

Meet the Icons!

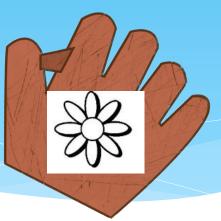
Depth & Complexity 101

Dr. Sandra Kaplan's Prompts of Depth & Complexity

in the K-5 Classroom

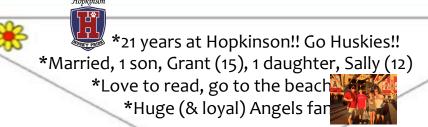
Presented by Jenny Stuart & Jill Moore





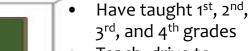
Let's Get Acquainted

Introduce Yourself to Students Using Depth and Complexity



- Scholars
- C.G.I.
- Thinking Maps
- Depth & Complexity icons
- Daily 5
- CAFE





- Teach, drive to dance, watch baseball, read
- Panera with teachers every Wed. & Fri.



- *What will this year be like?
- *Will my new students like third grade?
- *Are they as nervous as I am?

Rationale

- * Dr. Sandra Kaplan developed the Icons of **Depth & Complexity** after years of research, in an effort to help children generate a deeper, more complex thought process.
- * Students involved in the learning process whether reading a text, watching a presentation, or conducting an experiment, can apply elements of depth & complexity as they begin to assimilate new information, make connections, and dig deeper.

Why incorporate the icons?

- Quick, easy application to ANY material
- For visual learners "A picture is worth a thousand words"
- Provide scaffolding for higher level thinking
- Develop "Habits of Mind" that become ingrained
- Advanced learners are asked to reach the upper limits of their ZPD
- Increase student enthusiasm and motivation

Heads up!!



- * We are <u>not</u> TEACHING the icons, rather we are teaching concepts to new levels of depth & complexity using pictures (icons) to represent the thinking prompts and strategies.
- * The prompts are the verbal cues & terms used in ongoing discussions that lead to deeper thinking & understanding. The more they are used in instruction, the stronger the learners' connections will become.



How to USE the Icons

1st Base: Define the icon

Give the meaning/definition

Give synonyms

Model the prompt in context

2nd Base: Relate it to Previous Knowledge

What stories can you think of that ...

What scientific finding also ...

What historical event ...

3rd Base: Apply to NEW Knowledge

As you read ...

How can you apply this icon to solve a problem ...

Answer a question...

Homerun: Integrate into Real World

How does this relate to you in the real world? How can we relate it to CURRENT events?



Team "DEPTH"



- * <u>Depth</u> refers to studying a topic from the <u>CONCRETE</u> to the <u>ABSTRACT</u>; from the <u>KNOWN</u> to the <u>UNKNOWN</u>
- * Requires students to examine the facts, concepts, generalization, principles & theories.
- * Requires learners to uncover more details and new knowledge related to a topic of study.
- * Encourages students to adopt perspectives & recognize patterns in connections.
- * Your starting line up for Team DEPTH:

Language of the Discipline



Think like a DISCIPLINARIAN, an AUTHOR, an EXPERT

- Vocabulary/ Words
- Terms
- Jargon
- Terminology
- Figures of Speech
- Abbreviations
- Signs/Symbols





* TOOLS used in this field:

Equipment:

- * hat, jersey
- *bats, balls, gloves
- *helmets, face mask
- *chest protector
- *throat guard
- *cleats, shin guards

Baseball **EXPRESSIONS**:





*tough with two

*America's Favorite Pastime

*Come on Blue!

*Ride the pine

*Southpaw

*Switch hitter

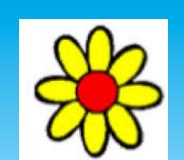
* base on balls



Details

Details that support/define/tell about:

a character, an event, the problem, conclusion, place, idea, etc...



Who? What? Where? When? Why?

