1 - Pregraduate Education

PO-001 - (23786) - INNOVATIVE PEDAGOGICAL STRATEGIES TO ENHANCE LEARNING IN BIOMEDICAL SCIENCES

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None.

Traditional teaching methods, while foundational, may not fully support long-term knowledge retention. To address this, we integrated evidence-based pedagogical tools—including flashcards, anatomical and histological mind maps, and junior teaching assistants—into the Anatomy and Histology module of a Medicinal Chemistry degree.

We analysed the mean grades (0–100%) of students attending the module from the academic year 2021/2022 (before the full implementation of these pedagogical tools) to the academic year 2023/2024. Additionally, a survey was conducted among students enrolled in the module in 2023/2024, with responses received from half of the cohort (n = 11).

Our results showed that, in the academic year 2021/2022, the mean grade was 50.4%, 56.8% in 2022/2023, and 60.8% in 2023/2024. In the survey, 84.6% of respondents identified flashcards as a highly effective study tool for enhancing learning outcomes. 61.5% reported that anatomical mind maps positively contributed to their knowledge acquisition. However, a smaller proportion (53.8%) considered histological mind maps relevant to their understanding of the subject. All students (100%) acknowledged the valuable contribution of instructors to their learning, although only a minority (15.4%) indicated that they would find it beneficial to approach instructors outside class hours for clarification.

Our findings demonstrate a progressive increase (exceeding 10%) in students' final marks over two academic years, highlighting the significant impact of flashcards and spaced revision on academic performance. These results underscore the importance of innovative pedagogical tools in supporting students' effective comprehension and knowledge retention.

Palavras-chave : Pedagogical Strategies, Anatomy and Histology Education, Knowledge Retention