

## **Critique on Research About Critical Thinking Used in Argument Against History B9**

**By Nick Strobel**

The crux of the argument against granting History B9 inclusion in the BC Gen Ed area A3 is that the course does not provide the evidence needed to show it would achieve the course SLOs of critical thinking as stated in the BC General Education A3 SLOs and criteria nor satisfy the criteria given in the CSU/UC "Guiding Notes for General Education Reviewers". The Hist B9 COR includes textbooks that explicitly teach critical thinking, course SLOs and course objectives can be mapped to the A3 SLOs and Guiding Notes criteria, and the topical outline includes explicit instruction in critical thinking. According to the BC A3 criteria and CSU/UC Guiding Notes criteria, there is now sufficient evidence to grant History B9 inclusion in our BC General Education area A3 and move it on to CSU/UC for approval.

However, another argument has been made that we should look at critical thinking pedagogy research to decide whether or not a course should be included in the BC Gen Ed A3 area and submitted for CSU/UC review as a critical thinking course. While the research offered by the Communication Department provides extensive support *for* our current Philosophy and Communication courses in the A3 area, it does not provide convincing evidence *against* History B9 as a critical thinking course or other possible well-constructed critical thinking courses in disciplines outside the traditional bounds of Philosophy and Communication. This short paper focuses on the research presented as evidence against History B9.

The argument has been made that because there is no evidence that a course like History B9 will increase critical thinking. However, this could be because the research has not been done on courses like History B9 which explicitly teach the critical thinking concepts defined in the A3 criteria in a contextualized manner. Furthermore, one could argue that the research has not been done because contextualized critical-thinking courses taught outside the traditional bounds of Philosophy and Communication are too new for an extensive body of research to have been done. In this case, it looks like we have the situation of "absence of evidence does not mean evidence of absence."

A careful review of the research offered by the Communication Department raises some concerns about its application to our present situation. The research papers are meta-analysis studies of courses at other colleges/universities taught well over a decade ago. The research cites a study done in 2001 about infusing critical thinking activities into subject matter courses and a 2004 study about critical thinking in psychology & nursing courses. The studies suggest a critical thinking inventory tool called "Watson-Glaser" be used. We do not know what explicit critical thinking instruction was given and the extent of such instruction in the courses used in the studies. Also, the use of nursing courses for this argument is to me a sort of straw man argument. Nursing is extremely applied. Although nurses must use critical thinking, there is very little to no exploration of inductive arguments vs. deductive arguments or the analysis of different medical theories or fallacies in medical research papers or how choices in words/phrases lead to different logical conclusions in nursing courses. You just don't do that with the subject matter of nursing.

The research cites another study done in 2007 which noted a smaller gain in critical thinking in courses with “some” critical thinking instruction than in Philosophy or dedicated critical thinking courses but we don’t know what metric was used (Watson-Glaser?) and we don’t know what and how much explicit critical thinking instruction was given in those other critical thinking-infused courses examined in 2007. Meta-analyses can be very tricky to do and can lead to incorrect conclusions if all variables are not properly accounted for. (Meta-analysis studies can be tricky for even an objective “hard science” like physics or astronomy!) The 2007 study does not prove that a well-structured history class could not provide the desired gains in critical thinking.

A more convincing research study than the old meta-analyses that would prove whether or not History B9 could achieve the BC GE A3 SLOs would be to do the following: grant History B9 critical thinking A3 status (so History faculty have incentive to provide proper instruction with all of the lengthy papers needed to drill it into the students heads) and measure the student critical thinking performance on an established critical thinking metric or tool and that the students in other A3 courses taught at BC be tested with the same metric/tool. This testing should be done over several semesters to take care of statistical fluctuations. The Curriculum Committee would examine the evidence when History B9 comes up for its mandatory six-year course review and decide whether or not History B9 should still be included in the A3 category.

Furthermore, the 2007 study did note some gain was measured in the non-classical critical thinking-infused courses. If we decide to put a lower bound on how much gain in critical thinking is required using the established critical thinking metric or tool as an additional criterion to that already given in the BC Gen Ed A3 criteria and CSU/UC Guiding Notes, then the Curriculum Committee and Academic Senate need to formally adopt that revision in our criteria and approval process.

Finally, History is more subjective and “argumentative” than many other disciplines. Models and paradigms for explaining the causes of events and human interactions in the past are developed and challenged using all of the methods described in the BC Gen Ed A3 SLOs and criteria and the criteria in the CSU/UC Guiding Notes. Explicit instruction in critical thinking theory in a history class could provide significant gains in critical thinking as defined in the A3 SLOs & criteria. Support for that statement comes from comparing the History B9 COR with another course we offer that includes explicit critical thinking instruction and then contextualizes the critical thinking theory with a lot of writing exercises—English B2. The English B2 COR shows 25% of the course consists of explicit instruction in critical thinking argumentation. Up to another 50% of the course could be contextualized application of the critical thinking theory. The History B9 COR shows 20% of the course consists of explicit instruction in critical thinking argumentation with up to 80% contextualized application of the critical thinking theory. BC faculty agree that English B2 is a good match for the A3 critical thinking criteria. There is a sufficient amount of critical thinking theory instruction in History B9 (explicit and contextualized application) for the Curriculum Committee to approve its inclusion in the BC General Education area A3.