

# Sprint Relays

Fostering Success



LOS ALAMOS  
TRACK AND FIELD



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- Head Coach - Los Alamos High School  
Girls (Previously at Taos High School)  
*10 NMAA State team titles*  
*24 Individual Sprint Champions (22 top 3)*  
*4 NMAA State Records*
- Taos High School Grad and Athlete
- NCAA DIV-1 Collegiate Career  
*6 X Individual Conference Champion*  
*Conference/School record holder*  
*2008 Conference Indoor Athlete of the Year*  
*NCAA DI National Qualifier (Heptathlon)*

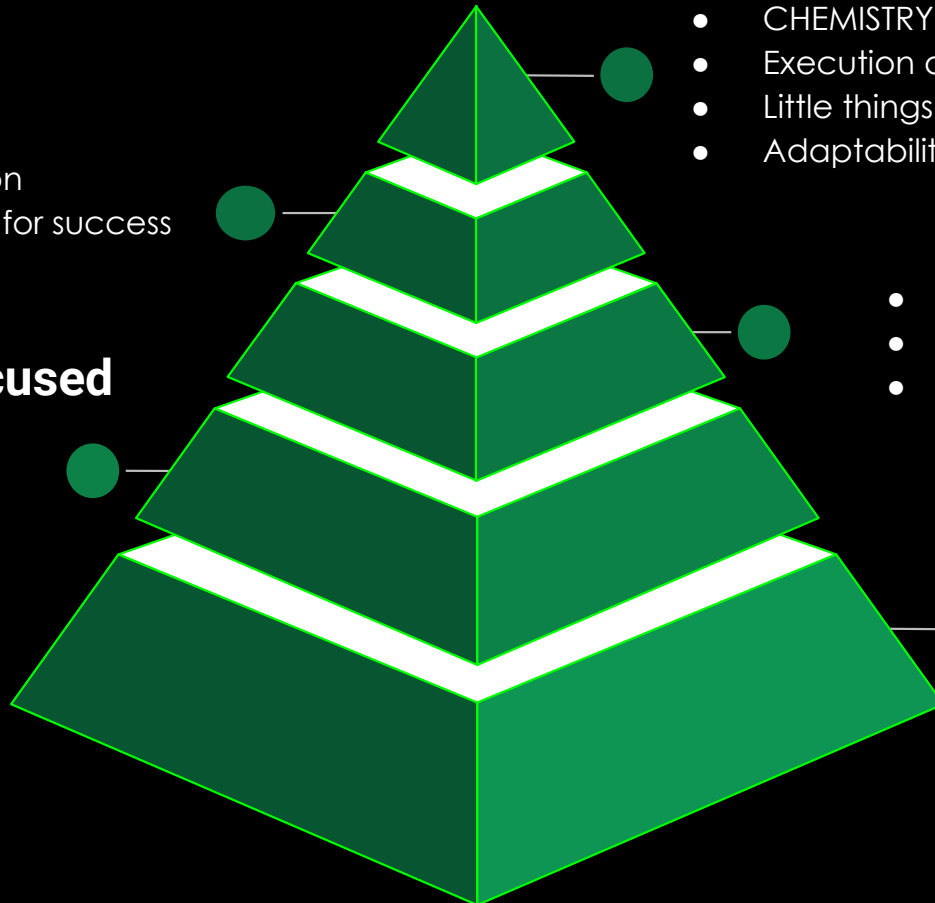
# Building an Identity

## Proactive

- Early intervention
- Looking ahead for success and needs

## Specific, Deliberate, Focused

- Know program direction
- Effective training philosophy
- Being an EXCELLENT teacher



## Intangibles

- CHEMISTRY
- Execution and compatibility
- Little things (hype, fun, facilities, etc)
- Adaptability and flexibility

## Organized

- Structured
- Delivered with Clarity
- Being an EXCELLENT teacher

## Coach Initiated

- Bridge the gap
- Staff concerns
- One voice!

## Take the time to Teach

5:00 o'clock the day before the meet is not the time to introduce relay concepts

## Have a clear relay identity

Know who you are, what you want to implement, and how to systematically achieve that

## Skill Build

We never stop learning as coaches and athletes

Limit variable as much as possible

## Foster Confidence and success

Athletes cannot consistently perform complex tasks under pressure if there is a lack of proficiency in the basics

Move from

External Feedback



**INTRINSIC** Feedback

# Know Your Athletes

- What are their strengths? Weaknesses?
- Commitment level
- Practice habits
- Competition dynamics
- How do they handle pressure and big moments?
- What does their race model look like?
- Acceleration patterns
- Teammate chemistry
- What is going on in their individual life at the moment?



Spoiler alert:

They are  
**COMPLEX!**



## Getting to work: The basics

### MOVE. THE. STICK.

Goal is to move the baton quickly, smoothly across the track.

