The Hows and Whys of Critical Thinking Education in an EFL Context

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I. Introduction

Many have remarked about the intimate relationship between language and thought. George Orwell has insightfully written:

> A man may take to drink because he feels himself to be a failure, and then fail all the more miserably because he drinks. It is rather the same thing that is happening to the English language. It becomes ugly and inaccurate because our thoughts are foolish, but the slovenliness of our language makes it easier for us to have foolish thoughts (1953, p.143).

Usually one finds clear, logical ideas reflected in well-ordered, precise language, whereas poorly conceived ideas often find their expression in ambiguous or confusing language. Undeniably, informal logic is

an integral part of English communication. Before a language utterance can achieve communicability, it probably must first achieve some sort of ideological coherence. Therefore, any English teaching needs to involve some serious attention to developing reasoning skills in English learners. Incoherent thinking will impede oral and written communication, especially at higher educational levels. It has long been recognized that reading is as much a cognitive skill as a matter of linguistics, but this is equally true of speaking, listening, and writing, which can be called "modes of reasoning" as well as language skills (Paul, 1992). A critical thinking approach to English language learning can make use of these insights in practical ways that enhance a learner's linguistic and intellectual development.

The language teaching community is coming to recognize the practical implications of the inseparable connection between language use and cognition. Through developing schema theory, ESL reading specialists in particular have observed how student analytical perspectives influence their comprehension of reading texts (Carrell, 1987). ESL instructors themselves are noticing that language deficiencies are not the only things which lie behind the failure of their students to perform well in English academic situations (Matthews, 1994). Because of their upbringing in societies in which independent, logical thinking is often discouraged, many EFL/ESL learners find themselves especially handicapped in competing with native speakers brought up in an atmosphere of controversy, debate, and free discussion (Pavlis, 1993). This need is also recognized among many in the Japanese educational world. A prominent physicist, Koreo Kinoshita has concluded that at academic symposia Japanese fare badly not so much because of a deficiency in their English skills as because of their weaknesses in debating skills and logic. This observation led him to author a series of textbooks in Japanese that are essentially critical thinking texts (Kobayashi, 1994).

An emphasis on thinking skills would also address criticisms which have been leveled at the unthinking character of many language-teaching approaches that only encourage superficial communication or passive "input" (Krashen, 1985). Tarvin and Al-Arishi (1991) have noted that language teaching has tended in recent years to encourage the interactive and intuitive over the reflective, thoughtful side of language use. Worse still, some language teaching approaches may even encourage a kind of brainwashing (Davidson, 1994). As an example, Suggestopedia is one method that seeks to infuse language input subliminally, through the power of suggestion and the influence of an authority-figure teacher (Lozanov, 1978). However, as Milgram's (1974) famous electric-shock experiment has shown, people in many cases already tend to submit mindlessly even to an immoral demand from an authority figure. Pedagogical approaches that rely on authority are likely to increase that tendency of unreasoning obedience, which can hardly encourage the thoughtful use of language.

Finally, even if EFL/ESL students do not look at their mental products critically, certainly many of their instructors and native speaker acquaintances will. Before teachers or students can deal with reasoned discourse based on criteria of good reasoning, they must pinpoint what those criteria are. That entails a basic understanding of the philosophy of critical thinking education.

II. The Critical Thinking Concept and Classroom

Robert Ennis, one of the pioneers in the field, has listed a number of critical thinking abilities, which he groups in the following manner:

Elementary Clarification
  1. Focusing on a question

2. Analyzing arguments

3. Asking and answering questions that clarify and challenge

Basic Support

4. Judging the credibility of a source

5. Making and judging observations

Inference

6. Making and judging deductions

7. Making and judging inductions

8. Making and judging value judgments

Advanced Clarification

9. Defining terms and judging definitions

10. Identifying assumptions

Strategies and Tactics

11. Deciding on an action

12. Interacting with others

One might take issue with some elements of this classification, but it brings to light some of the analytical tactics that together enable critical thinking (Norris & Ennis, 1989, p.14). However, some have noted that it is difficult to deal with critical thinking skills atomistically; in most cases several must come into play at the same time (Siegel, 1988). Furthermore, simple skill in various elements of critical analysis is insufficient without a commitment to certain standards of behavior such as fair-mindedness and intellectual humility. Conceivably, anyone can use all the critical thinking skills simply to demolish opposing arguments, not for reexamining one's own position. According to Paul, such standards require that thinking always be "clear, significant, deep, broad, fair, consistent, spe-

cific, adequate, and complete" (1992, p.105).

