Text Dependent Analysis Essay: Exploring A New Construct

(1.26.15)

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Introduction

A new feature of the Pennsylvania Common Core (PACC) is writing in response to a text. Specifically, the PA Core Standards state that in responding to text-dependent analysis questions, students will "draw evidence from literary or informational texts to support analysis, reflection, and research." Pennsylvania Department of Education (PDE) is calling the construct underlying these skills "text dependent analysis (TDA)." To respond to a TDA prompt, students must read a literary or informational text and then write an essay response that draws evidence, both explicit and implicit, from the text to support their analysis using effective written communication knowledge and skills. This practice of close, analytic reading requires students to critically examine a text to analyze the deep structures and big ideas and then provide evidence from the text in support of their responses (Fischer & Frey, 2012). TDA prompts, therefore, represent a move beyond general reading comprehension questions, such as "What is the main idea?", to specific questions about the interaction of reading elements that require students to draw evidence from the text in defining their response and explaining the relevance of that evidence in writing. An example of an analysis prompt may be, "Analyze how the author uses figurative language to communicate the main idea?" Furthermore, unlike some reading comprehension questions, TDA prompts necessitate more than recall, the identification of details in text without substantiating understanding, and/or the use of prior knowledge or information (without reference to the text) to provide evidence of understanding.

Since TDA represents a new construct (in general and for assessment on the PSSA) which requires teachers to instruct students in a different manner than what they have done in the past, there is an interest in understanding how the elements underlying this construct are represented in student responses. Such insight would serve to both inform the development of appropriate instructional strategies and support claims that the prompts are eliciting the types of skills desired and expected.

While TDA is intended to require more than basic reading comprehension and essay writing, as stated above, these elements (in conjunction with analysis, critical thinking and close reading skills) are still considered a necessary component for success. This is clearly reflected in the content standard, assessment anchor and eligible content associated with the TDA construct at each grade, which necessitate writing in response to literature and grade-level reading comprehension skills (e.g., determine main idea, explain and interpret text, identify details) in conjunction with more complex analysis/close reading skills (e.g., identifying relevant evidence from the text). The specific content standard associated with the TDA, and the associated eligible content from grade 4 is provided in Figure 1 below.

Figure 1. Content Standard for Text Dependent Analysis

1.4 Writing / Response to Literature.
Grades 4-5:Draw evidence from literary or information texts to support analysis, reflection, and research, applying grade-level reading standards for literature and informational texts
Grades 6-8: "Draw evidence from literary or information texts to support analysis, reflection, and research, applying

grade-level reading standards for literature and literary nonfiction

Grade 4 Eligible Content:

- **E04.A-K.1.1.3** Describe in depth a character, setting, or event in a story, drama, or poem, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

- **E04.B-K.1.1.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

- **E04.B-K.1.1.2** Determine the main idea of a text and explain how it is supported by key details; summarize the text.

- **E04.B-K.1.1.3** Explain events, procedures, ideas, steps, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Purpose

The purpose of this exploratory TDA initiative was two-fold: 1) to examine how the key knowledge and skills underlying student performance on a TDA prompt – specifically reading comprehension, essay writing, and analysis – interact and 2) to evaluate the impact of teacher TDA training on student performance and teacher understanding/instruction of TDA skills (e.g., close reading, analysis). The primary questions of interest were as follows:

1. How are the skills underlying high quality TDA performance, specifically; reading comprehension, writing and analysis related to one another?
    a. Are there examples of students who display strong reading comprehension skills but demonstrate only mediocre or poor understanding of the analysis skills necessitated by TDA?
    b. Are there examples of students who display strong analysis skills, but demonstrate little evidence of reading comprehension?
    c. To what extent is overall TDA performance dependent on each of these skills?
2. Do teachers benefit from targeted training on the development and instruction of student writing to TDA prompts?
    a. Can information gained through the analysis of student responses to TDA prompts provide teachers with information to improve instruction on this construct?
3. Do students of teachers who participated in TDA training perform better on these types of items than their peers, as reflected in their performance on TDA field-test items administered in 2013-2014?
4. Do students of teachers who participated in TDA training perform better on the PSSA Reading test (overall and looking specifically at reading comprehension items) than their peers, as reflected in their performance on 2013-2014 PSSA?

Participants

A sample of 20 teachers of English Language Arts in grades 4-8 (4 teachers per grade level with approximately 20 students per teacher) participated in this research. The sample provides for a range of experience (i.e., in terms of years teaching and population served), and represents 7 districts and 15 schools from across the state. Of these 15 schools, 6 were considered rural, 5 urban and 9 suburban[1]. With only one exception (an African American woman), all participants were white women. Years of

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[1] As reported by educators.

teaching ranged from 6-28, with the average of 17 for the entire group. Degrees held were predominantly elementary education (N=15) and ELA/Literature (N=8); however special education (N=2), reading (N=2), education leadership (N=1) and curriculum and instruction (N=1) degrees were also represented. In addition, of the 18 teachers who indicated experience teaching a general population, 10 also had experience with special education students; 6 with gifted students; and 5 with ELL students.

Meetings

Participating teachers were asked to attend three different meetings throughout this study. During the course of these meetings teachers received training to support: 1) understanding of the characteristics of a TDA prompt, 2) understanding of the differences between TDA and traditional reading comprehension prompts, 3) the development, evaluation, and revision of TDA prompts, and 4) the scoring and analysis of TDA essay responses as a means of identifying student strengths and misconceptions, and supporting the development of lessons/units that facilitate student understanding of this construct. An overview of the activities that occurred during and between each of these meetings, and the dates they were held, is provided below.

Meeting 1: November 25-26, 2013

The goal of the first meeting was to provide teachers with professional development targeted at understanding the difference between close analytical reading and general reading comprehension, as defined within the context of the PA Core Standards. Teachers were given articles to reference, teaching strategies, and examples illustrating the difference between reading comprehension and analysis/close-reading skills.

General reading comprehension was defined as "getting the gist" of the text. Examples of skills/tasks indicative of "reading comprehension" were found in the PSSA Samplers[2], and included:

- Understand the main ideas within a text
  - The passage is mainly about…
- Understand supporting details within a text
  - The author writes…, which statement best supports this claim?
- Understand the meaning of a word within a sentence
  - What is the meaning for the word …in the sentence?
- Understand the meaning of phrases within a sentence
  - What word best describes the phrase…?
- Understand explicit information from the text
  - Identify two challenges that the main character encountered …
- Inferring information from the text
  - State the theme or the author's message

Analysis was defined as "a detailed examination of the elements of reading or structure of text, typically as a basis for discussion or interpretation". Examples of texts and prompts having characteristics that elicit analysis skills were reviewed. A couple of these examples are provided below

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[2] At the link:
http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965/pennsylvania_system_of_school_assessment_(pssa)/1190526

- The text begins with: There once was a curious bird who wondered, "What can a small bird be?" Write an essay that analyzes why the authors chose to begin the text with this question. Use evidence from the text to support your response.
- The authors of each of the two texts about Amelia Earhart have stated that she was a daring, courageous person. Consider the argument each author made to demonstrate her bravery. Write an essay that analyzes the strength of the arguments using textual evidence to support your ideas.
- The author of "Casey at the Bat" uses humor to describe Casey's experiences. Write an essay analyzing whether the author's techniques are successful or not. Be sure to use textual evidence to support your analysis.

As part of this professional development, the characteristics of the TDA essay prompts and the skills necessary to respond to them were introduced. At the end of the meeting teachers were supplied with a pre-selected passage and asked to collaborate to draft one TDA essay prompt for their grade level. In addition, they were provided with the TDA scoring rubric and rules for collecting student performance data prior to the next meeting. Before adjourning, educators were encouraged to begin incorporating close-reading strategies into their day-to-day instruction and –to the extent possible –develop one "instructional" TDA essay prompt to administer to their class prior to the second meeting (for purely formative purposes). Detailed rules related to the type and amount of instruction to be provided, however, were not specified.

After the first meeting, each of the grade-level TDA essay prompts drafted by the teacher groups was reviewed and finalized by researchers and DRC. Prompts were reviewed to ensure they reflected the type and range of skills expected from a TDA prompt at that grade, and would provide for evaluation of general reading comprehension in addition to close, analytic reading skills. When necessary, text edits and modifications were made. Once finalized, the prompts were sent to the research teachers to administer to all of the students in their class[3]. These prompts are referred to as Research Prompt #1 within the context of this report.

