

# **FACILITATING TEACHERS' UNDERSTANDING AND TEACHING OF CRITICAL THINKING AS A WAY TO DEVELOP STUDENTS' POLITICAL LITERACY**

Rakshanda Ovais, *Fatimiyah Education Network, Pakistan*

**ABSTRACT** This study investigated how a teacher educator could facilitate social studies teachers in their understanding and teaching of critical thinking, as a way to develop students' political literacy. Data is drawn from a small scale action research, carried out in a community school with two social studies teachers. The paper examines teachers' present understanding about critical thinking and political literacy. In addition, it explores the strategies that enabled the teacher educator to facilitate teachers in their understanding and practices of teaching critical thinking. Furthermore, the paper highlights challenges faced during the process and suggests ways to address them. Lastly, the implications for teacher education are discussed, signifying the need to design professional development programs and courses for teachers and teacher educators for the development of critical thinking skill to prepare politically literate citizens.

## **INTRODUCTION**

Teaching critical thinking is crucial as it prepares children for their effective role in society, as informed, active and responsible citizens (Bank 1974; Case & Wright 1999). According to Crick report (1998) critical thinking is a key component of political literacy. For their active participation in public life, it is imperative that students learn to base their thinking on reasoned judgment. Crick (1998) contends that by teaching children to think critically, we can prepare effective citizens who are capable of taking informed actions for the public good. This paper briefly documents a study that aimed to facilitate social studies teachers in their understanding and teaching of critical thinking as a way to develop students' political literacy.

### **Critical Thinking**

A number of definitions on critical thinking exist in the academic world which provide different views about critical thinking. For example, according to Ennis (1996) critical thinking is a process 'to make reasonable decisions about what to believe and what to do' (p. xvii). Fisher (2001) considers critical thinking as an active process that engages a person to think deeply and critically in order to bring out the best meanings. Richard Paul's (2004) definition describes critical thinking as the ability of a person to think critically about one's own thinking known as 'meta-cognition'.

The key aspect that has emerged from these definitions indicates that people view critical thinking differently. However, the definition which I selected as the basis for my study is given by Case and Wright (1999) who define critical thinking as, "responding

thoughtfully to a particular challenge by making appropriate use of intellectual resources or what we call 'intellectual tools' (pp.181). The five intellectual tools identified by Case and Wright (1999) are *background knowledge*, *habits of mind*, *criteria for judgment*, *thinking strategies* and *critical thinking vocabulary*. The authors argue that promoting critical thinking among students is largely a matter of helping them develop mastery of five types of intellectual tools that good critical thinkers possess.

Explaining these tools Case and Wright (1999) state that *background knowledge* is the information that students need in order to think critically about the topic. *Habits of mind* are the values and dispositions of a careful thinker such as open mindedness or respect for difference of opinion. *Criteria for judgment* is the consideration or grounds for deciding which of the alternatives is the most sensible or appropriate while making distinctions among different issues. *Thinking strategies* refers to various graphic organizers and procedures that guide individuals in working through the challenges they encounter and *critical thinking vocabulary* is the range of concepts that are helpful when thinking critically.

The distinctive feature in this approach to critical thinking is the application of 'intellectual tools', which I thought would be helpful in developing teachers understanding about critical thinking. I therefore decided to use the approach to critical thinking given by Case and Wright (1999) for my study.

### **Background to study**

Literature on educational research indicate that while educationist consider critical thinking as the main goal of social studies, the teachers remain focused on transmitting knowledge and information to the students (Case & Wright 1999; Dean 2005). The transmission of content knowledge, according to Allen and Stevens (1994), is making students passive recipients of knowledge. The research findings of Dean (2005) indicate that in Pakistani schools, students acquire knowledge but they do not learn the skills of critical thinking required for their effective participation in democratic life.

In today's age of media and technology, when our children are exposed to endless amount of information, it becomes fundamental to teach them how to use their critical thinking ability, to select and use relevant information for meaningful purpose. The research findings of Schafersman (1991) inform that children are not born with the power

to think critically, nor can they develop this ability naturally. The researcher emphasizes the need to teach critical thinking skills to the students.