Clues Factors

Facts Elements

Features Attributes

Data Items

Traits Parts

Ideas specifics

Baseball's

Important Parts, Facts, Features:

9 innings 3 bases

9 players home plate

3 outs single

4 balls, 3 strikes double

Errors triple

American/National Leagues



- * Determine the most important details:
 - Knowing your pitch count – improves your chances of getting a hit
 - Defensive positioning improves your chances of getting the out

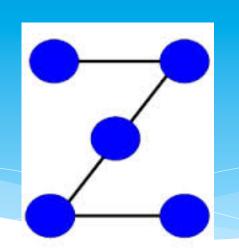


Babe Ruth, Hank Aaron, Mickey Mantle, Jackie Robinson, Branch Rickey, Lou Gehrig, Derek Jeter, Mike Trout

World Series, Jackie Robinson Day, Opening Day, Yankee Stadium, Green Monster, Cooperstown

Patterns

Examine patterns in the story/text that influence: behavior, the problem, a place, an event, the outcome



Patterns are:

Predictions Sequence

Cycles Order

Motifs Relationships

Repetitions Probabilities

Number lines

Recurring Elements

Patterns in Baseball:

Superstitions

National Anthem

7th inning stretch

Visitors, home team

Batting order

Three outs

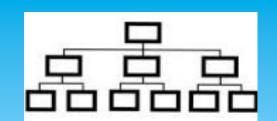
Playoffs

World Series

Rules

What keeps something together, makes something work, or causes order in behavior?





* Rules include:

Methods

Standards

Data collection

Reactions

Directions for conduct or procedure

Rules in BASEBALL:

Three strikes, you're out

Strike zone

Infield Fly Rule

Baseline

Replay/challenge; not for balls & strikes

Catcher blocking plate

Catcher's interference

Double play

Pine tar not allowed

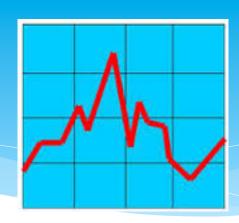
Spit balls illegal

Drug testing



Trends

Examine the trends in/outside the the story/text that influence: a behavior, the problem, a place, an event, an idea, our the outcome.



* Trends include:

Tendencies

Current styles

Influences

Changes over time

Data Representations

Direction

Trends in BASEBALL:

More homeruns

Higher salaries

More trades

Fewer "one team" players

Increasing foreign born players

Increasing Tommy John surgeries

Increasing concussions

Increasing ticket prices

Unanswered Questions

What is unresolved or remains unclear about: the character's actions/ behaviors, an event, the problem, the motive, the outcome.



An unknown

Something unexplained

Something unresolved

Something unproven

Missing information/facts

A dilemma

Doubt/uncertainty

A discrepancy



Unanswered?s in Baseball:

Why is the # of foreign born

players increasing?

How will the use of instant replay

impact baseball?

Does the Money ball technique

really work?

Why do salaries keep rising?

How did the Red Sox go from

first to worst?

Ethics

Right/Fair vs. Wrong/Unfair



* Ethics are:

Good/bad

Prejudices

Controversies

Right/wrong

Values/morals

Biases

Justice

Ethical issues in Baseball:

Drug use (Alex Rodriquez, Chris Davis)

Gambling (Pete Rose)

Cheating (White Sox 1919, pine tar)

Role models/chewing tobacco

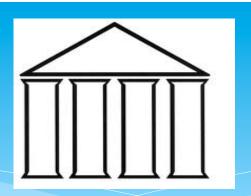
Racism (Jackie Robinson)

Small vs. Large market teams

Salaries



Big IdeaWhat is the main idea?



* Big Ideas are:

Generalizations

Overarching

Principle, theories, laws

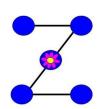
Related to global ideas/themes

Developed from many facts

Summarizations

Big Ideas in Baseball:

*Statistics drive coaches' decisions



- *playtime/draft
- *pitcher/batter
- *salary/value
- *defensive positioning

*It's America's Favorite Pastime

Meet the Depth Rookies

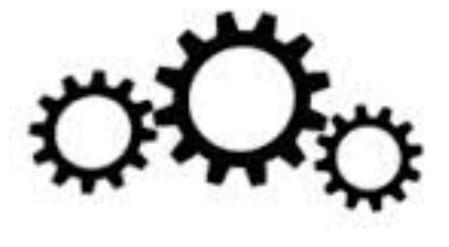
The Newest Prompts











Impact

How do forces affect an outcome?