Prompts were provided as word documents and accompanied with a standardized set of instructions for administration. After administration, teachers were instructed to read through their students' responses and to categorize the work as "high", "average", or "low" without scoring them. They were then asked to select a sample of 12 student responses from their class to bring to the second meeting. Teachers were told to select work they believed to represent the lower, middle, and upper third of the ability distribution (with respect to ELA skills) when identifying the sample of responses to be scored.

Meeting 2: January 21, 2014

At the second meeting teachers were first asked to discuss any questions or difficulties they encountered when developing instructional TDAs or when using the TDA rubric and/or domain-level rating scale to score student responses on the instructional TDA prompts. Subsequently, teachers worked in grade-level groups to review and score the 12 samples of student work resulting from Research Prompt #1. Discussions were focused on identifying student deficiencies and areas of instructional need with regard to reading comprehension, analysis, and writing, so that appropriate instructional strategies could be defined. Since student responses varied along the ability continuum, teachers discussed the instructional

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[3] Educators were instructed to select one class to administer the TDA research prompt – even if the instructional strategies were being more broadly applied.

needs of all students, including those identified as struggling and advanced students. Finally, teachers worked together to draft a second, grade-level TDA research prompt.

Following this meeting, teachers were asked to assign each student response from Research Prompt #1 an overall TDA score using the TDA scoring rubric, and 3 additional ratings representing the extent to which the response reflected evidence of reading comprehension, writing and analysis skills, respectively.[4] Reading comprehension, with respect to the PSSA, had been defined at both meetings as "getting the gist" of the text, examples of basic reading comprehension expectations and question types had been discussed along with an examination of reading comprehension open-ended response items from PSSA Samplers. Additionally, analysis was defined and explored, as were the expectations of essay writing. Ratings were made on a scale of 1-3, with a 1 representing weak evidence of the skill of interest and a 3 representing strong evidence of the skill of interest within the context of the response.

After this meeting, a similar process was used to finalize and distribute research prompt #2.   Teachers were instructed to administer the prompt to their class and to bring copies of the same sample of 12 students to the 3rd meeting for scoring.

Meeting 3: February 24-25, 2014

At the final meeting, educators worked in grade-level groups to review and discuss student responses to research prompt #2.   Teachers used the opportunity to discuss instructional strategies applied in the classroom and the extent to which they appeared to be influencing student performance.   In addition, they worked together to draft a 3rd research prompt for classroom administration.

After this third meeting, teachers were instructed to score Research Prompt #2 assigning an overall TDA score to all student work, and to provide the additional 1-3 rating for TDA, reading comprehension, and essay writing ability. A similar process to that previously described was used to finalize and distribute research prompt #3.   Teachers were instructed to administer the prompt to their class prior to the operational PSSA assessment window, and score all student responses, including the sample of 12 brought to previous meeting. Educators were asked to submit their scores to researchers using a provided data collection sheet and then complete the online survey distributed by the researchers via e-mail.

Research Tools and & Data

A variety of tools and data were used to evaluate the research questions previously discussed.   The tools include the TDA scoring rubric, TDA research prompts and passages, TDA data collection sheets, TDA Lesson Planning and Student Work Analysis templates, and TDA teacher participation surveys.   Each of these tools is briefly described below.
- **TDA Scoring Rubric** - the holistic scoring rubric developed by the state in collaboration with DRC, the researcher, teachers, and other consultants for use in scoring TDA essay responses. This rubric was used by the teachers to score student responses to Research prompts 1-3, and by DRC to score responses to the TDA field-test items administered on the 2013-2014 PSSA.   The

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[4] The TDA rubric is holistic, so performance in the domains of reading comprehension, writing and analysis are not independently scored. These ratings, therefore, provide for a rough estimate of differential performance across these domains.

version of this document used for scoring within the context of this research is included in Appendix A.[5]

- **TDA Research Prompts and Texts –** TDA essay prompts drafted by the teachers for administration to all students in their class. Three prompts were developed and administered within each grade-level group, resulting in 15 total prompts. Each educator administered the grade-level research prompt to all students within a given class. Two sample prompts and their associated texts are provided in Appendix B.

  To ensure the quality and appropriateness of all materials developed to support this initiative, several stages of review, feedback and revision were implemented throughout the study. Prior to each meeting, for example, all texts selected for use in developing TDA Research prompts were reviewed by content experts to determine if they could support the generation of high quality TDA prompts that address the KSAs of interest. Similarly, prior to the administration of any TDA research prompt in the classroom, DRC staff members reviewed each newly developed prompt for clarity, grade-appropriateness, and alignment to relevant assessment anchors and content specifications.

- **TDA Data Collection Sheets -** excel workbooks provided to teachers for recording student scores on each of the research prompts. For each research prompt (1-3), student responses were given a total TDA score (based on the TDA scoring rubric), as well as three additional ratings (on a scale of 1-3) indicating the extent to which the response reflected evidence of general reading comprehension, essay writing, and analysis skills.

- **TDA Lesson Planning Templates** – A template provided to teachers as a structure for planning lessons that included close reading strategies, text-dependent questions as scaffolding for the TDA, vocabulary and/or text structure analysis, and a culminating text-dependent analysis question. (See Appendix C)

- **TDA Student Work Analysis (SWA) Protocol** – A SWA form was shared to provide teachers with a framework for analyzing the results of the instructional or research TDAs. Through this analysis teachers would be able to identify student strengths and needs with regard to general reading comprehension, essay writing, and analysis skills. This information was further analyzed in order determine the instructional needs of the whole class, as well as students who were considered to be meeting expectations, partially meeting expectations, and those that were struggling to meet expectations. (See Appendix D)

- **TDA Teacher Participation Surveys** – Surveys provided to teachers upon completion of the research activity to get feedback regarding perceived usefulness and impact of the professional development activities, and the extent to which reading comprehension, writing and analysis skills could be uniquely identified and evaluated in student responses. (Summary of responses provided in Appendix E)

In addition to the materials described above, a variety of data were available to support analysis, including: student responses to each of the three group-developed research prompts, the associated scores

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[5] Note that this version of the rubric will not reflect any changes made in light of information gained from the pilot administration in 2013-2014. For the most current version of the rubric check the PDE website.

assigned by teachers[6], teacher survey data, 2013-2014 operational PSSA performance data for all students in the state (in grades 4-8), and 2013-2014 TDA field-test data. In addition, to evaluate the extent to which educators understood and could apply the TDA rubric and previously defined rating scale after training, approximately 75% of RP3 responses scored by a given teacher were rescored by an expert rater.

Analysis & Results

Question #1: **How are the skills underlying high quality TDA performance, specifically, reading comprehension, writing and analysis, related to one another and overall TDA scores?**

The first question was explored using teacher-scored data resulting from research prompt #3 (RP3), as well as information gained from the teacher survey. With respect to the data resulting from RP3, we looked at the pattern of ratings provided by teachers when evaluating each student response for evidence of reading comprehension, writing and analysis skills, and the relationship between these ratings in conjunction with the overall TDA rubric score. For each student response, evidence of skill in reading comprehension, writing and analysis was demonstrated was rated on a scale of 1-3 (e.g., low evidence to high evidence).

Means and standard deviations of assigned TDA rubric scores and domain-based ratings for research prompt #3 are provided in Table 1 below.   In general, strong evidence of reading comprehension was observed in student's TDA responses to a greater extent than evidence of writing or analysis skills, and this trend was consistent across all grades.

Table 1.   Descriptive Statistics associated with Research Prompt #3 – All Students[7]

Scoring Categories	N	Mean	Std. Dev	Min.	Max.	% Perfect Agreement
TDA Rubric Score	449	2.25	0.93	1	4	64%
Analysis Rating	449	1.87	0.79	1	3	63%
Reading Comprehension Rating	449	2.31	0.71	1	3	65%
Writing Rating	449	2.08	0.77	1	3	68%

To evaluate consistency in the scoring process, at least 65% of the scores/ratings assigned by a given teacher were rescored by an expert rater. Overall, 78% of the 449 student responses were rescored. Percent perfect agreement ranged from 63-68%, with writing ratings showing the highest agreement.[8] Non-adjacent scores were extremely infrequent, occurring less than 3% of the time. In general, adjacent scores showed teachers assigning higher overall TDA scores and/or domain-level ratings than that of the

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[6] For research prompt 1 & 2 teachers were only required to score 12 student responses, only for prompt #3 were all student responses scored.

[7] Note – students were given different prompts across grades. Total group results are provided here to reflect the general trend observed, which was consistent across grades; however, mean scores did differ greatly across grades.

