The Integration of Critical Thinking Skills into College Students' Spoken English Classes*

Bei Zhang

Department of Fundamental Studies, Shanghai University of Engineering and Science, Shanghai 201620, China angelabzhang@yahoo.com.cn

Abstract - Solving problems and making worthwhile decisions is valued in our rapidly changing environment today. Nowadays we see students as too often being passive receptors of information and knowledge. Surely students need a guide to weed through the information and not just passively accept it. Students need to "develop and effectively apply critical thinking skills to their academic studies, to the complex problems that they will face, and to the critical choices they will be forced to make as a result of the information explosion and other rapid technological changes" (Oliver & Utermohlen, R.1995) [1] . This paper reviews the literature of critical thinking and problem solving skills ;focuses on the need for the instruction of critical thinking and problem solving skills into the classroom teaching and provides the positive findings of critical thinking encouragement in the daily classes.

Index Terms - critical thinking, problem solving, teaching strategies, spoken English classes

1. Introduction of Critical Thinking Skills

The development of improved critical thinking and problem solving skills has been areas of great interest to educators around the world for many years. Today with the ongoing progress in technology and an increased demand for improved skills in the workplace, critical thinking and problem solving skills have become more crucial than ever before. It is the responsibility of educators to provide students with the skills and knowledge that will be required for their future careers. Thus, the ability to transfer knowledge becomes crucial and critical thinking and problems solving skills step in to play a prominent role for our students.

Critical thinking is not easily defined. Researchers have worked hard on developing adequate definitions for the term. According to Halporn (1998) [2] critical thinking skills are complicated and require judgment and scrutiny, along with thoughtful application; Hundgins and Edleman (1988) [3] define critical thinking as the ability to provide support for conclusions drawn and to insist on reviewing data prior to accepting conclusions drawn by others; Riesenmy, Michelle Hudgins and Ebel(1991) [4] view critical thinking as the ability to determine what a given problem or conclusions asks or declares and the ability to gather and organize available evidence and determine the worth of such evidence; Wade (1995) [5] identifies critical thinking involves asking questions, defining a problem, examining evidence and etc.

2. Need To Integrate Critical Thinking Skills into The Classroom

Critical thinking is cited as an important issue in education today. Attention is focused on good thinking as an important element of life success."Perhaps most importantly in today's information age, thinking skills are viewed as crucial for educated persons to cope with a rapidly changing world. Many educators believe that specific knowledge will not be as important to tomorrow's workers and citizens as the ability to learn and make sense of new information" (Gough, 1991) [6]. The ability to engage in careful, reflective thought is viewed in education as paramount. Today's students not only need to know an enormous amount of facts, concepts, and principles, they also must be able to effectively think about this knowledge in a variety of increasingly complex ways. If test items are used that only require lower-level thinking skills such as knowledge and comprehension, students will not develop and use their higher-order skills even if instructional methods that employ these skills are implemented. Individuals do not do what is expected, only what is inspected. Teaching students to become skilled thinkers is a goal of education. Students must be able to acquire and process information since the world is changing so quickly. Critical thinking and problem solving skills are among the essential skills that every student needs to develop and foster in such an explosion era.

3. Strategies To Help Students Develop Critical Thinking Skills In Class

There are various ways to teach critical thinking skill in class. Putting students in group learning situations for example is one of the ways to foster critical thinking. Teachers should purposely create properly-structured cooperative learning environments for students to perform more of the active critical thinking with continuous support and feedback from other students and the teacher. Cooperative learning can provide better benefits than the traditional lecture method (Cooper, J. L. (1995) [7] . With cooperative learning, a diverse group of students work together towards a common goal. The diverse nature of the group often leads to a variety of different ideas and approaches for a single issue. This in turn leads students to move to a more advanced type of thinking. Furthermore , when involved in a group dynamic, the more

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advanced students often take on the "teacher role" and help clarify any confusion for the less-advanced students. In these cases, the less-advanced students have some uncertainty clarified and the more advanced students benefit because providing such clarification requires expansion and other metacognitive strategies that promote critical thinking.

