

THE RELATIONSHIP BETWEEN CRITICAL THINKING ABILITY OF IRANIAN EFL LEARNERS AND THEIR SPEAKING SKILLS

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ABSTRACT

In line with the studies in English as a foreign/second language (EFL/ESL) contexts confirming the positive relationship between learner factors and language proficiency, this study investigated the relationship between critical thinking ability and the speaking skills of Iranian students. For this purpose, 40 male and female freshmen majoring in English were selected as the experimental group. Afterwards, Peter Honey's (2004) appraisal test was given to them. At the end of the semester, each student was interviewed and graded. The results of the study revealed that there is a strong relationship between the ability to think critically and speak skillfully. Due to the findings of the present study, it is suggested that critical thinking be developed as a core academic skill so that multiple educational outcomes are accomplished by learners. As far as English language classrooms are concerned, teachers should ask challenging questions in order to raise learners' critical awareness.

KEYWORDS: critical thinking, English as a Foreign Language (EFL), speaking skills

INTRODUCTION

According to Epstein (2006), "thinking critically is a defense against a world of too much information and too many people trying to convince us." Nowadays critical thinking has become a living standard in the field of education. All educators are now aware of the importance of equipping learners with critical thinking techniques, and teachers are making efforts to teach these techniques in the most effective way possible. Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Sezer, 2008). As Hooks (2010) says, "critical thinking involves first discovering the who, what, when, where, and how of things – finding the answers to those eternal questions of the inquisitive child – and then utilizing that knowledge in a manner that enables you to determine what matters most"(p.9).

Children are not born with critical thinking skills. So how can we make critical thinkers out of children to succeed in their whole life? To start with, education could be the first step for promoting critical thinking among the children. Educational psychology has for decades recognized, emphasized, and investigated the concept of individual learner differences; “it is undoubtedly true that learners bring many individual characteristics to the learning process which will affect both the way in which they learn and the outcomes of that process” (Williams & Burden, 1997, p. 88). Recently, EFL/ESL researchers have focused their attention on the identification of such learner characteristics and investigation of their effects on the process, progress, and outcome of learning. One of the intellectual abilities which have been recognized as determiners of learning is critical thinking. Critical thinking is a learned skill that must be developed, practiced, and continually integrated into the curriculum to engage students in active learning. To support this premise, focused attention needs to be placed on the application of content, the process of learning, and methods of assessment (Snyder & Snyder, 2008). Therefore, instead of being transmitters of information, educators are required to focus on teaching critical thinking in order to inform students how to learn. Since learning a new language presents a “massive learning problem” (Stern, 1983, p. 381), second language learners need to be high critical thinkers and possess personal resources and effective coping strategies which can contribute to their academic achievement. The banking concept of education has been rejected by critical pedagogues who aim at liberating students from the confines of those classrooms in which the teacher is traditionally expected to transfer knowledge to students, while students receive and accept the information, right or wrong, without deserving the right to question the authenticity of the knowledge being transferred.

At each educational level, thinking must be practiced in each content field. This means hard work for the teacher. It is much easier to teach students to memorize facts and then assess them with multiple-choice tests. In a course that emphasizes thinking, objectives must include application and analysis, divergent thinking, and opportunities to organize ideas and support value judgments. When more teachers recognize that the facts they teach today will be replaced by the discoveries of tomorrow, the content-versus-process controversy may be resolved (Schmitt, 2002). Moreover, computer technology and the Internet provide a wealth of visual and firsthand information for the use of students. With more materials available comes the opportunity to help students develop critical reading and thinking skills through document-based questions. By comparing interpretations and information in different materials, students can learn to look for accurate sources and develop understandings of different points of view (Ogle, Klemp & McBride, 2007).

Thus, it can be concluded that critical thinking is quite complicated, and it is not easy for a child to develop such a complex ability without help. Therefore, we understand that the task of teachers as people who play the pivotal role of training critical thinkers is very crucial, particularly in a language classroom in which students should get the opportunity to participate in class discussions and evaluate the arguments of their classmates. So far little research has been done on the importance of teaching critical thinking skills in a language classroom. This study aims at investigating the effects of these skills in a speaking classroom.