[8] With the exception of Grade 5, agreement rates are relatively consistent across grades. For grade 5, however, overall TDA scores and analysis ratings provided by teachers were consistently higher than that assigned by the expert rater. For this grade, and these two score categories, percent perfect agreement was around 35%, bringing down the overall agreement rate presented in Table 1.

expert raters. Across scoring categories, approximately two-thirds of adjacent scores/ratings followed this trend.

To evaluate the relationship between analysis, general reading comprehension, and essay writing skills in student TDA responses, patterns of teacher ratings were analyzed across these domains. A frequency distribution of all observed rating patterns is provided in Appendix F. Table 2, specifically, summarizes the percentage of cases in which a student's rating reflecting "evidence of analysis" in a written TDA response was higher, lower or the same as the rating reflecting "evidence of reading comprehension". This pattern is especially of interest, because the analysis skills necessary for success on a TDA prompt are believed to extend beyond that reflected by general reading comprehension. Across grades, there were very few instances where an essay showed stronger evidence of analysis skills than evidence of reading comprehension skills.   In fact, across all grades this only happened in 3.7% of the 449 student responses reviewed. In most cases analysis ratings were either equal to (53%) or less than (43.2%) assigned reading comprehension ratings, suggesting that evidence of analysis in student responses to TDA prompts is difficult to observe in the absence of, at least, equivalent demonstrations of evidence of reading comprehension.

While this general trend was consistent across grades, there was some variability.   For example, the percentage of essays receiving equal analysis and reading comprehension ratings was higher in grades 5 and 8 compared to the other grade (around 65%) and grade 7 had the highest percentage of cases where reading comprehension ratings were greater than analysis ratings (62.4%).

Table 2. Summary of Evidence of Analysis Skills and Reading Comprehension Skills

Grade	N	Percentage Falling in Each Category		
		Analysis Rating > Reading Comprehension Rating	Reading Comprehension Rating > Analysis Rating	Analysis Rating = Reading Comprehension Rating
4	94	6.3	48.9	44.7
5	102	6.9	26.5	66.7
6	92	1.0	45.7	53.3
7	85	2.4	62.4	35.3
8	77	1.3	34.2	64.5
All students	449	3.7	43.2	53.0

Similar findings are reflected in teacher responses to survey question #6 (see Appendix). Sixty-two percent of educators (13) indicated that they "never" observed strong evidence of analysis in TDA written responses in conjunction with weak evidence of general reading comprehension skills. Concurrently, 90% of educators indicated that they frequently or very frequently observed strong evidence of general reading comprehension, but limited evidence of analysis in written responses.

In addition to the findings reflected above, rating pattern analysis also showed that, for a given TDA response to RP3:
- Ratings reflecting evidence of strong writing skills were typically the same (66%) or lower (27%) than ratings reflecting evidence of strong reading comprehension skills.
- Ratings reflecting evidence of strong writing skill were typically the same (66%) or greater (26%) than ratings reflecting evidence of strong analysis skills.
- 45% of responses scored the same rating across all 3 domains; 23% of responses scored a lower rating on analysis compared to the other two domains; and 2.7% of responses were rated higher on analysis than the other 2 domains.

In general these patterns of results are also mirrored in teacher responses to survey question #6. Teachers indicated that TDA responses were not likely (i.e., never or only occasionally) to show strong evidence of writing or analysis skills in conjunction with limited evidence of reading comprehension. However, strong evidence of reading comprehension was frequently or very frequently observed in student responses in showing strong evidence of analysis skills.

As a means of evaluating the extent to which evidence of analysis, general reading comprehension and essay writing skills influenced the overall TDA score provided by teachers, regression analysis was conducted using the TDA rubric score as the dependent variable and the three domain-based ratings as the independent variables. When calculated across all grades, correlations between these variables were generally strong and positive ranging from 0.64 – 0.73. In addition, all three ratings contributed significantly to prediction of the overall TDA rubric score, jointly explaining 63% of the total variance in these ratings.

Table 3. Summary of Regression Analysis between Domain-Ratings and Overall TDA score for RP#3.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	246.32567	82.10856	254.20	<.0001
Error	445	143.73669	0.32300		
Corrected Total	448	390.06236			

Root MSE	0.56833	R-Square	0.6315
Dependent Mean	2.24944	Adj R-Sq	0.6290
Coeff Var	25.26555		

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Squared Semi-partial Corr Type I
Intercept	1	-0.04009	0.09313	-0.43	0.6671	.
TDA_rat3s	1	0.49842	0.04897	10.18	<.0001	0.53351
RC_rat3s	1	0.45902	0.05522	8.31	<.0001	0.09183
W_rat3s	1	0.14342	0.05258	2.73	0.0066	0.00616

When correlations and regression analyses were conducted by grade, different results emerged. Specifically; at the lower grades, correlations between variables were not as strong, and less of the total variance in TDA scores was explained by the domain-level ratings, as shown in Table 4.

Table 4. Variance in RP3 TDA Rubric Scores Explained by Domain-Level Ratings

Grade	% Total Variance Explained	% Variance Explained by Each Rating		
		Analysis	Reading Comp.	Writing
4	37	19	16	4
5	58	52	8	0
6	68	37	28	4
7	74	70	4	0
8	87	84	2	0

At grade 4, only 37% of the total variance could be explained by these ratings. Furthermore, in grades 7 and 8, the analysis rating tended to be the only variable significant in predicting a student's overall TDA score; whereas reading comprehension, in combination with writing (Grades 4 and 6) or the analysis rating (Grade 5) significantly contributed to the regression model in the other grades. Overall these results show that: 1) there was less of a relationship between the domain-level ratings and the overall rubric score assigned by teachers at the low grades compared to the high grades, and 2) at the higher grades analysis ratings were strongly related to the overall assigned TDA rubric score.

To further evaluate the differential impact of reading comprehension, writing and analysis on student level TDA prompts, the average TDA score associated with each domain-level rating is provided in Table 5.

Table 5. Average TDA Score Earned for each Domain-Level Rating

Rating	Reading Comprehension		Writing		Analysis	
	N	Mean TDA Score	N	Mean TDA Score	N	Mean TDA Score
1	65	1.14	115	1.47	174	1.52
2	182	1.90	181	2.10	159	2.30
3	202	2.93	153	3.01	116	3.26

This table shows that lower ratings on reading comprehension are associated with lower overall TDA scores to a greater extent than that seen for Writing and Analysis. For example, the average TDA score earned by the 65 students rated as showing "little" evidence of reading comprehension in their TDA response was 1.14, compared to a mean scores of 1.47 and 1.52 for students obtaining ratings of 1 with respect to writing and analysis, respectively. When results are reviewed across grades this trend persists. In fact, of the student 37 responses earning a rating of 1 with respect to reading of comprehension in grades 6-8, none earned a TDA rubric score greater than 1. This finding mirrors the grade-level correlations previously discussed, and suggests that the relationship between degree of evidence observed and the overall TDA score is not as pronounced at the lower grade levels.

Question #2: Do teachers and students benefit from targeted training on the development and instruction of student writing to TDA essays prompts?

The answer to question #2 is based mainly on feedback provided by educators within the context of the TDA meetings, or through the TDA survey. In general, teachers stated that they benefited greatly from the participation in the TDA research activity, and would continue to use the skills and strategies they

acquired into the future. Teachers indicated that participation in the TDA study improved their understanding of close reading as well as the skills necessary to write and prepare students to respond to TDA essay prompts. Furthermore 86% of teachers believed that their students' understanding and application of TDA skills (e.g., close reading, analysis, explanation using evidence) improved throughout the course of the research activity, as demonstrated in student responses to TDA prompts and classroom discussion.

Specific comments related to how participation influenced individual teaching practices are presented in Question #9 of the survey (See Appendix F). In general these responses fall into categories:
- More thoughtful selection of texts for use in instruction and essay prompt development – specifically those which support close reading and analysis
- Increased use of instructional strategies targeted specifically at improving close reading and text analysis skills.
- Better alignment between instruction and the expectations underlying success on TDA prompts.

