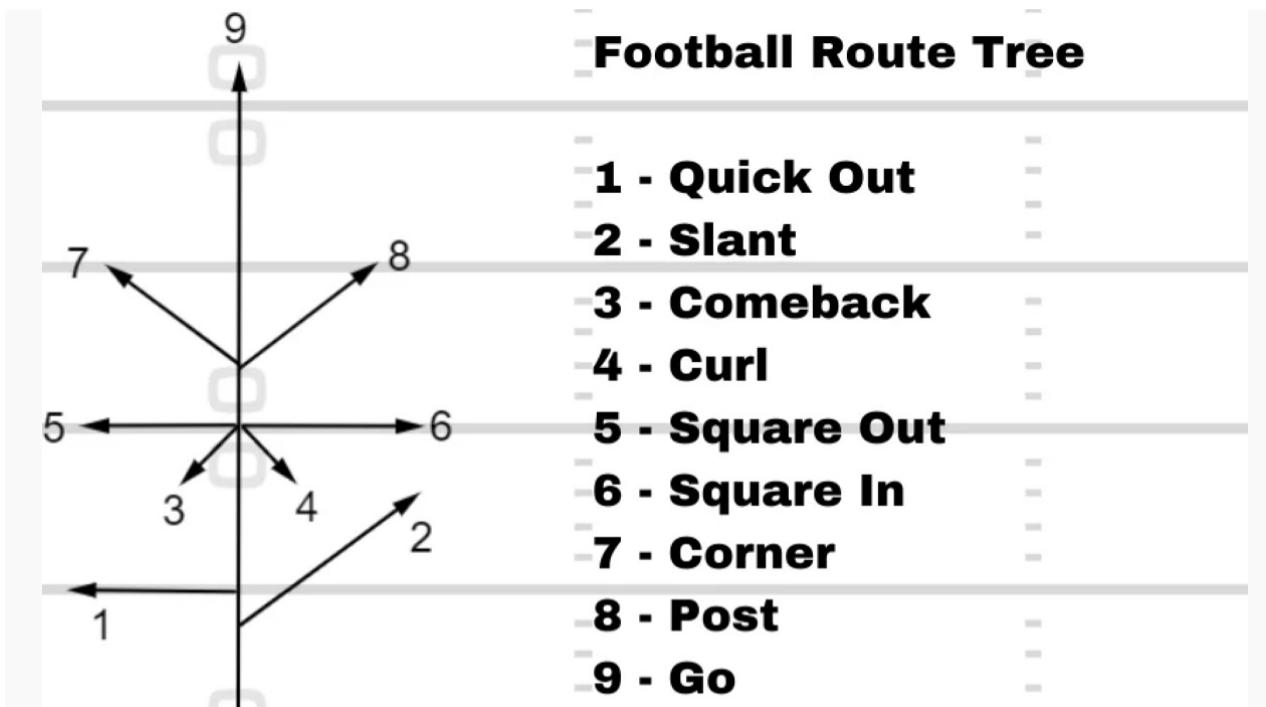


## Playbook (ai trainer )

### Route tree



This is a general route tree that coaches can build from and use for their players. Some coaches might have different depts for each route depending on system



coveraegs.pdf  
PDF Document  
42.0 KB

*(more detailed coverage breakdown sheet/ replace)*

### COVERAGE BREAKDOWN CHEAT SHEET (Expanded LimitintAI Coaching Detail)

#### Cover 0 – Pure Man, No Safety Help

All-out man coverage with **zero deep defenders**. Defenses in Cover 0 bring **heavy pressure**, typically sending 6 or more rushers, relying on tight man matchups. Corners and defensive backs will be **locked** into their man and not reading the QB's eyes — this means **pre-snap leverage recognition** is crucial.

- **QB Teaching Points:**

- Identify the blitz — look for defenders "mugged up" near the line of scrimmage and safeties creeping down.

