Text Dependent Analysis (TDA) Professional Learning Series:

Script for Module 5 - Recognizing the Difference between Inference and Analysis

<table>
<thead>
<tr>
<th>Slide</th>
<th>Script</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome to the Text Dependent Analysis Module #5: Recognizing the Difference between Inference and Analysis. This module answers the key question: <em>What is the difference between inference and analysis?</em> This module is part of a comprehensive series of TDA modules created by the Center for Assessment and Pennsylvania Department of Education. There is an Introduction Module to the TDA Professional Learning Series that explains the purpose, organization, and intended use of the modules and should be watched first, if you have not already done so.</td>
</tr>
</tbody>
</table>
| 2     | As a warm-up to this module, we ask you to consider the following questions: 1) *How do you define “inference”? 2) How is an inference the same/different from analysis?*

Please pause the video and respond to this question in your journal (page 2) then discuss with colleagues. After your reflection, resume playing the video. |
| 3     | If you struggled with determining how an inference is the same and different from analysis or even reading comprehension, it is not surprising since an inference is the bridge from comprehension to analysis. In other words, reading comprehension may include making an inference, but analyzing texts requires making inferences.

This resource is designed to assist with understanding the meaning of inference and analysis, identifying the purpose of inferencing and its connection to reading comprehension and analysis, and recognizing the difference between these two concepts in student writing. |
| 4     | Let’s begin with the expectations of reading comprehension. When students read, we expect them to engage with the written text, demonstrating a general understanding by identifying the reading elements and the main information the author wants the reader to know. Reading comprehension may also include interpreting the author’s meaning. |
How does this occur? Good readers create mental images of what they read and make inferences about the information in the text. To make inferences good readers use text evidence from a specific section of the text and combine this with their own background knowledge to make meaning of a small part of the text. When inferencing, readers look for logical relationships between the words and/or events from the text and seek to make a connection to what they know about themselves and the world around them to better understand the character or situation.

Let's look at an excerpt of a text to illustrate how students demonstrate these concepts.

5 Please pause the video to read over the short excerpt from the text, *Blueberry Picking* by Donald Hall. You can download the text from the module folder. Resume playing the video once you are ready.

Demonstration of basic reading comprehension includes questions such as, *What is this passage mainly about?* or *What are the challenges the main character encountered?* A response to these reading comprehension questions can be explicitly found in this small section of the text in which [click enter] the grandson picks low-bush berries and there are tricks that the berry picker should know so that the berries aren’t crushed, leaves and stems are not pulled along with the berries, or picking slowly doesn’t occur. Another challenge is that [click enter] picking berries creates problems when sitting, kneeling, or standing. The grandson tries different ways to pick but only fills the pail a quarter full but [click enter] his grandfather fills one whole pail.

6 We could also ask students:

- How do you think the grandson feels about blueberry picking and how do you know?
- What does this tell you about the grandson?

The answers to these questions are not right there in the text. To answer these questions, the students need to connect the text and their background knowledge and experiences to make a valid and educated suggestion of an idea that is not directly stated in the text.
For example, students might make an inference that the grandson feels frustrated because no matter how he picks the blueberries he has foreign matter in his bucket, and he can never get comfortable. A student could also make an inference that the grandson is persistent because despite the challenges of picking the blueberries he keeps picking them. There are other inferences a student could make about the character because readers interpret texts differently based on what they bring to the text from their own experiences.

As you can see, making inferences is about a small section of the text.

<table>
<thead>
<tr>
<th>7</th>
<th>On the other side of the bridge is analysis, which requires an interpretation of the reading elements and how they impact the whole text, rather than a small part of the text. We define analysis as “a detailed examination of the elements or structure of text, by breaking it into its component parts to uncover interrelationships in order to draw a conclusion about the whole text.” In other words, analysis seeks to determine how the reading elements are interrelated, and then drawing a conclusion and generalizing to make meaning about the entire text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>The main point is that analysis requires a causal chain of reasoning beginning with text evidence, then explaining the text evidence based on background knowledge and experiences (inferencing), to drawing a conclusion about the meaning of the text as a whole. Recognizing inferences or analysis can sometimes be difficult to identify in student writing, because it may seem like the student is summarizing. However, it is important to remember that making inferences and analyzing text requires using text evidence along with an explanation about the entire text. The difference is that a summary ends without connecting the evidence to any other information; whereas an inference connects to background knowledge, and analysis connects the evidence and inference with another reading element or text structure. This is the chain of reasoning!</td>
</tr>
</tbody>
</table>
| 9 | Let’s look at an example of student writing to identify this chain of reasoning. Students were asked to read the text Blueberry Picking and }
respond to the prompt of analyzing how the grandson demonstrates a theme about persistence when responding to the challenges of blueberry picking. The students are expected to show an interrelationship of the character (grandson) and a theme about persistence. In this response, the student includes paraphrased evidence: The grandson grabs handfuls and squishes some berries, but then his grandfather shows him the correct way.

