

Depth and Complexity

Prompts and their Icons: An

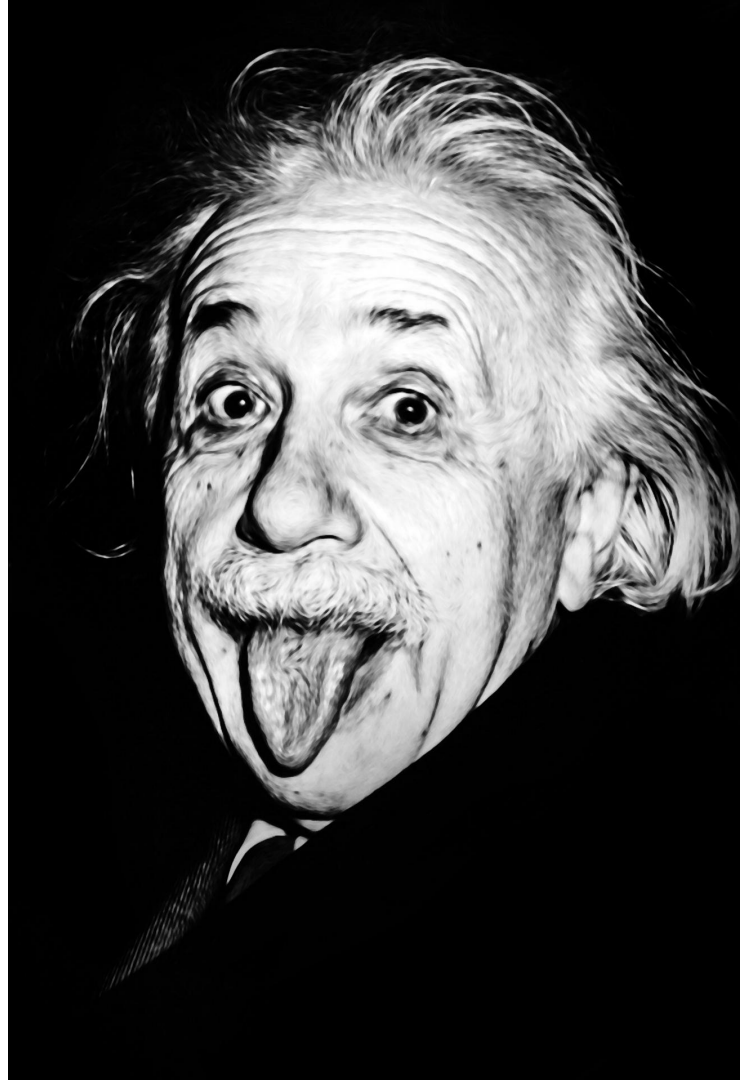
Introduction

Reagan Elementary
May 26-27, 2020



“Education is not the learning of facts, but the training of the mind to think.”

-Albert Einstein



Today's goal: Understanding the parts of the Depth and Complexity Framework so that you may employ the prompts/icons to differentiate your students' thinking within any content.



Origins:

The Depth and Complexity Framework was developed by Sandra Kaplan, clinical professor in learning and instruction at USC's Rossier School of Education. They were created through her research into the knowledge types which distinguish experts in a particular field of study from others with only a surface knowledge.



Expert Knowledge



Expert knowledge is defined as having depth and complexity.

Deep understanding is knowing the language, details, patterns, rules, trends, unanswered questions, ethics and big ideas which make up a topic's content.

Complex understanding is gained by examining the the change in the topic over time, different perspectives of the topic, and how it connects to others disciplines.

Why create the icons?

The icons were created as a tool to give teachers and students a way to quickly identify the types of thinking needed to move toward expert knowledge of a given topic or content area.



Why use the Icons? **“Thinking tools”** for your students.

- 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.”

*Think like a... geographer, historian,
physicist, economist, mathematician, etc...*

More why?...

- 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.
- Create a differentiated experience for ALL LEARNERS, of ALL AGES, in ALL SUBJECTS.

Student goals:



DEPTH

The goal of Depth is to help students to expand their knowledge and expertise while maintaining a balance with the academic content.

COMPLEXITY

The goal of Complexity is to challenge students to make connections across disciplines, both over time and between disciplines.

