CHAPTER 3: THE THREE LEARNING LAWS

You may wonder why some people improve faster with some instructors than with others. This is because good instructors present the material in a way that helps students learn better and faster. To enhance your teaching, this chapter discusses the three major learning laws:

#1: YOU MUST CREATE THE DESIRE TO LEARN.
#2: YOU MUST RESPECT THE FACT THAT STUDENTS LEARN IN DIFFERENT WAYS.
#3: YOU MUST RESPECT THE FACT THAT STUDENTS LEARN AT DIFFERENT SPEEDS.

LAW #1: YOU MUST CREATE THE DESIRE TO LEARN

We learn faster when we *want* to learn something, when we are motivated to learn. Ideally, this motivation comes from inside the student. You can have a great impact on your students by stimulating, in them, the desire to learn. Nurture motivation by setting goals and by providing a stimulating learning environment:

SETTING GOALS:

Setting goals creates a pathway to mastering skills. Clear goals motivate learning by giving both player and Instructor the ability to measure success and maintain the right amount of challenge. Goals can be **performance** oriented (what the student's mind, body, and racquet do), or **result** oriented (what the ball does). The goal must be clear throughout the lesson.

INSTRUCTOR'S ON-COURT ACTIVITIES: TOPIC, DRILL, SKILL

When delivering the lesson, always remember to motivate your students. For example:

a) When presenting the topic:

SELL the topic by being enthusiastic and by presenting reasons why the topic is important

b) When presenting a skill/teaching point:

Link the development of the skill/teaching point to improved performance; make the skill look easy to learn by emphasizing only one key element at a time.

c) When setting-up the drill:

Set up the drill in a way that maximizes students' participation and challenge; this fulfills students' need to move and to measure themselves.

d) When running the drill:

Ensure variety in the drills to maintain students' interest; provide lots of positive feedback to motivate your students to pursue the task.

LAW #2: YOU MUST RESPECT THE FACT THAT STUDENTS LEARN IN DIFFERENT WAYS

People learn sporting activities three different ways: by listening to an explanation, by watching a demonstration, and/or by feeling the type of movement that is required. Therefore, consider these elements when presenting topics, developing skills, and organizing drills.

Learning Theory: **LEARNING MODES**

Players "take in" and store information through three different "Modes".

Visual: Information recorded through the eyes and recalled through mental images
Auditory: Information recorded through the ears (verbal instructions or sounds)
Kinesthetic: Information recorded through the sense a player has of his/her own body and how it feels when moving

Players use all three, but one will be dominant. Your goal is to *include all three* learning modes when presenting information.

PRESENTING A TOPIC, SKILL/TEACHING POINT AND OR DRILL:

To adapt our presentation to the way people learn we need to set up our presentation while considering all three Modes.

VISUAL MODE	**TOPIC :** • Give a clear picture of the role of the skill with realistic positioning on the court (e.g., show volleys at the net where they occur) • Simulate the playing situation **SKILL/TEACHING POINT :** • Give a clear, simple visual demonstration of the shot at a speed appropriate to the student's level • Pause to visually emphasize an important part of the skill • Give a picture of correct performance (if some students have mastered the skill, use them to demonstrate) **DRILL :** • Give a clear picture of the role of each participant: ***People Organization,*** where they go: ***Movement Patterns/Rotation***, and the ***Goal***. Areas, pathways, and positions can be marked with cones or markers. • Result **Goals *(targets)*** can also be marked with cones or markers for ***Scoring*** because students learn faster and concentrate better if they can focus on a goal. Targets make goals clear and easier to measure.