In an attempt to better understand what, exactly, educators did in the classroom as a result of the PD activities (since specific activities were not dictated or required) a second survey was administered to the participants at the end of the instructional year. From those teachers who responded, we learned the following:
- They regularly used the score results from the research prompts to determine and differentiate the instructional needs of students. Differentiation served the purpose of deciding groupings (whole class, small group, or individual), as well as the focus of instruction (close reading, reading comprehension, analysis, or writing).
- The instructional TDAs, rather than the research prompts, were used to provide students with formative feedback regarding their performance, including strengths and needs, which sometimes were based on the scoring guidelines. This feedback was provided through whole group, small focus groups, as well as individual conferencing. This feedback generally consisted of suggestions to improve, and the frequency depended on need, results, and time.
- Teachers explicitly taught focused lessons on close reading strategies and analysis skills. Some of these strategies and skills included:
  - spending more time with texts to make inferences,
  - searching for evidence to support the inferences,
  - rereading for a variety of purposes,
  - annotating texts to allow for reflection and questioning
- Teacher provided students with the TDA scoring rubric as a means of clarifying expectations for performance.

Question #3: **Do students of teachers who participated in TDA professional development perform better on these types of items than their peers, as reflected in their performance on TDA field-test items administered in 2013-2014?**

To address questions 3 and 4, a sample of students matching the characteristics of those associated with the research teachers was selected from each grade to use as a non-treatment group comparison.[9] Sample selection variables included performance on the previous year's (2012-2013) PSSA Reading assessment,

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[9] One limitation of this study was that individual students, rather than classrooms of students had to be used when identifying the matched set for each grade.

gender, 2014 FT form, ethnicity, 2013 Reading Scaled Score, and economic-disadvantaged status[10]. Only students having a valid TDA field-test score were included in these analyses (i.e., those who received a score of 1-4).[11]

Within each grade, field-test forms were spiraled at the student-level, so students received different TDA FT prompts. The number of forms administered varied by grade, ranging from 9 in grade 4, to 20 in grade 8. To support the comparison of results across groups, sampling procedures provided for equal representation of field-test forms in the research group and non-research sample. Consequently, if a form was not represented in the research group, students taking those forms were not eligible for inclusion in the non-research sample. Although sample demographics could not be matched by form (due to limited N-counts), across forms the research group and non-research sample were extremely similar.

Table 3 summarizes the average score earned on the TDA field-test items for the research group (i.e., students associated with teachers that participated in the TDA professional development) and the non-research sample, by grade.

Table 5. Average Score Earned on TDA Field-Test Prompts Across Forms

Grade		Forms	Average Score	Standard Deviation
4	Non-Research Sample	81	1.57	0.67
	Research Group	81	1.58	0.76
5	Non-Research Sample	85	1.89	0.71
	Research Group	85	2.02	0.78
6	Non-Research Sample	55	1.81	0.71
	Research Group	55	1.90	0.69
7	Non-Research Sample	59	1.71	0.74
	Research Group	59	1.86	0.86
8	Non-Research Sample	52	2.08	0.95
	Research Group	52	2.44*	0.87

Across all grades, average TDA scores were higher in the research group versus the non-research sample, however, the only statistically significant mean difference (t=-2.05, p<0.05) was observed in grade 8.

Question #4: Do students of teachers who participated in TDA training perform better on the PSSA Reading test (overall and looking specifically at reading comprehension items) than their peers, as reflected in their performance on 2013-2014 PSSA?

The matched samples described above were used to compare the performance of students on the 2013-2014 PSSA Reading Assessment. The mean and standard deviation of the overall scaled score, as well as each reportable category score is presented by grade in Table 4. Similar to the findings above, on average, students in the research group scored higher than those in the non-research sample; however, *with the exception of Grade 5*, mean differences were not statistically significant.

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[10] The survey select procedure was used in SAS to perform the sampling. Students were matched using an index variable defined in terms of gender||2014 FT form||ethnicity||2013 scaled score and ||economically disadvantaged status. This process provided for groups that were extremely similar in terms of the variables used to define the index.

[11] Students who did not respond, or received a condition code were not included.

Table 4.

Grade	Variable	N	Non Research				Research Students			
			Mean	Std Dev	Min.	Max.	Mean	Std.	Min.	Max.
4	Scaled Score	80	1411.2	213.9	926	2255	1438.4	238.5	947	2255
	RC_A	80	26.5	6.5	9	37	27.0	6.4	12	37
	RC_B	80	11.2	2.3	5	15	11.5	2.9	2	15
5	ScSc14	85	1401.1	168.8	1022	1806	1463.0*	187.1	984	1904
	RC_A14	85	22.7	3.8	11	29	23.9	4.1	11	29
	RC_B14	85	16.0	2.9	6	22	16.7	3.0	7	22
6	ScSc14	55	1405.3	259.8	884	1874	1379.7	219.0	932	1799
	RC_A14	55	21.0	6.3	7	29	20.7	5.4	6	28
	RC_B14	55	14.4	4.7	3	21	14.2	4.2	5	21
7	ScSc14	59	1382.3	181.2	1060	1841	1392.0	187.7	1039	1928
	RC_A14	59	20.3	4.9	10	29	20.6	4.7	11	28
	RC_B14	59	13.5	3.8	6	21	13.7	3.9	6	22
8	ScSc14	52	1588.7	244.0	1066	2143	1596.9	252.9	1066	2143
	RC_A14	52	19.4	4.4	9	26	20.1	4.3	9	26
	RC_B14	52	18.5	4.2	7	24	18.0	4.6	6	25

*Difference is statistically significant ($p < 0.05$).

Limitations

The results presented in the previous section attempt to help us better understand the elements underlying the TDA construct, and the impact targeted PD related to TDA might have on student performance. However, there are several factors which must be kept in mind when discussing and interpreting the practical significance and generalizability of these results.

- Bad weather influenced the amount of time educators had to receive PD and participate with each other during the three scheduled meetings. For example, the first meeting was cut short due to snow and, for the same reason; several teachers were unable to attend the second meeting. As a result, the level of understanding and participation by teachers depended, to a great extent, on the individual teacher and the amount of time they decided to dedicate to this activity outside of the meeting.
- The time between meetings was condensed in light of a late start time and the need to complete the research prior to the PSSA administration. Consequently, teachers had limited time to create instructional TDAs and to score the resulting student work in addition to teaching and assessing other ELA content expectations.
- While educators were given instructional strategies and resources for use in the classroom, they were not provided with detailed, standardized instructions related to how, or how often, those strategies should be applied during the research window. Given the travel and amount of work associated with participation in this study (i.e., administration and scoring of research prompts) we did not believe it was fair/ reasonable to dictate time spent outside of the meeting.
- Limited time was available for teachers to practice the use of TDA strategies, to debrief their understanding and implementation of these strategies, and to learn additional strategies in order to

differentiate instruction or to further explore their understanding of the elements necessary for successful teaching and learning of a TDA prompt.

- TDA performance data was based on field test prompts for which students may not have been motivated to perform their best.
- For a Grade 5, TDA Research Prompt #3 (although reviewed and vetted by content experts) may have confused students in a way that influenced their performance and the manner in which rubric and domain-level ratings were assigned by educators.[12]

Discussion

One of the primary goals of this initiative was to better understand the nature of, and relationship between, some of the key skills underlying student performance on TDA prompts. Although by no means conclusive, the results presented above in conjunction with teacher comments *suggest* that the skills underlying TDA performance can be uniquely distinguished and evaluated, and the ability to display reading comprehension skills within the context of writing is a necessary, but not sufficient condition for successful TDA performance. While all three domains are clearly related, evidence of reading comprehension appears to greatly influence how performance in the other domains is perceived. Teachers' ratings and feedback indicate that the ability to reflect analysis in writing, a key component for TDA, is contingent on the ability to demonstrate evidence of reading comprehension. That is, analysis appears to be an extension of (not distinct from) reading comprehension. Similarly, evidence of writing did not typically occur at a level beyond that reflected by evidence of reading comprehension. There were only a few cases (6.5%) where responses received higher ratings of evidence for writing skill compared to evidence of reading comprehension.

In terms of the relationship between performance in each of the domains (writing, reading comprehension and analysis), and the TDA rubric score overall, while all grades showed positive correlations, this relationship tended to be greater at the upper grades compared to the lower grades. For example, the correlation between the reading comprehension ratings and the overall TDA score in grades 4 and 8 was 0.57 and 0.83, respectively. This could be an artifact of the educators involved in this study and how they rated student responses; however, it could also suggest that expectations associated with student performance on TDA prompts are lower at the elementary grade levels, such that any evidence (even minimal) is judged favorably. For example, while none of the grade 8 student responses rated as a 1 with respect to evidence of reading comprehension received TDA scores greater than 1; this occurred on several occasions in grade 4.

