
TOWARDS CREATING CRITICAL THINKING MEDIA IN EFL CLASSROOM

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Abstract: The paper deals with the idea of creating critical thinking media in the classroom through involving a wide range of thinking skills leading toward desirable outcomes alongside with reflective thinking which focuses on the process of making judgments about what has happened. However, reflective thinking is most important in prompting learning during complex problem-solving situations because it provides students with an opportunity to step back and think about how they actually solve problems and how a particular set of problem solving strategies is appropriated for achieving their goals. Scaffolding strategies are to be incorporated into the learning environment to help students develop their ability to reflect on their own learning. The term *scaffolding* refers to a process in which instructors make a model or demonstrate how to solve a problem, and then step back, offering support as needed. In order for EFL learners to meet the changing demands of the society, they should learn how to construct their knowledge, understand through interaction, and connect their experience with the current situations using metacognitive strategies that guide them to think, plan, and evaluate their learning. This entails the necessity of English mastery in its whole and in its specific components. In this perspective, the active role of students is the backbone of the success of learning. Learners are aware of and control their learning by actively participating in reflective thinking – assessing what they know, what they need to know, and how they bridge that gap – during learning situations. It's imperative and inherent in the role of the trainer to be able to ask the types of questions which follow the kind of models of Brookfield to guide the course participant, the teacher to make that reflection. At the end of the lesson the teacher should ask himself the questions at the end of a teaching session: What went wrong? What went well? What didn't go well? What do I plan to do next time? Those questions are mirroring the Kolb or Gibbs level of reflection. Supporting reflective thinking in classroom environment is most important in prompting learning during complex problem-solving situations because it provides students with an opportunity to step back and think about how they actually solve problems and how a particular set of problem solving strategies is appropriated for achieving their goal. The paper outlines the profile of the reflective student and the reflective teacher. Some reflective thinking activities are provided that prompt students to think about what they have done, what they learned, and what they still need to do. Engaging in critical thinking and problem solving activities implies integrating important academic or cultural content in the design of activities so students are not only growing linguistically, but are gaining knowledge. Fostering critical thinking through a task design that requires students to read, write, and listen to academic or other information sources before engaging in the academic conversations required for the task demands design tasks that engage and challenge students on a deep linguistic and knowledge level involving problem solving, predicting, critiquing, applying, and other cognitively challenging manipulations of language and information as well as choosing topics of interest that will engage and excite the learners to know more and discuss more freely. Thus the paper justifies the idea that reflection is critical to both learning and transfer. It is considered that reflection ends the active learning experience and begins the assessment by providing evaluation opportunities as learners apply concepts and skills to new and different situations.

Keywords: reflective thinking, critical thinking, scaffolding, teaching, learning and transfer

1. INTRODUCTION

Modern society is becoming more complex, information is becoming available and changing more rapidly prompting users to constantly rethink, switch directions, and change problem-solving strategies. Thus, it is increasingly important to prompt reflective thinking during learning to help learners develop strategies to apply new knowledge to the complex situations in their day-to-day activities. Reflective thinking helps learners develop higher-order thinking skills by prompting learners to: relate new knowledge to prior understanding; think in both abstract and conceptual terms; apply specific strategies in novel tasks; and understand their own thinking and learning strategies.

What is reflective thinking?

Critical thinking and reflective thinking are often used synonymously. Critical thinking is used to describe:

"... the use of those cognitive skills or strategies that increase the probability of a desirable outcome...thinking that is purposeful, reasoned and goal directed - the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking task. Critical thinking is sometimes called directed thinking because it focuses on a desired outcome." Halpern (1997). Reflective thinking, on the other hand, is a part of the

critical thinking process referring specifically to the processes of analyzing and making judgments about what has happened. Dewey (1910) suggests that reflective thinking is an active, persistent, and careful consideration of a belief or supposed form of knowledge, of the grounds that support that knowledge, and the further conclusions to which that knowledge leads. Critical and creative thinking can be described as qualities of good thinking processes and as types of thinking. Creative thinking is generally considered to be involved with the creation or generation of ideas, processes, experiences or objects; critical thinking is concerned with their evaluation. Critical thinking is an approach to learning that involves reflecting in a rational way to come to reasonable conclusions. It encourages learners to question the information put before them, as opposed to simply absorbing it. This opens a space for deeper learning and engagement with the object of learning.

