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## Results of an educational innovation project on clinical case-based learning in the Anaesthesia and Resuscitation subject

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### Background

Problem- and case-based learning enhances students' reasoning skills, autonomy and commitment. At the same time, active methodologies such as **teamwork** and **oral case presentations** foster communication and synthesis skills, which are essential for healthcare practice.

### Aims & Objectives

Promote active, student-centred learning by the resolution of **clinical cases** in groups and the creation of an **infographic**, in the compulsory **2nd year Dentistry module on Anaesthesia and Resuscitation**.

Specifically, to foster the student's **reflection and critical thinking**, to encourage evidence-based decisions, and to promote teamwork and communication skills.

### Results

A total of **120 students** divided into 26 working groups submitted their written reports.

Achieved an average score of **9.05 for their reports** and **9.21 for their oral presentations**.

Ninety students (75%) completed the satisfaction survey in which over 85% of them agreed or strongly agreed with all the questions.



- **Deep understanding of the subject matter**
- **Improved integration of theory and practice**
- **Independent and collaborative learning**
- **Development of clinical reasoning**
- **Communication skills**

### Materials & Methods

During the 2025–2026 academic year, an active learning methodology was implemented, based on **group-based resolution of one clinical case** each

**Vasovagal syncope**  
**Anxiety syndrome**  
**A myocardial infarction**  
**Seizure**

**Anaphilactic shock**  
**Hypoglycaemia**  
**Respiratory failure**

**Tasks:** written report and oral presentation (infographic)

**Evaluation methods:** Rubrics and satisfaction survey (Likert scale)

Diff. diagnosis / Therapeutic decisions / Scientific evidence / Clarity / Use of resources

### Discussion & Conclusions

The use of active methodologies based on the analysis of clinical cases could facilitate the **application of knowledge in real-world contexts** and the development of **clinical reasoning**.

The creation of infographics and oral presentations, alongside the search for up-to-date scientific evidence, may have contributed to critical thinking and independent learning.

The high level of student satisfaction indicates that the proposed methodology has been well received.

### References

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