Introducing the Icons:

<https://www.jtayloreducation.com/dciconintrovideos/>

Depth and Complexity Videos



Icons of Depth

- Requires students to uncover more details and new knowledge surrounding a topic of study.
- Encourages students to view a topic from different perspectives and see patterns and connections.
- Students study a topic from the known to the unknown and from the concrete to the abstract.
- Students examine a topics by identifying facts, concepts, principles, generalizations, and theories related to it.

Language of the Discipline



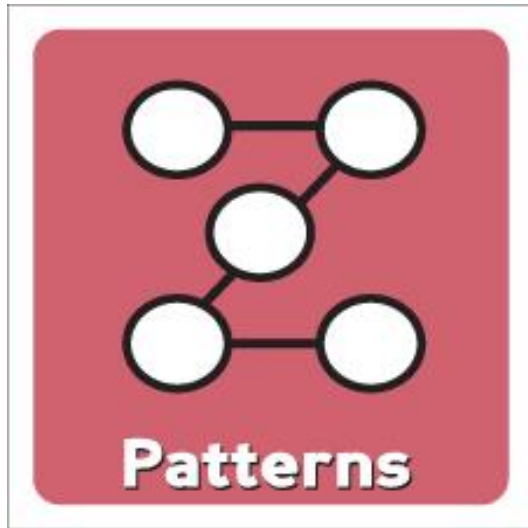
Terminology, tools,
jargon, signs and
symbols of the
discipline.

Details



Facts, features, traits,
parts, particulars of a
topic.

Patterns



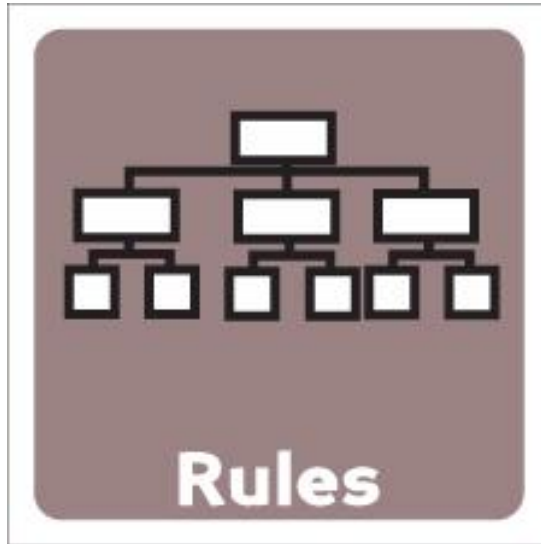
Predictive, cycles,
repetitive,
person-made and
natural, recurring

Unanswered Questions



An unknown,
unexplained, unsolved,
doubtful, uncertain

Rules



Standards, structure,
directions for conduct or
procedure, methods,
organization.

Trends



General tendencies,
influences, drifts, current
styles.

Ethics



Controversies, biases,
prejudices, moral
values, decision
making.

Icons of Complexity

- Students make relationships, connect other concepts, and create layers of understanding.
- Students build bridges to other disciplines, enhancing the meaning of content.
- Students examine ideas and concepts to a more sophisticated degree.
- Students discover associations among diverse topics and subjects.
- Students create multiple solutions from different points of view.

Big Idea



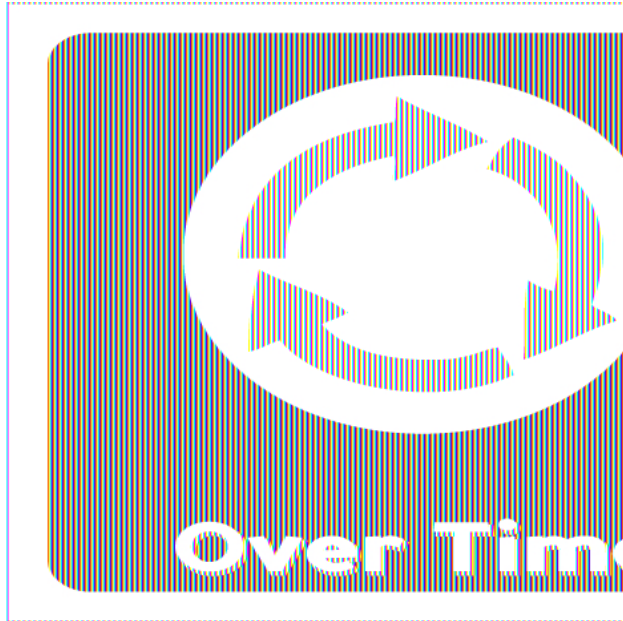
Generalizations,
overarching, developed
from many facts or
instances