2. EXPOSITION

Critical and creative thinking are interrelated and complementary aspects of thinking. Almost all of the thinking which we undertake contains some critical and some creative aspects. For example, when we try to solve real life problems we move back and forth several times between creative and critical reflection as we develop solutions or weigh the consequences of any one solution. It is important, therefore, that any attempts to improve thinking abilities pay attention to both critical and creative aspects of thinking.

Critical and creative thinking processes are combinations of abilities, knowledge, values, attitudes, skills and processes. While the knowledge base required for critical and creative reflection varies from subject to subject, the underlying values and attitudes remain constant across school subjects. Although skills and processes are somewhat dependent upon specific subject matter for their form, these same values and attitudes are required in all subjects for their execution. It is also important to note that the content of each category is descriptive of the area but not a final or all inclusive list. Educators are encouraged to evaluate these lists and to generate others as they become more familiar with incorporating critical and creative thinking into their teaching. Building on this, a teacher's role could be described as one of structuring activities, assignments and lessons which incorporate all of these aspects of critical and creative thinking into the subjects which they teach. Teachers would attempt to do this in ways which build upon their students' innate abilities, interests, experiences and background knowledge. Critical thinking involves reflective thinking, the habit of questioning assumptions and inquiring more deeply. John Dewey, who is credited with coining the term critical thinking, said, "If the suggestion that occurs is at once accepted, we have uncritical thinking, the minimum of reflection. To turn the thing over in mind, to reflect, means to hunt for additional evidence, for new data, that will develop the suggestion and will either ... bear it out or else make obvious its absurdity and irrelevance" (Dewey, 1910).

It demands we reflect on and explore more deeply the information and arguments presented to us. Critical thinking implies rational thinking, the ability to follow arguments in a logical and disciplined way (Frederickson, 2001). Unsurprisingly, this aspect of critical thinking is the one most commonly emphasized by universities, especially when instructing students on how to do research and write essays. The philosophy faculty of the University of Hong Kong (2018) states that "critical thinking is the ability to think clearly and rationally about what to do or what to believe." The goal is to create thinkers who are, as Siegel (2005) puts it, "appropriately moved by reasons" and who "grasp the relevance of various reasons for judgements and evaluate the weight of such reasons properly." critical thinking requires a reasonable approach, where individuals keep an objective, open mind and are sensitive to what is fair and balanced. Robert H. Ennis's (March, 1992) often cited definition describes critical thinking as "reasonable reflective thinking focused on deciding what to believe or do." The critical thinker must try to arrive at a conclusion that is reasonable, in other words, a conclusion that is as free from bias and prejudice as is possible.

In summary, critical thinking involves a wide range of thinking skills leading toward desirable outcomes and reflective thinking focuses on the process of making judgments about what has happened. However, reflective thinking is most important in prompting learning during complex problem-solving situations because it provides students with an opportunity to step back and think about how they actually solve problems and how a particular set of problem solving strategies is appropriated for achieving their goal. Thus we may outline the following characteristics of environments and activities that prompt and support reflective thinking:

- Provide enough wait-time for students to reflect when responding to inquiries.
- Provide emotionally supportive environments in the classroom encouraging reevaluation of conclusions.
- Prompt reviews of the learning situation, what is known, what is not yet known, and what has been learned.
- Provide authentic tasks involving ill-structured data to encourage reflective thinking during learning activities.
- Prompt students' reflection by asking questions that seek reasons and evidence.
- Provide some explanations to guide students' thought processes during explorations.

