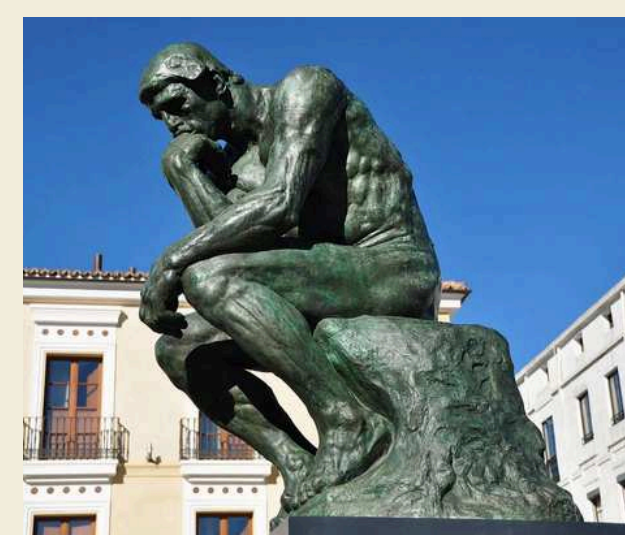# Challengues of Artificial Intelligence for higher education in Spain

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From AI Bing Image generator

The thinker by Rodin, from Wikipedia

Basis: The emergence of Artificial Intelligence (AI) last year has significant implications for higher education. During the 2023/24 academic year, we developed a teaching innovation project, and we present its main results in this poster. The Project focused on analyzing the potential use of AI as a tool for fraud, and base on these results, we assessed both the possible adaptation to this reality and its incorporation into teaching.

We have been able to identify three basic positions of teachers regarding the emergence of Artificial Intelligence:

Hostility

Rejection of the use of this technology and advocacy for traditional learning models.

Caution

Our position. It involves a concrete analysis of each area of knowledge and the capabilities and limitations of AI in each of them.

Optimism

Excessively optimistic positions are common, seeing AI as a "revolution" and the destruction of jobs.

OUR PROJECT is result of a teaching innovation project, which consisted of verifying the response capability in continuous assessment activities that students carried out at home. The accuracy decreases with the academic level and the practical nature of the exercises. It is possible to adapt the activities to make the use of AI irrelevant.

Key findings by theme.

Academic fraud:

- It is possible to adapt learning activities to AI so that its use becomes irrelevant.
- It is possible to detect fraudulent use of AI (presence of hallucinations).

Limitations of AI:

- Significant limitations of AI temper frequent optimism.
- Hallucinations: Fabricated information generated by AI pose the primary risk of its use. They raise concerns about usage risks.
- Specific limitations vary depending on the AI analyzed and from each scientific field

Incorporation of AI into teaching:

- Current AI limitations hinder its widespread adoption in higher education.
- AI integration in teaching requires critical implementation under expert supervision (due to hallucinations).
- Educators need to understand AI's capabilities and limitations within their domains.
- New competencies linked to AI are emerging. Their inclusion in higher education is needed to prepare professionals for future workmarket.

Educational model:

- AI has the potential to modify the educational system in the future (currently, failures are excessive). This affects memorization-based systems that persist in some educational systems (like Spain).
- Its gradual integration into higher education is essential to adapt future professionals to a market where AI is a readily available tool.
- It is not possible to establish universal criteria for use and risk, as it depends on each field of knowledge.