A variety of definitions of critical thinking have been offered by educators to elucidate the concept, and we find most of these overlap or paraphrase each other. First of all, critical thinking can perhaps be distinguished from creative thinking that simply generates ideas without concern for their merit, although many critical thinking specialists have challenged the creative/critical thinking dichotomy as too facile (Siegel, 1988 & Paul, 1992). Composition specialists have devoted a lot of attention to the creative aspects of idea-generation, called "brainstorming," using such techniques as listing and clustering, and critical thinking relates to what happens to those ideas after they appear on paper or in the course of discussion. From his brainstormed list of ideas, how does a student decide which ideas to reject, which to include, and how to connect them? Moreover, how does he or she make her composition convincing to the mind of her reader? Already in the composing process critical thinking comes into play as students deal with the products of their own creativity. An essential element of critical thinking is thus found to be rational judgment, and various definitions of critical thinking reflect this fact. Following Ennis, Norris (1985) explains critical thinking as "rationally deciding what to believe and do." Somewhat differently, Lippman (1991) defines it as the inculcation of healthy skepticism, so that students are not so quick to believe without sufficient proof. That concern is well-grounded, as one teacher found in encountering students easily won over to the views of even a blatantly slanted book (Davidson, 1994). Siegel (1988) considers the critical thinker to be one who is "appropriately moved by reasons." This educational ideal stands in marked opposition to the belief that rote-memorization of subject-matter helps students to arrive at real knowledge. What students have not thought through in their own minds, they do not really know in any deep sense. Critical thinking educators recognize that a student can become familiar with formulas, definitions, and

basic facts of a field without really grasping the logic of the subject
he is being exposed to.　Such learning becomes counterfeit knowl-
edge that passes for mastery in many contexts (Paul, 1992).　Using
language similar to that of Tarvin and Al-arishi (1991), Lippman
(1991) contrasts the rote-memorization model of education with "the
reflective model of education." In all satisfactory definitions of
critical thinking, the elements of logic and evaluation are never
absent.

Unfortunately, the term *critical thinking* in many contexts has
been reduced to a buzzword, judging by the large number of books,
presentations, and papers I have encountered that have incorporated
this term apparently without much comprehension of its meaning.
The proper conception of critical thinking may become clearer as we
look later at various techniques for fostering critical thinking.　It is
a rich concept, out of which flow a range of pedagogical tools and
strategies.　Paul (1992) catalogues thirty-five critical thinking peda-
gogical strategies.　However, some textbooks appropriating the
label "critical thinking" offer incomplete or misleading definitions.
One defines critical thinking only as "independent thinking," a defini-
tion which reduces it to just another word for individualism or
non-conformity (Rehner, 1994).　The exercises and strategies in that
text are correspondingly limited.

Far from encouraging individualism, many critical thinking
specialists reject the stereotype of the critical thinker as one who is
"a self-sufficient cognitive macho type, protected by an umbrella of
invincibly powerful arguments.　In reality, the reflective model is
thoroughly social and communal" (Lippman, 1991, p.19).　Lippman
advocates the concept of the classroom as a "community of inquiry,"
a term borrowed from the world of science.　By this description he
means that we should conceive of classrooms as places where teacher
and students can explore intellectual issues together rather than just
as places for students to absorb what the teacher transmits.　Small-

