## World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences Vol:17, No:05, 2023

## Detect Critical Thinking Skill in Written Text Analysis. The Use of Artificial Intelligence in Text Analysis vs Chat/Gpt

**Authors:** Lucilla Crosta, Anthony Edwards

Abstract: Companies and the market place nowadays struggle to find employees with adequate skills in relation to anticipated growth of their businesses. At least half of workers will need to undertake some form of up-skilling process in the next five years in order to remain aligned with the requests of the market. In order to meet these challenges, there is a clear need to explore the potential uses of AI (artificial Intelligence) based tools in assessing transversal skills (critical thinking, communication and soft skills of different types in general) of workers and adult students while empowering them to develop those same skills in a reliable trustworthy way. Companies seek workers with key transversal skills that can make a difference between workers now and in the future. However, critical thinking seems to be the one of the most imprtant skill, bringing unexplored ideas and company growth in business contexts. What employers have been reporting since years now, is that this skill is lacking in the majority of workers and adult students, and this is particularly visible trough their writing. This paper investigates how critical thinking and communication skills are currently developed in Higher Education environments through use of AI tools at postgraduate levels. It analyses the use of a branch of AI namely Machine Learning and Big Data and of Neural Network Analysis. It also examines the potential effect the acquisition of these skills through AI tools and what kind of effects this has on employability This paper will draw information from researchers and studies both at national (Italy & UK) and international level in Higher Education. The issues associated with the development and use of one specific AI tool Edulai, will be examined in details. Finally comparisons will be also made between these tools and the more recent phenomenon of Chat GPT and forthcomings and drawbacks will be analysed.

**Keywords :** critical thinking, artificial intelligence, higher education, soft skills, chat GPT **Conference Title :** ICAIE 2023 : International Conference on Artificial Intelligence in Education

**Conference Location :** Florence, Italy **Conference Dates :** May 11-12, 2023