# Analysis of Critical Thinking Aspects in Students' Essay

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Abstract: Critical Thinking (CT) is an essential skill that helps human make every verdict and select a lot of information available. For students, their CT skill can be seen in their academic writing, especially in their essay assignments. However, their essays do not always indicate that they are in charge of their ideas and thinking because they used to pick up people's thought subconsciously. The study is intended to describe the CT aspects which appear in students' essay, and the students' CT level shown in the students' essay writing. The method used in this research is a qualitative descriptive method. Data are obtained through the analysis of the essays using the University of Louisville's CT rubric. The results show that only two CT aspects that always appear in students' essays: claim and assumption.

# **1 INTRODUCTION**

The purpose of overall education is to create students who can think critically, not just taking things around them without thinking. This importance is shown by the Ministry of National Education that has put CT as one aspect in the government policies when related to education. The government shared the idea that students need to be able to choose, to analyze, and to assess the explosion of information to meet the demands of modern life (Khajavi, Yaser. Shahvali, 2013) Therefore, they need to be equipped with CT skills inserted into their academic studies effectively because knowing the facts is not sufficient for the students.

However, previous research shows that most students are not in charge of their thoughts. Instead of thinking what ideas they have, they tend to imitate and follow what other people's opinions. They subconsciously pick up what is thought by people around them (Paul, 1993). It is reflected in their academic writing, especially in their essay assignments. Thus, this study is intended to reveal (a) the CT aspects which appear in the 5<sup>th</sup>-semester students' essay, and (b) the students' CT level shown in the students' essay writing in the Indonesian context. This study is expected to give an alternative way of teaching writing that combines CT principles and writing, especially in essay writing.

# 2 LITERATURE REVIEW

Paul (1993) stated that "Critical Thinking (CT) is thinking about your thinking while you're thinking to make your thinking better." CT is also judgmental because it carefully evaluates something and eventually decides what to accept (Tittle, 2011). Besides, Ennis (2011) also argued that CT is rational and reflective thinking focused on determining what to believe or to do that you act according to your beliefs. This self-monitored thinking required an excellent standard to be applied in reasoning (Richard, Paul., Elder, 2008).

# 2.1 The Framework of Critical Thinking

Experts define particular features of CT as the most critical aspects of CT. As Mason (2008) explained, that most of the experts tend to emphasize one, or perhaps two, of this following features: The skills of critical reasoning (such as the ability to reason appropriately), a disposition, in the sense of a critical attitude and a moral orientation which motivates critical thinking, and substantial knowledge of particular content.

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One conceptual set that the researcher will focus on is the concept of CT proposed by Paul & Elder (2008) that is known as the Paul-Elder Critical Thinking Framework. The Paul-Elder CT framework is a refinement and development of the conceptualization of critical thinking by Richard Paul and Linda Elder. Moreover, this approach is outlined in several publications and one of the most widely published and cited frameworks in the CT literature (University of Louisville, no date)

The Paul-Elder framework has three components based on the Miniature Guide to Critical Thinking Concept and Tool by Paul and Elder. The components are (a) the elements of thought, (b) the intellectual standard, and (c) the intellectual traits. (Richard, Paul., Elder, 2008)



Figure 1: The Paul Elder Critical Thinking Framework

### 2.2 The Assessment of Critical Thinking Aspect in Essay Writing

Developed from Paul-Elder Critical Thinking Framework, one of the Tool Analysis that can be used to assess critical thinking aspects is University of Louisville Critical Thinking Rubric. As stated in Louisville University (2013), The University of Louisville General Education Critical Thinking Rubric is based on the Paul-Elder framework and developed at the University of Louisville (See appendix).

#### 2.3 General Concept of Essay

An essay is a set of paragraphs written about a particular topic and a central main idea. It must have

at least three paragraphs, but a five-paragraph essay is a common task for academic writing (Zemach, Dorothy E., Rumisek, 2003). Similar to a paragraph, an essay composes of three parts. These parts are the introductory paragraph; the supporting paragraphs or the body; and the concluding paragraph. Paragraphs can be easily developed into essay length (Boardman, 2008)

Further, Mccuen-Metherell and Winkler (2009) also agreed that essay writing is a process aimed at expressing with the written word what the writer feels or thinks about a subject. The essay is divisible into two major parts: the material elements—the words, sentences, and paragraphs arranged by a writer on paper—and the abstract elements—the purpose, audience, and strategy that must enter into the writer's calculations and writing.