* Impact involves:

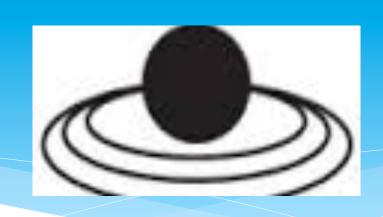
Affect/effects, Identity, Force

*How does ______ ?

*What are the effects of

on ?





Impact in Baseball:

*How did Jackie Robinson impact baseball? Greater impact?

*How have illegal drugs impacted MLB? (Alex Rodriguez, Barry Bonds, Nelson Cruz, etc..)

*What has Mike Trout's impact been on the Angels? On baseball?

*How has Billy Beane's philosophy affected baseball today?

Process



The procedure by which something gets done.

* Process involves:

Sequence

Connections

Order

Link

Arrange

*What steps are used to create/perform/ complete this?

*Writing Process

*Flow map



Process in
Baseball:
Pitcher's wind up
Batter's ritual
Innings 1 – 9
Draft
Trades
Warm ups
Superstitions

Proof

The evidence needed to validate something.

* Proof involves:

Determining fact vs. opinion

Supporting with evidence

Authenticating

Proving

Documenting

*What info verifies this beyond a reasonable doubt?

*Not judging; proving

Proof in Baseball:

Instant Replay

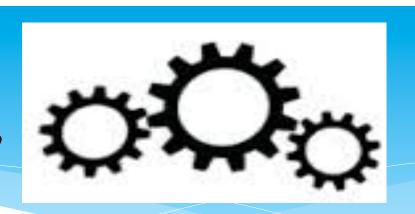
Statistics/Box Score

Records (W/L)

Demographics

Motive

Drives the "reason why..."



* Motive involves:

Catalyst

Reason

Excite

Inquire

Explain

*What is causing this to happen?

*How is the idea/work stimulated?

Motive in Baseball:

*Branch Rickey hiring Jackie

Robinson: (idealism/good business sense)

*Moneyball: Wall Street philosophy

"buy low, sell high"

*Workouts

*Switch hitting/pitchers

*Steroid use

Team "Complexity"



- * <u>Complexity</u> includes making <u>RELATIONSHIPS</u>, <u>CONNECT</u> CONCEPTS and <u>LAYER</u>.
- * Makes connections and **BRIDGES** to other disciplines, enhancing a unit of study.
- * Requires learners to relate concepts/ideas at a **HIGHER**, **MORE SOPHSTICATED LEVEL**
- * Encourages students to <u>MAKE ASSOCIATIONS</u> among diverse subjects and find <u>MULTIPLE SOLUTIONS</u> from multiple <u>POINTS OF VIEW</u>.

* Your starting line up for Team COMPLEXITY:

CHANGE/RELATE OVER TIME



Someone or something can change over time.

Change over time includes:

- Looking at past, present, future
- Applying something historic to present knowledge
- Contributions
- Innovations
- Noting change
- Compare topics past & present, predict future

Baseball OVER TIME

CHANGES in BASEBALL

*Negro Leagues to a

diverse MLB

*salaries

*instant replay

*free agency

*safety equipment/rules

*social media

*pitch count

Ways BASEBALL has REMAINED the SAME

*9 innings

*9 players

*no arguing balls/

strikes

*uniforms

*distance between bases/mound

Multiple Perspectives



How do different characters/groups view the same information, event, idea?

Multiple Perspectives include:

- Points of View
- often depends on place/time
- Affected by roles & responsibilities
- Different priorities

Multiple Perspectives in

Baseball

- *Favorite teams/players
- *****Scouts
- *Strike zone
- *Umpires (ask for help)
- *Sports psychologists
- *Historians
- *Scouts
- *Press



My Perspective Why is the topic important to me?

