

Think-Aloud Protocol (TAP) Analysis: An Investigation of Writing Assessment Tool for High School Teachers

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Abstract. Teachers experience particular difficulties in learners' writing activities for academic purposes. Teachers should concern more about this phenomenon. One of the strategies to explore this fact is by determining an assessment procedure to encompass the writing direction during the learners' writing process. Understanding learners' difficulties and defining direction to solve those difficulties are significant for teachers to develop writing direction. This research applied a case study method to investigate the directional concern that Indonesian high school teachers' arranged derived from a think-aloud protocol (TAP) assessment, which the researcher suggested. The researcher interviewed three Senior High School teachers about the argumentative writing performance of their three learners by applying the TAP Assessment. After the TAP assessment, the teachers' directional concerns contained more elements related to the process of writing, even though they still ignored several significant processes. The inference result was that writing teachers' professional development gave directional plans so that teachers were facilitated to work on writing assessment data thoroughly for the whole organization aspects.

Keywords: argumentative writing, classroom assessment, formative assessment, secondary school, think-aloud protocol

INTRODUCTION

A high-quality assessment procedure can be performed through a significant element of successful writing direction. Learners need teachers' support for their writing improvement. The problems experienced by learners' in academic writing should be recognized. Teachers make this information as a basis to construct direction, which is essential to solve the problems. Wylie & Lyon (2012 in Beck et al., 2018) stated that learners would get better treatment when more concerns were given for the development of formative and investigative uses of assessment. When teachers study to give more definite suggestions for development, learners' writing develops as well (Parr & Timperley, 2010 in Beck et al., 2018). Moreover, Black & William (1998) emphasized that formative assessment applications are useful to improve lower-level learners' proficiency.

The most frequent and applicable formative assessment instruments are possibly rubrics. Andrade, Du & Wang (2008) said the application of rubrics is

considered significant in raising learners' writing achievement and also students' self-efficacy as writers (Andrade, Wang, Du, & Akawi, 2009). On the other hand, rubrics also have another drawback that they are intended to evaluate a product-based writing assessment. That is why they do not give approaching into students' writing processes, nor the learners' efforts served during these processes. Graham & Perin (2007) stated the drawback is important since teaching writing procedures is the most successful way for writing problem solving. While teachers experienced the lack of technique and instrument to evaluate learners' writing procedures, it was impossible to suit the directional procedure to learners' individual goals.

Considering formative assessment significance for directional development and the proportional lack of provided instrument for learners' writing process assessment, the researcher built on formative assessment instrument called the Think-Aloud-Protocol (TAP) Assessment. The researcher observed how the information teachers collected with the TAP Assessment application was varied compared to their usual assessment technique. Beck, Llosa, Black, & Trzeszkowski-Giese (2015) explained they have investigated that this new assessment technique enabled teachers to know more about learners' writing processes and also their potencies as writers. Understanding the learners' difficulties in composing their ideas as well as their strengths as academic writers were the advantages of applying TAP Assessment. Then the researcher continued to the next step of the research to investigate the kinds of directional concerns that teachers arranged based on the collected information from these two distinctive techniques to their learners' writing assessment. This paper was guided by the following research questions:

- 1) To what level does the TAP Assessment promote a critical concentration on learners' strength as writers?
- 2) What directional concepts do teachers develop from applying the TAP Assessment?

LITERATURE REVIEW

The definition of formative assessment

Shepard et al. (2005) described formative assessment as assessment performed during the directional process for the teaching or learning progress intention. In the same way, OECD authors (2005) explained, "Formative assessment refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately" (p. 21). While Kahl (in Shepard: 2005) had a contrary argument with test vendors related to the misuse of the term, he underlined that formative assessment is a "midstream" tool that teachers use "to measure student grasp of the specific topics and skills they are teaching" (p.

38). The thing which makes formative assessment formative is its instantaneous changes for new learning development. Sadler (in Shepard: 2005) described, feedback is a significant part, involving that teachers have an obvious forethought of the learning skills, evaluate recent students' improvement, and explain the way to increase students' competence. In conclusion, formative assessment promotes the learning progress based on the directional process.