LITERATURE REVIEW

Critical Thinking

As a concept, critical thinking has been elaborated in several ways. A major influence in critical thinking traces back to the work of the American educational philosopher John Dewey. To John Dewey, schools are laboratories of human development in arranged environments. Dewey held that the goal of education could only be development (or what he called "growth"); Education "means supplying the conditions which foster growth" (Dewey, 1916, as cited in Kuhn, 1999), not toward a predetermined end but rather in the direction of "an increase in the range and complexity of situations to which the child is capable of applying reasoned inquiry" (Cahan, 1994, as cited in Kuhn, 1999). In fact, the educator's task is seen as a process of connecting with the young child's interests and purposes, but that one could not stop there. Dewey said, "The real problem of intellectual education is the transformation of more or less casual curiosity and sporadic suggestion into attitudes of alert, cautious, and thorough inquiry" (Dewey, 1933, as cited in Kuhn, 1999).

According to Facione (2013), if we teach people to make good decisions, they can improve their own futures and become contributing members of the society. Becoming educated and practicing good judgment is better than enduring unwanted and avoidable consequences of poor choices. Moreover, Forrester (2008) asserts that it is essential for students to develop a critical approach in order to be skilled employees who are able to adapt to new situations in the workplace. Almost everyone agrees that one of the main goals of education is to help develop general thinking skills, particularly critical thinking skills. However, students do not acquire these skills as much as they could and should. Apparently, we need to improve our teaching and our educational systems. But in what ways? How can critical thinking skills be developed? Van Gelder (2005) suggests that we look to science, particularly cognitive science, for some guidance. However, cognitive science only provides theoretical information and does not give any kind of detailed recipe for actual teaching. Its findings need to be blended with teachers' professional experience. He continues by introducing three strategies followed by an ideal critical thinker: (1) putting additional effort into searching for and attending to evidence contradictory to her own, (2) giving extra credit to arguments that go against her position, and (3) showing willingness to change her mind once the evidence is against hers.

Kuhn (1999) holds that developing cognitive competencies most relevant to critical thinking are metacognitive – rather than cognitive – competencies. Metacognitive skills are higher-order meta-knowing skills which help individuals to know about their own and that of others' knowing. As such, they are in contrast to lower-order cognitive skills which enable individuals to know about the world since "thinking about one's thought – in contrast to simply engaging in it – opens up a whole new plane of cognitive operations that do not exist at a simple first-order level of cognition" (Kuhn, 1999).

Cottrell (2005) lists a wide range of skills and attitudes for critical thinking:

- Identifying other people's positions, arguments, and conclusions;
- Evaluating the evidence for alternative points of view;
- Weighing up opposing arguments and evidence fairly,

- Being able to read between the lines, seeing behind surfaces, and identifying false or unfair assumptions;
- Recognizing techniques used to make certain positions more appealing than others, such as false logic and persuasive devices;
- Reflecting on issues in a structured way, bringing logic and insight to bear;
- Drawing conclusions about whether arguments are valid and justifiable, based on good evidence and sensible assumptions;
- Presenting a point of view in a structured, clear, well-reasoned way that convinces others.

Education should aim to support the development of independent thinkers who are discerning problem solvers, and can use a range of cognitive skills and strategies, including critical thinking, to solve problems (McGregor, 2007). Summer (1940) defines critical thinking as the examination and test of propositions of any kind which are offered for acceptance, in order to find out whether they correspond to reality or not. Unrau (1997) defines critical thinking under the influence of Ennis' works as "a process of reasoned reflection on the meaning of claims about what to believe or what to do" (p.14).

In his article, Kabilan (2000) notes that only using the language and knowing the meaning is not enough, in order to become proficient in a language, learners need to use creative and critical thinking through the target language. He also believes that creative and critical thinking skills should not be taught separately as an isolated entity, yet embedded in the subject matter and presented in curriculum. Then he concludes that most of the teachers ignore the capabilities of their learners, and disregard learners' views and opinions; therefore, the learners would not be able to train and use their thinking skills. He states that the remedy would be changing teachers' pedagogical views and choosing a more flexible attitude towards their teaching. Moreover, he believes that creative and critical language learners are those who have cognitive abilities to carry out tasks affectively. They must be able to carefully and deliberately determine to accept, reject or suspend judgment about a claim. In the mean time, critical language learners must be able to cite and identify good reasons for their answers and opinions; they should also correct themselves and others' methods and procedures, and cope with regularities, uniformities, irregular circumstances, special limitations, constraints and over-generalizations.