- **Hot throws and quick routes are critical.** Slants, hitches, quick outs, and shallow crossers win fast.
  - Have a **built-in answer vs pressure** (e.g., sight-adjusts, RB swings, quick screens).
  - Maintain composure — defenses want to force hurried decisions; stay calm and deliver on rhythm.
  - **Drill Tip:** Run 3-step drop blitz-recognition drills with immediate checkdown reads.
  - **Real-world cue:** NFL and college teams use Cover 0 on third-and-medium to force quick throws and test QB awareness.
- 

### Cover 1 – Man Coverage with Single-High Safety

One safety deep, everyone else in man. Excellent disguise coverage because it can look like Cover 3 pre-snap. Defenses will press or trail and rely on **athletic DBs** to win one-on-one. The “hang” or “robber” player (usually a nickel or safety) can add pressure or sit in low hole zones.

- **QB Teaching Points:**
    - Identify the **middle-field safety** early. If he shades toward one hash, expect rotation or bracket coverage on the opposite side.
    - Use **motions, stacks, and rub routes** to create separation.
    - **Look off the safety** before throwing deep balls or seam routes to prevent him from poaching.
    - Check for linebackers or nickels “green-dogging” (adding to the rush if their man stays in to block).
  - **Drill Tip:** Practice throwing deep digs, posts, and fades using eye discipline to manipulate the safety.
- 

### Cover 2 – Two-High Safeties, Soft Middle

Two deep safeties split the field in half; corners play **cloud technique** (squat in the flat). The soft spot sits between the safeties and behind the corners — known as the **“Turkey Hole.”**

- **QB Teaching Points:**
    - Read the corners’ depth and hips — **if under 7 yards and facing the QB**, they’re likely in Cover 2.
    - Attack **holes between safeties** (seam benders, hole shots, dig/post combos).
    - Watch for corners to **“trap”** — dropping off late to jump out routes.
    - Use patience and eye discipline: look off the boundary safety before throwing over top of the corner.
  - **Drill Tip:** Rep high-low reads vs. Cover 2 using corner-out or smash concepts.
  - **Factual Coaching Insight:** Cover 2 is vulnerable to spacing and timing; most pro QBs exploit it with layered concepts that force defenders into conflict.
- 

### Cover 3 – One-High Safety with Three Deep Zones

Single-high middle-field safety with three-deep defenders and four underneath zones. Great for disguising pressure and stopping vertical routes. The “hang” player (curl/flat defender) determines where your read starts.

- **QB Teaching Points:**

- Pre-snap, identify **middle-field closed look** (one safety deep).
  - Confirm rotation post-snap — many defenses disguise Cover 3 by starting in two-high.
  - Flood the sideline with **3-level reads** (flat, out, corner) to stretch zone defenders.
  - **Look off the safety** to prevent him from jumping seam or post routes.
  - Identify the “hang” player — if he walks up, anticipate pressure off the edge.
  - **Drill Tip:** Practice rollouts with 3-level reads (flood concept) and safety manipulation drills.
  - **Pro Teaching Note:** Seattle’s “Legion of Boom” era used Cover 3 as a base, emphasizing disciplined depth and QB baiting — making eye manipulation critical.
- 

### Cover 4 – Quarters Coverage (Four Deep Defenders)

Both safeties and corners each take a deep quarter of the field. The strength of Cover 4 lies in its flexibility — it can play like zone or man depending on route releases. Safeties read the No. 2 receiver (inside WR) for run/pass keys.

- **QB Teaching Points:**
  - Recognize **balanced two-high shell** where safeties and corners align at equal depth (8–10 yards).
  - Be patient — coverage is designed to take away deep shots.
  - Attack underneath routes, spacing concepts, and run-pass options to pull safeties downhill.
  - Use play-action and crossing routes to distort safety responsibilities.
  - Corners often play “off” technique — anticipate open hitches and quick outs early.
- **Drill Tip:** Rep “stick” and “spacing” concepts versus Cover 4 looks.
- **Film Study Note:** NFL and college defenses use Quarters as a modern counter to spread offenses; understanding No. 2’s route read is vital for both safeties and QBs.
- 

## Defensive Fronts

### 1. Technique Numbers (Alignment)

These numbers describe how a defensive lineman positions himself relative to the offensive line. Understanding them is key to identifying front types and gap responsibilities.

