INCULCATING CRITICAL THINKING AMONG BUSINESS STUDENTS THROUGH THE STRATEGY OF QUESTIONING

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Abstract

This qualitative study looks at the classroom pedagogical strategies of asking thought encouraging questions to promote critical thinking skills among the business students. General trends of Business education globally and in Pakistan suggest a preference for behaviorist rather than constructivist approaches, and needs to be replaced by critical thinking skills (Chun, 2010; Savery, 2009), for increased cognitive readiness for tasks that involve analysis and reasoning. The study took Golding's (2011) concept of 'thought encouraging questioning' as a model built on Richard Paul's method of Socrates questions, to study if thought-encouraging questions can inculcate critical thinking among business students. A dialogic approach was taken to excite thought encouraging question by adapting Lipman's (2003) concept of 'community of inquiry' into 'community of critical thinkers'. Ideas for discussions were derived from a plethora of multidisciplines, experiences and readings. A sample of 41 students was taken from a business communication course. A 6-hour teaching/learning process was studied through observation and feedback during the stages of training, tasking and reflecting, using classroom observations, semi-structured interviews and qualitative questionnaire. The findings of the study suggest a need for explicit training in CT skills through thought encouraging questions, students' preference for pedagogical interventions for enhancing critical thinking and increased quality time spent in formulating higher order questions.

Keywords: Critical Thinking, Community of Inquiry, Analysis, Dialogic Approach.

JEL Classification: Z000

Introduction

Critical thinking (CT) means to be able to practice the higher order skills of thinking such as analyzing situations or arguments, reasoning and making inferences, judging or evaluating, and making decisions or solving problems. CT skills hold a centre stage in education. In higher education,

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and specifically business studies, the role of critical thinking skills is vital. Today, universities regard CT as one of the absolutely important learning objectives, where graduates could think through the solutions to problems (Shah, 2010), analyze cases, and analyze information to find the most feasible solution to a variety of structured and ill-structured problems (Laxman, 2010; Shah, 2010; Winch 2006). Governments and industries seek to increase their economies by innovative problem solving of complex business and trade issues. In 2003, AACSB International (the global accreditation agency for business education) ushered in a new set of standards for accreditation, which highlights the importance of CT skills and reflective thinking skills as an important outcome of undergraduate business programs (Standard 15: Management of Curriculum).

However, universities and higher education institutes continually complain about the lack of these skills among their graduates nationally and internationally. One cause of this lack in CT could be a gap in pedagogical application to inculcate these skills among the graduates. Teachers may not be able to integrate these skills into their teaching practices, as these skills demand reflection and analysis (Rudd, 2007). Teachers may find it difficult to incorporate higher order thinking (Bloom's Taxonomy, 1976) into their teaching assignments (Choy & Cheah, 2009), or teachers do not understand critical thinking well enough to teach it to others. Teaching to promote critical thinking competence also necessitates a philosophical shift in focus from learning to thinking (Chun, 2010), drill and practice to problem-based learning and subject isolation to subject integration. Dewey (1933) highlights the critical role of teachers in problem solving and inquiry. As facilitators, teachers should support students to locate, analyze, interpret, and evaluate data (Ozman & Craver, 2008; Dunn, 2005); teachers should first model the CT behavior and create a culture of inquiry to promote CT.

This study extends the body of knowledge related to classroom pedagogies for promoting CT among the business students by specifically looking at Golding's (2011) classroom strategy of asking thought encouraging questions by creating students' 'community of critical thinkers', modifying Lipman's 'community of inquiry'. The study includes the added dimension of looking at issues and problems for analysis, synthesis, judgments, and evaluations from multidisciplinary perspective, and adopting a dialogic approach by setting up a community of critical thinkers. Insights gained from this study would have important bearings on pedagogical issues and would help educationists in re-adjusting their approaches and instructional strategies for teaching CT skills in business communication courses.

Purpose of the study

This qualitative study aimed at exploring the effectiveness of Golding's (2011) thought encouraging questions as a classroom strategy to inculcate CT skills among the undergraduate business students by adapting Lipman's 'community of inquiry' into 'community of critical thinkers' following a dialogic approach. The purpose of the study was to explore classroom pedagogy of asking thought encouraging questions as an effective instructional strategy to make students critical thinkers

who could transfer CT skills to other situations and contexts.

Research questions

1. What types of questions lead to students' transformation into 'community of critical thinkers'?
2. How can a dialogic approach lead to more CT?
3. How do multidisciplinary perspectives add to CT of the students?

