

Development of Novel Critical Thinking Assessment Instruments: Application in Information Systems Education at a Business School

Abstract

Higher education attaches significant value to critical thinking skills as it plays a profound role in achieving academic and professional success. We develop two separate instruments for assessing critical thinking skills and identifying students that need assistance with critical thinking growth. Specifically, we create an essay and an open-ended group discussion for an all-around assessment of these skills and demonstrate their application to undergraduate students pursuing business majors. To increase student engagement, both instruments use social media-related topics given their relevance to students' lives. These topics are particularly important for examining critical thinking in information systems because social media effects can be viewed from multiple valid perspectives rich for discussion. We use qualitative analysis for interpreting and analyzing the verbatim data collected. We find that these instruments do an excellent job in measuring students' critical thinking skills and also motivate them to consider ethical issues, related to both topics. This serendipitous finding, enabled by content analysis, is of great significance given that in their future careers' students are likely to be engaged in many decisions that involve ethical issues. Thus, our instruments facilitate an in-depth understanding of the quality of student thought processes and measure students' critical thinking skills but can also potentially reveal the depth of understanding of key societal issues critical for their role as future business leaders.

Keywords: Critical Thinking; Assessment Instruments; Social Media; Ethics; Higher Education