AUDITORY MODE	**TOPIC :** • Sell the topic by providing reasons why the topic is important **SKILL/TEACHING POINT :** • Highlight visual demonstrations with simple key words or phrases. (E.g., *"The path of the racquet goes up an escalator.")* These can be used later as memory tools. • Include the sounds of the skill (the ball impact, the footwork, etc.) • Use Cue Words ("triggers") that signal the start of a skill. E.g., You can use cue words to focus students on reception skills. Students can call out if the ball received is 'high' or 'low', 'short' or 'deep', etc. This speeds up their preparation and decision-making. • Use Command Words (instructions that give a feel or picture of what should be done). Command words are most commonly used for projection skills. All the moves and feelings of a skill can be associated with a simple Command Word or phrase that players and instructors can remember (to help them to focus better). E.g., for quick feedback to compare with correct performance, say: *"Remember to 'carry' the ball with your shoulder*. "Sound" words can also be used, e.g., *"Make your racquet 'swish' through the air for the right speed"*. **DRILL :** • Highlight visual demonstrations with simple key words or phrases. (E.g., *"Everyone rotate when I say, 'switch'."*) These can be used later as memory tools.
KINESTHETIC MODE	**SKILL/TEACHING POINT :** • Allow students to mimic your movements during the demonstration • Include key feelings the skill produces: e.g., *"This volley feels like you're 'catching' the ball."* (analogy) • When required, move the student's arm or racquet to provide the feel (body awareness) • Help awareness by limiting movement that should not occur during correct performance, e.g., *"Keep your feet behind this line."* (constraint) **DRILL :** • Run the students through a 'trial run' of the drill so they can experience the ***People Positioning, Movement Patterns, Feeding, Targets, Goals,*** and ***Rotation***

LAW #3: YOU MUST RESPECT THE FACT THAT STUDENTS LEARN AT DIFFERENT SPEEDS

To use a skill in match play, students must pass through three Stages of Learning. Students may be in different stages, or pass through them at different speeds. Keep in mind what to do with students in each stage. Lesson structure must be modified to account for different stages:

Learning Theory: **STAGES OF LEARNING**

Every player passes through three Stages of Learning before a skill can be automatically used in match play.

Stage #1 Understanding: In this stage, a player is introduced to the skill. To complete this stage, a player must both understand (mind), and feel (body) correct performance.

Stage #2 Repetition: In this stage, a player refines the skill and perfects it in drill situations. A German Tennis Federation study has shown that it takes approximately 150 repetitions of a skill to create a basic motor pattern. It requires anywhere between 8 to 21 sessions of 150 attempts each to make a skill automatic.

Stage #3 Automatic Differentiation: In this stage, a player works on integrating the skill with other options (decision-making) so it can be used at the right time in match play.

The Stage of Learning influences:

- The level of, and the reasons given for, the highlighted skills: ***(a) Presenting a Topic***
- Which skills to highlight: ***(b) Emphasizing a Skill***
- The way the drill is set-up: ***(c) Setting-up a Drill***
- When and how to increase or decrease the difficulty of a drill to maintain the optimal challenge: ***(d) Running the Drill***

Stage #1 Understanding: These elements must be in place for students to pass through this stage:

- **Clear demonstrations and explanations**: Students need a guide (a good demonstration) to follow to gain an understanding of how to perform a skill. The demonstration ties-in the visual mode of learning. Eighty percent of the initial understanding of a skill comes from the visual mode. The demonstration should include the auditory mode of learning. A concise verbal explanation highlights and complements the visual picture, creating a powerful combination of word & image (hearing and sight). The explanation should inform students "why" a skill is important. Add an analogy to complete the package by including the kinesthetic mode. For example, *"We are going to extend our racquet forward, like we are sweeping dishes off the end of an inclined table."*

- **Ask questions**: Use questions to assess *how much* students have understood. Questions help students to process information faster and allow you to work in cooperation *with* students, instead of simply talking *to* them.

- **Trial & Error**: Every attempt to perform a skill is a step towards mastering it. With many attempts, students can zero-in on the correct performance. Students need the freedom to experiment in a low-pressure environment.

Stage #2 Repetition: These elements must be in place for students to pass through this stage:

- **Increasing or decreasing skill difficulty**: In order to get the right *quality* of repetitions, it is important to adapt the difficulty of the skill to the student's level. Do this by changing the **reception** (change the ball received's height, distance, speed etc., or the amount of movement required). We can also change the **projection** by making the target or task (direction, distance, height, speed, spin) more demanding. This allows you to maintain the *optimal challenge* level. The objective is to repeat the skill enough to succeed 8 times out of 10 automatically.

Stage #3 Automatic Differentiation:

- **Process**: To get to this stage, we must allow our students to learn *when* to use skills (decision- making) through a process of:

  Learning one skill (1st skill)
  Learning a second option that could be used (2nd skill)
  Alternating use of the two skills
  Randomly mixing opportunities to use the skills so students can decide when to use each one.

CONCLUSION

Organize your teaching around the '3 Learning Laws' to help students shorten the learning process while building *correct performance*. Create an environment that both fosters a desire to learn and adapts to students' different learning speeds.

TEACHING CONSIDERATIONS FLOW CHART