Across the Disciplines



Multidisciplinary,
interdisciplinary, touching
multiple subjects at once

Change Over Time



Viewing past, present,
future, noting change,
prediction based on
current knowledge

Multiple Perspectives

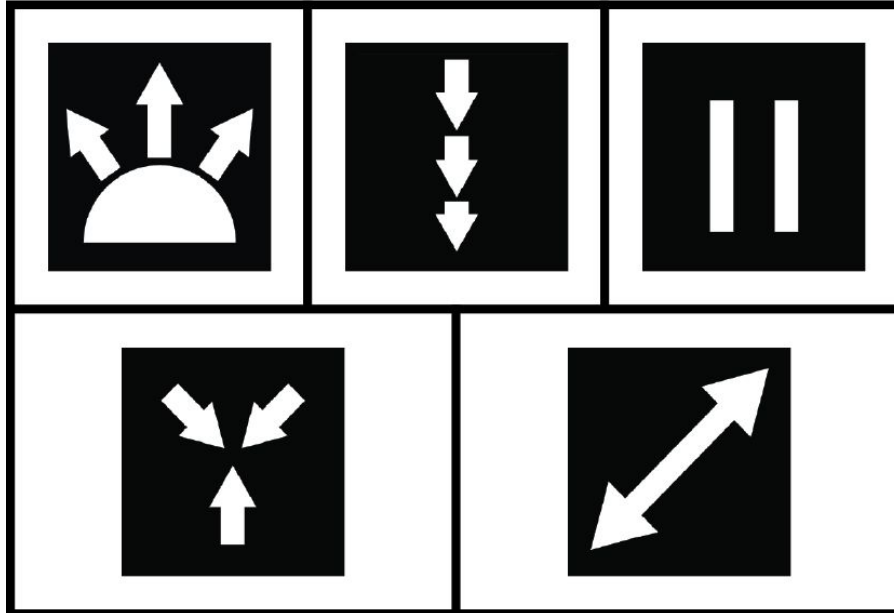


Different points of view or
ways of seeing things.

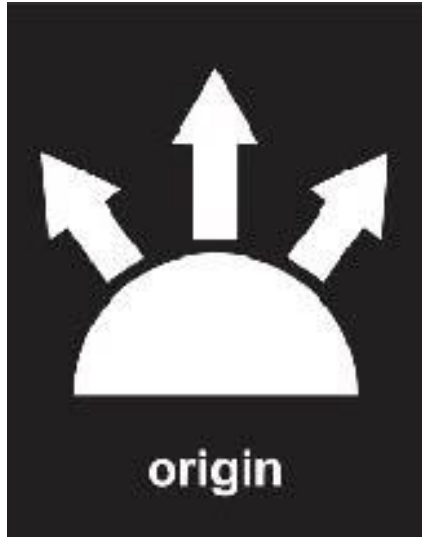
Content Imperatives

<https://www.jtayloreducation.com/the-content-imperative-prompts-icons/>

Content Imperatives

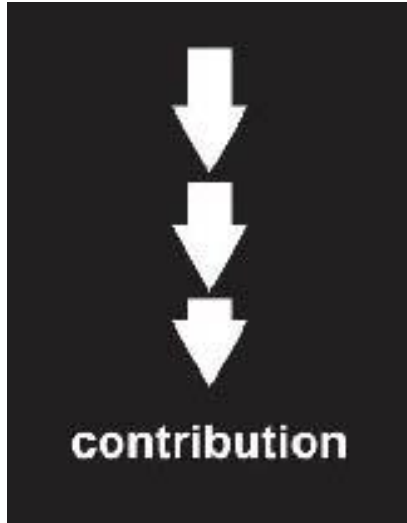


Origin



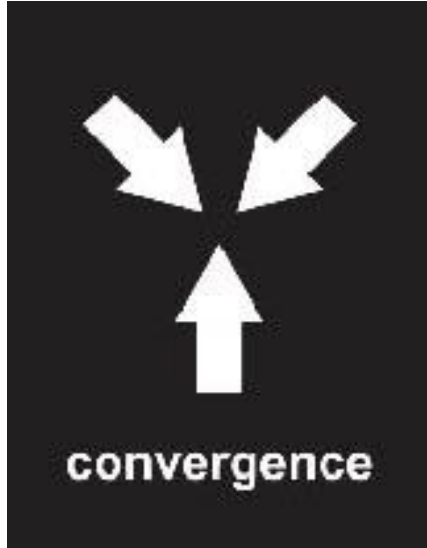
**Beginnings, roots,
foundations.**

Contribution



**Lasting effects, influence
upon people.**

Convergence



Events which merged,
happened in a particular
order, etc. to end in a
particular result.