The structure of essay consists of three main parts. Those parts are introduction, body, and conclusion (Zemach, Dorothy E., Rumisek, 2003; Boardman, Cynthia A., Frydenberg, 2008; Langan, 2008; Anker, 2010). Introduction, body and conclusion are the three important parts of essay that should exist in every essay to make the essay wellstructured and well written. Those who want to produce the better essay should produce the better writing in every main structure. Moreover, the conclusion reminds readers of the main point. It may summarize and reinforce the support, or it may make an observation based on that support (Anker, 2010)

#### 2.4 The Relationship between Critical Thinking and Essay Writing

Critical thinking and analysis are key elements of the reading and writing. Kirby and Goodpaster (1999) argue that writing is a mirror of mind that can clarify, sharpen, and enrich one's mind. Thought can be placed in writing to eliminate the ambiguity and achieve clarity, strengthen our physical and mental awareness.

Waburton (2006) stated that essay writing is at the heart of education. Hence, Essays serve as a tool to test the students' knowledge by assessing their arguments, analyses, and specific examples, as well as the conclusion.

The essay texts used for the analysis were one of the essay assignments in Reading Comprehension 5 Course. Those are the essay response to the text "Sexism in English: A 1990s Update" by Alleen Pace Nilsen in Reading Comprehension 5 course. The students taking this course had chosen among three quotations in the text: "Language and society are as intertwined as a chicken and an egg" (paragraph 5), "Early in life, children are conditioned to the superiority of the masculine role" (paragraph 29), and "I'm one of the linguists who believe that new language customs will cause a new generation of speakers to grow up with different expectations" (paragraph 36). Then, each student was supposed to make an argumentative essay in response to one of those quotations.

Essays on this issue also portrayed some of the issues in the previous meeting of reading class. Thus, it is believed that the students have the more prior knowledge to develop their essays.

## **3 METHODS**

This study employed qualitative approach Taylor, Steven J., Bogdan, Robert., Devault (2016) stated that qualitative method is a research procedure that produces a descriptive data of written or oral and the behaviour that can be observed. To attain the data, the study was held at a State Islamic University in Bandung, Indonesia. This location is chosen because there is a language major in this university, specifically English Education Department of which the students have produced a lot of writing assignments in their study that is beneficial for this research.

The participants of this research are the 5<sup>th</sup>semester EFL students. The population is 124 students divided into three classes: Class A, B, and C. The purposive sampling technique was employed to select the 27 students as the sample of this study. Nine students were taken from each class. They are classified into a high, medium and low level based on the students' score in Reading Comprehension subject. The students' classification aim is to gain data that are more specific from the participants.

The data were taken from the documents of the students' essay. The documents were analyzed by using the CT rubric adapted from Paul-Elder CT framework (Richard, Paul., Elder, 2008) to show the students' critical thinking in their essays. This CT rubric is also developed and used by Louisville University; therefore, it is named as The University of Louisville General Education Critical Thinking Rubric.

# 4 RESEARCH FINDINGS AND DISCUSSION

# 4.1 Aspects of Critical Thinking Which Appear in Students' Essay

Table 1 below shows CT aspects in the rubric that appeared in students' essay.

Ν	Aspects	Respondent	Total	Perce
0				ntage
1	Claim	R1-R27	27	100%
2	Evidence	R1,R3,R4,R6- R27	25	92%
3	Inference	R1, R3, R4, R8-R27, R29- R27	22	81%
4	Assumption	R1-R27	27	100%
5	Implication	R1, R3, R4, R5, R7,R10- R14, R17- R19, R21-R25	19	66%

Table 1: CT Aspects of the Students' Essay

It can be concluded that not all respondents have all the five aspects of CT in their essay. There are only two aspects--(1) claim (100%) and (2) assumption (100%)—that always present in respondents' essay. Both claim and assumption carry the writers' point of view. For the claim, which consists the thesis statement, the purpose and problem (University of Louisville, no date), the analysis shows that all of the respondents' essays have a claim. It relates to the statement of Mccuen-Metherell and Winkler (2009) that every essay has a purpose that exists in the claim. The data can be seen in the following figure:



Figure 2: Critical Thinking Aspects Appeared in Students' Essay

Meanwhile, the other three aspects-(3) evidence (92%), (4) inference (81%) and (5) implication

(66%)—are still missing from their essay. This shown that the research finding is contradictory with the theory that said that once expressed, the controlling idea should be supported by logic, evidence, and expert testimony; moreover, the argument should take into account the expected replies of the opposition (Mccuen-Metherell and Winkler, 2009), There are still essay which do not carry the evidence to strengthen the controlling idea. Moreover, about inference, there could be other explanations for the evidence cited and thus other positions to take and actions to advocate that should be exist in inference. (Nadell, Judith., Langan, John., Comodromos, 2009). Because of the evidences that do not exist in every essay, some inferences may not exist also to infer the arguments and this make the percentage of inference aspect is getting low. At last, Nadell, Judith., Langan, John., Comodromos (2009) stated that the kind of process analysis chosen has implications for the way the writer will relate to the reader. It relates to the findings shown that most of respondents can relate the implication with the readers.