Literature Review

CT is categorized as higher order thinking, which includes problem solving, creative thinking and decision making (Rudd, 2007). Ricketts and Rudd's (2005) model of CT, which combined a high critical thinking disposition with high critical thinking skills showed students' higher quality results. Sternberg's (1986) tripartite model for successful intelligence consists of critical thinking, creative thinking and practical thinking.

Students of traditional systems do not usually become independent thinkers. Research postulates that lecture and memorization do not lead to long-term knowledge or the ability to apply that knowledge to new situations (Celuch & Slama, 1999) Studies show a serious lack in pedagogies of inculcating CT among learners. In a four-year longitudinal (2005-2009) large-scale study on 2322 American colleges, 45% students showed no significant improvement in their critical thinking (Arum & Roksa; Rimer; Trounson, 2011). Another study showed 57 native English-speaking graduating students' lack in judgment, evaluation and argumentation (Larson, Britt, & Kurby, 2009). Yet another study showed that among 76 native English-speaking tertiary students, only thirty percent of the students could distinguish between claims and reasons (Annis & Annis, 1979). A large-scale study in Pakistan's province of Khyber Pukhtoon Khwa revealed that in 200 classes teachers largely asked convergent and lower order questions based on comprehension of the content (Bibi, 2014).

There is a serious need to train students in CT skills. Kuhn's studies (1991) showed that people generally have limited capacity to think critically naturally, and therefore supports the need for the training of these skills. Ikuenobe (2001) stresses the significance of asking open ended questions because of its epistemic and heuristic value in stimulating CT, such as evaluating and justifying beliefs, situations and assumptions, which nourishes students' intellect (Shaunessy, 2005). Such questions are based on the premise of human fallibilism (Ikuenobe) in which humans can make errors or correct errors leading to a further understanding of issues. The importance of these open ended questions is their ability to lead to further questions (Hintikka, 1984). According to Browne & Keeley (1982a) CT means the ability to ask and answer critical questions at appropriate times.

Dialogs among students enable them to learn from one another and mutually construct meanings. In this way dialogs are in the tradition of Socrates' reasoning through questioning by

holding dialogs in 'Learning Communities'(Vygotsky, 1978), as "thinking is the internalisation of dialogue" (Lipman et al., 1980).

This study is based on classroom study in a business school, and inquires into the ways CT can be inculcated by the strategy of asking 'thought encouraging question' in a 'community of critical thinkers'(Golding, 2011). The study looked at the higher order thinking skills (Bloom's Taxonomy) that involve analyzing and synthesizing information, looking for alternatives, reasoning, and evaluating outcomes before making judgments.

Methodology

This qualitative classroom study aimed at inculcating CT skills through the pedagogies of asking thought encouraging questions, using a dialogic approach, and following multidisciplinary aspects of analyzing issues. Classroom observations, semi-structured interviews, and qualitative questionnaire were used for the purpose of collecting data. The study puts forth the following four strategies:

1. The strategy of asking thought encouraging questions specific to a context.
2. A dialogic approach where students are involved in critical thinking as 'community of critical thinkers'.
3. Meanings are created dialogically in a community of critical thinkers which lead to further reflection and analysis.
4. Multidisciplinary perspective of looking at things.

Sample

A purposive sample of 41 undergraduate students was taken from a business communication course. All the study participants were full-time undergraduate students. They had attended an introductory course in business communication, and had an age range from 20-22 years. They were not employed, were single, were from Pakistani (Matric) or Cambridge (O & A Levels) system of education, and were familiar with the instruction in English as a second language.

Procedure

The process of educating for critical thinking took place in three stages:

1. training;
2. tasking;
3. reflecting.

Each stage is elaborated below

Stage 1: Training

In order to explore the effectiveness of pedagogical strategy of asking thought encouraging question in a community of critical thinkers, the teacher modeled the CT behavior by giving explicit training in CT. An ill-structured problem was presented to the students. The problem had no right or wrong answer, but was built by analyzing the issue in its context by asking analytical and critical questions. The questions started from fact-finding or information seeking questions. Teacher drew two columns on the board, and demonstrated first the convergent or information seeking questions, some of which were: How long has the problem persisted? Who were the people involved in such activities? When did the company make such a decision?

The other column was for critical thinking questions. The teacher demarcated the five areas of thinking, which were: initiating, suggesting, rationalizing, evaluating, and concluding before reaching possible conclusions. A worksheet (taken from Golding, 2011), which gives the type of thinking in the left hand column, and the kind of questions that can be generated from this kind of thinking, was given to the students. Students were told to read and reflect on the case, and keep on adding to the list of questions.

