What is critical thinking?

To some extent, critical thinking can be thought of in terms of what it is not: It is not rote memorization, nor is it a simple recapitulation of content.

From a models perspective, there are certain features that can promote critical thinking, i.e., identification of a problem, understanding the meaning or importance of a problem, applying theory to interpret the problem, conducting analysis to generate hypotheses, conclusions or an argument related to the problem, and being able to articulate one’s reasoning or conclusions. In particular, the scientific method is a useful vehicle to engage critical thought, though it is clear that the application of this method is not universally applicable.

Interestingly, there was a strong sense that the outcome of critical thinking is not that which should be emphasized as critical thinking processes can lead to disparate conclusions, based on which assumptions are selected, or which theories or models are applied. Rather, critical thinking represents a process of engaging problems. Some felt there was value for students to see professors model, not only the critical thinking process, but for professors to acknowledge disagreement and ambiguity. There was also the suggestion that critical thinking is a habit as much as it may be a skill set or technique.

For some, there is the sense that creativity is an integral component to critical thought, i.e., the novel application of skills, models or theories to a problem, the ability to synthesize various pieces of the problem puzzle, and the ability to identify how solutions to a particular problem may apply across a variety of additional situations. For others, creativity represents a distinct, though potentially complimentary, thought process.

Not surprisingly, there was also debate about the extent to which critical thinking can and should be applied to the arts. For example, whereas a chef or a painter can create a technically superior product, it may nevertheless be lacking. In contrast, there must also be room to counter dogma with approaches that are novel or unexpected. Additionally, whereas critical analysis can be applied to the selection of a wine or a movie, there is a sense that such an analysis can hinder spontaneity and perhaps not fully predict optimal outcomes.

How is critical thinking measured?
As one participant said, critical thinking is not something that can be easily quantified. At the same time, however, it is possible for a well-constructed multiple choice question engage critical thinking processes.

To the extent that “critical writing” is a manifestation or outcome of the critical thinking process, there was concern that class sizes are too large to meaningfully engage critical thinking in all classes. Consequently, it is either unreasonable to expect certain critical thinking outcomes for all classes, or classes must somehow be made smaller.

Some questioned whether late adolescents are capable of advanced critical thinking, leading to the suggestion that critical thinking must be advanced developmentally. That is, some types of critical thought may be best developed among young undergraduates and, thus, as part of the general education curriculum, whereas other types may require advanced content or are maturationally appropriate predominantly to senior level students.

There was the suggestion that a Logic course would represent a meaningful entry level course that would lay the framework for the development of critical thinking across departments and colleges. However, the logistical problems of such an endeavor were questioned.

For some disciplines, it was suggested that critical thinking includes engagement in the discipline and professionalization. In other words, one outcome of critical thinking is an appreciation of the core values of a discipline.