A second goal of this inquiry was to evaluate the impact that short-term, focused PD may have on teacher understanding and student performance. Although this research did not result in significant, short-term improvements in student performance (as evidenced by differential performance on the PSSA Reading assessment or TDA field-test prompt for those students associated with teachers participating in the study), participation was clearly beneficial for those involved. Teacher's response to the PD activities was overwhelmingly positive with most stating:

- they had a much clearer understanding of the TDA construct and the necessary elements of it
- they wished they had known about TDAs when they started planning and teaching for the school year
- that other content area teachers should be involved in learning about TDAs (i.e., social studies and science teachers)

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[12] For the Grade 5 prompt, students consistently showed evidence of analysis, but did not specifically respond to the prompt posed. For this reason some teachers assigned higher analysis than reading comprehension ratings.

- that they would like more time and professional development to explore "how to" teach analysis to students

In addition, many teachers suggested that the pace and of the research and the amount of work associated with participation were daunting, especially given the number of snow days they had to contend with during the research window, and that improvements in student understanding were apparent, even if not represented in obtained TDA research scores. It is our belief that if additional time had been available to support the discussion and implementation of the PD activities (as originally planned), and student TDA responses were not associated with a field-test, that true differences in performance between research and non-research samples would likely have been observed.

Conclusion

Although the research study ended, PDE requested that one of the key researchers from the Center for Assessment provide professional development in three areas of the state (Pittsburgh, Harrisburg, and King of Prussia). Intermediate Unit Curriculum Directors from the region were invited to attend the training and to bring two additional participants from their IU and/or representing districts. Each of the sessions was limited to approximately 30 participants and all three sessions were at capacity. These training sessions were highly successful and several IUs and districts requested additional training on TDAs from the Center for Assessment, clearly indicating a need for understanding TDAs as educators are realizing the distinct differences between them and the previous open-ended reading questions on the PSSA. In addition, in order to support the growing interest in understanding TDAs, PDE and the Center for Assessment are putting together a series supporting materials related to TDA, which includes:
- video modules on TDAs, including instructing, developing, and scoring, them,
- series of short papers to accompany the TDA modules
- grade span TDA units of instruction that include close reading strategies, essay writing, making inferences, and providing analysis

References

Berkin, A., (2012), *Quick Guide to the Common Core: Key Expectations Explained*, Education Week, p. 15-16.

Davis, L. (2012), *5 Thins Every Teacher Should be Doing to Meet the Common Core State Standards*, Eye on Education, Larchmont, NY.

Fischer, D. & Frey, N. (2012), *Close Reading in Elementary Schools*, The Reading Teacher, v. 66, n. 3, pp. 179-188, International Reading Association.

Hank, C. (2012), *Defining "Deep Reading" and "Text-Dependent Questions"*, Turn on Your Brain: Resources and Reflection on Contemporary Issues in Education, http://turnonyourbrain.wordpress.com/2012/03/29/defining-deep-reading-and-text-dependent-questions/

Appendix A: Text Dependent Analysis Scoring Rubric

ELA GRADES 4–8 TEXT DEPENDENT ANALYSIS SCORING GUIDELINES

Score Point	Description
4	• Effectively addresses all parts of the task demonstrating in-depth understanding of the text(s) • Effective introduction, development, and conclusion identifying an opinion, topic, or controlling idea related to the text(s) • Strong organizational structure that effectively supports the focus and ideas • Thorough analysis of explicit and implicit meanings from text(s) to effectively support claims, opinions, ideas and inferences • Substantial, accurate, and direct reference to the text(s) using relevant key details, examples, quotes, facts, and/or definitions • Substantial reference to the main idea(s) and relevant key details of the text(s) to support the writer's purpose • Skillful use of transitions to link ideas • Effective use of precise language and domain-specific vocabulary drawn from the text(s) to explain the topic and/or to convey experiences/events • Few errors, if any, are present in sentence formation, grammar, usage, spelling, capitalization, and punctuation; errors present do not interfere with meaning
3	• Adequately addresses all parts of the task demonstrating sufficient understanding of the text(s) • Clear introduction, development, and conclusion identifying an opinion, topic, or controlling idea related to the text(s) • Appropriate organizational structure that adequately supports the focus and ideas • Clear analysis of explicit and implicit meanings from text(s) to support claims, opinions, ideas, and inferences • Sufficient, accurate, and direct reference to the text(s) using relevant details, examples, quotes, facts, and/or definitions • Sufficient reference to the main idea(s) and relevant key details of the text(s) to support the writer's purpose • Appropriate use of transitions to link ideas • Appropriate use of precise language and domain-specific vocabulary drawn from the text(s) to explain the topic and/or to convey experiences/events • Some errors may be present in sentence formation, grammar, usage, spelling, capitalization, and punctuation; errors present seldom interfere with meaning
2	• Inconsistently addresses some parts of the task demonstrating partial understanding of the text(s) • Weak introduction, development, and/or conclusion identifying an opinion, topic, or controlling idea somewhat related to the text(s) • Weak organizational structure that inconsistently supports the focus and ideas • Weak or inconsistent analysis of explicit and/or implicit meanings from text(s) that somewhat supports claims, opinions, ideas, and inferences • Vague reference to the text(s) using some details, examples, quotes, facts, and/or definitions • Weak reference to the main idea(s) and relevant details of the text(s) to support the writer's purpose • Inconsistent use of transitions to link ideas • Inconsistent use of precise language and domain-specific vocabulary drawn from the text(s) to explain the topic and/or to convey experiences/events • Errors may be present in sentence formation, grammar, usage, spelling, capitalization, and punctuation; errors present may interfere with meaning
1	• Minimally addresses part(s) of the task demonstrating inadequate understanding of the text(s) • Minimal evidence of an introduction, development, and/or conclusion • Minimal evidence of an organizational structure • Insufficient or no analysis of the text(s); may or may not support claims, opinions, ideas, and inferences • Insufficient reference to the text(s) using few details, examples, quotes, facts, and/or definitions • Minimal reference to the main idea(s) and/or relevant details of the text(s) • Few, if any, transitions to link ideas • Little or no use of precise language or domain-specific vocabulary drawn from the text(s) • Many errors may be present in sentence formation, grammar, usage, spelling, capitalization, and punctuation; errors present often interfere with meaning

Appendix B: Examples of TDA Research Prompts

I'd give anything to draw horses the way Euphemia Tucker does. She draws them in the margins of spelling tests and on the back of her math homework. They're always running wild and free, their manes swirling over the paper like clouds across the sky.

Euphemia's horses look so real you can almost feel their breath on your face.

Luke Anderson, who sits next to me, says he can't decide whether my horses look more like Great Danes or kitchen tables. He also calls me Messy. I prefer Marisa, which is my real name, to Missy, which is what everyone--except Luke--calls me. If I could draw like Euphemia, I'd sign all my pictures Marisa. Nobody messes with Euphemia's name, not even Luke Anderson.

Today I sharpened my pencil and took a clean sheet of paper out of my desk. Then I closed my eyes and pictured one of Euphemia's perfect horses rearing up and pawing the air with its sharp hooves. I could see it so clearly I was sure I'd be able to draw it this time.

I started with what I do best: a big, billowing mane. Next I roughed in most of the body and drew a long tail streaming out behind. It really wasn't turning out half bad until I got to the front-legs-pawing-the-air part, which looked more like two macaroni noodles with tiny marshmallows for hooves.

I tried again, but the hooves still didn't seem right, and rather than doing them over and over, I erased them and went on to the head. That was when I really ran into trouble.

First I drew some great donkey ears, followed by sheep ears, pig ears, kangaroo ears ... everything except horse ears. I erased again and again until I had rubbed a hole in the paper. That was when Luke Anderson poked his nose over my shoulder.

"Hey, Messy," he said. "What are you drawing? It looks like a T. rex with a Mohawk."

I scratched a big X through my earless, macaroni-legged horse, wadded it up into a little ball, and stuffed it under the lid of my desk.

I was still upset when I got off the school bus this afternoon. I walked past the neighbors' horses standing in the field next to our house. They've been in that field for as long as I can remember. Their stringy manes never float into the sky. Their ragged old tails hang straight down to the ground, and I've never seen them run. Every few minutes they stamp their feet to knock off the fire ants, which is how I know they're alive.

Euphemia probably has her own herd of wild stallions. I bet they run right past her bedroom window.

I brooded about it all through dinner. After I'd helped clear the dishes, I sat down with a stack of typing paper and a freshly sharpened pencil. Without Luke Anderson there to pester me, I hoped I'd have better luck. I practiced a few horses' heads, trying to get the ears right. Then my mother walked by, carrying a basket of laundry.

