

Critical thinking and argumentation - ideas for the course

Anuradha A. Gokhale (1995) says collaborative learning develops critical thinking the most thorough discussion, clarification of ideas and evaluation of others' ideas. It is also mentioned that the role of an instructor is to serve as a facilitator for learning and thinking process should involve real world problems.

The course had collaborative learning but the group size was quite big so everyone was not involved as much as they could have. This could have been enhanced by creating smaller groups and assigning tasks to them. Tasks could be based on the books (real world problem) and these task could be presented during the lectures and then be discussed. The idea would be to get more people take part to the critical thinking process.

John C. Bean (2011) mentions that one of the biggest problem among students are that most students don't revise their essays and thus are not involved in critical thinking process throughoutly. Bean mentions that one solution for encouraging revision is to have writing conferences where students can discuss about their ideas.

In the course there could be an essay that a student must write. Again the ideas should come from the course books but they should include critical thinking aspect. For example some topics could be privacy of big data or ethics of big data. There could be one idea per student that are defined beforehand by a lecturer. At some point during the course there could be a writing conference where each student must explain their problem and how they are going to solve it. The ideas should be then discussed and new approaches could be proposed. In the end students could present their essays and explain how they used the ideas from the writing

conference and what kind of effect they had. Writing an essay would encourage more students to participate and think critically.

Learning centre in the university of Sydney mentions critical reviews as one way of learning critical thinking. The idea is to critically evaluate for example a research article. The essays mentioned in above chapter could be reviewed by another student who would act as an opponent. This would create discussion between students and to back up a claim student would need to find multiple sources for it.

References

Gokhale, A. A. (1995). Collaborative learning enhances critical thinking.

Bean, J. C. (2011). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. John Wiley & Sons.

Orientation Lecture Series: LEARNING TO LEARN Developing critical thinking skills, The University Of Sydney, Learning Centre, available at:

http://sydney.edu.au/stuserv/documents/learning_centre/critical.pdf