group activities can therefore be ideally suited to critical thinking. Authors involved in developing cooperative-learning approaches to education often find these techniques well-suited to a critical thinking approach. In their recommendations on encouraging reflection, Tavrin and Al-arishi (1991) confine it largely to individual mental activity, whereas other educators appreciate the fact that the collective intelligence of a class is greater than that of any of its individual members (Kohn, 1987). It is often impossible for one person to consider all possible points of view or angles on a topic, so thinkers do well to covet input or constructive criticism from their peers. For example, Johnson and Johnson (1988) have developed the "guided controversy" method, in which student teams receive contrasting information on some debated topic and use it in discussion. In EFL/ ESL jargon, we might call this activity an "information gap" debate. The authors warn against conceiving of this activity as a competitive debate in the traditional sense in which the object is for one side to win. The object is exploration of the ramifications of a certain topic to gain deeper understanding and develop reasoning skills. Thus cooperative group-work can work well toward the critical thinking goal, though it still leaves an important role for the instructor, who plays an essential role in modeling, assisting student efforts in the direction of logic, and helping students to evaluate their own ideas and the thinking of others (Collins, Brown, & Holum, 1987).

III. Practical Approaches for the EFL Classroom

A. Activities To Encourage In-depth Concept Formation

One weakness that besets many students concerns the poverty of their concepts. They may often have heard terms such as *friendship, international, human rights*, or *prejudice* but have little idea what they mean. If asked the meanings, their response might be to open the dictionary to find the authoritative explanation. Critical

thinking can point to a better way.　Rather than giving students a definition, I have asked them to compose their own.　They can clarify their definitions by bringing in personal examples.　When I asked students to bring in their own examples of prejudices arising from superficial thinking, they brought in a wide variety, not just the usual minority-group grievances.　One complained about how her personality was once erroneously classified by her friends according to her blood-type (a current fad in Japan); another mentioned her mistaken idea about an author whose books she had not bothered to read; another mentioned how one bad experience at a Chinese restaurant had convinced her that "Chinese people are cold." As Adler (1972) and Perkins (1986) point out, finding personal examples is often necessary for most of us to flesh out an idea for ourselves.　Without personal examples, almost any concept remains a rather meaningless abstraction in many cases, only a rote-memorized term.

　　　Paraphrasing and summarizing are usually thought of as belonging to the realm of research paper writing skills.　However, that restricts their significance.　They more properly belong to a much broader category: the realm of concept-formation skills. Adler (1972) contends that one of the true tests of reading comprehension is a reader's ability to restate the main ideas of a book in his or her own words.　Without the proof of a paraphrase, there is no way to tell if a student really comprehends a text or is merely regurgitating its words.　In addition, paraphrase is not restricted to composition; good listening and speaking require it as well, since confirming one's comprehension of the ideas of a speaker may require rephrasing: "So what you're really saying is that..." Moreover, summarizing requires analytical skill in distinguishing main ideas from less significant details.　Study skills texts often give attention to developing such skills, but in reality they belong to general English language competency, especially when it comes to academic English (Romanoff, 1991).　In classes I find students have had very little

practice in rephrasing ideas even in their native language, so they need a great deal of practice. A few months before a term paper assignment is due would seem to be a little late to begin to address this need. In oral and composition classes I have students practice rephrasing the ideas they hear from classmates or read in books as part of their general academic and language training. Partly as a result of their previous rote-memorization educational training, many students in the beginning are able to do little more than parrot the words of a book or an instructor.

Developed by Paul (1992), "Socratic questioning" is a technique by which an instructor guides a whole class into intellectual exploration of an idea. It usually begins with a question or an issue introduced by the instructor, who then calls on students to comment. Each student comment is followed up by further questions by the instructor, who is forbidden from commenting himself, although he can paraphrase or summarize what students have said. In the manner of Plato's dialogues involving Socrates, such questioning probes conventional ideas and definitions and drives students into a deeper analysis of their own thinking. In the right hands and with the right class, it can be a powerful and illuminating tool. In his questioning the instructor can assume a "devil's advocate" role, posing skeptical questions that he might not personally agree with just to force students to justify their thinking rationally. I have tried on occasion to make use of this technique in some of my more advanced classes in Japan with limited success. The trouble with it is that it assumes familiarity with the kind of full-class, free-wheeling discussions one sees sometimes in American classrooms but which are very threatening and alien in societies used to quiet respect for the teacher. On the other hand, this technique has the added benefit of helping to prepare the EFL/ESL student to participate in the kind of discussion she is likely to encounter in an English academic or social context.