No	Aspects	Level	Respondent	Total	%
1	Claim	0		0	0%
		1	R2, R5, R6, R7, R9, R11, R12, R15.	8	29%
		2	R1, R3, R8, R13, R14, R16, R17, R18, R19, R20, R23, R25, R26, R27	14	51%
		3	R4, R10, R21, R24	4	14%
		4	R22	1	3%
2	Evidence	0	R2, R5	2	7%
		1	R6, R7, R9, R13, R14, R20, R21, R26	8	29%
		2	R3, R4, R8, R10, R15, R16, R19, R24, R27	9	33%
		3	R1, R11, R12, R17, R18, R22, R23, R25	8	29%
		4	-	0	0%
3	Inference	0=	R2, R5, R6, R7, R18	5 6 7	18% —
		1	R4, R26	2	7%
		2	R9, R11, R14, R15,	4	14%
		3	R1, R3, R8, R10, R12, R13, R16, R17, R19, R20, R21, R22, R23, R24, R25, R27	16	59%
		4	-	0	0%
4	Assumption	0	-	0	0%
		1	R1, R2, R4, R6, R7, R9, R10, R13, R14, R15, R18, R19, R20, R22, R23, R25, R26, R27	18	66%
		2	R3, R5, R8, R11, R12, R16, R17, R21	8	29%
		3	R24	1	3%
		4	-	0	0%
4	Implication	0	R2, R6, R7, R9, R15, R16, R20, R26, R27	9	33%
		1	-	0	0%
		2	R1, R5, R8, R11, R19, R21, R23, R25	8	29%
		3	R3, R4, R10, R12, R13, R14, R17, R18, R22,	9	33%
		4	R24	1	3%

Table 2: Students' level of Critical Thinking Aspects in Their Essay.

The representatives of students' essay analysis in Table 2 may show the level of critical thinking aspects and enhance the research result.

#### 4.2 The Critical Thinking Aspects in Students' Essay Writing and Their Level

The students' essays are analyzed to identify the level of critical thinking aspects appear in students' essay writing. The rubric of University of Louisville used as the rubric adapted and based on critical thinking framework proposed by Paul and Elder (2008).

There are several levels in every critical thinking aspects, such as (1) for "Not Evident" level, (2) for "Minimally evident" level, (3) for "Usually Evident" Level, and (4) for "Clearly Evident" Level.

The analysis of representatives of students' essay is shown as follows based on the overall data of students' level above. The average of all sample level is analysed in separate aspects to elaborate and to strengthen the analysis.

#### 4.2.1 Claim

From the table 2, the student's level in claim as critical thinking aspect in University of Louisville rubric may best shown in diagram as follows:





Figure 3 shows that "Claim" is one of CT aspects that always emerged in students' essay. 14 students (51.8%) scored two which means that the essays are considered as "Minimally Evident." Then, eight students (29,6%) scored one as "Not evident" which means that those essays have not a clear, precise, and significant thesis and do not demonstrate an understanding of the purpose and do not recognize the problem. Only four students (14.8%) that scored three that is considered as "Usually Evident" which meant that their claim ad a clear and precise thesis but lacked significance. At last, only one student

(3.7%) that scored the highest score that is four as "Clearly Evident" which means the respondent has a clear, precise and significance thesis, also the clear purpose and problem recognition. Unfortunately, most of the respondents who scored 1 and 2 have unclear and imprecise claims. It means that the writers cannot elaborate critical thinking in the essay.

In relation to that, Pau & Elder (2008) elaborate that critical thinker should routinely apply intellectual standards, in this case, clarity, precision, significance, accuracy, relevance to the element of reasoning in a claim such as purposes, questions. The most of the respondent who scored 1 (51.8%) and 2 (29.6%) failed to apply this concept. Furthermore, based on this theory, only one person successfully has reached the level of a critical thinker and four respondents who nearly reach it. The good claim that has been analyzed previously proved that the respondents have a clear, precise, and significance claim.

