

NHSBCA Synergy Between Analytics and Pitchability

Data-informed pitching development: turning information into decisions without becoming handcuffed by the numbers

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DATA → DECISION → DEVELOPMENT

Throwers chase numbers. Pitchers solve problems.

THE DATA SEES

Velocity
Movement profile
Strike and location rate
Workload and trend

THE COACH SEES

What the athlete has today
Confidence and conviction
Game context and hitter behavior
Whether the cue actually helps

Data informs the decision. It does not make the decision.

Compete with what you have that day—not with the number you wish you had.

Data only matters if it changes the next pitch

01

MEASURE

Shape, command, count, tempo

02

INTERPRET

What does the pitcher need?

03

TRAIN

Create one focused constraint

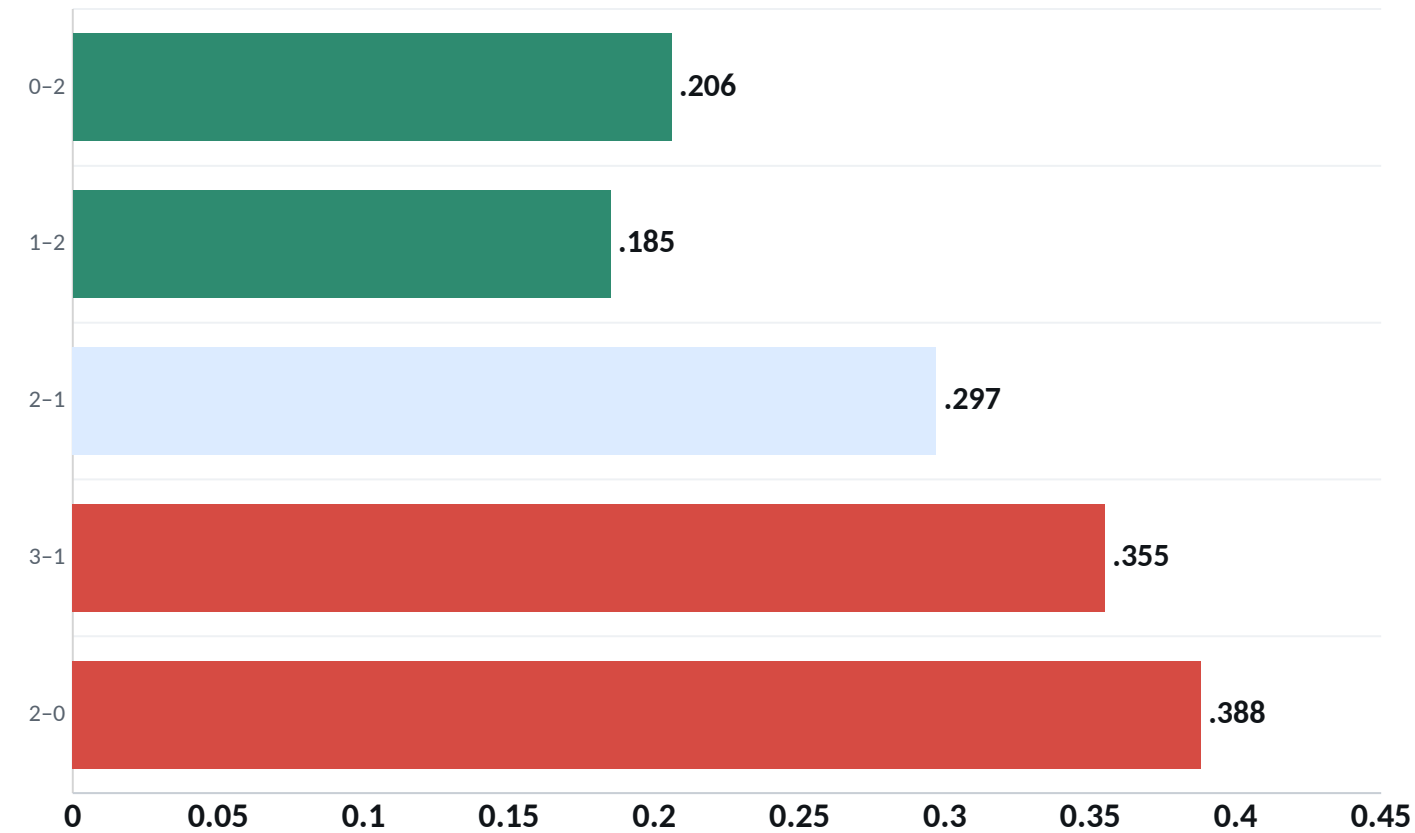
04

COMPETE

Execute it under pressure

The loop is complete only when game results inform the next assessment.