- Even-numbered techniques (0, 2, 4, 6) refer to a defender **lined directly head-up** on an offensive lineman (center, guard, tackle, or tight end respectively). For example: a “4-technique” is aligned head up on the tackle. [Shakin The Southland+3](#)[Big Blue View+3](#)[247Sports+3](#)
- Odd-numbered techniques (1, 3, 5, 7, 9) refer to defenders shaded to the **outside or inside shoulder** of an offensive lineman. For example: a “3-technique” sits on the outside shoulder of a guard; a “5-technique” on the outside shoulder of a tackle. [Big Blue View+1](#)
- The “i” designation (e.g., 4i) means a shade over the **inside shoulder** of the lineman rather than directly head-up. [Big Blue View+1](#)

- Example usages:
  - A "0-technique" aligns directly over the center. [Big Blue View+1](#)
  - A "7-technique" aligns on the inside shoulder of the tight end. [Big Blue View+1](#)
  - A "9-technique" often means a defensive end or edge aligned well outside the tight end. [Big Blue View+1](#)

**Coaching Tip:** Teach your players to identify the technique number pre-snap as a cue to what gap or block responsibility they are likely to face.

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## 2. Gap Designations (A, B, C, D, E...)

Gaps are the spaces between offensive linemen, tight ends, and the edge of the formation. Defenders must account for these spaces in both run and pass defense.

- **A-Gap:** Space between the center and each guard. [Big Blue View+1](#)
- **B-Gap:** Between the guard and the tackle. [Big Blue View+1](#)
- **C-Gap:** Between the tackle and a tight end (or where the tight end would align). [Big Blue View+1](#)
- **D-Gap:** Outside of the tight end (or offense's end-man) — the "off-tackle" space. [Big Blue View](#)
- **E-Gap:** In formations with two tight ends on one side ("double-Y"), an extra gap is created outside the second tight end. [Big Blue View](#)

### Why it matters:

- Offenses that deploy extra personnel (like two tight ends) create more gaps (like the E-gap) which the defense must account for — increasing the complexity of gap control. [Big Blue View](#)
  - Understanding gap naming helps coaches and players communicate responsibilities clearly (e.g., "You're A-gap, I'm B-gap") and simplifies load-versus-fill assignments.
- 

## 3. Gap Control Philosophies (1-Gap vs 2-Gap)

How a defensive front chooses to **control** or **attack** gaps is a defining characteristic of its style.

- **1-Gap System:** Each defensive lineman is responsible for one gap — they penetrate aggressively into their gap and attempt to disrupt before blockers can engage fully. Example: many 4-3 systems. [Shakin The Southland](#)
- **2-Gap System:** A lineman controls the gap on either side of a blocker by engaging, absorbing, and reading his life — freeing up linebackers to flow to the ball. Often seen in heavier, run-focused fronts. [Shakin The Southland+1](#)
- Some defenses use hybrid approaches (sometimes referred to as "gap-and-a-half") where a lineman is primarily one-gap but is tasked to help a second gap when needed. [Bleeding Green Nation](#)

### Coaching Application:

- If you want your DL to be **penetrative and disruptive**, teach a 1-gap scheme: emphasis on "shooting your gap," reading quickly, and making plays in the backfield.
  - If you want your DL to **anchor and control**, teach a 2-gap scheme: emphasis on reading, block-occupation, funneling to linebackers, and being stout vs run.
  - Your choice depends on personnel, opponent tendencies, and your defensive philosophy.
- 

## 4. Putting It Together: Technique + Gap Responsibility

When you combine technique and gap, you get a full picture of what a defender is aligned to do.

- Example: A defender in a "3-technique" (outside shoulder of guard) aligned in the B-gap is often meant to **shoot the B-gap** in a 1-gap scheme.
- Example: A "4i-technique" (inside shoulder of tackle) may be asked to cover the A-gap or assist B-gap depending on the front. [Big Blue View](#)
- Teaching point: Before the snap, ask your players to identify:
  1. My technique number?
  2. Which gap am I responsible for?
  3. Is this front 1-gap or 2-gap?
  4. Where is my help (linebacker, safety, edge)?

