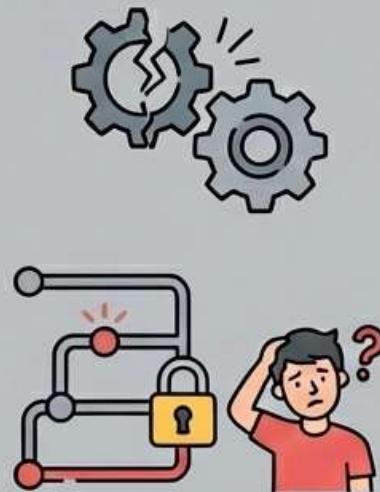


# Smart leveling: an AI-driven adaptive learning strategy in higher education.

Aldape-Valdes, P., Rincon-Flores, E. G., Castano, L., & Guerrero, S. – RIED-29(1).

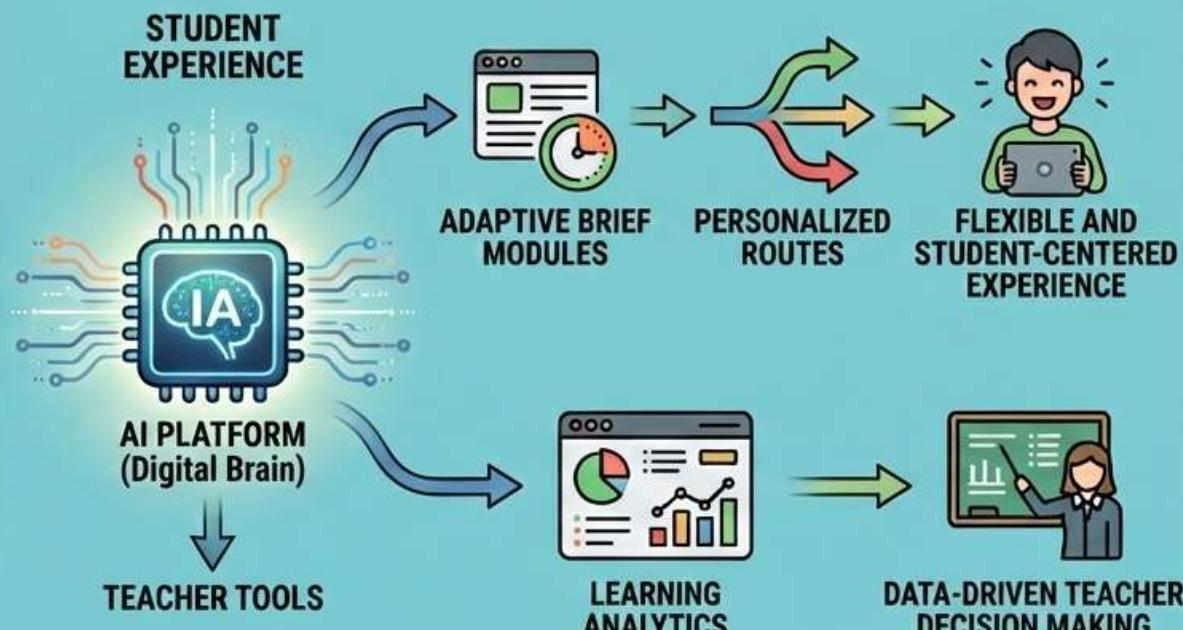
## THE CHALLENGE: ACADEMIC LEVELING (STEM) AND TRADITIONAL APPROACH



Challenge intensified after confinement, crucial in STEM disciplines.

Traditional remedial courses:  
Rigid, not adapted, limited results.

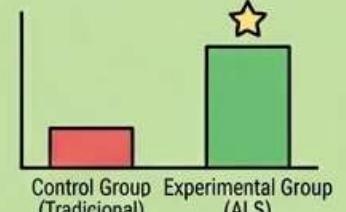
## THE SOLUTION: ADAPTIVE LEARNING STRATEGY (ALS) WITH AI



Quasi-experimental & Mixed Design (QUAN > QUAL).  
Sample: 1,309 students (First year, Mexico).

## EVIDENCE: IMPACT AND VALUATION

### ACADEMIC PERFORMANCE (QUAN)



Statistically significant differences in favor of the experimental group.

### VALUATION OF THE EXPERIENCE (QUAL)



Positive evaluation from Students and Professors in terms of utility and experience.

**Conclusion:** An adaptive, comprehensive, and AI-mediated strategy is an effective alternative to traditional remedial methods for academic leveling, offering substantial advantages.