Research support for formative assessment

Formative assessment has the wide-ranging research support and it relies on both cognitive and motivational research. Crooks (in Shepard: 2005), for instance, was remarkable since his review organized findings from the literature in educational measurement, motivational psychology, learning theory (both behaviorist and cognitive), and research on teaching – literature which hardly ever accepted each other at that time. Crooks' suggestions for educational performance had enclosed the most fundamental aspects of more complete recent research combinations. For instance, classroom assessments support student criticism in the significant aspect to learn and influence students' self-perceptions of proficiency. More effective learning works while assessments concentrate on deep learning rather than surface or memorization approaches to learning. Learning needs significant feedback the most than makes best use of summative evaluations consistency. Cooperative learning has a great impact for students' active commitment and supports valuable peer and self-assessment competences improvement.

In addition, Black and Wiliam (1998) stated an innovative review, which is the most broadly quoted reference on formative assessment and underlines the general principle that "Everyone knows that formative assessment improves learning." Black and Wiliam investigated 250 researches from research literature that focus on recent classroom practices, student motivation and student participation in assessment practices, learning theory, specific classroom strategies such as discourse and questioning, and the properties of effective feedback. They made an inference that formative assessment has a more intense impact on learning than do other certain educational treatments, creating impact sizes of between .4 and .7. Furthermore, formative assessment applications support low-proficiency students more than they do for high-proficiency students. In brief, formative assessment assists meta-cognitive skills construction and promotes motivation in various degrees for low-proficiency students because high-proficiency students have mastered these resources spontaneously or through other supports.

Intensive investigation of the research literature is beneficial for the characteristics of formative assessment recognition, or contributory procedures, which enable it to affect learning enhancement. In example, from a cognitive research, that made students have self-consciousness about controlling their

learning, also referred to as meta-cognition, upgrades achievement. In discussing Palincsar and Brown's (in Shepard: 2005) reciprocal teaching, teaching reading comprehension strategies like "thinking about the story and making predictions about what comes next", increased the reading competence significantly of low-level middle school students. Likewise, White & Frederickson (in Shepard: 2005) in the formative assessment literature, teaching students to self-assess so they are able to comprehend and apply requirements while they performed their task improves the student project excellence and theoretical perception. Other components of study in the cognitive literature show the benefits of keeping students' prior knowledge to encourage new learning and the importance of concerning about the main perception to convey and understand overview.

Recognizing the cognitive and motivational theories grounding formative assessment is important since these theories give clarification why formative assessment operates when it operates. The most noticeable characteristic of formative assessment is feedback and the one with the most intense research base as well. However, feedback does not work well sometimes. Kluger and DeNisi's (in Shepard: 2005) meta-analysis advises that in one-third of studies, while assessment aims to the people rather than the assignment, feedback makes performance worse. In one-third of comparisons, there is similar result with and without feedback. Only in the one-third of studies where the feedback concerned with considerable assignment parts, providing distinctive assistance about the way to develop, gave feedback steadily increase performance. As a result, simply letting students know their score or proficiency level does not belong to the kind of feedback supported by the formative assessment literature.

Comprehending the theoretical basis of formative assessment is essential since it gives coherence, therefore assisting to guarantee that discrete useful procedure features seem right and collaborate. Considering teachers as learners, the purpose should be full of meaning. More logical insight of learning theory functions as a tool to correlate formative assessment strategies. It is also to encourage how formative assessment is in connection with discourse reforms in mathematics, comprehension strategies in reading, inquiry methods in science, etc. Even though teachers and teacher education students habitually have less diligence with theory, big-portion perceptions are truly significant in the effort to make teaching practices better. The theory provides an idea about the way to act while a past experience is not substantial.

The findings from the research on motivation, principally concerning with formative assessments, present supplementary understanding. Research on motivation is possible to provide important inferences for the more regular of external testing. Students who have extrinsic motivation try to meet "performance goals," for instance, to have excellent scores, to satisfy the teacher, and to seem proficient to others. It is called a "performance orientation." Performance-oriented

students accept easy assignments and are reluctantly to continue while they face difficulty. On the other hand, students with intrinsic motivation, or students with a learning orientation, try to meet “learning goals,” for example, to have a sense of mastery progress and to become proficient (in contrast to seeming proficient). Learning-oriented students have more connections in schoolwork, apply more self-rule, and construct better insight to subject matter.