"Nice dogs, Missy," she said. "Is that one a German shepherd?"

I slammed my pencil against the table, hard. My dad looked up from his magazine.

"Was it something I said?" Mama asked.

I tossed all the dog heads into the trash and walked outside. The sun had just sunk below the horizon, feathering the whole sky with pink and orange wisps. Everything looked special in that light, even the scraggly horses next door.

I dragged a lawn chair over to the fence and sat down to take a better look at them. They'd never be free spirits like Euphemia's horses, but they did seem patient and strong. I noticed the curves of their muscles, the shadows on their faces, the shine along their backs. Their colors reminded me of dessert--rich chocolate, deep cinnamon, creamy caramel.

I was just sitting there, feeling kind of dazzled by the unexpected beauty of it all, when I remembered the big box of pastels my grandmother had sent for my birthday.

"For Marisa," the card had said, "because she is such a bright and colorful person."

An idea began to take shape in my mind, and just then the cinnamon horse turned its head toward me and nodded three times. It was like a sign.

I hurried into the house, grabbed the pastels and some paper, and raced for the door.

"Whoa, there, Missy," my dad said. "What's the rush?"

"Gotta run," I explained. "The sun is going down!"

I choose a deep brown, pulling it across my paper in the shape of the chocolate horse. It comes out right the first time, even the legs and ears! Drawing horses is easier when they're right in front of you, and I'll say this for the ones next door--they hold their poses.

The sky is turning out just as I'd hoped, too; all the pinks and reds blending together like a strawberry parfait, and I love the way the caramel horse's mane is blowing, just barely, in the wind.

It doesn't look exactly like one of Euphemia's horses, of course. But I already know that when this drawing is finished, I'll be signing it Marisa.

Text Dependent Analysis

✏️ QUESTION:

At the end of the passage, *Drawing Horses*, Marisa states, "But I already know that when this drawing is finished, I'll be signing it Marisa."   Write an essay analyzing why she makes this statement. Use evidence from the passage to support your response.

The Raft by Betsey Byars
(an excerpt from *Trouble River*)

Dewy took a deep breath and, glancing over his shoulder, started down the path. At the bank of the river he paused to look down at his raft. He felt better as he looked at his handiwork. Dewey thought that it was the most beautiful sight he had ever seen.

As he stood there he had a brief, startlingly clear picture of himself on the raft under the long, green shadows of the trees down the river. He saw his hands, broad and strong, gripping the oar and thrusting it into the shallow water, sending the raft over the water like a wind-blown leaf.

Smiling, he glanced over his shoulder again and then stepped onto the raft. It was made of nine logs lashed together with strips of hide and was approximately six feet across and eight feet long. Atop the logs Dewey had laid a floor of smaller split logs, nailing them so that they formed a platform. He had done all the work himself and he felt a pride that he had never known before.

It was the only thing he had ever made that was for himself alone. His family was almost machine-like in the way they worked to keep alive and comfortable, and sometimes Dewey felt that every hour of his day was taken up with the land and the animals; that he was part of the farm in the same way that the plow was, or the wagon. The raft was a separate thing, built only to give pleasure.

It seemed to him as fine as any of the rafts he had seen on the big rivers. Five years before, while waiting to cross the Mississippi, he had counted a string of a hundred and twenty rafts on its long journey to New Orleans. He had seen the low doghouses for the crew to sleep in, and a raft as big as a field with a tent for the family and fences for the horses and pigs. His was just as sturdy, just as ready to withstand the twists of the current as those.

He knelt at the front of the raft where he had put a large split log with the smooth side to the front. He took some stain he had made from old walnut hulls and dipped his finger into it and began to print across the front of the log. Slowly, carefully, ignoring the stain that was running down his finger, he began to print the first letter— *T*. He leaned back and looked at it and, not displeased, dipped his finger into the stain again.

A wolf howled in the night, and Dewey glanced up. The howl was far away, and after a moment he resumed his work. Once he had seen the wolves from the doorway of the cabin. They had sat in a half circle in the deep grass and howled in the moonlight, and when one wolf—the leader—had turned toward the cabin, his eyes had flashed green in the moonlight. Sometimes Dewey saw their tracks at the river and in the creek bottoms, but tonight they were far away, chasing elk and deer.

His hair, bleached pale from the sun, fell unnoticed over his eyes, and in the moonlight his tanned face was darker than his hair. The tip of his tongue touched his upper lip as he worked. Now he straightened and looked at the words he had printed. *The Rosey B*. The letters were even and again he felt a surge of pride. The *Rosey B* is a good ship, he thought as he looked her over, and now she was ready for her first voyage.

There was a loop of rope thrown over a stump on the bank to hold the raft to shore, and he slipped this off and coiled the rope at his feet. With mounting excitement, his fear forgotten, he bent and picked up the oar lying across the raft. This was his treasure. He had found it on the bank of Big River a year ago when he and his pa had gone over to get some wild plum trees.

"Pa, look, I found me an oar," he had cried. His pa had looked up, nodded, then gone back to working the shovel around the young plum tree.

"Can I take it home?" Dewey had stood clutching the oar in his dirty hands, thinking of other people who might have held it. "It's a sturdy oar, Pa."

"Keep it."

"Yahoo," he had cried. Putting his weight to the oar, he had swung a few feet off the ground before he had told his pa what he had thought the first moment he had seen the oar in the thick grass. "Pa, one day I'll make me a boat."

His pa had nodded.

"I'll make me a real boat and go everywhere."

And now he had his boat. Taking the oar, he jammed it against the muddy bank and pushed with all his might. He leaned on the oar, and slowly, heavily the raft moved into the water. It stuck on the muddy bottom, and Dewey pushed again. He could feel his head pounding with the effort. Then there was a certain lightness, an ease in the movement. He was afloat! For the first time he was afloat. He prepared to sweep the oar through the water. He had practiced many times on shore and anticipated the powerful surge of the raft.

Text Dependent Analysis

✏️ **QUESTION:**

Authors use various techniques when developing and explaining the motivations of characters. Write

an essay analyzing how the author of "The Raft" reveals Dewey's character and his motivations

throughout the passage. Use evidence from the passage to support your response.

Appendix C: TDA Lesson Planning Template

Form #2: Lesson Planning for Close Reading and Text-Dependent Questions (page 1)

Teacher: _____   Grade Level: _____   Number of Days:

_____

Task #: _____   Text Under Review (include page #s):_____

_____

Essential Understanding

Introduction to Text

Standards Addressed

Text Passage under Discussion	Vocabulary to be Taught or Analyzed	Directions for Teachers/Guiding Questions For Students
		Q#_____ :
		Q#_____ :

Form #2: Lesson Planning for Close Reading and Text-Dependent Questions (page 2)

Teacher: _____ Grade Level: _____ Number of Days: _____

Task #: _____ Text Under Review (include page #s):_____

_____

Text Passage under Discussion	Vocabulary to be Taught	Directions for Teachers/Guiding Questions For Students
Paragraph/Page #:		Directions:
		Q#_____ :
Paragraph/Page #:		Directions:
		Q#_____ :

Appendix D: Student Work Analysis Protocol for TDA

Form #3: Student Work Analysis – Text-Dependent Analysis Prompts (page 1)

Teacher: _____   Grade Level: _____

Task #: _____ Text Under Review (include page #s):_____

A. ***Ensure Understanding about Proficiency***

   Read the Text-Dependent Analysis prompt and clarify:
   - What are the students expected to do?
   - Which standards (CCSS or content standards) or curriculum expectations are being assessed?
   - What do you consider to be a proficient response on this prompt? Exactly what do students need to say or write for you to consider their work proficient?
   - Did the text-dependent question provide students an appropriate opportunity to demonstrate analysis of the text?

B. ***Diagnosing Student Strengths and Needs***

   Sort all students' work by the general degree of the content expectations met, partially met, not met. You may need a "not sure" pile. After sorting, any papers in the "not sure" pile should be matched with the typical papers in one of the other existing piles. Student names should be recorded in the columns in order to monitor progress over time.

HIGH (Objectives met)	EXPECTED (Objectives partially met)	LOW (Objectives not met)
_____% OF CLASS	_____% OF CLASS	_____% OF CLASS

Form #3: Student Work Analysis – Text-Dependent Analysis Prompts (page 2)

Teacher: _____ Grade Level: _____

Task #: _____ Text Under Review (include page #s):_____

1. For each level (low, expected, high) identify the **strengths or pre-requisite knowledge** that students demonstrated that they knew with regard to R**eading Comprehension (general understanding or gist of the text), Text-Dependent Analysis, and Writing** (use the PA Core Standards to guide your thinking).