In the chain of reasoning, the student makes an inference by stating: This is important because he gets frustrated that he won’t get blueberries picked cause he is squishing them all.

This statement makes meaning of the evidence from a small portion of the text. However, students cannot end here as they are expected to analyze the text and show an interrelationship between the evidence and inference about the character and a theme about persistence. The student continues with the chain of reasoning by stating: This connects to the prompt but he still continues. While this statement is not a strong analysis, the student does show an interrelationship between the grandson’s frustrations of how to pick blueberries to a theme about persistence by writing that the grandson continued picking.

This analysis could be strengthened with an explanation as to why the confusion of how to pick the blueberries led him to continue. For example adding the following would clarify and strengthen the analysis: His grandfather showed him the right way to pick and this helped the grandson to fill his bucket quicker. This encouraged him to persevere and overcome this challenge of squishing the blueberries.

In this second example of student writing, the students were asked to read the story, Cormorant in My Bathroom by Brooke Rogers. In the story, the narrator moves near the ocean and is sad and lonely, and finds comfort being alone at the beach and ocean. A storm occurs that causes an oil tanker to wreck and spill its oil, killing many birds. The main character tries to save as many birds as he can, but only manages to save the cormorant. The main character saving the cormorant is what allows him to experience a change. Please pause the video to read over the short text, The
Cormorant in My Bathtub. You can download the text from the module folder. Resume playing the video once you are ready.

Students are then asked to respond to the prompt: Write an essay analyzing how the main character of The Cormorant in my Bathtub changes in response to the events in the passage.

12 Examine this second example of a grade 6 student writing demonstrating analysis using the chain of reasoning of evidence-inference-analysis.

Please pause the video and record in your journal (page 3) the evidence the student provides, the inference the student makes (logical relationships between the words and/or events from the text and seek to make a connection to what they know about themselves and the world around them to better understand the character or situation), and the statement that shows analysis (interrelationship between two reading elements). After your reflection, resume playing the video.

13 In this response, the student writes the quoted evidence [click enter]: “I haunted the beach. I never made new friends.”

The student then makes an inference by stating [click enter]: The event of moving to the [beach] has an effect on the character. He loves the beach. He responds by going to the beach at all times.

The statement makes meaning of a small part of the text. The text does not state that the character loves the beach, but the student makes a logical connection between the event and background knowledge. If the character goes to the beach all the time, he must love the beach. The student uses the specific text evidence combined with background knowledge to make a logical connection between the event and how the character is feeling. The student's inference (The event of moving to the [beach] has an effect on the character. He loves the beach. He responds by going to the beach at all times.) is only about the character at a moment in time, not how the character changes as a result of events.

However, the student continues: This changes him because before he
moved he could have been very social, now he stays at the beach and does not try to make friends. In this statement, the student shows an interrelationship between the event – before he moved he could have been very social – to the character’s response to the event - never made new friends. The student includes that the event changes him and now he stays at the beach and does not try to make friends. Again, this is not a strong analysis, but the student does begin to show how the character is changing as a result of the event.

14 In this third example of student writing, the students were asked to read the poem, *Caged Bird* by Maya Angelou.

Please pause the video to read over the short poem, *Caged Bird*. You can access the poem from the module folder. Resume playing the video once you are ready.

15 Examine this third example of a grade 8 student writing demonstrating analysis using the chain of reasoning of evidence-inference-analysis.

Please pause the video and record in your journal (page 4) the evidence the student provides, the inference the student makes, and the statement that shows analysis (interrelationship between two reading elements). After your reflection, resume playing the video.

16 In this response, the student writes the quoted evidence: “...his wings are clipped and his feet are tied so he opens his throat to sing. The caged bird sings with a fearful trill of things unknown but longed for still and his tune is heard on the distant hill for the caged bird sings of freedom.” And identifies that this quote appears in every stanza.

