High-Level, Differentiated Questioning with Depth & Complexity Icons

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Who Is This Person?

• 27 years
  • 2 – high school government
  • 5 – 6th grade
  • 10 – 4th grade
  • 10 – TAG (Talented and Gifted)

• Depth and Complexity History

• Cell Phone
Questioning Considerations

• TEKS Verbiage
Questioning Considerations

- Bloom’s Taxonomy
Questioning Considerations

• Bloom’s Taxonomy

- Remembering
- Understanding
- Applying
- Analyzing
- Evaluating
- Creating
TEKS Verbiage

• 5th Grade Science
• TEKS 5.6 B
demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound

• Go Down

label that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound
TEKS Verbiage

- 5th Grade Science
- TEKS 5.6 B

demonstrate that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound

• Go Up

explain that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound

evaluate that the flow of electricity in circuits requires a complete path through which an electric current can pass and can produce light, heat, and sound
contrast Spanish, Mexican, and Anglo purposes for and methods of settlement in Texas
TEKS Verbiage

- 7th Grade Social Studies
- TEKS 7.2 F

**contrast** Spanish, Mexican, and Anglo purposes for and methods of settlement in Texas

- Go Up – Your Turn
Questioning Consideration

- Depth and Complexity and Content Imperatives
Questioning with DC and CI

• Language of the Discipline
• Use thinking skills to raise and lower level of questioning
Questioning with DC and CI

- Remembering:
  - Identify the types of figurative language

- Understanding:
  - Locate examples of figurative language

- Applying:
  - Write examples of figurative language
Questioning with DC and CI

• Analyzing:
  • Classify the types of figurative language

• Evaluating:
  • Interpret the different examples of figurative language and their effectiveness

• Creating:
  • Elaborate your writing with effective use of figurative language
Questioning with DC and CI

- Modeling Time
  - Choose icon
  - Choose subject matter
Questioning with DC and CI

• Discussion Time
  • Which icon would you like to use with your subject area?
  • Discuss using verbiage to differentiate the use of the icon
Question Stems

• Great way to incorporate DC and CI into daily tasks...

Today we will use _____ to (verb) the ______
Examples

• Today we will use Patterns to examine the causes of the Civil War.

• Today we will use Multiple Perspectives to compare two characters from *The Green Glass Sea*.

• Today we will use Details to infer the solution of an Encyclopedia Brown mystery.
Examples

Today we will use _____ to identify the _____.

Today we will use _____ to explain the _____.

Today we will use _____ to infer the _____.

Today we will use _____ to evaluate the _____.
DC Tool – Q3 Cards
Q3 Cards

• 2nd Grade Social Studies
• TEKS 2.7 A

describe how weather patterns and seasonal patterns affect activities and settlement patterns

• Question stem: What are the opposing viewpoints in _____ (issue)?

• Describe how people use water in your community.
Q3 Cards

• 2nd Grade Social Studies
• TEKS 2.7 A

describe how weather patterns and seasonal patterns affect activities and settlement patterns

• Question stem: What are the opposing viewpoints in _____ (issue)?

• Debate the use of water in your community.
Q3 Cards

• Take one of the Q3 cards given to your group.

• Identify a subject area and / or TEKS.

• How might one of the cards help you with that subject / TEKS?

• Differentiate the TEKS by changing the verbiage.
I Ponder...

- Use of DC and CI in informal ways
- Encourages students to question

I ponder the _____ of _____
The Astronomer

Johannes Vermeer
A Reason for Reading

Today we will use [icons] to analyze the [icons] to discover the [icons] to understand the [icons]
A Reason for Reading

What makes a planet habitable?

By NASA.gov on 01.26.17

Word Count 977
China's giant pandas are getting a huge mountain range all to themselves.

China is planning to create a giant panda reserve that will be three times the size of Yellowstone National Park in the United States. The new project is part of the country’s efforts to boost the wild population of the long-endangered giant panda.

The 10,476-square-mile area will link up 67 existing panda reserves on six isolated mountain ranges. It is hoped that this mountain “merger” will help the pandas mingle and mate. This level of breeding would enrich the gene pool, China's state news agency Xinhua reported.

The International Union for Conservation of Nature (IUCN) reclassified the giant panda last year from endangered to vulnerable. In other words, the future of the giant panda is more certain now than it was before. The numbers of giant pandas rose 17 percent between 2003 and 2013.

About 1,864 pandas live in the wild, where their main threat is loss of habitat. China wants to increase the number to 2,000 by 2025.
Hundreds of thousands of people followed trails west between 1840 and 1860. Most left from the town of Independence, Missouri. There they joined a wagon train, or a line of wagons traveling as a group, to places such as California or Oregon. To get there, they had to cross the vast Great Plains and the towering Rocky Mountains. The journey, which was up to 2,000 miles long, was a test of courage and strength.

The Westward Trail
Newsela Editor's Note: This essay appeared in the July-August 1845 edition of the United States Magazine and Democratic Review under the title "Annexion." The editor, John O'Sullivan, coined the term 'Manifest Destiny.' That phrase supported the U.S. taking of western land. It was also in part responsible for the removal of Native Americans from those lands. Its use of language is typical of newspapers of the time.

It is now time to stop fighting about Texas joining the Union. All of the angry talk about this question must stop. We know that, because we are a free people, it is common for us to struggle over things that divide our government parties. But when it comes to Texas, the parties have been through enough.

