



The Thompson TDA Model

Text Dependent Analysis Response:

Recognizing the Difference between Inference and Analysis

Text dependent analysis requires students to provide evidence from the text and to draw inferences based on what the text says in order to support an analysis. Students are expected to construct a well-written essay which communicates their inferences and their connection to the evidence, while drawing a conclusion aligned to the prompt in order to demonstrate analysis of the text. These expectations capture the three underlying components of text dependent analysis which include reading comprehension, analysis, and essay writing.

The purpose of this resource is to assist educators with understanding the meaning of inferencing and analyzing, identifying the purpose of inferencing and its connection to reading comprehension and analysis, and recognizing the difference between these two concepts in student writing.

Inference -- the Bridge from Comprehension to Analysis

Reading comprehension requires students to understand, interpret, and engage with written texts. As students engage with text they create a mental representation of the situation and information communicated by the author. A foundational or prerequisite skill for the interpretation of the author's meaning and for demonstrating analysis is the ability to make inferences (Marzano, 2010, p. 80). To make inferences, readers use specific text evidence and combine this with their own background knowledge to determine the meaning of a small part of the text. When inferencing, students look for logical relationships between words and/or events and they seek to make a connection between events by filling in missing information. In other words, inferencing requires a "causal chain of underlying conceptualizations" (Trabasso, 1981, p. 3). An inference can also be described as connecting a piece of text and what is in the mind together – background knowledge/experiences – to make a valid and educated suggestion of an idea that is not directly stated in the text (Beers, 2003; Royer, Carlo, Dufresne, & Mestre, 1996, 378).



A great amount has written about having students make inferences in order to increase comprehension. When readers make inferences they deepen their comprehension by establishing an understanding of vocabulary, the context of the events or situation, and domain or topic knowledge. Additionally, making inferences ultimately establishes a framework for interpretation and analysis.

Analysis is an interpretation of the text, as a whole, rather than a small part of the text. We have defined 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***. The goal of analysis is not simply to uncover parts within the whole, but to understand the connection of the parts to each other as a whole. Once the parts are identified, analysis then seeks to determine how those parts are related by recognizing the relationship and patterns between them. In the analysis, the whole is seen as greater than the sum of its parts, and requires drawing a conclusion and generalizing the meaning of the text (Thompson, 2018).

Recognizing Inferences and Analysis in Student Writing

Inferences and analysis are often difficult to identify in student writing. Statements that include an inference or analysis seem like a summary. However, it is important to look for **the chain of reasoning** in these statements. A summary ends without connecting to what the evidence means and moving to how the inference is interrelated to another reading element or to a structure. Demonstrating this chain of reasoning requires accurately using information from the text to demonstrate reading comprehension, to making inferences about the evidence, and drawing a conclusion about the meaning of the text as a whole.

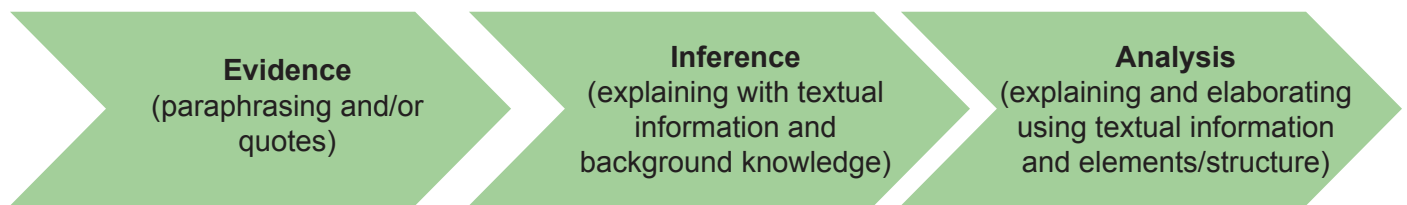


Figure 1. Chain of Reasoning

Provided below are examples of this chain of reasoning from grade 4, 6, and 8 student responses.

Example 1. Grade 4 Student Response

In the story, *Blueberry Picking*, a grandson goes blueberry picking with his grandfather. The grandson is not as adept at picking the berries as his grandfather. The prompt asks students to *Write an essay analyzing how the grandson demonstrates a theme about persistence when responding to the challenges of blueberry picking*.¹

¹ See additional TDA resources in the toolkit for more information regarding Annotated Student Work



One of the challenges is, how he does not know how to pick berries. The grandson grabs handfuls and squishes some berries but then his grandfather shows him the ~~correct~~ way. This is important because he gets frustrated that he won't get blueberries picked cause he is squishing them all. This connects to the prompt because he gets confused of how to pick the berries, but he still continues.

In this example, the student writes the paraphrased **evidence**: *The grandson grabs handfuls and squishes some berries, but then his grandfather shows him the correct way.*

The student then 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.*

The statement makes meaning of a **small part of the text**. The text does not state that the grandson is frustrated, but the student makes a logical connection between the event and her background knowledge. It is important to note that the expectations of text dependent analysis are related to the reading and writing instruction that occurs in the classroom and are not intended to require the use of a student's background knowledge extraneous to the instruction of the standards. However, there is no denying that a reader's interpretation of a whole text will be influenced by his or her prior knowledge and experiences. Therefore, the student uses the specific text evidence to make a logical connection between the event and how the character is feeling.