- Provide a less-structured learning environment that prompts students to explore what they think is important.
- Provide social-learning environments such as those inherent in peer-group works and small group activities to allow students to see other points of view.
- Provide reflective journal to write down students' positions, give reasons to support what they think, show awareness of opposing positions and the weaknesses of their own positions.

Learners do not just receive information only at the time it is given; they absorb information in many different ways, often after the fact, through reflection. Zemelman, Daniels, and Hyde (1993) believe that the most powerful learning happens when students self-monitor, or reflect.

Students may not always be aware of what they are learning and experiencing. Teachers must raise students' consciousness about underlying concepts and about their own reactions to these concepts. This offers times for reflection during and after the research process. Learners review the appropriateness of their actions and attitudes and evaluate what changes might be desirable in a similar problem-solving situation. They formulate concepts and generalizations and convert their individual and collective experience into education.

There are many ways to reflect. Reflection may occur individually, in groups, in teacher-led discussion, or during student-to-student dialogues. Reflection may occur at any time during the learning process; it does not have to wait until the end. Herbert (1995) offers some excellent advice:

To be an effective facilitator of this type of reflection and an analysis, the teacher must be a good observer of what is happening. He or she needs to observe not only the learners' actions and nonactions toward the activity, but also toward each other. Then, at appropriate times, observations could be offered, questions asked, feelings explored.

The teacher must also be able to vary his or her approach in helping the students analyze what has taken place. The methods are dependent on the personalities and situations involved. At times, it might be necessary to be blunt and honest with feedback.

At other times, questions, discussions, or a gentle approach help students discover for themselves what they have done and how they are perceived. Sometimes nothing needs to be said. It is difficult to know the approach to use with each individual in each situation. Experience is a good teacher. Reflection is critical to both learning and transfer. Reflection ends the active learning experience and begins the assessment by providing evaluation opportunities as learners apply concepts and skills to new and different situations (transfer).

On the other hand teachers have always been interested in recording student performance on tests, assignments, homework, and other data from the "instructional domain.". Much valuable information is available from teacher-kept records of a pupil's behavior in the classroom. During time following a class period or after the school day, teachers can assess the interactions that occurred in their classes. However, noticeably absent from most teachers' data gathering are records in the "management domain" other than attendance and tardiness records. Teachers don't trust their memory when it comes to instruction records, teachers would do well to keep records of students' behavior and do more than trust to memory the information dealing with student behavior. Keeping management records is a good habit for all those involved in teaching in the cooperative classroom. This kind of teaching incorporates prompts and scaffolding suggestions to promote reflective thinking by:

- ❖ Structuring lesson plans to support reflective thinking.
- ❖ Providing lesson components that prompt inquiry and curiosity.
- ❖ Providing resources and hand-on activities to prompt exploration.
- ❖ Providing reflective thinking activities that prompt students to think about what they have done, what they learned, and what they still need to do.
- ❖ Providing reflection activity worksheets for each lesson plan to prompt students to think about what they know, what they learned, and what they need to know as they progress through their exploration.

The role of the teacher in helping to improve students' critical and creative thinking abilities includes examining the personal qualities required of teachers by such a goal and the classroom climate and teaching practices which best support it. Discussion of the teacher's role in fostering critical and creative thinking must begin from a recognition of the teacher as a person whose unique character, interests and desires can not be separated out from the idea of the teacher's role. Good teachers are doing more when they teach than acting according to prescribed roles. Their desire to nurture a love for learning, to help students recognize and act upon their capabilities, and to establish a classroom climate which is based upon mutual regard and respect gives their teaching purpose and meaning beyond any technical description of the teacher's role. What is required is that teachers be authentic individuals who are striving to improve their practice through the use of critical and creative thought. Acting upon their belief in the importance of critical and creative reflection, teachers would attempt to:

- analyze their own thinking processes and classroom practices and provide reasons for what they do;

- be open-minded, encouraging students to follow their own thinking and not simply repeat what the teacher has said;
- change their own positions when the evidence warrants, being willing to admit a mistake;
- consistently provide opportunities for students to select activities and assignments from a range of appropriate choices;
- exhibit genuine interest, curiosity and commitment to learning;
- undertake the organization and preparation required to achieve learning goals;
- seek imaginative, appropriate and ethical solutions to problems;
- be sensitive to others' feelings, level of knowledge and degree of sophistication;
- show sensitivity to the physical elements which contribute to a stimulating learning environment through the physical arrangements and displays they provide or facilitate;
- allow for student participation in rule setting and decision making related to all aspects of learning, including assessment and evaluation.

