

## **Fractal: Formative Reflective Assessment and Critical Thinking in Learning**

**Authors :** Yannis Stavarakakis, Damian Gordon

**Abstract :** Critical Thinking and Reflective Practice are two vital skills that students undertaking postgraduate studies should ideally possess. To help students develop and enhance these skills, this research developed several authentic activities to be undertaken as part of a module that is delivered early in a taught MSc to enhance these skills. One of the challenges of these topics is that they are somewhat ill-defined in terms of precisely what they mean, and also, there is no clear route to operationalizing the teaching of these skills. This research focuses on identifying suitable models of these skills and delivering them in a manner that is both clear and highly motivating. To achieve this, a class of 22 Master's students was divided into two groups, one was provided with a presentation and checklist about critical thinking skills, and the other group was given the same materials on the reflective practice process. The groups were given two scenarios each to analyze using their respective checklists and were asked to present their outcomes to each other and give peer review. The results were coded and compared, and key differences were noted, including the fact that the Critical Thinking outcomes were more future-focused, and the Reflective Practice outcomes were more past-focused and present-focused, as well as the fact that the Reflective Practice process generated a significantly wider range of perspectives on the scenarios.

**Keywords :** critical thinking, ethical scenarios, formative assessment, reflective practice

**Conference Title :** ICCEEP 2023 : International Conference on Critical Education and Educational Policy

**Conference Location :** Paris, France

**Conference Dates :** May 11-12, 2023