



Module II: Teaching critical thinking

In the module, we present and discuss critical thinking as well as the approaches that might add the existence of critical thinking idea in the day-to-day teaching at educational institutions. Besides, we present some specific techniques that might be used for teaching of critical thinking.

The module presents detailed information in the areas of:

- **About critical thinking**

Critical thinking is the intellectually disciplined process of actively and skilfully conceptualizing, applying, analysing, synthesizing, and/or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, or communication, as a guide to belief and action.

Glaser (1941) showed experimentally that it was possible to improve the critical thinking of high school students. Bloom's influential taxonomy of cognitive educational objectives also incorporated critical thinking abilities. Ennis (1962) proposed 12 aspects of critical thinking as a basis for research on the teaching and evaluation of critical thinking ability.

Experiments have shown that educational interventions can improve critical thinking abilities and dispositions, as measured by standardized tests. Attempts at implementing such an approach have faced difficulties. The committees that approved courses as satisfying a general education requirement ignored the relation of curricular outcomes to critical thinking and focused instead on work requirements with a prima facie relation to reflective thought: term papers, projects, group work, and dialogue. There are two essential dimensions of thinking that students need to master to learn how to upgrade their thinking: They need to be able to identify the "parts" of their thinking, and they need to be able to assess their use of these parts of thinking.

- **Teaching to think critically - A framework**

Instruction that enhances students' critical thinking skills should be explicitly infused in all courses at an educational institution so that critical thinking skills can be developed and reinforced in student learning across all the curriculum.

The Paul-Elder approach to teaching critical thinking is one of the most widely published and cited frameworks in critical thinking literature. According to Paul and Elder, critical thinking is the: (1) analysis of thinking (reasoning) by focusing on the parts or structures of thinking; (2) evaluation of thinking by focusing on the quality – the intellectual standards that should be applied to the elements of reasoning, and (3) improvement of thinking by using of what you have learned - the intellectual traits associated with a cultivated critical thinker that result from



the consistent and disciplined application of the intellectual standards to the elements of thought. Intellectual traits maintained by the right approaches to critical thinking instruction are, for example, intellectual humility, intellectual courage, intellectual empathy, intellectual autonomy, intellectual integrity, intellectual perseverance, confidence in reason, and fair-mindedness.

- **Techniques that may be used for enhancing critical thinking abilities**

Several techniques have been recognised that enhance critical thinking at students. For example, 3-2-1 and Jigsaw technique guides small groups of students to develop knowledge about a given topic, Active Reading Documents technique guides students through the process of critical and careful reading. Fact or Opinion technique encourages students to critically evaluate information by questioning what they read. Update your Classmate technique is a short writing activity where students explain what they learned in a previous class session to set the stage for new learning. Support a Statement technique provides students with a provocative statement and prompts them to locate details, examples, or data in their lecture notes or a reading assignment to support the statement.