Introduction to the Iconic Prompts for Depth & Complexity

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Icons of Depth & Complexity

- Challenge advanced learners by directing them to extend their understanding of the area of study.
- Encourages students to approach content by "Thinking like a Disciplinarian."
- Provide students with tiered assignments, tiered lessons, and independent projects to make certain that advanced students are challenged and that struggling students catch up to grade level standards.

Depth & Complexity

DEPTH

Moves students toward greater expertise and strikes a balance with the goal of content coverage.

COMPLEXITY

Students are challenged to make connections across disciplines, over time, and between disciplines.

•What vocabulary is used? •What vocabulary is used? •What tools are used? •What methods are used? •What service is provided? •What products are made?	Details •Who? What? •When? Where? •Why? How?	 Patterns What patterns do you notice? Can you predict what will come next? Why do you think so? 	 Trends Identify cause & effect relationships What are influencing factors?
 PPP Unanswered Questions What words don't you understand? What is unclear? What information is missing? 	•What was it like in the past, the present & what might it be like in the future?	Ethics •Who believes the behavior or action to be right or wrong and why?	Big Ideas•What is the theme?•Identify the "Big Idea", principle or generalization.
Depth & Complexity Icons Use this page to guide discussions, as conversation "cues" during literature circles discussions, & as writing prompts to encourage critical thinking. Shared by Sandra Kaplan	Multiple Perspectives •Who agrees & disagrees? •What are their opinions? • Who believes what & why?	Rules •What are the rules? •How it is structured?	•What common theme connects the topics? •How is one topic like the other?

ICONS of DEPTH

- Necessitates uncovering more details and new knowledge related to a topic of study.
- Encourages students to adopt perspectives and to see patterns in connections.
- Refers to approaching or studying something from the concrete to the abstract, from the known to the unknown.
- Requires students to examine topics by determining the facts, concepts, generalization, principles and theories related to them.



Language of the Discipline

Refers to:

Terminology

Nomenclature

Lexicon

Tools of the discipline

Combinations and patterns of terms

Jargon, idiom

Signs & symbols

Figures of speech



Language of the Disciplines- A Sample List

E/LA	Math	Social Studies	Science
 Descriptive words Interpretation of vocabulary Style Plot theme 	 Terms, signs, symbols Operations Measurements Variables Functions 	Terms of geographyHistoryGovernment	MatterScaleSpaceAtomsLaws

What words are specific to the work in this discipline? What tools are used by the experts in this discipline? What are the origins of new terms in this discipline?

Details

Refers to:

Clues

Facts

Features

Data

Ideas

Traits

Items

Parts

Particulars

Specifics

Attributes



Details- A Sample List

E/LA	Math	Social Studies	Science
 Characters Setting Description Connotation Informative writing 	 Numbers Factors Points Lines Curves algorithms 	 Documents Time Location People Events Cause/effect 	 Features Time Atoms Cells parts
What details de	?		

What distinguishes this from other things? What are its attributes?

Patterns

are:

Predictive

Able to be replicated

Cycles

Motifs

Repetitive

Made up of details

Person-made and natural designs

Recurring elements



Patterns within the discipline– A Sample List

E/LA	Math	Social Studies	Science
 Plot Conflict Themes Writing structures 	 Number lines Geometric patterns Probability Order of operations Measurement 	DocumentsTime linesThemes	 DNA Periodic table Biology Molecules Crystals Solar system

Describe the patterns you find. How does one pattern compare to another? Identify primary & secondary patterns.

Rules

are:

Standards

Related to structure

Usual courses of action or behavior

Methods

Organizational elements

Statements of truth

Authoritative directions for conduct or procedure



Rules within the discipline- A Sample List

E/LA	Math	Social Studies	Science
 Genres Grammar Word usage Style Poetry Matching	 Problem solving Operations Computation Ratios Accuracy Arithmetic Geometry algebra 	 Supporting	 Measurement Data
writing to		evidence Primary	collection Systems Chemical
purpose		documents Government Economics	reactions

Describe the rules How are rules related to patterns and details? How do you evaluate rules' efficiency and validity?

Trends

are:

General directions

Tendencies

Current styles

Drifts

Influences

Changes over time



Trends within the discipline- A Sample List

E/LA	Math	Social Studies	Science
 Historical fiction Nonfiction Character types 	 Application of principles Tools & machines of measurement 	 Cultural Different eras Voter patterns 	 Research Financial support Environmental Space
SpellingWord usage	Data collection	ExplorationGovernment	exploration • health

Describe the trends Identify causes and results of a trend. How do you evaluate a trend's importance?