The most worrying finding from this study is that students can learn to be extrinsically motivated or to become extrinsically motivated in several situations and not in others. Normative scoring applications and extrinsic rewards make performance-oriented students (Stipek, in Shepard: 2005). Not all mastery-oriented students will quit their passion in learning due to a teacher’s comparative scoring applications, but the proof is considerable that many students learn to concern with scores because scores have been applied much persistently as rewards to manage manner and lead student work. Working against students’ excitement with scores and readdressing attention and attempt toward learning is a target in performing a formative assessment classroom routine.

Motivation research on self-efficacy and children’s beliefs in relation to competency shows precious learning about the way everyday applications of feedback and commendation may lead to children’s confidence about their competencies as learners. Commending children for “being smart” while they practice excellently on assignments may cause bad effects for learning as such commendation promotes students’ understood beliefs that cleverness and competency are permanent. Carol Dweck (in Shepard: 2005) investigated that students, who believe that cleverness is an inborn invariable characteristic, are puzzled by serious problems and inclined to stay away from academic challenges. On the contrary, students who have been educated that competency can be developed by work, have a tendency to obtain academic challenges and to keep on when encountered with serious problems.

Principles for valuable formative assessment

Knowing What Students Know (Pellegrino et al. in Shepard: 2005), the National Research Council committee published innovative information on assessment, required “balanced assessment systems” to remedy the equity of resources between classroom and external assessment types. The main characteristics suggested for an equal assessment system were comprehensiveness, coherence, and continuity. Comprehensiveness deals with the need for numerous sources of facts for conclusions drawing related to each student’s competence. The coherence element is in the correlation with the necessity for a joint model of learning linking curriculum, direction, and assessment within the classroom and also linking classroom assessments and external, large-scale assessments. Continuity extends the underlying model of learning to allow for a longitudinal

assessment of learning progress over time.

Assessments must embody learning goals. The first criterion, requested for day-to-day formative assessment, is that it “embodies learning goals” and completely symbolize the aspects students should comprehend. The term authentic assessment is often used to express this notion that students be involved in practicing their skills and “know-how” in the context of realistic tasks that reflect the “core challenges of the field of study, not the easily scored” (Wiggins, 1998, p. 23). In classrooms, formative assessment can surely be applied in the context of mathematics problems, history papers, and science experiments, focusing on the key concepts and competencies that are intended for a given directional part.

Assessments should be timed to be instructional-linked or instructional embedded. One of the main aspects is timing, on which formative program evaluation instruments and formative assessments differ. Assessment guidelines must be applied instantly as a component of the directional process to make it formative. For instance, a teacher knows that some students are puzzled and interferes immediately, or a student gets feedback in a writing conference and works to rewrite his essay properly. Formative assessment is useful when it is timed so that the information can be applied. Comments on a term paper, for example, are not formative if students do not have the chance to manage feedback to develop a certain piece of work or the following task.

Assessments must satisfy their respective definitions by providing program insights or supporting learning processes. In that understanding, program evaluation tools and formative assessments are dissimilar in intentions and how well they work can be seen by their usefulness to those relevant goals. Formative assessments should meet particular goal and promote student learning. The research literature declarations can evaluate the level of the importance of formative assessment application. Take as example, whether the given feedback supports students in their effort of skills development. Is self-assessment applied for internal understanding and private possession of learning process assistance?

Assessments should produce coherent improvements in teaching and learning. In the end, program evaluation tools and formative assessment are judged by their significance in leading attempts for teaching enhancement. Formative assessments should direct to coherent and enrich teaching progress since they are implanted in direction. Different from more formal assessments which targeted to make a score, formative assessment gives more specific qualitative ideas related to students’ strength and difficulties since it started from particular directional steps. Shepard (2005, p. 23) proposed some practical steps for this case. Formative assessment in an algebra class might occur as students are working in groups to solve problems. The teacher notes that the student is thinking about the steepness of a line above the x axis, but she is not thinking

about the change in y related to the change in x . The student can also give a memorized definition of slope but has not learned what it means until the teacher asks her to show on the graph how the change in y and the change in x relate to the steepness of the slope. Then to make sure the student is understanding, the teacher asks a follow-up question, “So what would the change in x need to be, in order to make the slope flatter?”