In order for our students to display critical thinking skills, the use of ongoing classroom assessment is a way to monitor and facilitate students' critical thinking; A good example is to ask students to write a "Minute Paper" responding to questions such as "What was the most important thing you learned from the material?""What question related to this event remains uppermost in your mind?"

Using questions in the classroom. Students must create questions about the lecture material. In small groups, the students ask each other the questions and then teachers select a few of the questions as the impetus for class discussion.

Case studies help promote critical thinking. Case study is a very effective way in critical thinking instruction. The teacher presents a case (or story) to the class without a conclusion and then leads students through a discussion, allowing students to construct a conclusion for the case. Having students justify their reasoning to someone else can benefit a lot and justifying other students' reasoning can also promote thinking. A student who attempts to explain his or her decisions has to consider the other person's perspective. Thus, trying to synchronize his or her reasoning with another individual's reasoning encourages the student to think critically. This kind of the practice not only encourages students to articulate their own ideas but it also exposes students to the ideas of fellow classmates, thus, encouraging critical thinking.

Critical thinking and problem solving involves students' personal discovery of information, and make decisions rather than merely repeating information. Students should learn to be flexible like using new information to redefine the problem they face, finding new ways if alternatives are not workable, or combining or abbreviating steps if needed. Critical thinking requires more than simple engagement. Critical thinking is a mental habit that requires students to think about their thinking and about improving the process. It requires students to use higher-order thinking skills (Scriven, M. & Paul, R. 1996) [8]. It is a product of education, training and practice.

4. Integrating Critical Thinking Skills into College Oral English Class

As one of the major components contributing to the poor problem solving skills found in students nowadays is the lack of emphasis on creativity skills in the classroom (Doolittle. John H 1995) [9]. So teachers must make cognitive flexibility the main concern and encourage students to participate in higher-order thinking, As a spoken English teacher in a technology university, I have applied the critical thinking and problem-solving strategies into my spoken English classroom in order to train our college students in the area of self-directed critical thinking, while training their spoken English. I would

carefully choose some spoken English materials for my freshmen as discussion topics to improve their problem solving skills, I choose the movies , stories ,or games that our students love to watch, read or play. I divide class into several groups and encourage them to raise questions . Sometimes I would ask them to raise assumptions if stories or movies are shown or told in the other way. For instance, in the famous Chinese fable "Mr. Mercy and the hunter", my students are asked to think what if the hunter discovered something unusual about Mr. Mercy and his bag.... Sometimes I would train them to think of a happy or sad ending to the stories they hear.

To evaluate how well my students develop their critical thinking skills when learning, at the end of each semester I would design a critical thinking test. The purpose is to see if students exposed to the training (a) would apply their previous knowledge to solve new problems; (b)would utilize more information given in the problem when compared to those students who had not yet been exposed to the training, and (c) would provide solutions that were more advanced than those given by the students in the control group.. The result each time indicated that thinking skills instruction makes a positive difference in the achievement levels of students and the findings of the research demonstrated that students trained in self-directed critical thinking do in fact benefit from this training. They exhibit more efficient problem solving skills as they produce more self-directed critical thinking behaviors and better utilize the information provided in any given problem.

5. Conclusions

Teaching critical thinking and problem solving skills in the classroom can better enable students to apply the skills they have to remove the obstacles they face in the real world in the future. Presseisen [10] asserts that the basic premise is students can learn to think better if schools teach them how to think. Thinking can be learned (Francis Adu-Febiri 2002) [11]. To make critical thinking and problem solving skills instruction more effective, we teachers need to make plans for the type of cognitive processing that they wish to foster and design learning environments and experiences accordingly for our students; What is more, teachers need to balance methods of instruction by providing opportunities for the students to take some ownership of their learning. It is very important for teachers to present students with various activities that require students to determine on their own for the given problem: Most important of all, teachers need to encourage students to ask quality questions as well as create good questions themselves while providing courses for them. The driving forces in the thinking process are the questions, just as Paul [12] points out that "thinking is not driven by answers but by questions."

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