It is time for our love of country to win out. If this cannot be done, it is at least time for us to use our common sense. We must accept the unavoidable and the unchangeable.
I am going to use details to demonstrate the language of the discipline.

The book, *Elijah of Buxton*, uses a special slang for common words, which serves as one of the unique aspects of Elijah Freeman’s life. Popular in the settlement, there are many examples to reflect the use of the special language.

“Afore I knewed what was happening I was through Cooter’s gate and right in the middle of a good long hard run home. I had sense enough not to take any shortcuts and stuck to the road so’s I could at least see the hoop snake hunting party if I ran up on it. Ma must’ve heard me screaming a ways off ‘cause she was running out our front gate by the time I got there.” (P8)

From this paragraph, there are as many as six words and phrases different from the standard English. “Afore” means before. “Knowed” is actually the word “knew”. “Not to take any shortcuts” will be “not to take any shortcuts”. “So’s” represents the word “so”. “A ways off” actually means far away. Finally “cause” is the word “because”. Growing up in the settlement, Elijah learned to talk like everyone else. It is no surprise he uses many of the slang words in his community.

Another paragraph from the book also implies the lack of schooling may have caused African Americans to talk differently.

“All the *growned* folks that hadn’t never learnt to read nor write whilst they were ‘slaved had to take lessons at the schoolhouse at night. Between cooking and cleaning and gardening and sewing and knitting and working the fields at *harvesttime* and helping out at the chopping bees and the raising bees and tending to her sheep and shearing them and gathering wool and carding it and spinning it, Ma had been lazy and was slackin off on her school lessons and they weren’t sticking particular good.” (Page 189)
Frames and Questioning
Deductive and Inductive Reasoning

Deductive Reasoning
Use to guide questions about a subject.
Deductive and Inductive Reasoning

Inductive Reasoning
Writing a Summary
What is the big idea of The Hero’s Journey?

Joseph Campbell spent his life trying to figure out one pattern in every poem. He found out the patterns that he now called the Hero’s journey.

What questions remain in your mind about the Hero’s journey?

Choose another icon and respond to the text.
Joseph Campbell was interested in the patterns of which fiction stories are written. He studied stories for a long time and came up with the Hero's Journey, a pattern that many stories now follow.

Joseph Campbell was inspired by a lot of people to find out more about patterns within multiple books. After a lot of research and studying he found a pattern that applied to many books. He made a pattern based on the pattern he found. He called it the Hero's Journey. Many people started using his pattern in their own stories.
Inferencing Explanation based on the Icons of Depth and Complexity and the Content Imperative Icons
Amazon Prime Air

What big ideas and details did you discover from the video?

What parallels from history can you make?

What issues might arise from this?

What must come together for this to work?
Literature Circle Questions
The Icon Game

What makes a planet habitable?

By NASA.gov on 01.26.17
Word Count 977
<table>
<thead>
<tr>
<th>Second Grade</th>
<th>Icons</th>
<th>Third Grade</th>
<th>Icons</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) establish purposes for reading selected texts based upon desired outcome to enhance comprehension</td>
<td>![icons]</td>
<td>(A) establish purposes for reading selected texts based upon own or others’ desired outcome to enhance comprehension</td>
<td>![icons]</td>
</tr>
<tr>
<td>(B) unliteral questions of text</td>
<td>![icons]</td>
<td>(B) ask literal, interpretive, and evaluative questions of text</td>
<td>![icons]</td>
</tr>
<tr>
<td>(C) monitor and adjust comprehension (e.g., using background knowledge, creating sensory images, re-creating a portion aloud, generating questions)</td>
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<td>![icons]</td>
</tr>
<tr>
<td>(D) make inferences about text and use textual evidence to support understanding</td>
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<td>![icons]</td>
</tr>
<tr>
<td>(E) recall important events in stories in logical order</td>
<td>![icons]</td>
<td>(E) summarize information in text, maintaining meaning and logical order</td>
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<tr>
<td>(F) make connections to own experiences, to ideas in other texts, and to the larger community and discuss textual evidence</td>
<td>![icons]</td>
<td>(F) make connections (e.g., thematic links, author analysis) between literary and informational texts with similar ideas and provide textual evidence</td>
<td>![icons]</td>
</tr>
</tbody>
</table>

Figure 19
Math Process

TEKS

<table>
<thead>
<tr>
<th>Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) apply mathematics to problems arising in everyday life, society, and the workplace</td>
</tr>
<tr>
<td>(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution</td>
</tr>
<tr>
<td>(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems</td>
</tr>
<tr>
<td>(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate</td>
</tr>
<tr>
<td>(E) create and use representations to organize, record, and communicate mathematical ideas</td>
</tr>
<tr>
<td>(F) analyze mathematical relationships to connect and communicate mathematical ideas</td>
</tr>
<tr>
<td>(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication</td>
</tr>
</tbody>
</table>
Time To Work / Reflect

**OPTION I**

- Work with group at your table or with others who teach approximately your grade level.
- Identify curriculum.
- Work on including questioning based on DC and CI.

**OPTION II**

- Work as a group
- “Yell out” a curriculum need
- Everyone brainstorms solutions and discusses
Final Thoughts

• Unanswered Questions Icon very important
• Ties into self-directed exploration