



CRITICAL THINKING IN TEACHER TRAINING PROGRAMME: A BUILDING BLOCK FOR EDUCATIONAL REFORM

Kuldeep Kaur

Research Scholar, Department of Education, University of Allahabad.

Abstract

This is the age of Information and Technology. Among the bulk of information, students have to choose correct one that can help them further. To compete in the present digital age, students must develop the ability to invent new ways of solving problems by connecting new knowledge to the previous information and to apply their updated knowledge in new situations. In such a situation the teachers' role is more complex. The manner in which information is directed and conveyed to students can affect student's ability to think critically. Thus the quality of the students in the future is determined by the role of teachers in today's schools. Teachers are in a unique position to have a direct impact on the students' learning. Critical thinking in the Teacher Training Programme is a process-oriented agenda which acts as a building block for educational reform by improving the teachers' ability. The present paper is an attempt to throw some light on empowering the critical thinking skills in teacher training programme.

*Learning needs freedom to think and freedom to imagine,
and both have to be facilitated by the teacher.*

---Dr. A. P. J. Abdul Kalam

Introduction

Teaching is the noblest profession that lays the foundation for preparing the individual for all other professions. The education policy in India has grown like never before and therefore the demand for teachers is also on the rise today. It is a well established dictum that no nation can rise above the level of its teachers. It is the teacher who plays pivotal role in educational system and is a catalytic agent of change in society.

Teachers are expected to play a role to bring positive changes for the students. The way in which teachers respond to the diverse needs of students are constantly changing as a result of such rapid technological developments and the demands of the community to achieve excellence as well as changes in the social construction of society and globalization. Now, the teachers' role is more complex. In the process of learning, students have to face many challenges to choose the correct information. They need to develop thinking ability for finding new ways of solving problems by connecting new knowledge to the previous information and to apply their skills in new situations. Such ability to think clearly and rationally by understanding the logical connection between ideas is referred as Critical thinking. It has been observed that the manner in which information is directed and conveyed to students can affect student's ability to think critically. Therefore, a critical and inspiring teacher is able to motivate and inspire the students for optimizing the potential of their critical thinking ability that is useful for the future.

The concept of critical thinking was featured in taxonomies a few decades ago. The meaning of critical thinking can also be summarized from past researches as a reflection, identification, interpretation, analysis and judgment with the consideration of context. Critical thinking is the use of cognitive skills and strategies that increase the probability of a desirable outcome, purposeful, reasoned and goal directed (Halpern, 1996). Hence, critical thinking differs from other types of thinking, especially in cognitive skills and strategies which are involved in processing information (Kürüm, 2002).

In the present era, critical thinking skills are effectively essential in all aspects of life. In order to teach students to learn how to think, teachers have to enhance their thought process. Therefore, cultivating teachers' critical thinking skills is a very important step toward educational reform.

"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."

—D. Gough (1991)

Thus, critical thinking is a complex process that requires cognitive skills in the processing of information. This is an essential tool of inquiry which liberates force in education and a powerful resource in one's personal and civic life. Ennis (1993) defined critical thinking as reasonable reflective thinking that is focused on deciding what to believe or do. Critical thinking skills provide the right direction for rational thought.



The concept of Critical thinking was first highlighted by Benjamin Bloom's taxonomy a few decades ago. It was perceived that a higher level of cognitive ability involving critical thinking was a feature in the analysis, synthesis and evaluation levels while lower levels of cognitive ability that is knowledge, comprehension and application only involved remembering, relating and applying information respectively. Therefore, critical thinking is a high level cognitive activity related to the use of reason. Such cognitive skills assist to identify the accurate one among the bulk of information. Learning to develop critical thinking emphasizes the importance of focusing on learners attempt to analyze actively and solve a variety of problems that exist around including in their learning process (Slameto, 2014). Kember (1997) pointed that a lack of understanding about the teaching of critical thinking has a tendency to not teach or perform an assessment of students' thinking skills. Although the teaching of Critical thinking as a means of problem solving, yet the ability to solve problems is part of the Critical thinking skills (Pithers and Soden, 2000). Therefore, it is essential to improve teachers' quality to make them able to keep pace with the changes in the needs of students and society.

Critical Thinking and Teacher Training: Role Incompatibility

One of the scopes in which critical thinking research penetrated is in Teacher training programme. The effectiveness of an educational system is mainly dependent upon its teachers. Teacher education has a special role to play for quality improvement of students. King Rice (2003) stated that teaching is a complex activity which is influenced by the many elements of teacher quality and teacher quality is a powerful predictor of student performance.

The Programme of Action (POA) of National Policy on Education has been emphasized the role of teacher. Programme of Action (1992) observed that Teachers' performance is the most crucial input in the field of education. Whatever policy may be laid down, in the ultimate analysis these have to be interpreted and implemented by teachers as much through their personal example as through teaching learning process. Inside the daily reality of classrooms and educational establishments, the promotion of quality education for all young people sharply brings to light problems concerning the role of the teacher. It is evident that a sufficient number of competent teachers are required in order to improve the quality of educational processes. In order to enhance the problem-solving ability of students the teachers should assign challenging tasks. They can help their students more effectively by improving their problem solving skills. Therefore, teacher needs to be trained properly for quality teaching.