My theoretical understanding about critical thinking, led me to assume that if the social studies teachers acquire knowledge, skill, and disposition about teaching critical thinking, they would be able to develop students' critical thinking ability. This assumption became the basis of my study.

### **Research Question**

The central question that framed my study was: *How can I facilitate teachers understanding and teaching of critical thinking as a way to develop students' political literacy?* My main research question led me to develop four subsidiary questions which focused on: a) to assess teachers' present understanding of political literacy, and critical thinking, b) to describe the role of a teacher educator in developing teachers' understanding about political literacy, and critical thinking, c) to explore strategies that help teachers to improve their understanding and practices of teaching critical thinking, d) to identify the challenges that would emerge during the process and to find ways to address those challenges.

### **Professional Development Model**

For the professional development of the research participants I selected 'Training' model of Joyce and Showers (1982) which consists of five key components of training which include *theory, demonstration, practice, feedback and peer coaching*. The theory component focuses on exploring knowledge and rationale for the new skills or strategies. Theory component is followed by demonstration of the new skills. In the third phase, teachers practice the new skill to learn its application. Joyce and Showers (1982) report, that teachers can practice the new knowledge and skill if provided with adequate opportunities to learn. Productive feedback about performance of practice from an observer is the fourth component which helps teacher to improve their practices. Finally, the fifth component is peer coaching, which is the collaborative work of teachers in planning and developing the lessons and materials to implement the training effectively.

Given that I had only seven weeks for the field work, I decided to use the first four components of the training model that is theory, demonstration, practice, and feedback, to help teachers learn and apply their new learning in their classrooms. I

thought I will encourage the participants to be independent learners and support each other in teaching critical thinking skills after the research is over.

## **METHODOLOGY**

### ***Research Design***

My study aimed at improving my practices as a teacher educator, as well as improving the practices of participating teachers, thereby improving students' learning. I found action research the most suitable research design to conduct my study, as it served the dual purpose 'action and research'. Action is taken with the aim to improve practices and research to increase knowledge and understanding about the topic under study.

In defining action research, Carr and Kemmis (1986) assert that:

Action research is a form of self-reflective enquiry undertaken by participants in social situations in order to improve rationality and justice of their own practice, their understanding of these practices, and the situation in which the practice are carried out (pp.162).

I took the definition of Carr and Kemmis (1986) which is widely cited, as the starting point of my study and throughout the study, I tried to follow the principles of action research that is, understanding and improving my practices as a teacher educator and improving the practices of my research participants.

### ***Data collection and data analysis***

My reflective journal, in which I wrote my critical self-reflections, was the most valuable data collection tool. It enabled me to analyze my self in my teacher educator's role, assess participating teachers learning in light of their behavior and responses and make or revise suitable action plans. Schon (cited in Thorpe 2004) recognized reflective journals as a tool for teachers' professional development; he contends that without reflective thinking teachers would continue to rely on their routine practices. Drawing on Schon's concept of reflective practice, I encouraged the research participants to maintain their reflective journals. In addition, I also maintained a diary, in which I kept record of my plans and the activities.

In action research, data analysis is embedded in the research process. During the study I audio taped teachers' interviews with their permission, and transcribed them to use the data for planning and action. In addition, I also observed participating teachers to understand their current practices. I recorded all observations by script taping, which is a

way to document the detailed account of what one observes. I also held research conversation after each observation, to explore the teachers' beliefs about teaching and learning. The on going data analysis allowed me to observe and identify emerging themes and patterns of participants' behavior and responses. It enabled me to reflect and analyze outcomes and identify ways to revise and implement my plan of action.

### **Action Research Process**

I started my study with a mixed feeling. On one hand, I was happy about the idea of going to the school as an action researcher and on the other hand I was apprehensive about my role as a novice teacher educator and researcher. I started reading related books and journal articles to enhance my knowledge and understanding about the topic, and to see how others had conducted research in this area.

Review of the literature broadened my understanding about critical thinking and political literacy. I particularly found the article 'Citizenship Education in Pakistani Schools: Problems and possibilities', by Dean (2005) very informative because it was based on research done in my own country. An article by Bailin et al. (1999) 'Common Misconceptions of Critical Thinking' was quite helpful in removing my own misconceptions. I also discovered a website, 'The Critical Thinking Consortium' (TC<sup>2</sup>) which offers a wide range of online resource material, for teaching critical thinking. I was glad to learn that Dr. Roland Case, whose concept of critical thinking I was using for my study was the co-founder of The Critical Thinking Consortium.