It is important to prompt reflective thinking in middle school children to support them in their transition between childhood and adulthood. During this time period adolescents experience major changes in intellectual, emotional, social, and physical development. They begin to shape their own thought processes and are at an ideal time to begin developing thinking, learning, and metacognitive strategies. Therefore, reflective thinking provides middle level students with the skills to mentally process learning experiences, identify what they learned, modify their understanding based on new information and experiences, and transfer their learning to other situations. An integral part of teaching methodologies designed to foster critical and creative reflection is the type of classroom environment which the teacher helps to create. The type of climate which appears to be most desirable is one which fosters psychological safety and intellectual freedom within a structure where individuals respect one another as persons of unconditional worth. Perhaps the most important aspect in developing a climate conducive to critical and creative thinking is to increase students' will or motivation to behave reflectively. While there are many ways to learn and to know, the knowledge retained by students is that knowledge which they find relevant to their daily lives or which can be integrated into larger systems of knowledge. This does not mean that learning should always be easy or that all knowledge should have immediate relevance. It also is not intended to imply that memorization and drill are necessarily inappropriate or meaningless activities. Rather, the suggestion is that students will voluntarily exercise their own willpower and persevere at difficult learning tasks (including memorization when necessary), if they see the learning task as personally meaningful. For educators, this means portraying knowledge as valuable in itself and as a means to important human ends. Thus, the knowledge which students encounter in schools must not be presented solely as isolated or discrete elements, but rather should be explored as parts of meaningful wholes. Knowledge must be examined in terms of its relationship to other knowledge and to students' experiences and understandings. Teaching which encourages students to reflect upon and build these relationships supports critical and creative thinking.

Teachers can move towards making their classrooms more thoughtful places by making judgments and decisions from a base of empathy and understanding, by valuing originality and authenticity, and by using differences of opinion as teaching situations which invite thoughtful analyses. More specific activities and strategies for the improvement of thinking abilities will also be proposed, with the qualification that the best ways to foster critical and creative thinking will continue to be developed by reflective practitioners as they come to know their students. What is needed are teachers who engage their students in meaningful activities - ones which incorporate students' unique interests, abilities, backgrounds and community needs.

Scaffolding strategies should be incorporated into the learning environment to help students develop their ability to reflect on their own learning (Vicheva, 2019). The term *scaffolding* refers to a process in which instructors make a model or demonstrate how to solve a problem, and then step back, offering support as needed. Psychologist and instructional designer Jerome Bruner first used the term 'scaffolding' in this context back in the 1960s. In order for EFL learners to meet the changing demands of the society, they should learn how to construct their knowledge, understand through interaction, and connect their experience with the current situations using metacognitive strategies that guide them to think, plan, and evaluate their learning. This entails the necessity of English mastery in its whole and in its specific components. In this perspective, the active role of students is the backbone of the success of learning. The Concept of Scaffolded Instruction is the systematic sequencing of prompted content, materials, tasks, and teacher and peer support to optimize learning. Some form of scaffolding is essential for helping students to develop higher-order thinking skills. Scaffolded instruction can be integrated with other strategies such as peer tutoring, cooperative learning, and direct instruction.

When applying scaffolding theory in the teaching activities, instructors should give students higher level support and help, and teach them some principles or rules that can be used to solve some problems in order to let learners strengthen the sense of learning independently, build the learning ability of self-control and self-responsibility. With scaffolding, the learning task is transferred to the students gradually and finally it is withdrawn from the learning process.