#### 4.2.2 Evidence

To enhance the findings and discussion, the diagram of result in "Evidence" as aspect of critical thinking can be seen as follows:





Despite the fact that evidence is important in supporting the claim in the essay, according to the rubric of University of Louisville, there are still two students (7.4%) who are not stated their evidence and scored 0 in their essay. The fact that the students fail in writing the evidence in their essay contradicts with the fact that it is very important to establish how the evidence (data) supports the thesis (claim) (Nadell, Judith., Langan, John., Comodromos, 2009).

Then, both groups of students who achieved the highest scores (3) and the lowest scores (1) have eight students each. The eight students (29.6%) who scored three are categorized as "Usually Evident" which means that their evidence is sufficient,

defensible and counter-evidence was acknowledged even though insufficiently refuted. Then other eight students (29.6%) who scored one were considered as "Not Evident" which means that their evidence aspect was insufficient or misinterpreted evidence or ignored counter evidence. Nine students (33.3%) scored two as "Minimally Evident" which means that the evidence is found in minimally sufficient and lack of the counter evidence.

The problem of the group of respondents who categorized as "Not Evident" and "Minimally Evident" is that they lack the logic of the evidence in their writings. Whereas, according to Paul & Elder (2008) the logic is part of aspect in Universal Intellectual standard, which means that the evidence should make sense, the writers should bring a variety of thoughts together into some order. There are no respondents who scored four that belongs to "Clearly Evident" category. Based on the analysis, the problem is the counter evidence. There are no respondents who acknowledge and refute the counter evidence sufficiently. While in fact, as Mccuen-Metherell and Winkler (2009) argued that to write an effective argument, the writer must not only deliver personal views but must also raise and disprove any possible counterclaims by the other side.

#### 4.2.3 Inference

The students' essay analysis result of "Inference" as one of the aspects in critical thinking was shown as follows:





Figure 5 shows that there are five samples (18.5%) that did not have any inference in their essay and scored zero. Furthermore, there are 3 students (11.1%) who scored 1 as "Not Evident" which means that they have inferences that did not show connections between evidence and conclusion. 4 students (14.8%) scored 2 as "Minimally Evident" which means that their inferences are illogical and inconsistent in connecting the evidence and

conclusion. The last, the most sample students that are 15 students (55.5%) scored three which categorized them into "Usually Evident" level. This level has shown that their inference usually made logical connections between evidence and conclusion. While for score 4 "Clearly Evident" inference, there is no single students appear to reach this level.

The sample of inferences analyzed in this research has shown that there are quite lot students who do not provide a conclusion in the essay at all in their writing. It means that they are not even consider information and evidence. This analysis also proves that the five respondents that scored 0 in inference do not summarize the main point of the essay.

For the other group of respondents, they have been analyzed based on the connection between the evidence with the conclusions they draw. Group of respondents who had scored 1 (11.1%) as "Not Evident" does not connect evidence and the conclusion. It contradicts with Waburton's opinion stating that a good writer should conclude from the evidence that has been given (Waburton, 2006). The next group of respondents who scored two as "Minimally Evident" (14.8%) has made illogical and inconsistent connection between evidence and conclusion. These findings show that they had already provided evidence, as Waburton (2006) have stated in the previous statement, yet they ignored the relevant conclusion and the logic behind the conclusion.

#### 4.2.4 Influence of Context and Assumptions

Figure 6 below shows the level of assumption among students in their essay.



Figure 6: Students' Level in Assumption Same as claim, assumption is one of the aspects in critical thinking that always appear in students' essay. Beside that fact, the most of samples that are 18 students (66,6%) scored low that is 1. That made their essays are categorized as "Not Evident" essay in assumption which means that their assumption are shown an emerging awareness of present assumptions and they began to identify some contexts when presenting a position (University of Louisvile, 2013).

Further, as can be seen in Figure 6, only one student (3.7%) that has reached score 3 and his/her essay categorized as "Usually Evident" which means that s/he not only identifies his/her assumption but also others' assumption and several relevant contexts. And the rest of the eight students (29.6%) scored two as "Minimally Evident" which means that they questioned some assumptions and also identifies several relevant contexts.

The problem with the research findings that do not reach level 4 of assumption is the fairness of the assumption. The respondent at the low level does not recognize any other's assumption. The respondents who fall into level 2 are only aware of their own assumption than the others. Meanwhile, the highest level that achieved only reach level 3 that happens when the writer identifies own and others' assumption and several relevant contexts.