Win the count before trying to win the at-bat — finish the count



1-1

The pivot pitch

The source philosophy frames 1-1 as the decision point: move to 1-2 and attack, or fall to 2-1 and defend.

COUNT LEVERAGE — MLB 0-0: 94% end in a strikeout or an out, 6% in a hit.
Historical batting averages reproduced from the supplied coaching handout.
ADAM VARTERESSIAN | VALLEY CHRISTIAN HIGH SCHOOL

One more pitch changes the entire game plan

2-PITCH ARSENAL

2 choices per count
12 possible counts

$2^{12} = 4,096$
potential game plans

3-PITCH ARSENAL

3 choices per count
12 possible counts

$3^{12} = 531,441$
potential game plans

“A third pitch gives you only one more option in a single count—

but across all 12 counts, it expands the potential game plan from 4,096 combinations to more than 531,000.”

Pitchability is Repeatability

- | | | |
|----|--------------------------|--|
| 01 | QUALITY STRIKES | Own the zone; understand the quality miss — and what comes next. |
| 02 | CHANGE SPEEDS | Disrupt timing with three usable pitches. |
| 03 | CHANGE EYE LEVELS | Work north–south and east–west with purpose. |
| 04 | CONTROL TEMPO | Make the hitter compete at the pitcher’s pace. |

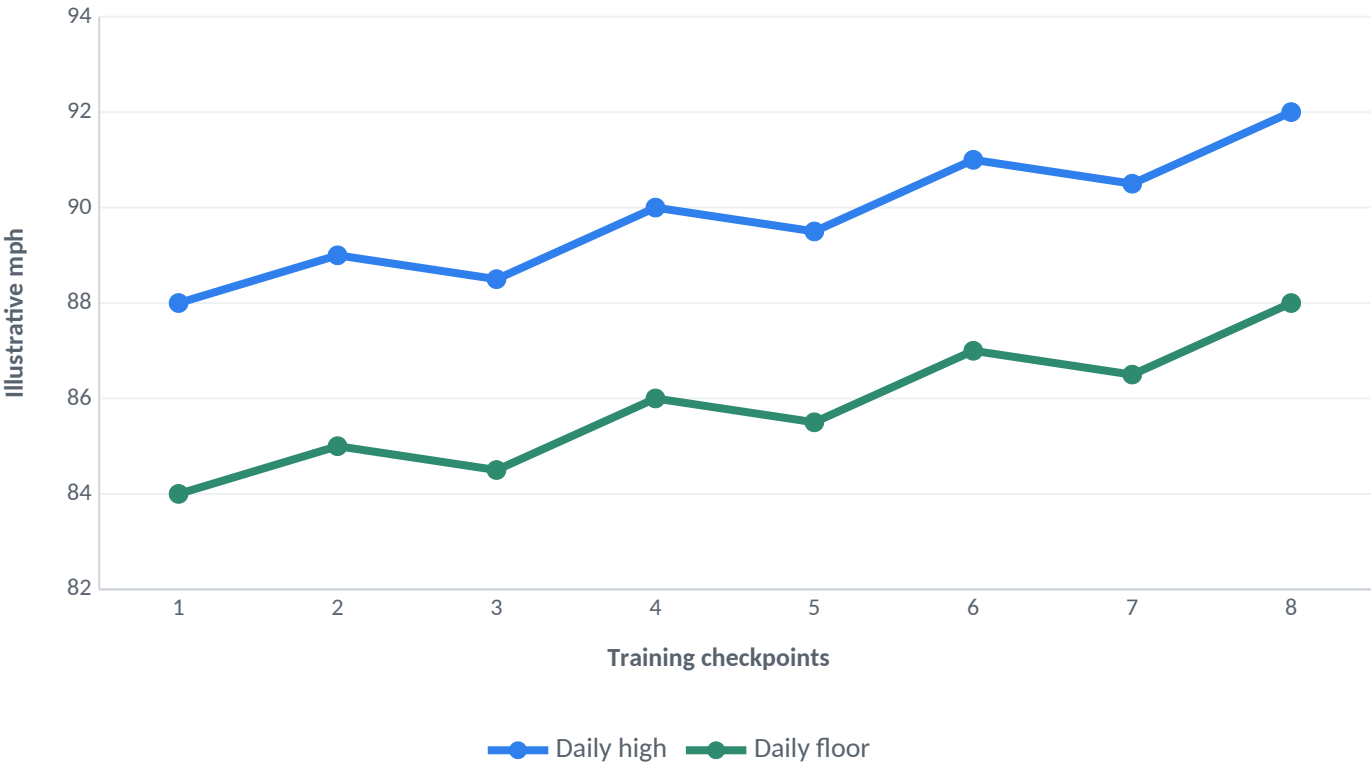
Give every pitch a job—not just a metric