3. CONCLUSION

To sum up, in our working model, we would like learners to view critical thinking as a mindset that involves thinking reflectively (being curious), rationally (thinking analytically), and reasonably (coming to sensible conclusions). critical thinking skills are not just a box of tools to be used when needed and then put away, but derive from a mindset that involves seeking knowledge in a particular way (Fig.1).

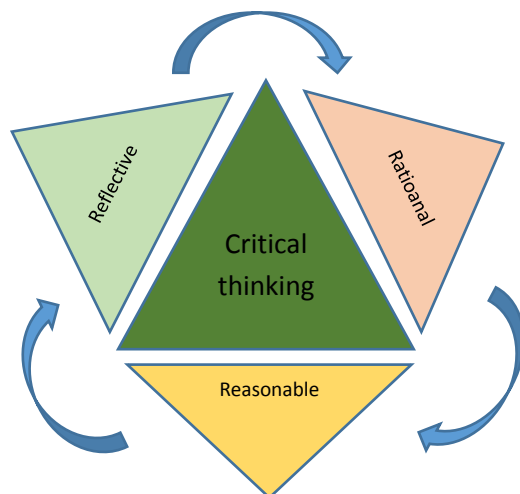


Fig.1 A Model of Critical thinking in the R^3 triangulation “Reflective-Rational-Reasonable thinking skills”

Critical thinker’s skills are in continual use, not just as an exercise, but as part of a considered and holistic approach to learning. Just one note of caution here: This mindset, which Dewey (1910) called a “healthy skepticism,” does not mean a subversive or cynical approach. Rather, it simply means a curious and considered one. The idea is not to challenge ideas aggressively, but to seek to understand how these ideas were arrived at. Learners employ different thinking skills when learning a language. These can be classified into three types: basic comprehension, critical thinking, and creative thinking.

All play a key role in learning and should appear at different points within a lesson, but not necessarily in any particular order. We believe that up to now the lack of a clear working model—along with a lack of clear examples of critical thinking activities—has prevented teachers from helping learners to practice critical thinking skills to full effect. Firstly, having in mind the above said, we would like to focus on the materials used in the English language classroom. It has become obvious for many teachers of ESL trainees that most of the available texts and materials are based on artificial situations following grammatical structures and sometimes irrelevant dialogues and topics. Actually, the idea is that we, instructors of English as a Foreign language should strive for using texts that would meet the needs and requirements of the students, the language they need to function successfully in everyday situations and settings where they will use English. Thus, stratifying the communicative approach in teaching as stated by Zhelezova-Mindizova: “According to the object of labor the main types of occupations can be professions dealing with the social dichotomy: “man-nature”, “man-technique”, “man-sign system”, “man-artistic image” and “man-man”. The teaching profession, as is known, belongs to the latter type, called a more communicative profession. Why is this so? Communication on all levels and formats is “embedded”, “fit in”, “coded” in pedagogical interactions.”(2016) These holds true for university students as their needs are closely connected with their profession and they must be able to communicate successfully in their future professional settings and situations. Consequently, it is necessary to follow open language experiences with more intensive structured situations, dialogues and roleplaying. According to Zhelezova-Mindizova: “Pedagogical situations, regardless of location, type of school and professional orientation, are similar in nature. (2016)

Classroom experiences should involve enjoyable, concrete, and physical learning activities whenever possible to ensure proper attention to the unique cognitive, affective, and psychomotor domain development of middle school students. Teachers should model metacognitive and self-explanation strategies on specific problems to help students build an integrated understanding of the process of reflection. Study guides or advance organizer should be integrated into classroom materials to prompt students to reflect on their learning. Questioning strategies should be used to prompt reflective thinking, specifically getting students to respond to why, how, and what specific decisions are made. Social learning environments should exist that prompt collaborative work with peers, teachers, and experts. Learning experiences should be designed to include advice from teachers and co-learners. Classroom activities should be relevant to real-world situations and provide integrated experiences.

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