I embarked on my journey to conduct the first phase of action research, namely reconnaissance. The reconnaissance as described by Kemmis and Wilkinson (1998) is an initial fact-finding stage where the researcher tries to collect data about self, participants and the context, to find out what is already happening and what is the reason for that? In order to collect preliminary data, I conducted two semi-structured interviews and observed two lessons of each participant, which allowed me to probe teachers' understanding about political literacy, and critical thinking.

### ***Participants***

My research participants were two social studies teachers. I have used their pseudonyms in my study to protect their identity. Mehnaz, is a graduate with four years teaching experience in the same school. She teaches English and social studies to class

VI. Rehana, is also a graduate, she has ten years of teaching experience in different schools. She has recently joined the present school and is teaching Social studies to classes VIII and IX.

### ***Context***

I conducted my study in a community school. It is a purpose built, well resourced school. Classrooms are well lit and spacious. In the classroom I found students sitting in rows facing the black board. I observed teachers standing in-front of the class or moving between the rows, giving lecture or engaging students in written work.

### **The staff development plan**

I had seven weeks for my field work, from Jan 22 to March 09, 2007. In the first and second week, I negotiated my entry, collected preliminary data and developed my initial plan of action. I was careful not to disturb participating teachers during their teaching periods. Since the research participants lived very close to school, they volunteered to come on Saturdays, to have uninterrupted training sessions.

Although I had decided to use the first four components of the Joyce and Shower's training model, for the professional development of the participants, most of my field work was spent in the first two components; developing participants' theoretical understanding about critical thinking and demonstrating how critical thinking skill can be taught through relevant activities. However, less time was spent to practice the skill in the classroom or receiving feedback about teaching of critical thinking.

### **Findings and analysis**

This section presents findings and analysis of data, focusing on the four areas of my study: a) teachers' perception about political literacy, and critical thinking, b) role of a teacher educator in developing teachers' understanding about political literacy, and critical thinking, c) strategies that helped teachers to improve their understanding of teaching of critical thinking, d) challenges that emerged during the process and ways to address those challenges.

#### ***Teachers' perception about political literacy, and critical thinking***

Data revealed that both the research participants regarded political literacy as, having knowledge about the structure and functions of government. The participants considered critical thinking as a way to find faults and criticize others. They had no idea

how teaching of critical thinking could lead to the development of students' political literacy.

In the initial interview, repeated use of the word 'knowledge' by both the participants made me realize that their belief was deeply rooted in the transmission mode of teaching. The reason for transmission of knowledge, I assumed could also be pressure in school to cover the syllabus, which they had mentioned during the interview.

Classroom practices of both the teachers revealed that their focus of teaching is on knowledge. Rehana's classroom depicted a traditional view where teacher talk dominated and students listened passively. Mehnaz, tried to create interactive atmosphere but the focus was on knowledge. Both the participants mainly asked factual, low order questions, which promoted recall. For example while teaching about the life of the founder of Pakistan, Quaid-e-Azam to class VIII, Rehana asked where was Quaid-e-Azam born, what was his mothers' name? What was his sister's name? In which year Quaid-e-Azam joined the Muslim League? Similarly, while teaching about Egypt and River Nile to class VI, Mehnaz asked, where is River Nile? What was the name of the Prophet who came during the time of pharaohs? How do we know about Egypt's past? (24/01/07)

During classroom observation I did not find evidence of developing students' critical thinking through questioning. I observed a subtle difference in the practices of both the participants. Although they both considered transmission of knowledge as the main aim of social studies, Rehana, relied heavily on lecture where as Mehnaz focused on asking questions. Data from the interview revealed that Rehana, due to her long experience of teaching social studies, developed confidence about her knowledge. Her degree of confidence in her content knowledge led her to teach through lecture. Mehnaz, on the other hand believed that through questioning a teacher could help students enhance their knowledge and clear their concepts. I inferred that due to her lack of content knowledge, which she had mentioned in her interview, Mehnaz tried to cover knowledge gaps through questioning.