Unanswered Questions

are:

A puzzle

A conundrum

Unsolved

An unknown

Something unexplained

A dilemma

Doubtful or uncertain

???

Unanswered Questions- A Sample List

E/LA	Math	Social Studies	Science
 Anonymous authors Author's message Author's motivation Likes/ dislikes 	 Equations Historical math problems Unforeseen relationships 	 Cause & effect The future Ancient civilizations 	 Experiments Ethical implications The future consequences

Describe the unknown details or stimuli for the event? Identify the origins of an unanswered question. How do you evaluate an unanswered question's importance?

Ethics

are:

Controversies

Dilemmas

Biases

Prejudices

Found in decision making

Principles of right behavior

A set or theory of moral values

Ethics within the disciplines– A Sample List

 Conflicts Problem- conflicts bit conflicts bit bit conflicts bit bit conflicts bit bit conflicts conflicts conflicts conflicts conflicts bit conflicts <li< th=""><th>xperimental ias NA</th></li<>	xperimental ias NA
• Media • Applied math • Dissent • Ex	esearch xpert isagreement

Describe the ethical issues you find. How do ethics get developed? What are universal ethics or values?

Big Ideas

are:

Generalizations

Related to many instances

Developed from many facts

Overarching

Principles, laws, theories

Related to universal or global themes



Big Ideas within the disciplines– A Sample List

E/LA	Math	Social Studies	Science
 Themes Poetry Conflict Critical analysis 	 Principles, laws Accuracy Systems Validity 	 Origins Cultures Migration Exploration Innovation 	 Energy Gravity Waves Light Change
	• Scale	 Conflict 	• Laws, theories

List the evidence needed to support a big idea. How does working with big ideas help you learn? How do you evaluate a big idea's importance?

ICONS of COMPLEXITY

- Includes making relationships, connecting other concepts, and layering.
- Why/how approach that connects and bridges to other disciplines to enhance the meaning of a unit of study.
- Relate concepts and ideas at a more sophisticated level
- See associations among diverse subjects, topics or levels
- Find multiple solutions from multiple points of view







Over Time

means:

Looking at past, present, future

Applying something historic to present knowledge

Noting change

Predicting something based on present knowledge

Applying from the past to the present



Over Time within the disciplines– A Sample List

E/LA	Math	Social Studies	Science
 Setting Relevance Science fiction Biographies 	 Interpretation of data Time measurement Origins Problem solving 	 History Issues of importance Contributions Big ideas 	 Geology Change Climate Innovation Formulas

Identify a time that this issue or topic was different. How does knowing things over time affect what we learn? How is history being made every day?

Multiple Perspectives

are:

Different points of view

Ways of seeing and reporting things

Often dependent on time and place

Different slants

Affected by roles and responsibilities



Perspectives within the disciplines- A Sample List

E/LA	Math	Social Studies	Science
 Characterization Persuasive writing Editorials Points of view 	 Interpretation of data Representatio n of data Statistics Charts Graphs 	 Historical roles Multi- cultural studies Interpreting evidence 	 Perspectives Environmental perspectives ethics

Identify a different point of view and explain it. How does point of view affect what we learn? When is your perspective different from others?

Across Disciplnes

means:

Multidisciplinary

Interdisciplinary

Connections among disciplines

Touching on many subjects at once



Across the disciplines- A Sample List

E/LA	Math	Social Studies	Science
 Biographies & auto biographies Journals 	 Geometry, architecture Economics Data collection 	 Culture Patterns Human behavior Sociology 	 Origins of laws Research findings Geobotany Biophysics

Sort information you are studying into several disciplines How do experts in a discipline learn from experts in other disciplines?

Icon-Based Questions and Prompts May Be Used...

- After reading assignments
- In academic discussion
- In lab write-ups
- In math reviews
- As summary activities
- As comparison-contrast activities

- In practice of a world language
- In reflection on learning in physical education
- On tests
- As essay prompts
- As formative assessment

The Velveteen Rabbit

- Listen to *The Velveteen Rabbit*
- Complete the frame
- Share responses with your small group











~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	An item that was really important to was	_because
Another way to solve the problem of		By the end of the story, $\frac{1}{1 - 1}$
might have been to	The Velveteen Rabbit	learned
	The author was trying to help readers understand that	
	It seemed unfair when	



# Video: Dr. Kaplan explains the Icons

## https://www.youtube.com /watch?v=McEldMETSnw

• While viewing, take notes on the template provided.