Use movement information to clarify intent, target, and pairing. The numbers describe the pitch; the job makes it usable.

Pitch archetype	Shape cue from source	Primary job
Back-spun fastball	12:00–12:30; 95%+ efficiency	Carry above barrels / establish top rail
Side-spun fastball	2:30–3:30; near-zero vertical	Run to arm side / create east–west separation
12–6 curveball	6:00–6:30; vertical movement	Change eye level / finish below the zone
Gyro slider	Low efficiency; high gyro degree	Late, compact action / miss the barrel
Change-up	Reduce speed and/or spin profile	Mirror fastball intent / disrupt timing

Individualize the target: archetype → movement → location → game use.

Raise the floor before celebrating the ceiling



90

is not the whole goal

A better goal: keep every competitive fastball at 87+ rather than touching 90 once and living well below it.

Illustrative development pattern—not individual athlete data. Expect gradual up/down adaptation rather than one dramatic spike.

Build every bullpen around one measurable focus

1

FOCUS

Mechanical, pitch development, or execution

2

PLAN

Choose sequence, constraints, and game context

3

TRACK

Compare bullpen execution with game execution

EXAMPLE

Two sets. Two different jobs.

SET 1 • Back-leg load
Prime the movement; mix pitches without changing the cue.

SET 2 • First-pitch strikes
Add a hitter; chart strike intent and result.

One correction at a time. One outcome to evaluate.

Competition reveals what a standard bullpen hides

60%

STRIKES

A pitch is not game-ready until the pitcher can land it at least six times out of ten.

SKINS	One pitch vs. one pitch. Staff decides who executed it best.
1-1 COUNT	Every hitter starts at the decision point.
RUN-GAME	Slide step only—or runner at second only.
DELIVERY	Windup variations while preserving command and intent.
BLOCKED	FB FB FB FB / SL SL SL SL — useful early for feel, but weak as the finish.
REPRESENTATIVE	FB3 / CH1 / FB2 · CB1 / FB3 / CB3 — treat each three-pitch set as a hitter. Make 2 of 3.

The pitching staff defines the winner—and the standard. The goal is game transfer.

Block the skill. Randomize the decision.

1

BUILD

Repeat one pitch to establish feel, shape, or a correction.

2

RE-PLAN

Change the task so the pitcher must build a new plan each rep.

3

TRANSFER

Judge learning by retention and game execution—not bullpen comfort.

PITCHING APPLICATION

Build it. Mix it. Test it.

BLOCK • ACQUIRE
8 glove-side fastballs.
8 changeups below the zone.

RANDOM • TRANSFER
Change pitch, count, target, or hitter
—then evaluate the decision.

Do not confuse a clean bullpen with lasting learning.