*Grew up a California Angels fan: games with my grandpa

*My son, Grant, has loved the game since he could walk

*Enjoy Angel games as a family My Perspective on Baseball

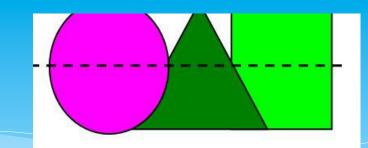
We went to Cooperstown!

*Scorekeeper

*LAHS Griffins FROSH Baseball



Across the Disciplines



What would different disciplines say about: a behavior, the problem, an idea, the outcome?

Across the Disciplines include:

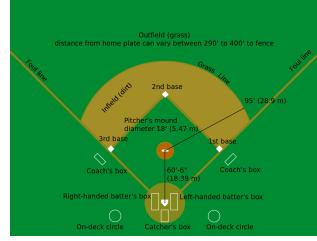
- Multidisciplinary
- interdisciplinary
- Touching on multiple subjects at once
- Integrating subjects
- Themes
- Associations

Across the Disciplines w/ Baseball

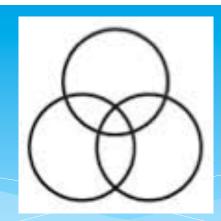
*Mainly related to Athletics, but also connected to:

*Mathematics/Statistics

- *Technology
- *Media
- *History
- *Civics
- *Economics



CONTEXT



How do circumstances affect the outcome?

Context involves:

- Time/place
- Philosophies
- Background
- Current conditions
- Circumstances
- Time frame

Context as it relates to Baseball

*Would Jackie Robinson be a hero if he was playing today?

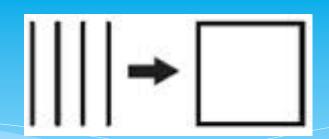
*How did World War II affect baseball?

*What is the current public opinion on steroid use in the major leagues?

*What role did baseball play in Japanese internment camps?

*How does geography determine player talent?

Translate



How is the same idea interpreted in different situations and by different people?

Translate involves:

- Multiple meanings
- Restating
- Interpreting
- Reciting
- Expressing
- Explaining
- Converting
- Translations

Translate as it relates to Baseball

- *Interpretation of rules (catcher/transfer)
- *Fan chants
- *Umpire's call
- *Pitch signs (pitcher/catcher)
- *Base coach signs



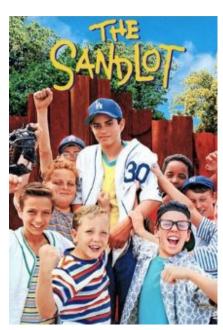
Original



A first; something new to you, others or the world.

Original involves:

- Unique
- Create
- Design
- Innovate
- Modify
- Redesign
- Engineer



Original as it relates to Baseball

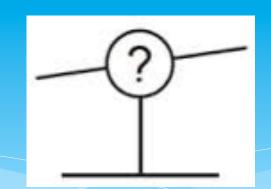
Movies/books

Pitcher's protective headgear Convertible Stadiums

Uniforms

Give-a-ways

Judgement



How is a decision or judgement to be made? Prove with evidence, judge with criteria.

Judgement involves:

- Decide
- Determine
- Agree
- Disagree
- Verify
- Investigate
- Identify options to argue