With Paul's Socratic approach, the instructor has a consider-
able measure of flexibility in leading the discussion in whatever
direction he wishes, but Perkins (1986) recommends a somewhat more
structured analytical approach.　For every topic to be analyzed as a
class, he recommends going through the same list of analytical
questions: "What is the purpose of it?," "What is the structure?,"
"What are the models?," and "What are the arguments?" Reflecting
Perkins's own background as a mathematician, his approach appears
to be more suited to analyzing concrete physical phenomena en-
countered in science or engineering than to the humanities.　Along
with his analytical approach, Perkins (1994) helpfully suggests that
instructors present some topic for thought, give students some
minutes to think about it, let them write their thoughts down briefly,
have them share their ideas in pairs, and then have them share them
with the whole class, while the instructor puts them on the board.
He calls this technique "think-pair-share."

B. Source Credibility and Media Analysis Techniques

Media analysis is becoming a significant sub-field within criti-
cal thinking pedagogy (Lazerre, 1987).　Regardless of whether they
are native English speakers or English learners, many students are
poor at interacting critically with the media.　Students can learn to
weigh various considerations in order to judge the relative
believability of accounts and sources of information.　Before lan-
guage teachers can realistically expect EFL/ESL students to synthe-
size information from various sources, they need to know how to
evaluate the credibility of those sources.　When they see that it is
difficult to put one's complete faith in one view of an incident or a
topic, then they will appreciate the need for multiple references in
reports or term papers, as well as the need to process those sources
intelligently.　Plagiarism sometimes results simply from naive faith
in the perfect credibility and accuracy of the plagiarized work, an

attitude to which many EFL/ESL students seem particularly suscep-
tible.

At the simplest level, Matthews (1994) uses news stories as a
context for discussing the moral reasoning behind the controversial
issues they raise. Beyond simply capitalizing on items in the media
as topics for debate, however, the news media itself is a fit subject for
critical analysis. A number of approaches exist for critically ap-
praising historical or news texts themselves. One consists in looking
at a text and analyzing its reliability. Is the account first-hand or
second-hand? Does the writer have a reason to lie? Does it tell the
whole story, or only one side of it? Students can be trained to analyze
news stories according to a set of questions after the teacher models
an analysis or two for them of a brief news event or a historical
account (Beyer, 1991). I have given a list of differing statements
from various news sources about the same event. The students must
rank the statements or quotes according to how believable they think
each is. They then discuss their choices in groups in light of the
standard list of questions. In a content-based course on the Arab-
Israeli Conflict, for example, I presented students with brief, sim-
plified quotes from several different accounts of an attack by an
Israeli terrorist group on an Arab village during the War of Indepen-
dence in 1947-1948. One is from a book by a former president of
Israeli, another from an Arab eye-witness, another from a Red Cross
worker who happened to be present, and the last from an Israeli army
officer who happened to arrive shortly after the incident. Students
are surprised to find that the account of the Israeli officer is actually
critical of the attack, a fact that enhances its credibility, since one
would normally expect such a person to try to protect the reputation
of Israel. In contrast, the account by the former president of Israel
obviously tries to cover-up the event, in addition to being mostly
second-hand.

Another approach has been developed by Dorman (1994), which

he calls "frame analysis." This technique simply looks at news stories in terms of how each is "framed" according to the headline or approach, which shows the point of view of the writer.　Concretely, I have confronted class members with four varied news accounts of the assassination of Malcolm X (Chaffee, 1987).　Then in groups their task is to rank them in regard to how sympathetic each is to Malcolm X and his followers.　Then they must underline the phrases which seem to reveal the particular bias of the news writer.　The stories include one which is dryly factual, one which emphasizes the affection in which Malcolm X is held by his followers, and one that is obviously critical of Malcolm X's past inflammatory behavior. Students seem surprised to find that the news is not simply the unadulterated truth but is molded by the perspective of the news presenter.