This pre-snap recognition allows the defense to be more reactive rather than purely reactive.

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## 5. Why This Matters for Offensive AND Defensive Coaches

- For **defensive coaches**, teaching technique-and-gap awareness creates more discipline, fewer assignment breakdowns, and better robo-calls when the offense shifts personnel or formation.
- For **offensive coaches**, knowing opponent front will help you:
  - Identify where to attack (which gap might be weaker)
  - Understand how to count its techniques (so you can scheme double-teams or blocks accordingly)
  - Create mis-direction schemes or motion to force defensive mis-alignment

**Example:** When an offense uses two tight ends to create an E-gap, a defense that hasn't prepared for the extra gap may be out-numbered and vulnerable. [Big Blue View](#)

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## LimitintAI Quarterback Fundamentals: Dropback Mechanics

## 1. Stance & Pre-Snap Posture

A QB's stance decides how fast and clean he can get into his drop.

### Key Points:

- Feet shoulder-width apart, slight stagger with throwing-side foot back.
- Knees relaxed, not locked.
- Weight balanced on the balls of the feet — not on heels.
- Hands: top hand lightly over the bottom hand on the center, elbows tucked.
- Eyes up scanning coverage, *never locked on the snap point*.

### Why it matters:

A balanced stance keeps the QB from wasting steps and prevents false movement that slows the drop.

NFL QBs train posture first because everything after depends on balance.

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## 2. First Step (The Trigger Step)

The first step is the most important in dropback mechanics — it sets rhythm, depth, and direction.

### Coaching Details:

- The first step should be fast, clean, and **gain ground** straight back.
- Heel should barely kiss the turf; avoid long, looping steps.
- Shoulders must stay level — no bobbing or rising up.
- Ball snaps back to sternum immediately on the first step (protect the ball).

### Common Error:

Over-striding, which slows the drop and causes drifting in the pocket.

---

## 3. Drop Types

### Three-Step Drop

Used for quick game (slants, hitches, outs, quick seams).

### Mechanics:

- Step 1: Big trigger step gaining good ground.
- Steps 2 & 3: Smaller, quicker steps to gather & balance.

- Should hit the top of the drop with **feet in throwing position**, ready to fire.

#### **Teaching Cue:**

"Quick rhythm — big, quick, plant."

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## **Five-Step Drop**

Used for intermediate concepts: digs, curls, comebacks, deep outs.

#### **Mechanics:**

- Step 1: Big trigger step
- Steps 2-4: Controlled, smooth ground-gaining steps
- Step 5: Plant foot down and ready to throw
- Shoulders stay square downfield

#### **Teaching Cue:**

"Smooth to the spot, violent on the throw."

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## **Seven-Step Drop**

Used for deeper timing routes and max-protect concepts.

#### **Mechanics:**

- Must be smooth and not rushed — deeper routes require timing
- Feet stay under hips; no long reaching steps
- Finish with a balanced, loaded base ready to hitch if needed

#### **Teaching Cue:**

"Reach depth without floating."

---

## **4. Base at the Top of the Drop**

Once the QB hits the top of the drop, he must land in a base that allows full-field reads and controlled movement.

#### **Attributes of a proper base:**

- Feet slightly wider than shoulder width
- Weight inside the knees, not drifting outward
- Toes pointed slightly inward to avoid opening the hips early
- Ball carriage: elbow tight, ball at chest height

## Why it matters:

Your base is your "launch pad."

A bad base means inconsistent accuracy.

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## 5. Pocket Movement (Climb, Reset, Escape)

NFL coaches break pocket movement into three categories.

### Climb

- Step up into the pocket with two short, quick steps
- Keep shoulders level; do not hop
- Eyes stay downfield at all times

### Reset

- After moving, the QB must reset his base quickly
- Feet back under hips
- No crossing feet — maintain stability

### Escape

- If the edge collapses, escape *with purpose*
  - Maintain throwing posture while moving
  - Keep ball loaded at chest, not dangling
- 

## 6. Timing & Rhythm

Every drop is tied to the route concept.

- Quick game = rhythm throw on step 1 or step 3
- Intermediate = hitch off the fifth step
- Deep = hitch off the seventh step or slide in pocket

### NFL Coaching Note:

A QB shouldn't "look for open receivers."