Judgment as it relates to Baseball

Suspensions

Umpire ejects players/coaches

New stadium locations

Player choice/draft/trades

All Star voting

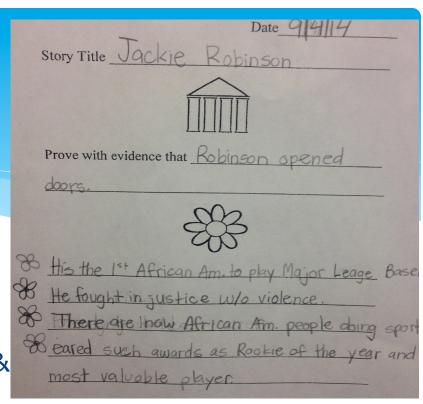
Fan reaction

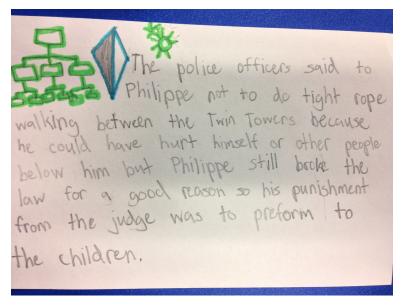
Try outs

Layering the Icons

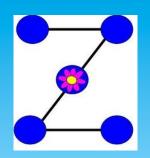
- * 1 icon/prompt: <u>SINGLETON</u> (i.e. Details)
- * Jackie Robinson was talented at baseball, football, track, and basketball
- * 2 icons: <u>SET/HYBRID</u> (i.e. Details & Patterns) or (Big Idea & Details)
- * Robinson was an all star at every sport, then a star in middle school, high school, jr. college, UCLA, Negro Leagues, minors, major leagues

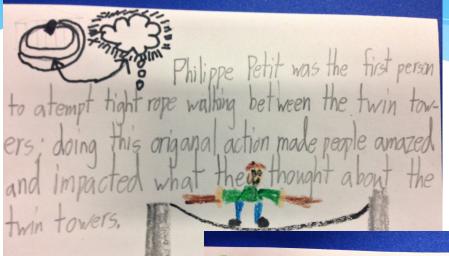
Robinson was a gifted athlete.

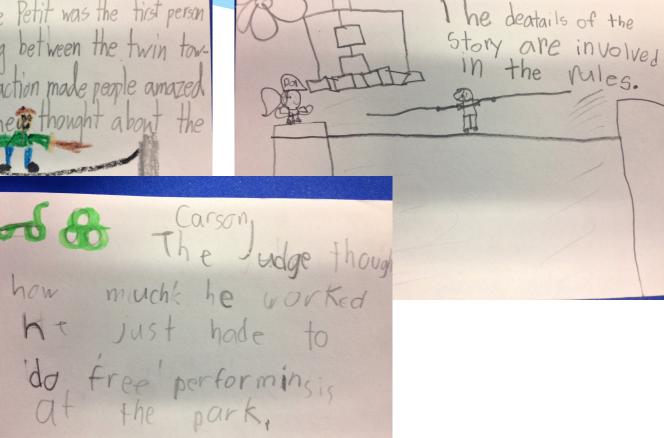




Layering the Icons

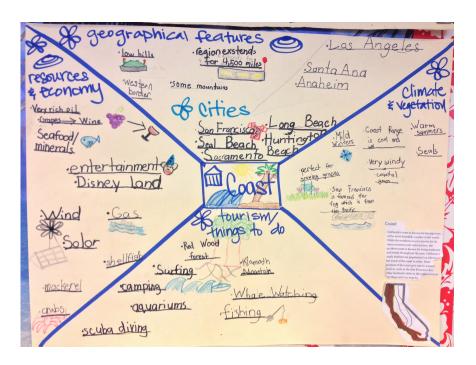




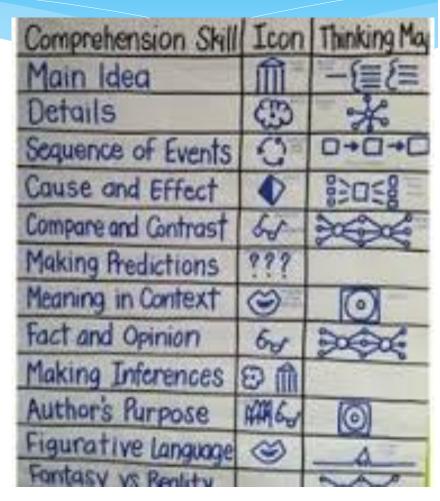


Use Organically

Like thinking maps, you DO NOT NEED prefabricated worksheets.

