

Review of: "Paulian Approach to Critical Thinking: Assessing an Intervention Program"

Bruce Haynes

Potential competing interests: No potential competing interests to declare.

Review

Paulian Approach to Critical Thinking: Assessing an intervention program

V.G. Gawarkar

This study addresses a fundamental issue in education generally and teacher education in particular. Put simply, should education focus on how to think or on accumulation of knowledge? In the case of this study, the focus is on specific teaching on how to think.

The contentious claim is made "the processes in school education have not been able to completely integrate critical thinking as there is no subject that explicitly focuses on critical thinking development, and there is very little evidence to suggest that other subjects can develop critical thinking skills explicitly." (p. 1)

The one semester intervention in an undergraduate teacher education programme used a diverse array of teaching strategies based on Paul's conception of critical thinking and sought to evaluate it using test and other data collection procedures. Remarkably it found

"The study found that the critical thinking intervention programme improved the academic performance of the student teachers. Likewise, it improved reasoning skills, organisation of thoughts, and thought connectivity, supported achieving better work-life balance, developed reflective abilities, developed depth in academic work, and developed metacognitive Skills." (Abstract) As a result "the researcher strongly asserts that CT is a crucial aspect that must be integrated into the training of student teachers" (p. 1)

"The results depict that the academic achievement of the student teachers had significantly improved." (p. 8) and also reported positive engagement by students in the course. No results were reported to justify the claim of improved academic results and it is hard to identify how such data could be generated in a one semester course. Some of the data upon which the conclusions are drawn is also suspect. The focus group discussion was opened by asking "What aspect of CT did you use in life? How has CT helped you in various domains of life? What are the different areas in which CT has helped these student teachers in academic and personal life?" (p. 5) This seems like push-polling by the use of 'help' in these questions.

This intervention "has improved abilities in a broad range of aspects of CT, like purpose, organised thinking, concepts and



ideas, implications, and barriers like sociocentrism and egocentrism. This has been effective for student teachers and can now be applied to other disciplines like science, the arts, engineering and commerce." (p. 7)

What this report does not do is indicate whether the teacher education course continued this intervention as part of its scheduled offering, whether it was made compulsory or elective, or whether any other part of the university sought to take up this initiative. This report does not provide evidence as to how students sought to apply their new found skills in their other academic subjects although the unsubstantiated claim is made about improved academic results. This report does not indicate what, if any, effort was made to engage the remainder of the university in practising critical thinking in their own academic offerings (or even whether they were already doing so). This report also does not indicate why this intervention was substantially different from the various stand-alone critical thinking courses that have been part of teacher education and other professional and general university courses over the past 30 years.