### ***Role of a teacher educator in developing teachers' understanding***

During the training sessions my role was mainly of a facilitator. I never imposed my views on the participants. I asked probing questions to generate critical discussion and to encourage the participants to think critically. For example while doing the 'text

analysis' I selected a paragraph about 'Mahmud of Ghazni', from the history book of class VIII, which described Mahmud's raid on Somnath, a famous temple of Hindus (Appendix-A). I thought that by analyzing a controversial text the participants will be able to bring their biases upfront and challenge their prejudice. I observed that both of them began to critique the text using a biased lens. Rehana called Mahmud Gaznavi a great hero who fought wars with Hindus, Mehnaz said that he was a supporter of religious freedom. I therefore raised a couple of critical questions, for example, 'If Mahmud Gaznavi was the supporter of religious freedom, why did he allow his army to destroy the Hindu place of worship?' This generated critical and thought provoking discussions and helped the participants to look at the text with an open mind. During the reflective conversation, both the participants acknowledged that we teach children to believe whatever information is written in the text book as the ultimate truth. They added that in this way we are not helping our children to become politically literate citizens.

### ***Strategies that helped to improve teachers' understanding***

I found discussion as the most appropriate strategy for my training sessions because of its potential outcomes (Brookfield & Preskill 1999). Through discussions both the participants were able to understand critical thinking and its importance. Rehana wrote in her reflective diary "the discussion about text analysis was an eye opener. I always used to believe what ever is given in the textbook as truth; today I learnt that we should not accept everything blindly" (03/03/07). Mehnaz wrote, "I enjoyed today's session a lot, we discussed about what kind of questions we should ask to make children think critically" (08/03/07).

Discussion provided the participants an opportunity to critique others points of view and to challenge their own assumptions, this was evident on occasions when they changed their stance, for example in the beginning Rehana was of the opinion, that girls should not raise their voice in front of their parents for any matter, even if it violates their rights, but later when Mehnaz challenged her view, she realized and agreed that girls must know their rights in order to speak for themselves. It was through discussions that both the teacher openly discussed their opinions and clarified their concepts.

I discovered that the activities that I used such as 'to distinguish between fact and opinion', 'using advertisements to detect biases' (Dean et al. 2006), 'text analysis', and

‘debate’ proved helpful in developing participants’ conceptual understanding about political literacy and critical thinking. Both the participants acknowledged that they had understood the importance of teaching of critical thinking as a way to develop students’ political literacy.

The activity ‘To Distinguish Facts from Opinion’ required participating to give reason in support of their answer, for which they needed critical thinking vocabulary and background knowledge. Regarding the statement that, ‘Allama Iqbal is a poet of Pakistan’. Rehana said that ‘I assumed that it is a fact. But when I realized that Allama Iqbal died before the creation of Pakistan, I marked this statement as ‘opinion’. Mehnaz on the other hand, had difficulty agreeing to which statement was fact and which was opinion, because of her lack of knowledge. The activity, ‘Using Advertisement to Detect Biases’, made the participants realize that due to personal inclination in favour or against any person or product, we make hasty and uninformed judgment. They realized that by thinking critically, we can overcome this habit. The participants agreed that using intellectual tools, such as ‘criteria for judgment’ we can make informed and better decisions in life.

‘Debate’ helped to remove participants’ misconception about critical thinking. They realized that while speaking for and against the topic they were not thinking about any right or wrong answer; rather they were trying to support their arguments with reasons to justify their respective position. Case and Daniels (n.d) assert that the focus of critical thinking is on the quality of thinking and reasoning, and not arriving at the right answer.

I found Kolb’s model useful to explain critical challenge. Kolb (1984) explains that effective learning takes place because of experience, observation and reflection on the experience, and connecting the experience to real world. Teachers first experienced the critical challenge by performing it and then reflected on the process.

### ***Challenges and ways to address them***

Teaching critical thinking is a complex skill, it requires a lot of effort and time on teachers’ part to teach it effectively. I observed that due to the pressure of completing the syllabus as mentioned by the participants, they were more inclined to teach through lecture method. Besides, the transmission approach to teaching is so deeply rooted in our

belief system, that it took a lot of time to facilitate the participants to challenge their own thoughts, beliefs and assumptions about teaching critical thinking.