A complete pitcher owns more than pitches

BODY

Strength, conditioning, mobility,
stability

DELIVERY

Balance, timing, direction,
repeatability

BASEBALL

PFP, picks, tempo, runner
awareness

MIND

Preparation, presence, process

NUTRITION

Fuelling, hydration, sleep, recovery

Balance • Timing • Direction | Preparation • Presence • Process | Fuel • Recovery

Define success together. Compete one hitter at a time.

DEFINE THE STANDARD

As a pitching staff, answer together:

What does it mean to be a pitcher?

What does successful pitching look like?

Which behaviors can we control?

THE 2026 RESET

At Valley Christian, one simple focus changed the trajectory of the season:

“ONE OUT OR ONE HITTER AT A TIME.”

Shared language turns philosophy into behavior.

Define it together. Return to it when the game speeds up.

Players give the pitching philosophy a living reference point

**PATRICK
WICKLANDER**

Bring a competitive attitude and a desire to win.

**WILLIAM
KEMPNER**

Compete. Expand with intent.
Disrupt timing.

STEVEN ZOBAC

Prepare every day and compete to give the team its best chance.

**EVERY
PITCHER**

Own the zone, change speeds, attack with conviction, and work fast.

Pound the zone • Quality strikes • Change speeds • Maximize velocity • Control tempo

Use elite pitchers as reference points—not blueprints



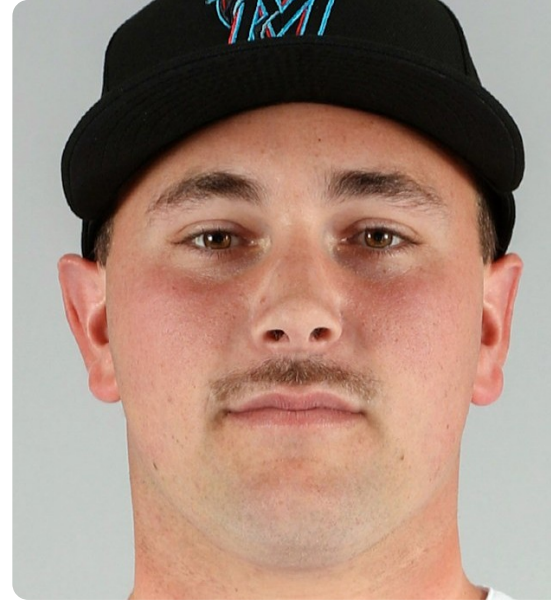
PATRICK WICKLANDER

COMPETITIVE INTENT



STEVEN ZOBAC

STUFF + A PLAN



WILLIAM KEMPNER

DEVELOPMENT PATH



QUENTIN MARSH

ARSENAL WITH PURPOSE

Study what makes each pitcher effective. Translate the principle to the athlete in front of you.

Develop thinkers—not pitch robots

CATCHER

Let catchers call scrimmages and intersquads. They learn what each pitcher is trying to do—and pitchers learn to communicate a plan.

COACH

Certifications matter. Relatability matters more. Never forget how difficult the game feels in both the good and the bad.

VISUALIZE

Baseball in hand. Photo of the upcoming mound. See the environment, feel the pitch, then execute the routine.

SEE IT. FEEL IT. EXECUTE IT.

See the mound before you ever take it



SEE IT. FEEL IT. EXECUTE IT.

Protect availability with a progression—not a slogan

01

PREP

Mobility + total-body temperature

02

THROW

Distance and volume progress gradually

03

MOUND

Fastball first; effort and pitch count build

04

RECOVER

Post-throw care + symptom response

STOP RULE

Pain, symptoms, fatigue, or mechanical breakdown means step back—do not push forward.

Return-to-throw decisions should be individualized and coordinated with qualified medical professionals.

A simple weekly system can run without expensive technology



ASSESS

Chart strikes, quality misses, tempo, and pitch shape.



ASSIGN

Give each pitcher one current development priority.



COMPETE

Build a short, game-like bullpen around that priority.



REVIEW

Compare pen and game execution; update the next plan.

Clipboard → **spreadsheet** → **Rapsodo/TrackMan**

The process scales; the technology is optional.

**Measure what matters.
Train it under pressure.
Compete with a plan.**

A pitcher is a thinker—not just a thrower.