A critical thinker approaches problems and complicated situations aware of his or her thoughts, beliefs, and viewpoints. Then, he or she can direct those thoughts, beliefs, and viewpoints to be more rational and accurate. A critical thinker is willing to explore, question, and search out answers and solutions. These skills not only mean greater success at school and at work, but they are the basis of better decisions and problem solving at home, too (Starkey, 2004). Furthermore, Paul & Elder (2004, cited in Moon, 2008: 84) describe intellectual courage in critical thinking as 'having consciousness of the need to face and fairly address ideas, beliefs, or viewpoints towards which we have not given a serious hearing.' Critical thinkers should also be interested in arguments and provide others with good reasons for acting and believing (Bowell & Kemp, 2005).

There are a number of critical thinking skills that we can teach out students in order to develop these higher order thinking skills and empower them to be critical thinkers. A selection of those skills is presented in the following list (Forrester, 2008):

- Consideration and evaluation of different points of view;
- Open-mindedness;
- Development of a logical argument with appropriate evidence;
- Identifying the flaws, weaknesses or strengths of an argument;
- Identifying bias in themselves and others;
- Establishing priorities or decoding significance;
- Analysis of the quality of sources;
- Synthesizing from a variety of sources;
- Deduction – reasoning from the general to the specific;
- Induction – reasoning from the specific to the general;
- Problem solving, even with previously unknown problems;
- Development of criteria for evaluation;
- Evaluation of their own decision making;
- Evaluation of their own work and that of others;
- Purposeful, reflective judgment; and
- Self-regulation.

Speaking Skills

Speaking skills are often considered the most important part of an EFL course. With the increasing need for international communication in the information age, many language learners attend language classes to improve their speaking ability. Even though many students have mastered basic speaking skills, some students are much more effective in their oral communication than others. And those who are more effective communicators experience more success in school and in other areas of their lives. According to Folse (2006), for most people, the ability to speak a language is synonymous with knowing that language since speech is the most basic means of human communication. Nevertheless, speaking in a second or foreign language has often been viewed as the most demanding of the four language skills. Speaking a language is especially difficult for foreign language learners because effective oral communication requires the ability to use the language appropriately in social interactions. Diversity in interaction involves not only verbal communication, but also paralinguistic elements of speech such as pitch, stress, and intonation (Fulcher, 2003).

Based on Thornbury (2007) spoken interaction involves producing and negotiating language rather differently from the way it is used in writing. Speakers and listeners are simultaneously involved in both producing and processing spoken interactions. They are under time constraints which means that they must process language as they go, with no chance to go back and make changes. Speakers must also take account of relationships with others, adjusting their language according to the meanings they wish to get across, and responding to verbal or non-verbal signals from their listeners. Many spoken interactions consist of commenting on immediate actions or events, or casually moving from one topic to another (Richards & Renandya, 2002).

According to Luoma (2004), two methods are used for assessing speaking skills. In the observational approach, the student's behavior is observed and assessed unobtrusively. In the structured approach, the student is asked to perform one or more specific oral communication tasks. His or her performance on the task is then evaluated. The task can be administered in a one-on-one setting -- with the test administrator and one student -- or in a group or class setting. In the present study, a structured approach was adopted for interviewing each learner individually at the end of the course. Both observational and structured approaches use a variety of rating systems. A holistic rating captures a general impression of the student's performance. A primary trait score assesses the student's ability to achieve a specific communication purpose - for example, to persuade the listener to adopt a certain point of view. Analytic scales capture the student's performance on various aspects of communication, such as delivery, organization, content, and language. Rating systems may describe varying degrees of competence along a scale or may indicate the presence or absence of a characteristic.

Critical thinking has gained widespread popularity in various disciplines nowadays. Educators have realized the importance of nurturing students who are critical thinkers and have a critical eye to look at the world surrounding them. Critical thinking skills figure prominently among the goals for education, whether one asks developers of curricula, educational researchers, parents, or employers. Although lots of studies have been conducted in various fields to examine the significance of critical thinking and the methods of teaching it, we don't know much about the relationship between critical thinking and language learning. To shed more light on this issue, the impact of critical thinking skills on EFL learners' speaking ability is investigated in this study.

RESEARCH QUESTION

Q1: Do critical thinking skills have any significant effect on the development of the speaking skills of Iranian EFL learners?

Null Hypothesis

HO1. Critical thinking skills have no significant effect on the speaking ability of Iranian EFL learners.