Paradox



**Contradictory elements of an
opinion, statement or event.**

Parallel

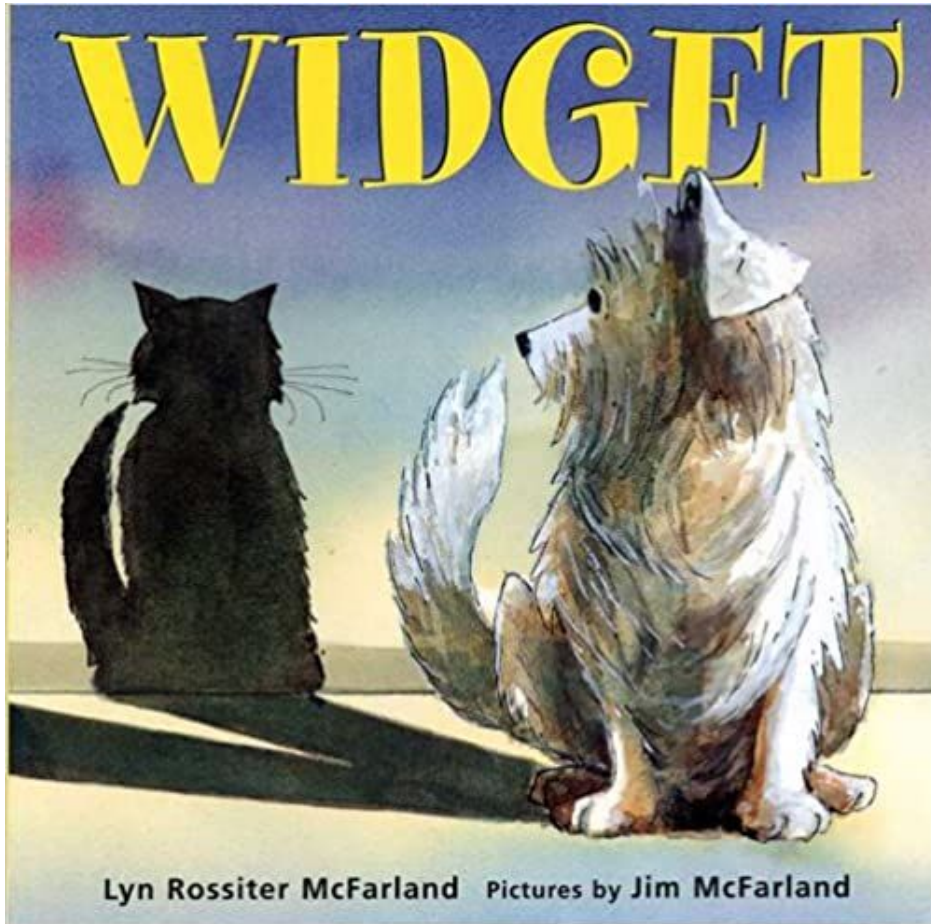


Similarities, comparisons
of events, peoples,
problems.

Task Statements: Differentiation equations to develop individualized learning objectives.

$$[T/S+(C+D/C)+R/S+P]$$

- T/S=Thinking Skills
- C=Content
- D/C=Dimensions of Depth and Complexity
- R/S=Resources and Research Skills (how will you teach and what will you need?)
- P=Product (evidence of student learning)



Read a story... Widget

Assign icons: Details,
Patterns, Ethics, Change
Over Time.

Listen with your focus and
reflect on your icon.

Record your findings.

Share together into frame.

Samples/Ideas from the D&C pbvU class



Norton Simon Artist - Dustin Schonauer

See other student samples in the Google Classroom:

<https://classroom.google.com/c/NTEzNzQzNDMwODRa>

Samples from Kim Tredick

Intro Depth and Complexity Icons

PBVUSD

Resources to explore:

jtayloreducation.com

Byrdseed.com

envisiongifted.com