HIGH (Objectives met)	EXPECTED (Objectives partially met)	LOW (Objectives not met)
Reading Comprehension		
Text-Dependent Analysis		
Writing		

Form #3: Student Work Analysis – Text-Dependent Analysis Prompts (page 3)

Teacher: _____ Grade Level: _____

Task #: _____ Text Under Review (include page #s):_____

2. Using the reviewed student work from each level, identify the **misconceptions, wrong information, and what students did not demonstrate** that was expected with regard to **Reading Comprehension (general understanding or gist of the text), Text-Dependent Analysis, and Writing**.

HIGH (Objectives met)	EXPECTED (Objectives partially met)	LOW (Objectives not met)
Reading Comprehension		
Text-Dependent Analysis		
Writing		

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Form #3: Student Work Analysis – Text-Dependent Analysis Prompts (page 4)

Teacher: _____ Grade Level: _____

Task #: _____ Text Under Review (include page #s): _____

C. *Identifying Instructional Next Steps*

After diagnosing what the student knows and still needs to learn, determine the learning needs for the students in each level considering the following questions.

Based on the diagnosis of the students' performance:

- What patterns or trends are noted for the whole class?
  _____
  _____
  _____

- What strategies will be beneficial for the whole class?
  _____
  _____
  _____

- Based on the diagnosis of students' responses at the high, expected, and low levels, what will students at each level benefit from?

HIGH (Objectives met)	EXPECTED (Objectives partially met)	LOW (Objectives not met)
Reading Comprehension		
Text-Dependent Analysis		
Writing		

Appendix F: Teacher Responses to Survey

1. How many years have you been in your current position?

Answer Options	Response Percent	Response Count
1-3	14.3%	3
4-8	28.6%	6
9-15	28.6%	6
More than 15	28.6%	6

2. Which grade level group were you assigned to for this research?

Answer Options	Response Percent	Response Count
4	19.0%	4
5	19.0%	4
6	23.8%	5
7	19.0%	4
8	19.0%	4

3. How many of the three scheduled meetings in Harrisburg were you able to attend?

Answer Options	Response Percent	Response Count
1	0.0%	0
2	47.6%	10
3	52.4%	11

4. On a scale from 1-4, indicating "Not at all Beneficial" to "Extremely Beneficial" how beneficial did you find each of the following activities or materials?

Answer Options	Not at all Beneficial	Somewhat Beneficial	Beneficial	Extremely Beneficial	N/A	Rating Average
Training/instructional materials (e.g., Power point slides, planning forms, etc.)	0	4	7	10	0	3.29
Group discussion around instructional strategies	0	1	2	18	0	3.81
Group development of research TDA prompts	0	0	3	18	0	3.86
Independent development of TDA instructional prompts	0	3	11	7	0	3.19
Group scoring of student responses	0	0	1	19	1	3.95
Independent scoring of student responses	0	2	13	6	0	3.19

5. Please indicate the extent to which you agree with each of the following statements.

Answer Options	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	Rating Average
Participation in this research improved my understanding of the skills underlying close reading.	0	1	6	14	0	3.62
Participation in this research improved my understanding of how to write TDA writing prompts.	0	0	9	12	0	3.57
Participation in this research helped me prepare my students to respond to TDA writing prompts.	0	0	8	13	0	3.62
Prior to participating in this research I feel I was teaching my students the skills necessary to respond toTDA prompts (e.g., close reading, analysis, etc.)	0	14	6	1	0	2.38
My understanding of the score points in the TDA scoring rubric improved throughout the course of this research.	0	1	8	12	0	3.52
I feel as if I was able to consistently apply the TDA scoring rubric to score student responses.	0	1	13	7	0	3.29
Conversation with the other teachers in this study suggested that we were applying the TDA rubric to student responses in a consistent manner.	0	1	8	10	2	3.47
I was able to differentiate skills that demonstrate reading comprehension only vs. skills that demonstrate text analysis in student TDA responses .	0	0	14	6	1	3.30
I will continue to use the strategies I learned as a result of participation in this research.	0	0	3	17	1	3.85

6. Please indicate how frequently you observed the following patterns of performance when reviewing student responses to TDA writing prompts.

Answer Options	Never	Occasionally	Frequently	Very Frequently	N/A	Rating Average
Strong evidence of reading comprehension skills but limited evidence of text analysis.	0	2	9	10	0	3.38
Strong evidence of text analysis skills but limited evidence of reading comprehension.	13	8	0	0	0	1.38
Strong evidence of text analysis skills but limited evidence of writing skills.	3	12	4	2	0	2.24
Strong evidence of writing skills but limited evidence of text analysis.	1	8	8	4	0	2.71
Strong evidence of writing skills but limited evidence of reading comprehension.	7	12	1	1	0	1.81
Strong evidence of reading comprehension skills but limited evidence of writing skills.	0	16	4	1	0	2.29

7. Throughout the course of this study were you able to develop and administer instructional TDA prompts to your students, in addition to the three group-developed research prompts?

Answer Options	Response Percent	Response Count
Yes	80.0%	16
No	20.0%	4
If yes, how many in total?		18

18 of the 20 participating teachers indicated having given at least one instructional TDA prompt during the course of the research. The number of instructional prompts administered ranged from 1 to 8, as shown in the table below:

Number of Instructional TDA Prompts Administered	Frequency
1	2
2	3
3	8
4	3
5	1
8	1

8. Do you believe your student's understanding and application of the skills necessary to respond to TDA writing prompts improved throughout the course of this research?

Answer Options	Response Percent	Response Count
Yes	85.7%	18
No	9.5%	2
Could not tell	4.8%	1
Please explain your answer.		20

They are getting better at it, but their analysis of the text isn't strong yet. I believe this might be due to the age level.

I would love to have seen the growth that would have taken place had I been doing this since September. It took me a bit to understand what I was to do, and allowing for that time plus a lot of lost time due to weather and prep for PSSAs was a challenge.

Yes, even though their scores did not reflect this. The prompts seem to be more difficult as went and different language being used in prompts threw a few of them off. Additionally, I chose to do this study with my lower achieving students.

The data reflected growth among all students, but sometimes it was within the high and low within the 1,2,3 and 4.

Even though overall rubric scores may not have demonstrated it, the students' responses to the TDA prompts showed gradual improvement over the course of the study. In the classroom, they felt less intimidated by the TDA prompts and were more comfortable with responding to them.

Students were limited in their first responses. They often gave text evidence but no explanations. By the end, they were beginning to understand that the explanation part was really the important part. Although their explanations were limited, they were present.

The students now know/understand the difference between an OER and a TDA. The students know that they need to step it up when answering a TDA. They understand the structural and contextual differences between the two.

Students began to realize that they needed to defend their text evidence with analysis, rather than simply selecting it and relating it.

My students became better at close reading and annotating text, which gave them a foundation for constructing an analysis.

I feel that my students grasped the concepts and skills necessary to master the TDA prompts. From the beginning of instruction until the end, I saw an improvement with each an every student. I look forward to implementing and sharing these instructional practices.

I think my students understanding of the skills necessary remained the same through out the study. It appeared that some questions were better than others. Overall their comprehension foundation was strong but the analysis was weak. It seems the buy in of the analysis side was hard since they have been so used to open ended and short responses.

TDA responses improved with each instructional and formal TDA prompt. I saw an increase in the use of close reading strategies, writing performance, and overall analysis. Although there were performance gains made by most students, they still struggled to "prove" their analysis through their written responses.

"By the time my students took the third formal TDA they understood what analysis was and all of them had elements of analysis in their work. The PSSA results will be interesting to see if the amount of instruction was enough to transfer the analysis to the PSSA's.

My students also knew they were doing something new and challenging but they felt really good about tackling the TDA's. (They didn't ask for more....just so you know:)

My average to high students improved in their understanding of analysis. The first TDA prompt was very weak from all reading levels in my class. My low students were never able to improve in the actual analysis, but I felt they were better at summarizing the text to try and get to the next level of comprehension.

Their analysis skills improved tremendously

They are beginning to understand but I believe it will take constant repetition. Sixth graders are not "programmed" to analyze anything- they are so impulsive! But I think with continued instruction, they will improve.