METHODOLOGY

Participants

The subjects of this study were 40 freshmen English majors studying at Islamic Azad University, Shiraz, Iran. A majority of them had attended different English language institutes before their acceptance by the university. There were both male and female learners in class, aged between 18 and 25.

Instrument

The instrument used was the Persian version of Peter Honey's (2004) 30-item critical thinking questionnaire adopted from Naieni (2005) to evaluate the skills of analysis, inference, evaluation

and reasoning. The reliability of the questionnaire was calculated amounting to .86 by Naieni (2005).

Procedure

About one month after giving Honey's test to the students, each learner was interviewed individually at the end of the term. The questions were:

1. Tell me about yourself and your family.
2. Tell me about your own neighborhood. What is important to you in a neighborhood?
3. Name four things you would like to do, but you can't.
4. What is the most memorable experience of your life? Why so?
5. What kind of a person are you from your own perspective? What are your positive and negative points?
6. Describe your own hometown. Can you compare it with the capital city, what are the similarities and differences?

The data gathered from these two tests were analyzed by utilizing the Statistical Package for Social Sciences (SPSS) version 16.0. To investigate the role of critical thinking in learners' English speaking skills, Pearson product-moment correlation was applied to the data.

RESULTS AND DISCUSSION

This table shows the Pearson product-moment correlation which was applied to the data:

Critical Thinking	Pearson correlation Significance Number	1 .423 .006 40
Speaking Skills	Pearson correlation Significance Number	.423 1 .006 40

From a statistical perspective, the assumption behind the null hypothesis is that there is no significant correlation between Iranian EFL learners' critical thinking ability and their speaking skills. To test this hypothesis, Pearson product-moment correlation was run. The calculated correlation coefficient is .423 which is significant at the 0.01 level ($r = 0.423$, $p < 0.01$). Put it another way, the two variables at issue are significantly positively correlated with each other and, thus, the null hypothesis is rejected.

CONCLUSION

Critical-thinking strategies helped the learners to become active participants in the interaction process by listening carefully to other students lectures, by judging on those utterances, and by making the best decisions about what to say in response to what has been said in the conversation by other students. In fact, critical thinking strategies help the learners consider all the characteristics of a good conversation when they were talking in the classroom. The students were totally attentive to what other students said and to what themselves wanted to say in the interactions. The findings of this study revealed that there is a significant correlation ($r = .423$) at the 0.01 level between critical thinking and speaking skills. Therefore,

the null hypothesis of the study is rejected and it can be concluded that speaking skills are affected by the ability to think critically. As for the limitations of the study, time management can be mentioned. It seems that the 16-week semester of Iranian universities is not enough for teachers to practice both critical thinking and speaking skills with their students. Teachers need to encourage their students to work on these skills outside the class and use their thinking in order to state their critical opinions with great confidence. In addition, more Persian books on critical thinking should be available so that learners can benefit from the advantages of being a critical thinker.

Pedagogical implications

This study wants to emphasize that critical thinking and speaking are interrelated and interdependent. This claim is not the researchers claim in this study but it is a very profound and a research-based idea. Vygotsky (1962) has talked about the interdependence of thought and speech and has emphasized that it is thinking that motivates speaking and vice versa. Obviously, thinking is not limited just to the speaking ability and other language skills are all based on thinking. Listening comprehension, reading, and writing are all rooted in the thinking processes. In fact, thinking is the hidden software of all cognitive activities. Accordingly, enhancing critical thinking strategies can directly lead to learning a language better. Thus language teachers should try to include the explicit instruction of critical thinking strategies in the classrooms. Critical thinking techniques helped the learners to use evidence skillfully and impartially in their interactions with their classmates during the semester. Such kind of techniques motivated the learners to organize their thoughts and to articulate them concisely and coherently in their oral productions.

It seems that learners are very much in need of course books and materials that invoke critical thinking. Therefore, materials developers need to make an effort to create lessons that promote critical thinking and encourage students to reflect on their progress and take charge of their own thinking. Also, test developers should bring about changes in testing, constructing tests that integrate critical thinking skills and improve students' ability to think critically and reason effectively. One popular model for test developing in critical thinking is Bloom's taxonomy which covers the requirements of testing in critical thinking program. Concerning teachers, as they have an enormous responsibility in the classroom, it is crucially important that instead of being exam- oriented and producing learners who would obtain good results on their exams (Kabilan, 2000), they should be more flexible toward teaching, and they should consider students' attitudes, interests, and abilities encouraging them to use their thinking and express themselves critically and creatively.

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