We are timing the progression of the **BATON**, not the athlete!

### Acceleration Fluency

Acceleration is the **PRIORITY** of sprint relays, not the exchange.

We must execute proper acceleration techniques in order to succeed.

### Technical Exchange

- Lane location
- Foot Placement
- Outgoing hand positions
- Incoming Baton position
- Silent VS Verbal
- Blind Vs Open
- Periodization: Safe vs Risky
- Zone specifics
- 4X1 vs. 4X2
- "Run the ZONE!"



## Fluency: Acceleration Dynamics

Basics:

- Produce MAX horizontal force (absolute strength requirements)
- Overcome inertia
- Explosive, Violent, and Powerful

- 100M Base
- Max V not achieved @ 30M
- Shift for 200M?

Requirements

**Timing**

Velocity: 30 vs 100+

**Accel to MAX V**

**Triple Extension**  
torso angle = shin angle

# Technical Exchange: Feet Position

01

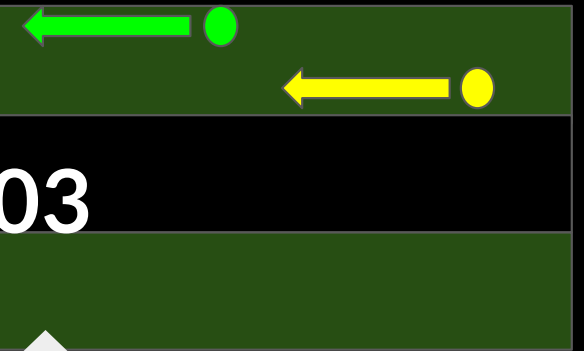


## Active Stance

3 Point vs Upright (looking under vs over)

Facing Forward/ READY TO GO!

03



## Go Mark Location

Know the zones/teach the zones

Know where, but more importantly:  
WHY?

02



## Appropriate Lane Position

What race/leg am I running?

What side of the lane do I need to be on?

Creating space



# Technical Exchange: Hand Positions (Blind)

## OUTGOING



- 01 | HIGH HAND
- 02 | VERTICAL HAND (U-Down)
- 03 | STABLE! No searching
- 04 | SLIGHTLY AWAY FROM BODY
- 05 | WHEN?

## INCOMING



- 01 | RUN VERTICAL BATON IN
- 02 | PUSH PASS No pointing or flicking
- 03 | ACCURACY AND PATIENCE!!

# Technical Exchange: Hand Positions (Open)

## OUTGOING



- 01 | HIGH HAND
- 02 | VERTICAL HAND (U-Up)
- 03 | STABLE! No searching
- 04 | STRAIGHT ARM/HIPS FORWARD
- 05 | WHEN?

## INCOMING



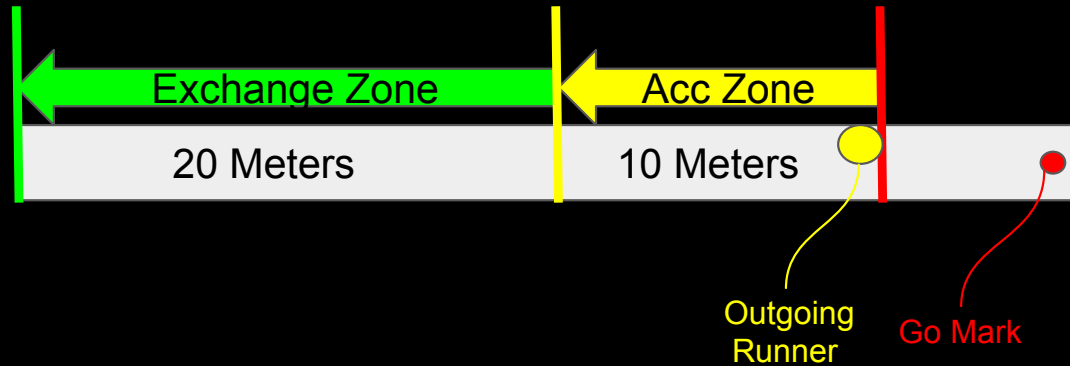
- 01 | RUN VERTICAL BATON IN
- 02 | PUSH PASS No pointing or flicking
- 03 | ACCURACY AND PATIENCE!!