Education and training as an integral system is a set of components or elements or sub-systems that interact to change the competence of teachers' work so that he/she could do better by learning in education and training activities (Vincent et al., 2000). The role of teachers has been observed as purveyors of knowledge, values and as community leaders responsible for the future of young generation. Thus efforts should pay to support them and to learn from them.

Most educators agree that it is essential for teachers to develop critical thinking skills because it makes them able to engage the students in purposeful, self-regulatory judgement. Using critical thinking skills teachers can better help their students to evaluate the arguments of others and their own, resolve conflicts and come to well-reasoned resolutions to complex problems (Allegretti and Frederick, 1995).

To order to develop critical thinking among teachers, training should be developed in the form of active learning, allowing participants to be the subject of education and training activities in the learning process. With the experience and engagement work activities teacher training is expected to develop skills in more impressive and stronger manner.

Strategies for Teacher Training Programme

To enhance the Teacher training programme, critical thinking strategies include five components: Identifying central issues and assumptions, making correct inferences, deducing conclusions, interpreting the conclusions and evaluating evidence or authority. Unless the teachers are familiar with different components of critical thinking and approaches to teach it, they will not be able to equip students with this precious ability. The lack of training is also seen on the part of the teachers.

Pupil-teachers need to be aware that students cannot begin to think critically from the higher levels. However, they are in need to be guided through levels of critical thinking. For implementation in teacher training programme, six levels of critical thinking has been proposed which are as follows: Level 1: Unilateral descriptions, Level 2: Simplistic alternatives/ argument, Level 3: Basic analysis, Level 4: Theoretical inference, Level 5: Empirical inference and Level 6: Merging values with analysis. Review of studies emphasize to follow training strategies that can improve critical thinking skills, namely Learning through small group discussion, use relevant context such as the problem with the training materials that are understood by the participants to improve critical thinking skills, the method of evaluation that requires study deeper, encouraging participants to learn in a more meaningful way, not just memorize. Along with this group learning methods to work together is needed.



Langer (1997) emphasized on the innovative power of mindful learning. He stated that teachers should learn to teach from multiple perspectives and focus on linkages and similarities of content to present mindfully. Few studies focused on critical thinking is to teach it as a separate course.

For teacher training, Infusion approach is another favoured approach, in which critical thinking is incorporated into the existing subject matter in different ways. Continued practice plays major role for the success of teacher training programme.

We know that practice makes perfect in every task. Consistency is significantly important for developing critical thinking skills among pupil-teachers. It is recommended that teacher training persists on asking students to think critically and to use different levels of critical thinking. Students when they get expertise in thinking critically will continue practicing it, too.

Critical thinking practice can have magical effects on the teachers as well as their students. This can be done by encouraging a positive attitude towards critical thinking. When teachers and students are aligned in pursuit of improved critical thinking, cognitive magic is possible. Reasoning improves without the encumbrance of the automatic animosity that can ruin the atmosphere for prospective critical thinking. Each attribute of critical thinking during teacher training discussed herein plays a facilitative role in the fragile potential for a broad community of critical thinkers.

Conclusion

Critical thinking is not an isolated goal unrelated to other important goals in education. It is foundational to the effective teaching of any subject. To improve student performance on critical thinking, schools of teacher education must improve training strategies. They must teach cognitive skills to pre-service teachers before training them to teach these skills in the classroom. They must integrate critical thinking skills into all aspects of teacher preparation and train future teachers to be models of effective thinking strategies. Elementary and secondary schools considering critical thinking skills emphasis must make a long-term commitment to programs fostering the critical thinking process; provide in-service training; assign mentors to new teachers; allot time for teachers to share effective strategies for instruction; involve experienced teachers in the selection of instructional materials and testing programs and appoint a committee to guide curriculum development (Walsh and Paul, 1988). In conclusion, critical thinking if implemented in teacher training would influence the teachers' competence greatly in every aspect.

"It is the supreme art of teacher to awaken joy in creative expression and knowledge."

---Albert Einstein

References

1. Allegretti, C. L. and Frederick, J. N. (1995). A Model for Thinking Critically About Ethical Issues. *Teaching of Psychology*, 22 (1), 46-48.
2. D. Kember (1997). A reconceptualization of the research into university academics' conceptions of teaching. *Learning and Instruction*, 7, 255-275.
3. Ennis, R. H. (1993). Teaching for higher order thinking. *Theory into Practice*, 32 (3), 181.
4. Halpern, d.f. (1996). *Thought and Knowledge: An Introduction to Critical thinking*. 3rd Ed.
5. Kürüm, D. (2002). *Teaching Candidates' Critical Thinking Ability*. Eskisehir Anadolu University.
6. Langer, E. (1997). *The Power of Mindful Learning*, Addison Wesley, New York.
7. R. T. Pithers and R. Soden (2000). Critical Thinking in Education: A Review. *Educational Research*, 42 (3), 237-249.
8. Slameto (2014). Developing Critical Thinking Skills through School Teacher Training 'Training and Development Personnel' Model and Their Determinants of Success. *International Journal of Information and Education Technology*, 4 (2).
9. Walsh, D. and Paul R. (1988). *The goal of critical thinking: From educational ideal to educational reality*. Washington, D. C.: American Federation of Teachers.