Alice helped her grandfather paint pictures. What are some ways you can help a grandparent or an older person in your family? • the out trach for more • help dean thouse • listen to more and dad • vacuum the read • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • help my mon take can d an some Alaba • tan help my more feld her clothes • I can wash my clother • I can get feed for my mem and dad. • Would try not to be noisy. • I like to mow the law and of the paints. • I used then not the laws. • I like to may the fam and and the dad. • Would try not to be noisy.





How ups tern a triend to Wildur? What lessons did you Describe have she treated him. learn from reading the story. charlottes Nep . A friend in need is a friend instead. . Fern wied Wilber's life. . She field willow pall before she wort to school and in . It tells about a numbers like cycle. Her attennion when sit came nome. . It shows how a community can have an arother Form built a counter house for When to deep on · It's deal here al below one of meak "The brought Willow to tak and takened any strongs White we have problems don't are no hereas pres of · Fore let Willow rule in her doll arrivings when Willow gut tired of analysis above Somere will beep an . It's ited the set did . She held the milk bottle while Wilber coded from it · Always De nice to an interer Augusti (man juane (Elatigo) (Andre Elisa Inon Mia Jonathan Janner What untamilion words Do think Mr. Arable's idea. did you come across to kill the pig because it in the story! was a runt was right or irant understand animal or person (more) wrong: -radiant. (adj) glowing with broken () Right +gullible - (adj) early failed and with t's mean is an in meaning one might get some the · crafty. Carl ; ) shallful at placette - Killing the parts right because they can get money by where the mest. It's make to get rel of it if your tandy is alleger to page · Shittle Lady I should the disting to do something . alisty ( mus) talent, intell openin "It's not not to kill on another part because it a little. thing, especially a work of art and I were because I don t want provide pilling nor cutre had broken a Lit's wrong brieves you won't came it it will theme . Its always a bad idea to kill a pet (Ami) OLEVE Chinese (Tomary (Themas) (Juster Strays )

They tell us when to find places They aive us directions They can show where mountains, lakes deserts are. They show the capitals of states and countries. 5) They show big cities and rivers. 6) They show where one place is compared to other, places 7) They show how far things are apart. 8) They can show where things are located (fossils, ages) ⇒^{\$}Maps often have: Compass Rose +++= A compass rose shows directions Map Key Desert The map key explains the symbols on the map It can be pictures or colors Drale 500miles The map scale can be used to Find out how far one place is from another Countries of the World +1 Our world has more than 190 countries. Can you find the country that you live in?

# **Introducing Iconic Prompts**

### Make a Connection

- Show students pictures of different signs and symbols
- Ask how these signs help us.
- Then relate those signs to the symbols we use to represent the D& C icons.
- Explain that these symbols will help us along our pathway of learning in school

### **Relate to Self**

- Introduce yourself to the class using each element of D&C
- Then students can relate the elements to themselves
- Students can then frame themselves using 4 of the elements, using the frames to introduce themselves to each other.

### **Relate to Text**

- Look at a simple story in a more sophisticated way.
- Using a simple story, have the students identify the elements of D &C

From the story of _ Name: A Tale About Char Paturns Ethics Details I think that kids My name is Charli. I think that when should be able to have fun because I was born on arn't class it will be a fun to gear and I will have fun we many projects. I am in Mrs. Haris's September 4, 2004. I am in 4th grade and in Mrs. Stowers class. houe life Rules 品品 Multiple Perspectives I believe that no playing ball in the house I no electronics in bed euryone should be able to think what no dincer at firends herse deving with **Big Idea** playing with Enerds after 65 I am all about having ever and evryone fun, playing around, figuring pajamas on after 12:00. the play with friends a 9:00 out things, and a little bit base freedom, of seriousness. my teeth and get my pg 192

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MySt	Ory A Tale About Me
Multiple Perspectives My perspective is that the most fun thing to do is go and playalat and learn more. My perspective is that something I don't like to do is	Details Some details that tell about me My Name is <u>Tecoron Yong</u> I am <u>nine</u> years old. My hair is <u>black and brownish</u> My eyes are <u>brown</u>
like to do is Werk be eause I work every day going backand forth Rules A rule that is important to me is	My favorite color is <u>Black</u> .
be Griende with others and te mow people more	A pattern in my life is I de work every week and it repeats.
Ethics I believe it is wrong to bate others.	Change Over time Some things about me that have changed over time are
I believe it is right to	Myage. Hight My hair.

EZrat

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#### Dan;



etails about what someone in this	Study of A Discipline
	Some vocabulary used in this discipline:
Think Like A	
whose job it is to	Some tools used in this discipline:
Describe something that has changed over time in this discipline or "field"	
	Think Like A Think Like A whose job it is to Describe something that has changed over time in this

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