Writing formative assessment and writing direction

An assessment which its information is used for instructional conception belongs to formative assessment (Black & William, 1998; Cizek, 2010 in Beck et al., 2018). Furthermore, Nagin & National Writing Project (2003, p. 77 in Beck et al., 2018) noted assessment should have an instructional purpose, not simply an evaluative or administrative one. The information teachers collected would guide them to formulate the directional procedures for the next teaching writing practices. Assessment information needs to apply correctly. That is why the teachers should have high-quality experience in the field of directional approaches. Limbrick, et al. (2010 in Beck et al., 2018) discovered that the solution for teachers’ support of creating an effective application of formative writing assessment was preparing teachers the excellent performance of writing direction with a research-based report.

Based on the result applied in the writing assessment, a general inference was that teachers should understand theoretical mistakes on the aspects of the genre, grammar, and vocabulary. Writing improvement understanding was able to assist teachers correlated assessment information to the direction. Limbrick et al. (2010 in Beck et al., 2018) discovered that this understanding might enable teachers to develop learners’ studying course, to make directional preparation and define standard for learner improvement degree (Parr, Glasswell, & Aikman, 2007), and to develop the response aim the teachers applied for learners, affecting the development of students’ writing accomplishment (Parr & Timperley, 2010). Individual learner characteristics comprehension is crucial. Callahan & Spalding (2006) stated that dealing with a portfolio system may cause teachers to comprehend the way different learners needed different kinds of directional assistance in the goal of their writing development.

Ruiz-Primo (2011) explained the strength of dialogic “assessment conversations” combined within activities in the classroom and clarified that this method might be precise to teachers probability to recognize learners’ misunderstandings. When teachers are competent to correlate their observations to interpret the aims of studying and set the aims correlation to expand the output of studying. Similarly, teachers’ professional development attempts had guided them to make an inference that concentrating only on the data of quantitative school-level assessment was not enough for effective directional procedure developments

(Langer & Colton, 2005 in Beck et al., 2018). The reason was it led teachers to “overgeneralize and engage in uniform instructional and professional development practices” (24), predicting that the similar rationale explanation for the whole learners’ efforts to defined writing elements. Based on what they had encountered, quantitative assessment data in great extent is significant for the comprehensive beginning, qualitative and longitudinal study to certain learners recognized since symbolizing particular types of struggling learners and their learning obstacles as well. The revolution in teaching approaches that deals with the learner want in a more appropriate and distinctive way may be created by teachers’ partnership in the matter of these researches.

Data source for writing formative assessment: Think-aloud protocol

The TAP Assessment is derived from research instrument, namely the think-aloud protocol, which is applied as an instrument for learning cognitive processes in assignments variety for several long time. The think-aloud protocol technique has enlightened cognitive processes varieties that distinguish advanced and beginner writers. For instance, advanced writers answer a writing assignment by explaining the difficulties in more specific and detailed manners compared to beginners conduct (Flower & Hayes, 1981), and that advanced writers' cognitive processes are defined by a “knowledge-transforming” approach, in contradiction of beginner writers' “knowledge-telling” approach (Bereiter & Scardamalia, 1987 in Beck et al., 2018). Traditionally, the significance of this research content is that it verified the writing process to be more iterative, lively and compound than prediction in the stage model of the writing process that had significant role on writing direction at that time (Flower & Hayes, 1981) – and in some cases, remains its significance. On certain correlation deals with the study in this research that applied think-aloud protocols to verify the problems of elementary school learners with correction processes and showed that the writing process feature stage this technique gives important inferences for instructional action (Van Gelderen, 1997).