I believe my students now have a much better understanding of how to take TDA prompts, figure out what they need to do to answer them effectively, and decide how to best organize their information in a logical way together with evidence from the texts.

Outside condition like weather prevented me from spending the time I needed to to have my students spend the time they needed to succeed.

I feel that as the students were exposed to more TDA prompts they were better able to apply the analysis of the question. This was evident on the field items on the PSSA.

By the time they completed the last prompt, they were on their way to understanding what was expected.

9. How has participation in this research affected your teaching practices?

It has given me a guide for adding writing to every reading assignment. It has also given me a direct focus for their writing prompts.

I see the value in getting kids to really think and dig deep when they are reading.

Prior to this study I asked discussion questions that were text dependent; however, the types of essays I was given by my district to check for understanding were not. As a result, I changed those essay questions to analysis.

Participating in this research study has enriched the ways in which I instruct my students. I try to use Close Reading more frequently and also utilize TDA questions to enrich the questions used with most assignments. I look for student to be able to go back into the text in order to answer questions, but to go from the literal to the analytical in their explanation.

It has made me much more aware of Close reading strategies and how to utilize them in my teaching. It also helped me to understand the differences and expectations between an open-ended reading prompt and a TDA prompt.

I look at questions I pose differently. I consider what evidence students can find in the text to answer the question. I am more conscious of how I use the word "opinion". I ask "where did you find that?" more often even when everyone knows where it was found. I explain that we are building that habit of backing up what you say with evidence you can show me.

Goodness, yes! Now that I know what the outcome should look like, it's much easier to guide my students toward that goal!

I have learned how essential it is to scaffold student outcomes with directed close-reading events before the writing.

I have learned an immense amount of information on how to plan and teach close reading lessons, develop TDA prompts, and score them. Now I feel ready to prepare my students for new state assessments and becoming better readers.

My teaching practices have become highly refined. I have a new found inspiration for teaching reading and writing strategies together. I thoroughly enjoyed looking at a text from a different more analytical perspective and teaching my students to do the same.

Participating in this study has given me insight on what is needed to answer a TDA question.   Through this study I've attempted to find a systematic way using the rubric, a checklist and color highlighters to aid in how well the students respond to the prompt. Also, I now use close reading strategies to help with comprehension. I have a better understanding for close reading strategies, and we use them regularly in Language Arts and Social Studies instruction.

I have learned so much by being a part of this TDA learning community. I understand what the expectation is but I'm still processing the best way to infuse the instruction into my curriculum for next year. I feel that I will be able to introduce TDA's to fellow teachers and continue to learn with them.

I will continue to use the skills and strategies that I learned in this study next year and beyond. I feel because I have such a good base that I will be able to continue to grow each year to help my students get to a higher level of reading.

I have in increased the rigor through the use of the tda's. I now fully understand the expectations.

It has made me rethink every piece of text I use. It also has increased the dialogue with the Social Studies dept. We can't do this alone. I am eliminating some stories we use so I have time to go deeper into the text. While I will still require some short answers for literature selections, I want to move beyond just identifying and supplying text evidence, to carefully thinking through the evidence to consider the author's purpose in using it. It's a whole new way of thinking for 11 year olds!

I am much more mindful of using consistent terminology when referencing text based analysis questions/prompts and realize that students are able to do well with tackling TDAs, but that much time is needed in order to scaffold and build those skills over time.

I know what a TDA is and how to prepare students.

It has made me more aware of teaching the students how to attack an essay question and to perform close reading strategies through all that we read
.
It has changed my teaching- fewer short answer responses, more analysis- during class, and then independent work by students.

10. What additional support or professional development would you find beneficial as a result of participating in this research?

TDA Development.

Info on teaching the skills for close reading and text analysis, especially for younger children (fourth grade being the newbies to this expectation). I will be pioneering a new reading program for my district next year. I am hoping that the links to the Common Core wil help me to do this more successfully. I understood scoring and expectations after this research, but I felt that getting the students there was on our shoulders. My colleagues seemed to feel the same. I did benefit in working with other fourth grade teachers and sharing ideas.

I would love to see how the experts in this study scored my essays so that I can reflect on how well I am doing or not doing looking at student work. Additionally, I would like to know how I can get someone who is more of an expert to meet with the staff in building to help train then as well. I am teaching in a pre-k to 8 school and feel the earlier they start with this the better. Thanks again for all you do!

We need to work as a team on the school level to incorporation TDA questioning in all content areas. Working with peers to score student work and discuss why we assigned a certain score is helpful. Looking at work in other content areas to see if student can transfer the knowledge of TDA would be informative and show areas where work is needed.

Anchor papers would be helpful for the students to see what the expectations are and what an "analysis" might look like. More work with other teachers in scoring TDA responses would also be beneficial.

We talked about getting benchmark papers for each of the scoring levels. Having a session where we looked at the benchmark papers then scored another set of our own student work would be beneficial. For everyone, releasing a test item at each grade with examples on the PDE website would be beneficial for those not involved with the study group. We have one from last year, but I think the questions this year may have been refined a bit. Models always help!

I would love some more group scoring! That was the most beneficial. Being able to discuss and bounce ideas off of each other was fantastic. I would also like to create a few more TDAs.   Creating them has really helped me figure out what the final product should be.   Overall, I am thankful that I was asked to participate in this research. What I have learned is invaluable!

More review of assessment items to fine tune my understanding of the scoring rubric.

I think it would be beneficial for our research group to meet periodically over the next year as we work to implement this kind of instruction more fully.

I would love to be a part of another study similar to this one. I think the amount of work was quite rigorous for a full time classroom ELA teacher, but I think the benefits outweigh the disadvantages.
More practice with generating TDA questions, specific teaching strategies that work, and more scoring based on the rubric with colleagues.

I would like additional professional development in writing TDA prompts and in guiding students to effectively analyze texts, make claims, and support claims through their writing.

Are there any professional materials or websites that could help us continue to learn.
I know you mentioned and showed us some when we were in Harrisburg. Could you resend that list. Have the local IU's been informed about the TDA's and will they be providing any professional development? Thank you for including us in this work!!! I have learned so much from working with my fellow 5th grade teachers as we figured out how to instruct students so they would be successful with the TDA's on the PSSA. Good luck with your continued research! Additional information for #4 I know it couldn't be helped, but I believe the weather had an impact on how well prepared I felt to independently create TDA's. I appreciate the support of the others in the learning community as welll as the phone acess to Jeri. I knew this was new and challenging and I also felt good about tackling TDA's.

I would like to see more student samples responses scored by the study team. I'd like to see a 4 because we never really came across one.

Dialogue with other teachers is vital! More released items will be helpful along with anchor papers, and just time!

I would love to see instructional videos devellped on how to teach close reading for TDA prompts moving forward which would be available for all teachers in PA> I also feel like more time is needed to meet kids where they are now in order to get them where they need to be in order to be successful with answering TDA prompts.

More professional development about creating TDAs

Continued development of writing effective TDA questions.

The best part of the study was working with other teachers. It helped clarify the task, helped with scoring and most of all, it helped with the confidence that this can be done!!!

Appendix F: Frequency Distribution of Rating Patterns for Research Prompt #3

Observed Pattern of Ratings (Analysis/ Reading Comprehension/ Writing)	Frequency	Percent	Cumulative Frequency	Cumulative Percent
111	47	10.47	47	10.47
112	13	2.90	60	13.36
113	1	0.22	61	13.59
121	48	10.69	109	24.28
122	39	8.69	148	32.96
123	8	1.78	156	34.74
131	4	0.89	160	35.63
132	9	2.00	169	37.64
133	5	1.11	174	38.75
211	3	0.67	177	39.42
212	1	0.22	178	39.64
221	8	1.78	186	41.43
222	64	14.25	250	55.68
223	2	0.45	252	56.12
231	4	0.89	256	57.02
232	36	8.02	292	65.03
233	41	9.13	333	74.16
322	9	2.00	342	76.17
323	4	0.89	346	77.06
331	1	0.22	347	77.28
332	10	2.23	357	79.51
333	92	20.49	449	100.00

Key:
Yellow: All ratings are equal (45%)
Green: Analysis Rating higher than Reading Comprehension and Writing Ratings (3%)
Aqua: Analysis Rating lower than both Reading Comprehension and Writing (23%)
Purple: Analysis Rating equal to Reading Comp Rating (8%)
Orange: Analysis Rating equal to Writing Rating (21%)
Pink: Analysis Rating lower than Reading Comprehension and Higher than Writing (1%)