C. Argument Analysis

To fill the deficiencies in student reasoning abilities, some ESL texts have resorted to including a section on formal syllogistic logic, including exercises (Smalley & Reuten, 1987).　However, there are problems with this approach.　One is that the syllogism is only Aristotle's abstract simplification of the reasoning processes (Gamut, 1991).　In reality, it is often very hard to encode the arguments of everyday life into the form of a syllogism (Scriven, 1976).　On top of that, even students who become proficient in formal logical opera tions often are not good at transferring these skills to everyday reasoning.　What students normally seem to need is skill in dealing with everyday reasoning, not an introduction to ivory-tower philo- sophical concepts and formulas.　The Informal Logic movement in philosophy has appeared to explore and improve the character of everyday argument (Blair & Johnson, 1980).　If such educators see serious limitations to formal logical training in the case of native English speakers, how much more must it be of limited value for

those to whom English is not their native language?

Some EFL/ESL pedagogues have not grasped this point. For instance, Hinkel (1994) confuses Aristotelian logic with essay argumentation. The two are distinct, so familiarity with one does not carry over to skill in the other. Moreover, logical reasoning was not invented by Aristotle. Hinkel also mistakenly equates logic with Western cultural traditions, but in fact examples of informal logic abound in the Japanese language as well (Davidson, 1995), though probably there has been more development and exploration of reasoning concepts in English rhetorical and philosophical traditions compared with some cultures. Students of EFL/ESL may simply need to become better versed in the English language's conventions about the applications and expressions of logical analysis, along with greater skill in the type of thinking such language embodies. For those who believe such things to be beyond the ken of the typical English language learner, consider the evidence of the Philosophy for Children program's educational research. Lippman and others have succeeded in engaging small children in reasoning about ethical and philosophical issues and improving their overall academic performance as measured by standard tests (Walsh & Paul, n.d.). This program has even been implemented with some success in non-English settings outside the U.S. ("Philosophy," 1992). If small children can do it, older English language learners probably can too.

In critical thinking and informal logic jargon, instances of deductive reasoning are called *arguments*, which can be analyzed into *premises* and *conclusions*. Even a simple sentence might constitute an argument. In contrast, bare assertions are claims without any rational support. Distinguishing real arguments from unsupported claims is an elementary skill that EFL/ESL students often need to learn. Exercises exist to practice this (Engel, 1994).

In addition, critical thinking specialists have labeled a large number of false steps frequently present in poor arguments. These

they call *fallacies*, which they have variously labeled and categorized. Among them are the *ad hominem* argument, which attacks a person's character rather than his reasoning, and the circular argument, which simply repeats the idea to be proven under the guise of a reason (e. g., "Married women should not work outside the home because they ought only to take care of their families."). Damer (1995) has enumerated as many as sixty fallacies, which he places into roughly four general groups, as fallacies pertaining to relevance, acceptability (credibility), sufficient grounds, and the rebuttal criterion. Students can of course learn the names of some principle fallacies; however, it may be better simply to train them to be on the lookout for argumentative false steps, using some general guidelines such as Damer's four criteria ("Is the reason relevant?," "Is it acceptable?," etc.). In my critical thinking class, I have found that many students can quickly identify fallacious reasoning and explain why some text is a poor argument, without being able to put a name to the fallacy they find. I have given lists of brief statements exemplifying various fallacies for students to analyze in groups. Once they explain each fallacy, I give them its formal label. Students seem to find this activity enjoyable, and as homework I assign them to go out and find similar examples to share in class.