He should throw on time to the window the route is designed to create.

---

## 7. Shoulder Level & Hip Alignment

The video emphasizes posture more than anything.

#### **Key Mechanics:**

- Shoulders parallel to the ground
- Hips square to the LOS during the drop
- Body stays compact — no flailing elbows
- Nose over toes — athletic posture

#### **Why:**

If the shoulders rise and fall during the drop, accuracy drops dramatically.

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## **8. Ball Security Mechanics**

While dropping:

- Two hands on the ball
- "Tight carriage" — ball stays close to the body
- No swinging or drifting of the ball away from frame
- Elbow tucked to prevent punch-outs

This is a major coaching point in the NFL: **"Protect the ball with your life."**

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## **9. Eye Discipline**

Coaches stress that eyes must work independent from feet.

#### **Eye Rules:**

- Pre-snap: Identify shell, leverage, threats
- Mid-drop: Eyes downfield locking into progression
- On plant: Eyes move defenders, not the arm

NFL Coaching Cue:

"Your eyes create space. Your feet deliver the ball."

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## **10. Finishing Mechanics (Throw-Ready Position)**

At the end of any drop, the QB should always:

- Have a clean base
- Have shoulders loaded

- Be ready to drive into the throw
- Be able to deliver immediately or hitch into the next window

If the plant foot is off-line, the throw will miss.

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## **LIMITINTAI – DROPOUT EXPLANATION USING THE QB TIME-CLOCK SYSTEM (BIG + GATHER Method)**

Quarterback footwork is a timing mechanism.

Every step a QB takes matches the timing of a route concept.

To teach this clearly, LimitintAI uses a **QB Time Clock** where every foot strike equals a clock tick AND is categorized as either a **BIG step** (explosive, ground-gaining) or a **GATHER step** (control/balance).

---

### **3-STEP DROP (Quick Game)**

#### **Time Clock: 1...2...3**

#### **Footwork Structure: 1 BIG, 2 GATHERS**

Routes: slant, hitch, quick outs, stick, choice routes.

The 3-step drop is built for instant rhythm — catch, separate, throw. Footwork must be compact and efficient.

---

### **Clock Breakdown + Footwork Mechanics**

#### **1 = BIG STEP**

- First and ONLY big step in the 3-step drop.
- Explosive off the LOS.
- Gains the majority of the depth.
- Shoulders remain level; no vertical bounce.

#### **2 = GATHER STEP**

- Short, balanced step that begins to tighten the base.
- Feet stay under the hips.

- QB's eyes transition into the read.

### **3 = GATHER / PLANT**

- Final gather sets the base for the throw.
  - QB must land loaded and ready to release IMMEDIATELY.
- 

### **TIME-TO-THROW RULE (Quick Game)**

| "Big – gather – gather – BALL."

No hitch.

No drift.

Ball must be out on the third clock tick.

---

### **5-STEP DROP (Intermediate Game)**

**Time Clock: 1...2...3...4...5**

#### **Footwork Structure: 3 BIGS, 2 GATHERS**

Routes: curls, digs, comebacks, deep outs, smash variations.

The 5-step drop blends depth, timing, and balance.

Perfect for intermediate windows.

---

### **Clock Breakdown + Footwork Mechanics**

#### **1 = BIG STEP**

- Longest, most aggressive step.
- Creates separation from edge defenders.

#### **2 = BIG STEP**

- Continues to gain ground.
- Body stays relaxed and controlled.

#### **3 = BIG STEP**

- Last explosive step to reach final travel speed.
- QB should now be at full dropback rhythm.

#### **4 = GATHER STEP**

- Begins to tighten the posture.
- Hips load for the throw.
- Eyes confirm progression.

#### **5 = GATHER / PLANT**

- Final gather step sets the base.
  - QB is in perfect throwing position.
- 

### **TIME-TO-THROW RULE (Intermediate Game)**

Two timing options:

#### **1. Rhythm Throw**

| "Big-big-big – gather – gather – BALL."

