
NEWSLETTER

Is Critical Thinking Teachable?

By Leng, J., & Lu, X.

Correspondence to: Jing Leng, Associate Professor, Faculty of Education, East China Normal University, China. Email: jleng@deit.ecnu.edu.cn

CRITICAL thinking, as an indispensable ability for talents in the 21st century is helpful for people to think logically and independently, screen information, and make decisions quickly in the information society. Whether critical thinking is teachable or not has always been a controversial topic in the academic world. A recent study published in *Open Education Research* selected 79 experiment or quasi-experimental research literature from China and abroad as the research objects, explored the differences of critical thinking teaching effects and the teachability of critical thinking from the aspects of the discipline, teaching stage, the number of participants, technical intervention, countries, testing methods and so on.

The results show that:

- The effect of critical thinking teaching varies significantly among different disciplines and teaching stages, it works the best in Mathematics and in high school education.
- The longer the cycle of critical thinking teaching is, the better the enhancing effects will be.
- Teaching intervention has the same effect on whatever the participants' number, and there is no significant difference in the improvement of students' critical thinking with or without technical intervention;
- The teaching effect of critical thinking among different countries is significantly different, and the improvement of critical thinking ability measured by the self-compiled tools of standardized tests is more obvious.

Suggestions:

- Extend the integration range of critical thinking and disciplines.
- Professors of critical thinking should be introduced into basic education, and the continuity and systematization of teaching should be maintained.
- In the teaching of critical thinking, teachers should not blindly follow the trend of technology and abandon the traditional teaching methods.

- Use multiple assessment tools to measure changes in critical thinking. Evaluation tools are one of the variables that affect the effectiveness of students' critical thinking.

In conclusion, through the comprehensive analysis of the existing research data, this study obtained that the combined effects of teaching intervention effect on students' critical thinking values, with the quantitative results, show that critical thinking can be taught, and found that subject, learning, teaching period, the technology involved in various cultures, and assessment tools for the students' critical thinking teaching effect has certain adjustment.

Source: Open Education Research, 2020; 26(6):110-118.