As his prescription for analysis, Scriven (1976) recommends numbering the basic statements in an argument and from them constructing a "tree diagram" of assumptions, inferences, and conclusions to make the reasoning visually and logically clear. To reconstruct the logical bones of an argument, he outlines seven basic steps: "(1) clarification of meaning, (2) identification of conclusions, (3) portrayal of structure, (4) formulation of unstated assumptions, (5) criticism of the premises and the inferences, (6) introduction of other relevant arguments, and (7) overall evaluation of the argument in the light of 1 through 6" (p.39). Taking a simpler approach, Engel (1994) recommends rephrasing the argument in a kind of logic-paraphrase,

in which one reorders the elements by placing the premises before the conclusion and omitting the unnecessary verbiage. This procedure makes the structure of an argument clearer and easier to evaluate. Engel trains students in basic elements of argument analysis, namely: (1) learning to identify what is an argument and what is not, (2) locating the basic premises and conclusion, (3) paraphrasing and simplifying the words while removing the "fat" of any embellishing language, and (4) reconstructing the argument in logical form, placing premises before the conclusion. Engel's steps may be simpler and more easily transferable to the EFL/ESL context.

One important element in the thoughtful analysis of verbal communication is the accurate identification of less obvious aspects of an argument. The thrust of many verbal messages is based on some unstated foundational ideas which we usually call *assumptions*. Similarly, the reasoned consequences of a certain idea, what can be concluded from it, are called *implications*. However, students new to concept of logical analysis have difficulty finding such not-so-obvious elements of reasoning. For them, even the meaning of these words often presents a puzzle, so they need to be taught how to use them accurately. Moreover, assumption identification has its pitfalls. For instance, Scriven takes up the case of someone who says, "She's a redhead, so she's probably quick-tempered" (1976, p.81). One might think that the assumption here is that "All redheads are quick-tempered" and cast doubt upon that notion. However, that would be creating a straw man, which is a reasoning fallacy, since the speaker does not necessarily believe that all redheaded people have bad tempers. He may think that only women have this problem, and he adds the qualifying adverb *probably*. So good assumption identification requires one to find an assumption that is really buried in the original text but is also open to critical attention. Obviously this is not a skill that native speakers, much less non-native speakers, can instantly learn. Like assumptions, implications in a communication

can either be explicit or simply suggested.　Advertisements provide a stimulating topic for assumption and implication identification in class, I have found.　After demonstrating and practicing the skill, I have student groups identify one important assumption and one important implication in an ad.　Then students bring their own magazine ads to class to explain.　For example, about one vitamin drink ad showing a muscular young man flexing his muscles, a female student explained, "I think this ad implies if we drink Protina we will be a muscular man.　And this ad assumes that a muscular man is popular, and man should have brawny arms and legs." The next step, of course, can be evaluation of the assumptions and implications of a message or argument, but this more sophisticated step must await proficiency in the basic ability to uncover such hidden elements of reasoning.

D. Testing and Evaluating Critical Thinking Skills

Currently critical thinking testing is one of the most hotly debated aspects of the field.　The best overview of this area is by Norris and Ennis (1989).　Both informal and formal approaches exist.　Among the informal ways of evaluating progress can be included student journals, teacher impressions of class discussions, and individual interviews with students.

Formal instruments include various types of tests.　Both multiple choice and essay-type tests are available, some of them developed by Robert Ennis, recognized as perhaps the leading authority on critical thinking testing.　However, Norris and Ennis (1989) admit flaws in the multiple-choice approach, since it provides no opportunity for students to justify their choices and also might suffer from background bias.　Of his two multiple-choice critical thinking tests, the X and Z tests, the X test seems most suitable for EFL/ESL students.　Aimed at junior high school and high school age native English speakers, its language would pose few problems for advanced

or even intermediate ESL learners. The whole test consists in a continuing science fiction story about the exploration of the fictitious planet Nicosia (Ennis, Millman, & Tomko, 1985). Reflecting Ennis's inventory of critical thinking abilities, the test is divided into four sections, dealing with inductive reasoning, source credibility, deductive reasoning, and assumption identification. An alternative to the multiple choice test is the Ennis-Weir Critical Thinking Essay Test (1985). The test is simply a nine-paragraph letter to a newspaper editor about a city parking problem. In writing students must evaluate the strength of the brief argument in each paragraph. Since this test is also linguistically simple, most college preparatory ESL students should be able to understand it. The real difficulty may lie elsewhere, as Hatcher (1994) found in administering this test to Japanese and Chinese students at Baker University. These students did so poorly on the test that their scores were not included in a comprehensive empirical study of the effects of critical thinking instruction at that school. Hatcher speculated that the culturally-based attitude of politeness and hesitancy to criticize of these students made this test especially difficult for them, even after year-long enrollment in a freshman critical thinking course.