The students are expected to analyze how the character (literary element) demonstrates a theme about persistence (literary element). The student's inference is only about a character trait of the grandson, not how the character is showing a theme about persistence. However, the student continues: *This connects to the prompt because he gets confused of how to pick the berries, but he still continues.* In this statement, the student shows an **interrelationship** between the grandson's frustrations of how to pick blueberries – *gets confused* – to a theme about persistence – *he still continues*. This analysis could be strengthened with an **explanation** as to why the confusion of how to pick the blueberries led him to continue, such as: *his grandfather showed him the right way to pick and this new knowledge helped the grandson to fill his bucket quicker. This encouraged him to persevere and overcome this challenge of squishing the blueberries.*



Example 2. Grade 6 Student Response

In the story, *Cormorant in My Bathtub*, the narrator moves to the beach and is sad and lonely. While there, the narrator finds comfort in the beach and the ocean and spends most of his time alone on the beach. 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 saves the cormorant. The main character saving the cormorant is what allows him to experience this change. The prompt asks students to *Write an essay analyzing how the main character of The Cormorant in My Bathtub changes in response to the events in the passage.*

One event that the narrator changes to in response to the event is moving to the ocean. In the text it states, "I haunted the beach. I never tried to make new friends." The event of moving to the has an effect on the character. He loves the beach. He responds by going to the beach at all times. 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 example, the student writes the quoted **evidence**: "*I haunted the beach. I never made new friends.*"

The student then makes an **inference** by stating: *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* – to the character's response to the event – *he*



could have been very social. The student includes that the event *changes him* and *now he stays at the beach and does not try to make friends.*

Example 3. Grade 8 Student Response

In the poem, *Caged Bird*, by Maya Angelou, the poet describes two birds in different settings. One bird is free and can do whatever it wants while the other bird is trapped in a cage and cannot do anything but sing, showing that he longs for freedom. The prompt asks students to *Write an essay analyzing how the poet's descriptions develop the theme of the poem.* The student identified the theme as having hope fuels perseverance.

Reading the stanzas about the caged bird, the one thing he does appears every stanza. "...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." The repetition of these two sentences are crucial to the theme of this piece. When reading about the caged bird, the image given by the word choice is cruel and unpleasant. 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 example, 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."

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*. However, the student continues: *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.



Instructional Implications

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. 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. As teachers listen to students respond, misconceptions or incomplete understanding of the text can be detected and adjusted immediately. “Glaser (1989) stated that one criterion for distinguishing poor and good readers is the number of inferences they produce. Glaser pointed out that poor readers do not realize their breakdowns in comprehension. Whereas good readers produce more inferences to rebuild comprehension breaks, poor readers simply paraphrase the text” (Ozgunor, S. & Guthrie, J., 2004, p. 438). In fact, Ozgunor and Guthrie report that teaching students to make inferences increases comprehension for struggling readers.

Thompson, J. (2018). Text Dependent Analysis Resource: Response to a Text Dependent Analysis Prompt – The difference between inference and analysis. www.nciea.org, <http://www.education.pa.gov>, and <http://pdesas.org>.

Resources:

Beers, K. (2003). *When Kids Can't Read: What should teachers do*. Portsmouth, NH: Heinemann.

Glaser, R. (1989). Expertise and learning: How do we think about instructional processes now that we have discovered knowledge structure? In D. Klahr & K. Kotosky (Eds.), *Complex information processing: The impact of Herbert A. Simon*, 269–282. Hillsdale, NJ: Erlbaum.

Marzano, R. (2010). The Art and Science of Teaching / Teaching Inference, *Educational Leadership*, 67, 80-81. Retrieved from <http://www.ascd.org/publications/educational-leadership/apr10/vol67/num07/Teaching-Inference.aspx>.

Ozgunor, S. & Guthrie, J. (2004). Interactions Among Elaborative Interrogation, Knowledge, and the Process of Constructing Knowledge from Text, *Journal of Educational Psychology*, 96, 437-443. Retrieved from: <http://www.corilearning.com/research-publications/2004-ozgunor-guthrie.pdf>.

Royer, M., Carlo, M., Dufresne, R., & Mestre, J. (1996). The assessment of levels of domain expertise while reading. *Cognition and Instruction*, 14, 373–408. Retrieved from: https://www.researchgate.net/publication/247502407_The_Assessment_of_Levels_of_Domain_Expertise_While_Reading/link/02e7e53a987afd54fb000000/download



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Thompson, J. (2018). *Text Dependent Analysis: The Need for a Shift in Instruction and Curriculum*. Dover, NH: Center for Assessment.

Trabasso, T. (1981). On the making of inferences during reading and their assessment. In J. T. Guthrie's (Ed.) *Comprehension and Teaching: Research Reviews*. Newark, DE: International Reading Association.