The researchers realized that the TAP Assessment was really beneficial in some significant methods (Beck et al., 2015). First, the think-aloud protocol gives more perspectives about learners’ problems to teachers with writing processes than product-based assessments gave. In the TAP Assessment, teachers concluded about learners’ competencies to assess, correct, target, and set their writing processes. The researchers also investigated that in conclusion drawing from the TAP Assessment deal with learners’ proficiencies in the link of writing elements such as assessing, correcting, understanding the assignment instructions, and defining what the learners want. Another significant result was that in the TAP Assessment, teachers rarely drew conclusions related to learners’ qualities – for instance, their general EFL competencies, their attempt level, or their general

intelligence – than when teachers just examined learners' writing. That is why the researchers have recommended that the TAP Assessment should be in accordance to discover learners' certain potencies and weaknesses as writers than are more standard product-focused assessments, where teachers' perspectives of learners' writing may be difficult to understand by holistic consciousness of learners' academic natures or other qualities (Beck et al., 2015).

This paper analysis resumed and developed the previous work by investigating the types of instructional priorities teachers arranged according to the teachers finding on the obstacles in applying the TAP assessment and also their certain product-based approach for students' writing evaluation. This paper was a significant summary to the previous study since if the TAP assessment was to accomplish its agreement in the function of a formative assessment means, applying it to find students' writing difficulties was insufficient. The teachers have to manage the information related to the difficulties to inform their following direction. Opening up the relation that the teachers created between assessment information and directional preparation needed to concern seriously since this topic gained less practical notice.

METHODOLOGY

Participants

The researcher selected three Senior High School teachers in Indonesia for collaboration to investigate the application of the TAP Assessment. The teachers and three students in each class involved in the study, for a total of three teachers and nine students. The researcher asked the teachers to suggest for students' involvement related to the information needed to support their writing development using direction. The teachers chose the three students based on their proficiency, gender, and character.

Data collection

The researcher collected data through open-ended and close-ended questionnaire. The researcher got the information from the three teachers about several aspects: their recent writing curriculum and assessment practices, their students' strengths and difficulties in writing, and how they applied the TAP Assessment with their three students. In the next step, the researcher asked the teachers to know what they learned about students as writers from the TAP Assessment, what factors they focused on during the students' performance, and how they thought about the information they collected from the TAP Assessment to be effective for directional planning.

Data Analysis

The researcher applied three different steps of data coding and comparison in order to answer research questions. First, the researcher classified cases based on the teachers conclusions drawing related to the students' writing processes in the TAP Assessment record-keeping sheet. Adapted from (Beck et al., 2013), the researcher coded those cases based on the writing process elements or writing product components they concern. The writing process elements contain evaluating, revising, translating, and defining the rhetorical problem (Flower & Hayes, 1981, p. 369). Components of the written product consist of thesis, cohesion and supporting evidence.

Second, the researcher noticed whether the conclusion teachers drew were categorized as the strength or the difficulty, writing processes, or written products. The writer tallied those to determine the pattern in teachers' concerns to categorize strengths or difficulties in the correlation to writing processes or written products.

Third, the researcher noticed the source of information for each conclusion by categorizing whether the teacher used what they heard in the students' verbal report, what they observed during the think-aloud, what they read in the writing students created during the TAP Assessment, or their previous knowledge of the student. After finishing these stages, the researcher applied matrices (Miles & Huberman, 1994 in Beck et al., 2018), to answer the first research question, by computing the number of strengths-based conclusions from the TAP Assessment. Finally, to answer the second question, the researcher coded the teachers' post-TAP Assessment questionnaire for directional concepts correlated to conclusions drawn from the students' performance on the TAP Assessment.

FINDINGS

The TAP Assessment emphasizes potencies in writing processes

The TAP Assessment was beneficial to figure out potencies in correlation to Topic Choice and Translating-Vocabulary, for which 2 out of 3 (67%) teachers concluded that these aspects showed their students' potencies. For the aspects of Analyzing, Defining the Rhetorical Problem, Evaluating, Generating, Internal Focus, Managing Writing Process, Planning, and Translating-General, which 1 out of 3 (33%) teachers found. Those differed from what Beck et al. (2015) findings concluded Defining the Rhetorical Problem, for which 43 out of 79 (54%) of the conclusions based on the TAP Assessment had to perform the students' potencies. In the correlation to Evaluating, 10 out of 14 (71%) of the TAP-based conclusions had to perform with potencies. In the correlation to Revising, 21 out of 28 (75%) TAP-based observations had to perform with potencies. In the correlation to Topic Choice, 16 out of 17 TAP-based conclusions

had to perform with potencies.