#### **2. 1-Hitch Throw**

For deeper intermediate routes:

| "Big-big-big – gather – gather – HITCH – BALL."

The QB must know which timing fits the concept.

---

### **7-STEP DROP (Deep Concepts / Play-Action Shot Game)**

**Time Clock: 1...2...3...4...5...6...7**

#### **Footwork Structure: 5 BIGS, 2 GATHERS**

Routes: post, post-dig, deep outs, deep crossers, double moves, shot plays.

This is the longest, most technically demanding drop.

Footwork must be smooth, fast, and balanced.

---

## Clock Breakdown + Footwork Mechanics

### 1 = BIG STEP

- Explosive and directional.
- Gets QB off the LOS quickly.

### 2 = BIG STEP

- Smooth depth-gaining step.
- Keep shoulders level.

### 3 = BIG STEP

- Maintain tempo without over-striding.

### 4 = BIG STEP

- Feet remain under the hips; no reaching.

### 5 = BIG STEP

- Final explosive step.
- QB should be at maximum dropback depth.

### 6 = GATHER STEP

- Begins to settle the body.
- Lowers hips into throwing posture.

### 7 = GATHER / PLANT

- Final gather sets the throwing platform.
- QB is loaded and ready for:
  - Rhythm throw
  - Hitch
  - Climb and throw

---

## TIME-TO-THROW RULE (Deep Game)

Deep timing routes usually require:

### Rhythm Throw

| "Big-big-big-big – gather – gather – BALL."

## Hitch Timing

For deeper combinations:

| "Big-big-big-big-big – gather – gather – HITCH – BALL."

If pressure forces movement:

| "Big-big-big-big-big – gather – gather – CLIMB – BALL."

## LimitintAI – Unified Dropback Time Clock + Big/Gather Chart

Drop Type	Foot Sequence (Clock)	Big/Gather Structure	When Ball Comes Out	Timing Style
3-Step	1-2-3	1 BIG, 2 GATHERS	Step 3	Pure Rhythm
5-Step (Rhythm)	1-2-3-4-5	3 BIGS, 2 GATHERS	Step 5	Rhythm Timing
5-Step (1 Hitch)	1-2-3-4-5-HITCH	3 BIGS, 2 GATHERS + Hitch	Hitch → Throw	Rhythm + Timing
7-Step (Rhythm)	1-2-3-4-5-6-7	5 BIGS, 2 GATHERS	Step 7	Long Rhythm
7-Step (Hitch)	1-2-3-4-5-6-7-HITCH	5 BIGS, 2 GATHERS + Hitch	Hitch → Throw	Deep Timing

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## LimitintAI Coaching Cues

For all dropbacks:

- Shoulders level
- internal clock in head at all times( if your first read/ second read is not there and you feel pressure ( extend the paly with your legs in order to help your team extend the drive instead of forcing something into coverage. (Every foot strike = a clock tick)
- Ball tight to chest/ dont squeeze ball to tight, the sweet spot is right under the chin, this allows you to keep your wrist high so that you cna turn the ball over faster instead of having to drop your elbow and then bring it back up into a throwing motion(longer motion) kepping the ball higher will allow a quicker release for guys looking to get the ball out faster and shorter their throwing style. this also hels the ball from being knocke out by defenders that might come swiping low at the ball from leakage in protection
- Eyes downfield reading defenders not routes

- Feet under hips staying on the ball of your feet and never standing flatfooted. you also dont want to bounce. stay on the ball of your foot so youre ready at all times to make a dynamic move. if youre bouncing in the air then you arent ready to throw the ball and if youre flatfooted you will not be able to make a dynamic move out the pocket or a strong throw.
- Never drift backward after step 1 if you end up behind the guard and not the center then youre not dropping back straight. try to stay behind the center as much as possible to help out the o lineman in case there is leakage. this allows you to use the whole pocket instead of limiting yourself.
- invision a clock ( use 12(noon) and 6) on the clock as your opening stance after taking the snap, then get into gather sequence depending on depth of drop

Tell your QB:

"Your feet are the clock. If your feet are late, the throw will be late."

"be rushed, but not in a hurry."

"see a lot see a little, see a little , see nothing "