Using the University of Louisville's rubric, they fail to recognize their assumption and others' assumption thoroughly, and do not carefully evaluates the relevance of contexts when presenting position.

#### 4.2.5 Implication

To enhance the analysis and discussion of the research, the diagram of implication as one of the aspects of critical thinking can be seen in Figure 7.





There are quite a lot of sample that does not imply anything in their essay. There are nine students (33.3%) who scored 0. As for the highest score which is 4, only one student reached the level and his/her implication considered as "Clearly Evident" implication which means that his/her identifies and thoroughly discusses implications, conclusions, and consequences and also considered all relevant assumptions, contexts, data, and evidence. For score 2, there are eight students (29.6%) categorized as "Minimally Evident" implication and they suggest some implications without clear reference to context and data or evidence. And then, there are nine students (33.3%) who scored 3 and their essay considered as "Usually Evident" in implication which means that they identify, briefly discuss implication and consider most but not all relevant data.

As can be seen from the statistic of implication section, data show a lot of absence of implication in respondents' essay. 33.3% respondents have no implication, whereas implication aspect is important in an essay. As Paul (1993) argued that the principle of implication is to reason through an issue or decision; critical thinkers must understand the implications and consequences that follow from it.

The fact that the remaining respondents do not have low score such as level 1 means that the respondents have reduced the flawed implication and consequences. Further, Level 2 until 4 indicate that the students could differentiate assumption and evidence in their implication. In implication, there is only one respondent who reached the highest level: that is Level 4. This means that that one respondent can be considered as the good thinkers.

Overall, based on the University of Louisville's rubric, regarding the existence of a claim in their writing, most students reach Level 2 (Minimally Evident). Meanwhile, regarding the existence of evidence, most students have Level 2 (Minimally Evident), and for inference, most students score three that is at "Usually Evident" level. In addition, for assumption, most students reach Level 2 (Minimally Evident) and, for implication, most students score 0 and three as "usually evident". For implication, the average score of the students is 1.7 which belongs to Level 1 as "Not Evident."

In relation to Paul & Elder (2008), a wellcultivated critical thinker raises a clear and precisely important question and problems. When most students reach Level 2 in the claim, this means that they are not quite good in making a claim, because the theses are stated clearly but lack precision and demonstrate a limited understanding of purpose, problem or unclear question. Second, a good critical thinker gathers and assesses relevant information, using abstract ideas to interpret it effectively. Seeing from the Level 2 in evidence, the students cannot be considered as a well critical thinker, because the evidence in students' essay is less sufficient to support the claim and lack of the counter evidence.

Third, Paul & Elder (2008) also stated that a well-cultivated critical thinker has well-reasoned conclusions and solutions. This relates to the fact that inference as one of the CT aspects reaches Level 3 which means that the students usually make logical connections between evidence and conclusion. Then, a critical thinker also thinks, recognizes, assesses the assumption, implications, consequences, and communicates the solution to the problem open-mindedly. In relation to this, the assumption with Level 'minimally evident' and implication with Level 'not evident' have proven that the students are not good enough to be a critical thinker. Thus, based on the analysis above, the students cannot be considered as a well-cultivated critical thinker.

Based on the analysis, the students reach Level 2 as 'minimally evident' in both aspects of evidence and assumption. The problems are bad opinion or lack of counter opinion. This makes the students' essay failed to develop some intellectual traits such as intellectual humility, intellectual courage, intellectual empathy, and fair-mindedness that needs the critical thinkers to acknowledge counter-opinion in their essay. Level 3 in inference relates to intellectual autonomy traits that are having rational control of one's beliefs, value, and inference and confidence in reason. It means that one draws the reasonable conclusion and persuades each other by reason. These traits have developed in the students' CT. Moreover, Evidence aspect with Level 2 indicates that the students' evidence is minimally sufficient to make the students fail to develop intellectual integrity and perseverance traits. This because intellectual integrity and perseverance need consistency in intellectual standard and rigorous standards in evidence. In addition, the use of intellectual insights achieve to а deeper understanding, and the 'minimally evidence' level in students' essay is not enough to achieve these traits. In conclusion, the students only develop two traits that are intellectual autonomy and confidence in reason out of eight other intellectual traits.