17 The student then makes an inference by stating: *When reading about the caged bird, the image given by the word choice is cruel and unpleasant.*

The statement makes meaning of a small part of the text. The text does not state that caging the bird is cruel. The text implies that it is unpleasant for the bird to be caged. The student uses the specific text evidence combined with background knowledge to make a logical connection between the word choice in these repeated lines and the image that is created. The student’s inference (*When reading about the caged bird, the image given by the word*
choice is cruel and unpleasant.) is only about the poet’s use of repeated lines and the image produced for the reader. It does not connect to the student’s stated theme of having hope fuels perseverance.

18 The student continues the chain of reasoning by stating: Despite such descriptions, at the end, the caged bird’s hope of one day being free is powerful. So powerful that even though he is bound, he uses the last option he has left – his voice – to continue singing of freedom again and again.

In this statement, the student shows an interrelationship between the poet’s descriptions in the repeated lines to the theme – hope fuels perseverance. The caged bird’s singing of freedom again and again, demonstrates its perseverance. Although this is not specifically stated in the paragraph, the student implies this point.

How did your identification of evidence-inference-and analysis compare to ours?

19 Based on these three samples of student work showing evidence-inference-analysis, explain in your own words, how these students demonstrated a chain of reasoning.

Please pause the video and respond to this question in your journal (page 5) then discuss with colleagues. After your reflection, resume playing the video.

20 At the beginning of this module, we identified that good readers create mental images of what they read and make inferences about the information in the text. To make inferences good readers use text evidence from a specific section of the text and combine this with their own background knowledge to make meaning of a small part of the text. When inferencing, readers look for logical relationships between the words and/or events from the text and seek to make a connection to what they know about themselves and the world around them to better understand the character or situation.

However, research has shown that struggling readers often do not move beyond basic reading comprehension and paraphrasing the text. One study
conducted by Glaser (1989) found that one criterion for distinguishing poor and good readers is the number of inferences they produce. He pointed out that poor readers do not realize their breakdowns in comprehension. Whereas good readers produce more inferences to rebuild comprehension breaks.

Given this information about good readers and struggling readers, what do you think are the instructional implications?

Please pause the video and respond to this question in your journal (page 6) then discuss with colleagues. After your reflection, resume playing the video.

We believe there are several instructional implications for teachers:

1) Teachers should explicitly teach students the meaning of inference and analysis as academic vocabulary. When students are expected to write a response to a text dependent analysis prompt, they must move beyond recall and recitation of information. In order to do this, they must consider broader perspectives, moving toward generalizing their understanding of text. However, they must first understand the vocabulary and what is expected when asked to make an inference or analyze a text.

2) During instruction, teachers should ask students “why” questions that elicit an inference. Rather than allowing students to focus on insignificant information, the teacher asks specific “why” questions that point students to important sections of the text. This strategy also supports reading comprehension.

3) As teachers listen to students respond, misconceptions or incomplete understanding of the text can be detected and adjusted immediately.

We believe that it is essential to take a few minutes to reflect upon what you just heard, organize it in your own mind, and to apply it to your professional practice. Pause to reflect and respond to the following question in your reflection journal (pages 7-9):

Consider your instructional practices:

1) How often do you teach students the academic vocabulary necessary to
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>successfully understand and engage in making inferences and analyzing different reading elements?</td>
<td></td>
</tr>
<tr>
<td>2) In what ways do you support students in making inferences when they are reading text? Describe the types of questions you pose and the strategies you use to help students make inferences.</td>
<td></td>
</tr>
<tr>
<td>3) What opportunities do you provide students to learn and practice what is expected in an analysis of two reading elements? After your reflection, resume playing the video.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>If you are interested in further information about the content of this module, you can download the resource, <em>Recognizing the Difference between Inference and Analysis</em>, from the module folder.</td>
</tr>
<tr>
<td>25</td>
<td>This module answered the key question: <em>What is the difference between inference and analysis?</em> This module is part of a comprehensive series of TDA modules created to help you go deeper and extend your learning about text dependent analysis.</td>
</tr>
<tr>
<td>26</td>
<td>Additional information for this module can be found using these references.</td>
</tr>
<tr>
<td>27</td>
<td>Thank you for taking the time to engage in Module 5.</td>
</tr>
</tbody>
</table>