The teachers figured out more potencies than difficulties in correlation to the whole writing process features apart from Memory, Revising, and Translating-Grammar. It was similar as Beck et al. (2015) but in other aspects, apart from Planning, Analyzing, Translating-General, and Translating-Grammar. Taken as a whole, 12 out of 21 (57%) of the writing process conclusions teachers drew during the TAP Assessment focused on potencies. On the other hand, Beck et al. (2015) found 51% of the conclusions drawn based on the TAP Assessment focused on potencies. It was significantly different from the conclusions drawn about the written product, where difficulty-focused conclusions were more in number than potency-focused ones for 8 out of 11 (73%) while Beck et al. (2015) figured out (65%). Therefore, the TAP Assessment seemed to give more elaboration to the writing process and students' potencies.

Directional concepts derived from the TAP Assessment

The conclusions teachers drew related to students' difficulties with Translating-Grammar and Evaluating guided to several remarkable directional principles. For instance, Respondent 2 paid attention to where his students missed what the TAP Assessment instruction was asking for, related to building good sentences. About one of his students, he said, "They talk so much but write a little since they are not able to bring their ideas into meaningful sentences. I always try to guide them with clear instructions before starting writing." Difficulties with Evaluating also stimulated directional principles. For instance, Respondent 1 observed that one of her three students commonly made the great effort in this field. The student was much better in fluency and accuracy in his spoken language than in his written work but did not investigate the error when he reviewed his writing. Respondent 1 concluded that a significant directional procedure would be applicable to teach him for errors analysis in his writing.

Students' potencies in the field of Topic Choice and Translating-Vocabulary also guided to directional principles. For instance, from listening to one of her students think aloud, Respondent 3 noted a special initiative to define a writing topic immediately and assumed that with several treatments, this initiative might be organized to maintain the student in "selecting the appropriate information to support her topic." Likewise, Respondent 1 found out that one of her students applied a creative procedure to check her word choice: at the beginning of the TAP Assessment she made her vocabulary list and asked herself, "What if I change this word with this one?" Respondent 1 thought it would be effective as a consideration before determining the most appropriate word.

The teachers noticed the TAP Assessment prospective as a chance to give the directional response to the students during their writing processes. The ideas to give this response can be by guiding students to review their writing and

managing their focus on certain features of the guidance. They stated a hope to differ from the TAP Assessment's standardized directions. It indicated that they allowed the student to think naturally. They did not interrupt his/her thinking during the think-aloud. In this situation, the assessment exposed their certain directional attentions.

DISCUSSION AND CONCLUSION

The researcher noted that teachers experienced more perceptions related to their student writers based on the TAP Assessment. In general, when applying the TAP Assessment as a data source, teachers figured out more students' difficulties than students' potencies during the writing processes. The difficulties related to Memory, Revising and Translating-Grammar. Teachers should help students by designing the appropriate instruction. In the other side, teachers noted students' potencies in more various aspects: Analyzing, Generating, Internal Focus, Topic Choice, and Translating General. These are important elements in the writing processes. For the written product, teachers figured out students' difficulties in Cohesion and Thesis. Teachers need guiding students to evaluate and revise their argumentative writing.

Meanwhile, De la Paz & Graham (2002) stated that explicit direction in creating plans had a positive consequence for low-grade writers. It was significant for assessment techniques implementation that enabled to investigate potencies and difficulties in certain features of the creating procedure. The TAP Assessment enabled teachers to draw conclusions in correlation to certain students' writing competencies and reduce the whole consciousness of students as learners. When teachers thought that students' writing competencies could be improved through direction, it was essential to investigate students' potencies and difficulties.