# Technical Exchange: In depth set-up

## 4x100

- \* 10M Acc, 20M Exc
- \* Exchange at 15-17M in
- \* 25-27 M Free Run

- \* Right, Left, Right, Left
- \* Lane Position: Inside, Outside, Inside, Outside
- \* 18-22 steps (girls)
- \* 22-27 steps (boys)



## 4x200 & Med 2's

- \* 10M Acc, 20M Exc
- \* Exchange at 11-15M in
- \* 21-25 M Free Run

- \* Right to Left - Quick Shift
- \* Lane Position: Inside, Outside
- \* 14-18 steps (girls)
- \* 16 - 20 steps (boys)

### Logistics

- Dots, tape, tennis balls, boxes
- Silent vs Verbal
- Blind vs Open

### Periodization

- Having a clear purpose
- Safe vs Risky
- Time of year

### Intangibles

- Order of athletes
- Strengths and weaknesses
- Competition match-ups

# EXCHANGE PRACTICE DRILLS: FOCUSED, CONCISE, COACH LED

WALL DRILLS

STATIONARY PARTNER  
TAP/PASS

STATIONARY RUNNING

STANDING STAGGERS

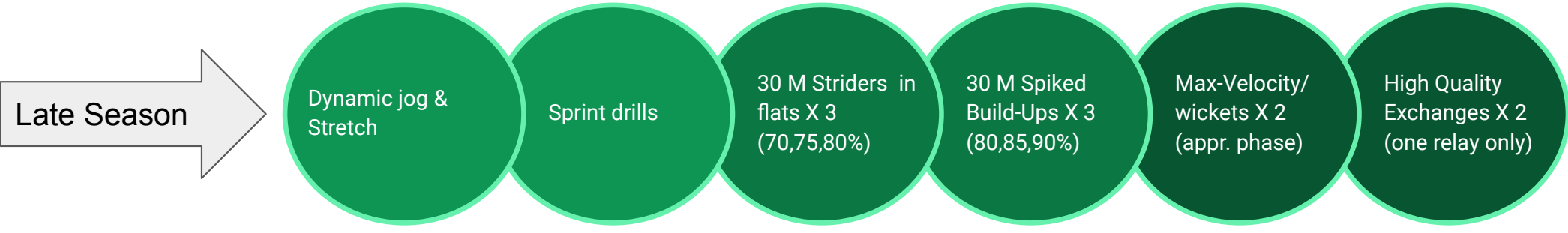
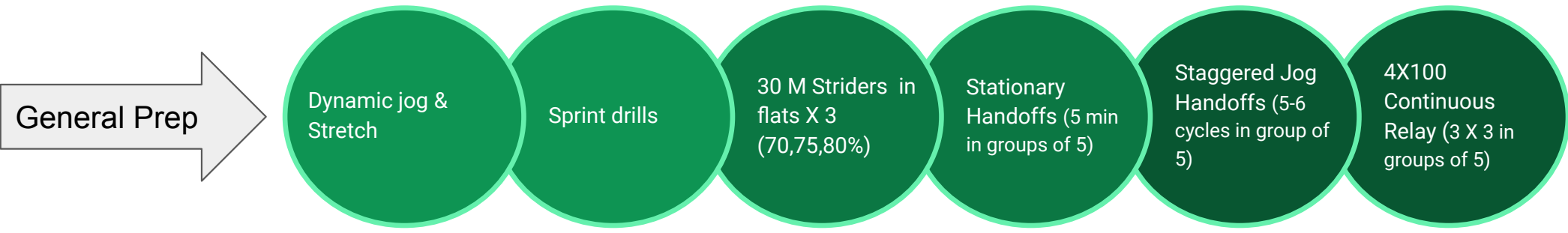
WALKING AND JOGGING  
STAGGERS

CONTINUOUS

FULLS

RACE SIMULATION

RELAY PRACTICE EXAMPLES: FOCUSED, CONCISE, COACH LED



## Training Emphasis: General Macro Cycle Progression

	Winter			Pre-Season			Competition Season			Championship Season		
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
REPETITIONS	Low			High			Low			Low		
LARGE GROUP	High			High			Low			Low		
FREQUENCY	Low			Low			High			Low		
FOCUS	High			Low			High			High		
QUALITY	Low			Low			High			High		

# INCOMING RESPONSIBILITY

## RUN THE ZONE!

Limit deceleration

Lane position

Run THROUGH the exchange

## Finish

Run through the zone

Stay in lane

Exit safely and retrieve mark

## Patience

Micro adjustments

WAIT for the target

Do not decelerate

## Accuracy

Vertical Push (no point or flick)

Top half of baton on outgoing hand

Wait for teammate to take baton



# OUTGOING RESPONSIBILITY





# COACHES RESPONSIBILITY

## Establish

- A Culture
- Rules
- Relay Structure

## TEACH

- Acceleration, Speed Development, Sprint Mechanics, Exchange Mechanics

## Identify

- Athletes/talent
- Strengths and Weaknesses

## Manage

- Athletes
- Marks and Specifics
- Emotions and Confidence



# Troubleshooting:

Know what you are seeing

- Correct race set-up
- Lane location
- On time
- Incoming ran the zone
- Outgoing acceleration
- Accurate target? hand?
- Patient/Accurate pass
- Exchange early in the zone
- Outside the back
- Deceleration

Error: Set-up or Execution

Cause or Symptom