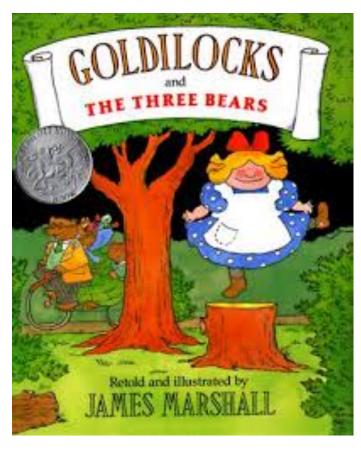


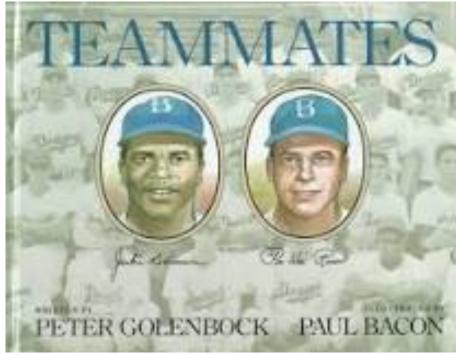
Speaking of Thinking Maps...



* Use a familiar story (<u>Little Red Riding Hood</u>, <u>Teammates</u>,

<u>The Recess Queen</u>, <u>Goldilocks</u>)

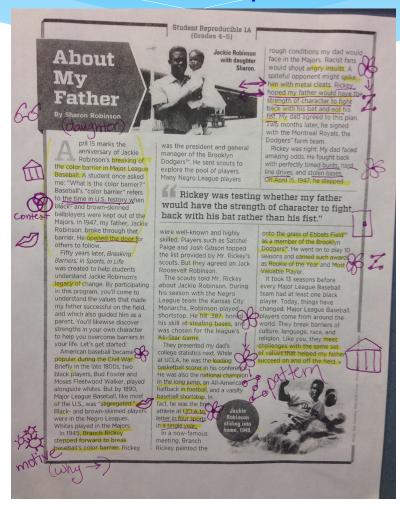




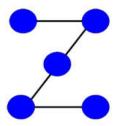
Frame the Teacher, then students frame themselves



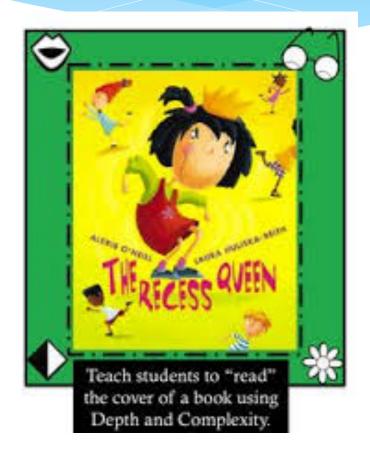
*Non-fiction texts/articles



- * Collaborate in small groups to finds patterns amongst their peers using their selfframes
- * Intro each icons as it relates to its symbol:
- * Circle, line, circle, line, etc... It's a pattern!

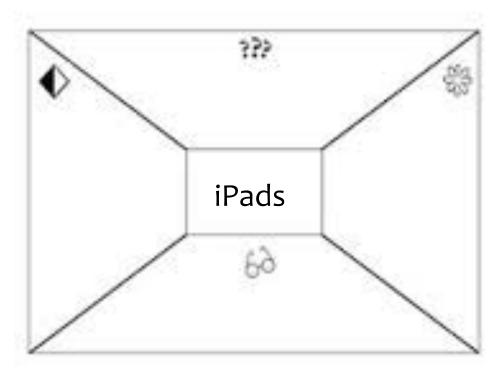


*Engaging Books



* Frame their interests!

Birthdays, iPads, Disneyland, etc..



*Use an interesting photo or piece of art

*Analyze a song w/ icons

*Use icons to introduce class rules:

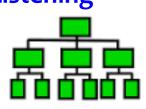
Behavior

Homework

Speaking/Listening

C.G.I.

Daily 5



Rules

Utilize resources!

- * Dr. Kaplan
- * District "One Drive"
- Thinking Reader Map (by Evan Grandon)
- * You Tube
- * Internet
- * Icon set (post n' go!)