Table 1

Type of thinking	Kind of questions
1. Initiating	What are some questions about …?
2. Reasoning and elaborating	If … were true, what would follow?
	How might we explain more about …?
	What is a different way of saying …?
	What do you mean by …?
	What is an example of …?
3. Suggesting	What are some possible ideas about …?
	What are other alternatives?
4. Evaluating	Why do you think …?
	What evidence is there for …?
	What are some reasons to agree with …?
	What are some reasons to disagree with …?
5. Concluding	What conclusions can we draw?
	What do we need to do next?

Using the pedagogical strategy of modeling, the teacher modeled the behavior of CT by thinking aloud; navigating the way thoughts were conceived and furthered by thought provoking questions. The teacher turned towards the students for answers, and in the process of dialoguing with the students, further questions were built upon the previous ones dialogically. As the students discussed, their ideas were derived and supported from multidisciplinary perspectives. Teacher drew on the following aspects to make students think 'out of the box':

1. students' knowledge and experiences about socio-cultural issues and practices
2. discipline (Business) specific knowledge
3. past experiences and readings in other disciplines such as, Media, Political history, Current Affairs, and Education.
4. analysis of psychological and ethical values as determiners of people's choices in specific situations or contexts.

These aspects were illustrated on the board with a different color marker. Together these formed trajectories of students' analysis points, and were first verbally reported by the teacher.
Both the teacher and the students set up criteria for evaluating alternatives for solving an issue. First the issue was seen from the practical criteria, for example, students might decide that the solutions must not increase the budget; may lead to higher number of advertisers; or may increase the readership by at least 10%. Then the teacher and the students evaluated each alternative according to the criteria. For example, to what extent does incorporating reviews of area restaurants meet the criteria? Would it increase the budget? Would it lead to an increase in advertising revenue? Each alternative was matched against the criteria for evaluating solutions. Among the alternatives given, students held dialogs in their groups by critically looking at each alternative, selecting the best possible solution(s), and asking questions to evaluate if the proposed alternative was the best solution. If the outcomes of the discussion showed promising results based on validity or logical claims such as an increase in sales, or a change in client's perceptions etc. the groups followed that course, or took an alternate action.

The next session was also spent in training in CT skills. This time students were given a choice to take a case either from fashion industry or media. Students analyzed the issues by following the format given above, by working in groups of 4-5 students in each group.

Stage 2: Tasking

After the initial training, an ill-structured problem from a business case was presented to the students in 7 groups, with 4-5 students in each group. Students were told to bring reading material on the topic of Setting up Hotel and Spa in the Middle East. A lot of reading material was brought to the class. Students also used the modality of downloading material from websites during their discussions, providing evidences, reasoning and sorting their claims. Following the guide sheet of questions given

to the students earlier, students added to the given questions. Observations were made and notes were taken as the groups got involved in discussion. This activity was spread over 3 hours class which had a 15 minute break. The observation table showed the following activities:

Table 2

Activity	Type of thinking	Types of Questions
Getting information	Initiating	Information seeking
Asking critical thinking questions	Suggesting alternatives Giving reasons and explaining	Divergent, critical questions
Setting up criteria for evaluating alternatives Drawing conclusions	Evaluating alternates Concluding decisions	Evaluative Concluding questions

Stage 3: Reflecting

In the next class, the teacher and students summarized the process of CT. Specific areas were highlighted in a mutual dialog together which comprised of the following points:

• Thought encouraging questions were built dialogically in a community of critical thinkers

• Students found that they were discussing issues in the same manner as the experts do. Their confidence in discussions had increased. They were more convinced of their claims and arguments because of their readings.

• The teacher and the students listed the activities as analyzing issues, correcting themselves by looking at the issues logically, reflecting on what was possible and what aspects needed further clarification.

• Students were evaluating problems, and the possible alternatives to solve the problems. In the process they were aware of the possibility of always going back and correcting their perceptions, assumptions, or their own reasoning.

• The possibility of holding a dialog among the students led to forming a community of thinkers who had the tools to ask thought encouraging questions as the experts ask in their own field or discipline.

- Students' references to other subjects, sharing of knowledge from other subject teachers, and students' readings in various subjects, such as Current Affairs, Politics, History, Economics, or even Accounting and Finance.

At the end of the activity, a questionnaire was given to the students to find out the following aspects: students' past experiences (if any) of CT; kind of activities that the students were involved in ; likes and dislikes of aspects related to such activities; students' evaluation of whether such activities helped them to analyze and judge issues in a more critical manner; and teacher's role in promoting CT through such classroom activities and tasks. A semi-structured interview was conducted on a voluntary participation of one student from each group. The findings collated from all the three tools of data collection are presented in the next section.