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Appendix A. Think-Aloud-Protocol (TAP Assessment) Record-Keeping Sheet

Think-Aloud-Protocol (TAP) Assessment Record-Keeping Sheet

Please use this sheet to track what you hear and observe as your student completes the think-aloud protocol task. You should use both the thoughts that they verbalize and the actual writing that students do to answer the questions on this sheet. Use this sheet to identify both what you perceive as problems or difficulties (including what students are not verbalizing) as well as strengths or strategies that they demonstrate.

1. Does the student interpret the prompt accurately?	Yes	No	Not sure
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What if any challenges does the student demonstrate related to interpreting the prompt?

2. Does the student choose a book or film that they have enough to say about?	Yes	No	Not sure
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What if any challenges does the student demonstrate related to choosing a book/film?

3. Does the student engage in planning and setting goals to complete the task? (Examples of planning include pre-writing, outlining, note-taking, talking through the ideas)?	Yes	No	Not sure
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What if any challenges does the student demonstrate in planning and setting goals?

4. Does the student come up with a thesis statement?	Yes	No	Not sure
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In composing a thesis statement, what if any challenges does the student demonstrate?

5. Does the student generate support for the thesis?	Yes	No	Not sure
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In generating support for the thesis statement, what if any challenges does the student demonstrate?

6. Does the student have trouble recalling information from the book or movie?	Yes	No	Not sure
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7. Does the student analyze and/or synthesize information from the book or movie and not just summarize it (to use as information to support the thesis)?	Yes	No	Not sure
8. Does the student show awareness of audience? (For example, “this would make the movie sound exciting” “I don’t want to give the plot away”)	Yes	No	Not sure
What challenges does the student demonstrate in relation to audience awareness?			
9. Does the student develop a structure for the essay? (E.g. multiple paragraphs, intro, conclusion)	Yes	No	Not sure
What if any challenges does the student demonstrate in developing the structure of the essay?			
10. Does the student connect ideas effectively? For example, does the student use transitions between paragraphs? Does the student refer to the thesis later in the essay?	Yes	No	Not sure
What challenges does the student demonstrate in relation to connecting ideas?			
11. Does the student evaluate and/or revise his or her own writing?	Yes	No	Not sure
What if any challenges does the student demonstrate relative to evaluating and revising?			
12. Is the student able to stay focused on the task?	Yes	No	Not sure
13. Does the student have trouble using conventions of standard written English (e.g. correct spelling, punctuation, grammar)?	Yes	No	Not sure
What if any challenges does the student demonstrate relative to conventions?			
14. Does the student identify appropriate words to express his/her meaning?	Yes	No	Not sure
What if any challenges does the student demonstrate in identifying appropriate words?			
15. Does the student get too caught up in sentence-level issues and lose sight of the big picture?	Yes	No	Not sure

Please summarize the main strengths and the main challenges that you observed for the student during this protocol.

What if any discrepancies did you notice between the thoughts that the student verbalized and the writing they composed?

Based on the information you have gathered here what kinds of instruction or support would you provide to help this student improve his or her writing?

Appendix B. Table Distribution of Focus of Assessment Inferences in Post-TAP Questionnaire

Type of Inference	Definition	TAP- Assessment Challenge	TAP- Assessment Strength	TAP- Assessment Total
Writing Process				
Analyzing	Higher level analysis of book or film	0	1	1
Defining the Rhetorical Problem	Interpreting task requirements and audience needs	1	1	2
Evaluating	Reviewing and evaluating essay	1	1	2
Generating	Generating new ideas	0	1	1
Internal Focus	Focus on task	0	1	1
Managing Writing Processes	Allocating time to different steps of process	1	1	2
Memory	Recall of information from text	1	0	1
Planning	Planning essay	1	1	2
Revising	Revising essay	1	0	1
Topic Choice	Choosing a topic	0	2	2
Translating: General	Rendering thoughts in written English	0	1	1
Translating: Grammar	Grammatical aspect of translating	2	0	2
Translating: Vocabulary	Lexical aspect of translating	1	2	3
Writing Process Total		9	12	21
Written Product				
Cohesion	Making the essay coherent	2	0	2
Structuring	Organizing essay	2	1	3
Supporting Evidence	Providing evidence for argument	1	2	3
Thesis	Articulating a thesis	3	0	3
Written Product Total		8	3	11