Among informal techniques for monitoring student progress in critical thinking, thinking-journals give an instructor the opportunity to see how well students are grasping and applying the techniques and concepts practiced in class (Fogarty, 1991). Without feedback, it is difficult to know if mental skills such as assumption identification have really taken hold. My oral class turned in a thinking journal monthly, and the responses recorded in them have been encouraging, especially in confirming that at least some students grasp the significance of their study of critical analysis. During our program's oral course we studied prejudice, advertising, and rational persuasion, and student comments often showed insight and analytical thinking about these subjects. Many quickly grasped the implications of their

study. One student wrote, "I watched commercials consciously recently" as a result of the unit. Others commented: "The media have us many influence in politic, thinking, and so on. We must not be infatuated by the exaggerated media. We should see the truth of thing." "I think T.V. is wonderful but also fearful. Audience should understand truth." "I have ever thought that advertising does not have power to change people's thoughts and opinions. But I noticed that was mistake. Advertisings influence our life." During the unit on prejudice, students also penned strong reactions: "Unit Four was very difficult and very interesting and very instructive and very meaningful for me. I have never thought serious about 'Human Rights and Prejudice'... As we say, 'never judge from appearances,' people should not be possessed with a foolish preconception."

IV. Conclusion

We have seen a wide assortment of approaches to developing the critical thinking skills of students. Student thinking abilities will not necessarily be developed if they are simply left to themselves. Mere practice in speaking or writing does not always result in better thinking unless such activities are somehow combined with training and evaluation of the thinking quality of their verbal output. Furthermore, merely giving reasons by itself does not constitute critical thinking unless evaluation according to criteria comes into play. Before labeling certain language learning activities as "critical thinking," English language teaching specialists should become more thoroughly acquainted with the field of critical thinking education. There they can find useful tools to adapt to the language classroom. To date not many texts or EFL/ESL educators appear to have explored very deeply the possibilities of critical thinking EFL/EFL teaching. For example, one ESL text billing itself as a course in "listening and critical thinking skills" includes very few of

the sorts of activities I have outlined (Numrich, 1990).

Rather than present a comprehensive review of all that is available from the world of critical thinking, in this article I have attempted to present a broad sampling of what might be of use to English language teachers. Many of the techniques used in critical thinking instruction are simply variations of activities language teachers have been using for years, such as task-based group work, teacher-directed idea-generation, paraphrasing, and journal-keeping. However, the critical thinking goal gives a different slant to these activities. No longer is the emphasis simply on improving one's ability to produce and receive language messages. More importance is attached to grasping and evaluating the thoughts embodied in the messages. In that direction lies the possibility of deeper interaction with English. Therefore, the critical thinking educational movement has a number of very practical ideas to offer the English language teacher. Most significantly, the developing English language learner has much to gain from adding critical thinking to his or her repertoire of skills.

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The Hows and Whys of Critical Thinking Education in an EFL Context

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Since language and thought are closely linked, educators recognize that language learning involves the development of cognitive skills. A critical thinking approach to EFL/ESL can make use of this insight in practical ways that enhance an English learner's development. It can also address various weaknesses found in current directions of English language pedagogical theory and practice, which sometimes encourage superficiality, passivity, or even indoctrination. Sound critical thinking methodology is grounded in a proper conception of critical thinking, which most specialists seem to define as rationality in practice. Strategies for the development of reasoning skills can be grouped into those related to basic concept formation, information source credibility analysis, and argument analysis. More concretely, instructors can make use of various techniques such as Socratic discussion and assumption identification to get students to think critically.