Findings and Discussion

The data collected through classroom observations, qualitative interviews, and questionnaires formed a trajectory of student beliefs and awareness about the pedagogy of asking questions to inculcate CT skills. Main themes emerging from the study are discussed below.

Academia's perceptions about CT and the pedagogies of inculcating CT

By academia, the paper refers to teachers and students. During the earlier business communication courses, the teacher- researcher realized students' lack of training in CT as well as a gap in awareness about critical thinking. On a general reconnaissance, CT meant negative analysis of issues. However, students did share that things should not be taken at face value but that people should probe into the matters deeply. One explanation for the gap in CT is the background of the students. Students belonging to either Pakistani system of education or the GCSC levels of education showed a lack in these skills when they were given a situation to analyze. Largely, a lack in understanding CT skills was found when the same teacher conducted a workshop for the teachers at the business school, presented at an educational conference, and conducted teacher education sessions for school and college teachers at local levels. The teachers shared that they were not trained in these skills in their own educational career, nor CT skills were a part of their under graduate and post graduate teacher education programs, although the National Professional Standards of Teachers, 2009 lay out critical thinking skills as part of standards of teacher education.

In this study the students listed out the following barriers or difficulties in CT:

- CT is time-consuming. Otherwise we could finish up the task and reach the conclusion in much lesser time.

- Asking us to think in this particular manner is not easy, as we are not used to thinking in such a depth.

- We do understand that we are learning a lot this way, but we are most of the time thinking if our grades can be improved by thinking like that.

- There were a lot of arguments and confusion. It all seemed to be spreading in all directions and we were so confused. But when the teacher started pulling the strings together, we started realizing how thinking was getting organized.

- At times, it was felt that we were forced to think like that but actually the flow of the discussion was such that we said many things and corrected our thinking. Most of the time we found how misunderstood our perceptions were regarding various situations or people involved.

- We used to hear many professors saying 'Think out of the box', but we did not know how to do that. During such exercises and discussions, we realized that we were actually thinking in some other ways which actually was out of our habitual way of thinking.

Explicit training in CT skills

The study found that an explicit training in CT skills yielded promising outcomes. Besides, this constructivist approach should also be given a thorough practice by repeating and exercising the process of CT. By asking 'thought encouraging' questions in groups which we called 'a community of critical thinkers' , all the students could have their share of participation in the thinking process and could contribute towards the solving of problems. As Dweck (2002), Halpern (2003) and Kuhn (2000) observe that CT is not exclusive to "smart people". Much depends on how teachers facilitate the process of thinking and making the students practice CT. Students of this study showed obvious like for being involved in the learning process and taking responsibility of their thinking.

Multidisciplinary perspectives

The study found multidisciplinary perspectives to be very helpful in stimulating ideas, generating perspectives and view on real-life issues. In previous sessions, cases and problems posed challenges in initiating discussions, sustaining dialogs, and bringing in references from multiple disciplines like sociology, psychology, economics, politics, etc.

Dialogic approach

Dialogs within the groups led to more critical thinking questions being asked. Based on these questions, the dialogues sometimes became analytical, sometimes evaluative; sometimes these group members were invited to make judgments by looking at the feasibility of following a course of action. There were frequent agreements but there were more disagreements in the discussions. While clarifying issues, students' analytical skills got refined and led to meaning-making dialogically:

discussions emerging from questions led to further questions. At times, the students challenged teacher's incurred assumptions by giving evidence from multiple facets of life and disciplines. The teacher cashed on this opportunity and linked local issues to national and international ones. Starting from a very specific situation, the discussions extended to larger socio-cultural aspects. The ultimate move of the discussion, in this way, was from specificity to generality.

Conclusion

This study tried to look at the pedagogical aspect of asking thought encouraging questions in a dialogic approach where students had turned into a 'community of critical thinkers'. After the initial phase of training and practicing, the students actually got involved in the discussions with increased confidence. As they took references from their readings and knowledge and information of experts in the field, they were able to ask more critical questions about the situations with more ease and fluency. On the basis of this study the paper recommends:

•   To add explicit training in CT by taking students through the stages of thinking critically.

•   To inculcate CT in lectures, other subjects, educational seminars, etc. as a process of training.

•   To adopt a dialogic approach frequently in business classes, clubs, and academic sessions.

•   To inculcate a habit among the students to discuss the issues outside the class while sitting in cafeterias, talking to discipline specific faculty, observing or reading real life-situations.

•   To build confidence among the students about the value of their questions and develop a love for CT questions.

The pedagogical implications are promising and the study recommends to be adopted and build upon by the faculty of Business Communication.

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