# 5 CONCLUSIONS

In conclusion, there are five aspects of critical thinking appear in students' essay. There are only two aspects--claim and assumption--that always emerge in their essay. While the other three aspects that are evidence, inference and implication are still missing from some of the essays. The level of critical thinking aspects in students' essay writing ranging from Level 1 to Level 4. In "Claim" and "Evidence," most of the students reach level 2 (Minimally Evident). In "Inference," most of the students have scored three that is "Usually Evident" level. In "Assumption" most of the students reach level 2 (Minimally Evident), and in "Implication," most of the students scored 0 and three as "usually evident." In average for implication, students scored one which categorized in level 1 as "Not Evident."

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# APPENDIX

University of Louisville Critical Thinking Rubric.

Claim: State	Claim: States thesis; Identifies purpose; Demonstrates			
recognition	of problem or	question		
4 - Clearly	3 -	2 -Minimally	1-Not	
Evident	Usually	Evident	Evident	
	Evident			
States a	Clearly	Clearly states	Does not	
clear,	states a	a thesis, but	state clear,	
precise,	thesis that	thesis lacks	precise,	
and	is precise,	precision and	and	
significant	but thesis	significance;	significant	
thesis;	lacks	Demonstrates	thesis;	
Demonstr	significan	a limited	Does not	
ates a	ce for	understanding	demonstra	
clear	making an	of purpose of	te an	
understan	argument;	the	understan	
ding of	Demonstr	assignment or	ding of	
the	ates an	recognition of	the	
purpose of	understan	the problem or	purpose of	
the	ding of	question is	the	
assignmen	the	unclear	assignmen	
t,	purpose of		t, nor	
recognitio	the		recognize	
n of the	assignmen		the	
problem	t or		problem	
or	recognitio		or	

question	n of the		question		
_	problem		_		
	or				
	question				
Evidence: U	ses evidence,	information, data	2		
	observations, experiences, and/or reasons				
Presents	Evidence	Evidence is	Evidence		
strong,	is	minimally	is		
credible	sufficient	sufficient to	insufficien		
evidence	to support	support the	t to		
and	the claim	claim and	support		
interprets	and	evidence is	the claim,		
evidence	evidence	usually	or		
defensibly	is	interpreted	misinterpr		
and	interprete	defensibly but	ets		
convincin	d	ignores some	evidence,		
gly and	defensibly	of the counter	or ignores		
acknowle	and	evidence	evidence		
dges and	counter-		that		
refutes	evidence		counters		
evidence	is		the claim		
that does	acknowle				
not	dged but				
support	insufficien				
the claim	tly refuted				
Inference: M	lakes a logica	l argument; Devel	ops a line		
	based on evid				
Always	Usually	Makes	Does not		
makes	makes	illogical and	show		
logical	logical	inconsistent	connectio		
connectio	connectio	connections	ns		
ns	ns	between	between		
between	between	evidence and	evidence		
evidence	evidence	conclusions	and		
and	and		conclusio		
conclusio	conclusio		ns		
ns	ns				
Influence of	Context and	Assumptions			
Thoroughl	Identifies	Questions	Shows an		
у	own and	some	emerging		
(systemati	others'	assumptions.	awareness		
cally and	assumptio	Identifies	of present		
methodica	ns and	several	assumptio		
lly)	several	relevant	ns		
analyses	relevant	contexts when	(sometime		
own and	contexts	presenting a	s labels		
others'	when	position. May	assumptio		
assumptio	presenting	be more aware	ns as		
ns and	a position.	of others'	assumptio		
carefully		assumptions	ns).		
evaluates		than one's	Begins to		
the		own (or vice	identify		
relevance		versa).	some		
of			contexts		
contexts			when		
when			presenting		
presenting			a position.		
o monit					
a position.	. F .1 . T	nplications, conclu			

consequences			
Identifies	Identifies	Suggests	Fails to
and	and	some	identify
thoroughl	briefly	implications,	implicatio
У	discusses	conclusions,	ns,
discusses	implicatio	and	conclusio
implicatio	ns,	consequences,	ns, and
ns,	conclusio	but without	consequen
conclusio	ns, and	clear	ces of the
ns, and	consequen	reference to	issue,
consequen	ces,	context,	(OR) the
ces,	considerin	assumptions,	key
considerin	g most but	data, and	relationshi
g all	not all the	evidence.	ps
relevant	relevant		between
assumptio	assumptio		the other
ns,	ns,		elements
contexts,	contexts,		of the
data, and	data, and		problem
evidence.	evidence.		such as
			context,
			assumptio
			ns, or data
			and
			evidence.

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