After developing their theoretical understanding about critical thinking, I thought participants were now ready to teach critical thinking to their students. In one of their lessons, both the participants had tried to incorporate the activity ‘identify facts and opinion’ and were happy to see students’ active engagement in the critical thinking process. By observing them, I realized that they might rely only on the activities that were used in the training sessions; therefore I decided to facilitate them in developing their own critical questions using their respective textbooks.

Finlay (2005) has provided a guideline about how to teach critical thinking using critical challenges<sup>1</sup>. For example, instead of asking, ‘How can we prevent water pollution?’ a teacher can ask, “Identify all the threats to safe water supplies. Which threat is the greatest concern and why? Identify possible solution to the threat and justify which one offers the most realistic chance of success” (Finlay, 2005).

I prepared a handout describing critical challenge (Appendix- B) and asked the participants to read the text silently and then compare the two methods of information gathering; traditional information gathering and critical challenges and select the one that they find better. Unexpectedly both the participants expressed their opinion in favour of traditional information gathering process. Rehana said that the importance of traditional research model in which students are asked to ‘collect information’ on any given topic can not be ruled out because it helps them to ‘develop their knowledge’. Mehnaz said she was not very sure of ‘critical challenge’, how to use it in the class. She also said that she did not see any problem with information gathering model.

Participants’ responses made me quite upset because they still considered ‘acquisition of knowledge’ as important. I searched the literature to address this issue. Joyce and Showers (2003) note that teachers need time to develop their own interpretations and make sense of the new learning. They contend that teachers need a substantial period of time that is from 8 to 10 weeks, involving around 25 trials to practice new skills for effective implementation of a new strategy. Reflecting on what

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<sup>1</sup> Critical challenges are questions that provide motivation and context for critical thinking (Finlay, 2005)

Joyce and Showers (2003) said about staff development I realized that I was being too impatient and expected quick responses. I observed that participants were still trying to grasp the meaning and importance of critical thinking. I realized that they were not yet prepared to teach critical challenges and more input sessions were required on developing teachers understanding about framing critical challenge.

I changed my plan, and decided to facilitate the participants to improve their questioning skill for teaching critical thinking. King (1995) provides a set of questions stems which he says could be used to teach critical thinking. Some of the question stems were ‘what is another way to look at...? , What would happen if...? , What do you think causes..? Why? Do you agree or disagree with this statement? What evidence is there to support your answer?’ I used these question stems to help teachers in developing thinking questions. I prepared some hand outs with question stems and facilitated the participants to prepare high order questions using their text books. It was a fruitful exercise, but required more time and practice for the participants to learn how to frame high order questions.

### **Concluding session**

My field work had come to an end. In the concluding session both the participants shared that the study had helped them understand critical thinking and its importance. Mehnaz said that she had learnt how to analyze an issue with an open mind. She particularly liked the activity ‘to distinguish fact from opinion’ and said that she would use this activity in most of her lessons. She said that she needed more help in planning and teaching for critical thinking.

Mehnaz said that by participating in the study she learnt how critical thinking helps children to become responsible citizens. She however felt that further support in lesson planning and classroom teaching is required.

### **Implications and Conclusion**

The key findings that I have identified as a result of my study imply that critical thinking is a complex skill. Teachers need sufficient time to develop an understanding about critical thinking and its importance. While there is a possibility of promoting teaching of critical thinking, the belief system of teachers takes time to change. Learning is a process to create knowledge and to improve practices (Joyce and Showers 2003),

therefore care must be taken to provide sufficient time for teachers to understand new knowledge. Teaching critical thinking is possible if teachers are provided enough practice in planning and teaching

The success of critical thinking programs also depends on professional knowledge, skills and expertise of teacher educators. Professional development institutes should take teaching of critical thinking seriously and design programs and courses for teachers and teacher educators to enhance their knowledge and skills regarding teaching of critical thinking.

The study proved a rich learning experience. I am better equipped with skills and knowledge to play my role as a teacher educator. The study has helped me to explore strategies that will help teachers to improve their understanding and practices of teaching of critical thinking.

