through reduced capacity demands and reduced effector competition. Improves motor programs. Self-sufficient in error detection without instruction. ONMOTOR LEARNING: SPEED, ACCURACY, SKILL RETENTION, SKILL ACQUISITION SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder NowFitts 3 Learning StagesCognitive, Associative, and AutonomousDescribe error detection capabilityA person can detect errors independently and make corrections in the moment without the instructor. Makes the learner self-sufficient. What are things that should be incorporated into a practice session? Practice should have a practice session and a testing session. A practice session should encompass one way in which the person can achieve the task differently from before and then a testing session, in which the person does the task the best way they can.

Practice time, method, intentional practice, and the level of the learner. (Verbal) Cognitive stage characteristicsJerky, uncoordinated movement. Very little past experience. This stage encompasses goal identification, what to do, how to do it, when to do it. The practitioner wants the learner to transfer past learning information. Gains in proficiency are immense at this stage. Large number of errors. Self-talk. Associative Learning Stage (fixation)This stage encompasses effective movement patterns, performance improves, inconsistency decreasesAutonomous StageThis stage is considered the expert stage. Well developed motor programs. Automaticity in sensory analysis, decreased attention on how to perform the task, too much self analysis. Increased attention on use of task in context. Stages of Learning

GoalsConsiders perceptual-motor learning placed on how the cognitive processes invested in motor performance change as a function of practiceVerbal StatementsAs a practitioner, we must translate thought into action. What should practitioners do for cognitive learners? Reward effective and efficient methods, regardless of whether they score or not. Ex: efficient passing form, proper shooting form
(trial and error is going to over-rule your instruction)Characteristics of Motor/Associative StageThe learner begins to focus on the strategies of the skill. What am I going to do with this skill/ how and where do I use this skill? Takes the focus off of how do I do this to how do I use this? Begins to reduce self-talk, later stages, less improvement. Quick movements become possible. Begins to monitor your own feedback. Instructor responsibilities for motor stageFocus on fine motor errors, variety in practice, use far transfer, think about context, directing realistic goal setting and challenges, use of peer analysisInstructor responsibilities for autonomic stagesComplex strategies need to be assigned. Introduce different ways to use the skills. Activities which encourage refinement skills, contextual settings which encourage performance under pressure/stress