I have learnt that action research is a process for improvement of practices. The end of my research project did not mean that my learning or my participating teachers learning had come to an end. The study helped me to facilitate participating teachers in their professional growth by providing them new ways of teaching social studies. I was able to make teachers understand that the aim of social studies is to prepare thoughtful citizens who can think critically and who can contribute effectively for society.

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## **APPENDIX-A**

### **MAHMUD OF GHAZNI**

Mehmud inherited the throne at his father's death (AD 997). He needed vast amounts of money to protect his central Asian empire, which was very profitable because the trade routes from China to the west ran through it. Whoever controlled these roads could tax the merchants. Mehmud made his capital the most beautiful city in the world after Baghdad. Craftsmen from all over Asia were paid to build huge mosques, palaces, universities and libraries. He encouraged artists, scientists, writers and poets to settle there. Although he raided many lands, he was very kind and loved beauty, learning and knowledge. Mahmud fought for the Islamic faith and tried to spread it wherever he could.

#### **MEHMUD AT WAR**

...Mehmud employed some Indian troops and Hindu commanders in case his own Turkish senior officers became too powerful and tried to overthrow him. The fighting in his raids was often intense, with many killed or taken as slaves...His

most daring raid was across the desert to Somnath, where a number of Hindu warriors from various parts of India were gathering. There, Mahmud's army destroyed the Hindu temple; he smashed the most important idol with his own hands. Many were killed, and 6.5 tones of gold and the massive temple gates were carried all the way back to Ghazni. When they had been defeated, Mahmud usually allowed Hindus to practice their own religion as long as, like Christian and Jews, they paid a special tax (jizya) instead of doing military service. He also allowed many Hindu officials to remain in office as this made the administration of the captured lands much easier.

(Moss, P. (2005). pp. 68 & 69)

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## APPENDIX- B

### FROM “FINDING OUT” TO “THINKING ABOUT”

Traditional research skill model focuses on information gathering, as if information is an objective ‘thing’ residing in books or other resources. Information problem solving, on the other hand views information as a process of constructing personal meaning.

Information problem solving model helps students improve their critical thinking by making reasoned judgments about what to believe or how to act, that demonstrate the qualities of a competent thinker. Problematic situations which are deliberately presented to students for consideration are labeled as ‘critical challenges’. Critical challenges are the deliberately set tasks or questions that provide motivation and context for critical thinking. They can be created in all subjects and for all grade levels.

Critical challenges can be distinguished from two other types of tasks or questions: In the typical ‘find out about’ questions students are expected to know the answers from memory or find the answers from sources such as textbooks, library resources, lecture notes etc. e.g. Describe the tourist attractions of Pakistan. The other type of questions is such where students’ answers are basically personal preferences or guesses. E.g what would you like to see as a tourist in Pakistan?

Both these types of questions are valuable to ask. However they are not critical challenges as they do not invite students’ critical reflection. A question or task is a critical challenge only if it requires students to make a judgment about which of the possible answers they might offer which is the most reasonable. Making a reasonable judgment is the key force for critical thinking to occur e.g. which tourist attraction best represent Pakistan’s cultural heritage? Give reasons to support your answer.

This first step in using the model can get us started on teaching the tools to enable students to become capable critical thinkers.

There are four criteria that an effective critical challenge must meet.

1. Does the question or task require judgment between possible alternatives?
2. Is the challenge focused so as to limit the requisite tools?
3. Will the challenge be meaningful to students?

4. Is the challenge embedded in the core of the curriculum

Here are some examples of how a twist on a typical question or task can make the task more meaningful and thought provoking.

Research assignment	Critical challenge
How can we prevent water pollution?	Identify all the threats to safe water supplies. Which threat is the greatest concern and why? Identify possible solution to the threat and justify which one offers the most realistic chance of success.
Make an anti-smoking poster	Create a poster advertisement to discourage fellow students from smoking. Effectively employing the techniques of persuasion without distorting the evidence.
Find out about frogs	Design the ideal habitat for a frog which would meet its needs for food, for protection from enemies and for reproduction.

Adapted from: Finlay (2005), Professional Readings from tc2

<http://tc2.ca/pdf/About%20Critical%20Thinking/Online%20Articles/Teaching%20and%20Assessment/Finlayout.pdf>