The aim of this study is to assess if asynchronous, limited-facilitation cases are a potentially viable method to enhance dental students' perceived understanding of pediatric dentistry.

The baseline and immediate post-survey results were summarized and Wilcoxon rank sum tests were used to compare matching questions with a 5% significance level. The results are pending.

Project Aims

Using Asynchronous, Limited-facilitation Case-based Exercises to Enhance Dental Student Learning

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BACKGROUND

- Case-based learning (CBL) promotes deeper learning
- Prepares students for clinical practice through guided, controlled cases
- Knowledge benefits
- Transforms novice thinking patterns to expert level thinking patterns
- Structures case narratives in a logical, sequential order

MATERIALS and METHODS

- Cases constructed in Microsoft PowerPoint 2010
- Relevant medical, dental and social history
- Radiographs, photographs as available, extraoral and intraoral descriptions
- Questions relevant to the learning objectives for each case

RESULTS

- 229 students participated in the baseline pre-survey (BPS), case exercises and immediate post-survey (IPS)
- 120 D3a completed Cases 1-6
- 109 D4s completed Case 10 (Data not shown)
- 60 D4s completed the 6-month post-survey (6MPS)

STUDENT FEEDBACK

- Positive
  - "This case was really long and I was distracted by switching ‘topics’.
  - "Too long, and too hard."
  - "This was a really useful case, but a bit too long."
  - "Not having a crazy medical history helped isolate the learning to just a few points to focus on which I appreciated."
  - "Overall, I think these cases were helpful and very informative."

- Feedback/Suggestions
  - "I would like more comprehension of knowledge."
  - "I was confused over the case. It showed me to see what the doctor’s thought process."
  - "This was a really useful case, but a bit too long."
  - "Review the cases soon after we do them in clinic."

REFERENCE


TABLES AND FIGURES

- Q1 Q5 Q6 Q9 Q32 Q33 Q34 Q35 Q36 Q37
- D3 Case 8- Survey Responses
- D3 Case 6- Survey Responses
- D3 Case 1- Survey Responses
- D3 Case 5- Survey Responses
- D3 Case 3- Survey Responses
- D3 Case 7- Survey Responses
- D3 Case 4- Survey Responses

- Data gathered from patient cases seen in resident and predoctoral clinics
- Each case: Relevant, medical, dental and social history
- Radiographs, photographs as available, extraoral and intraoral descriptions
- Questions relevant to the learning objectives for each case
- Physiology, pharmacology, anatomy, pathology, radiology, diagnosis, treatment planning, anticipatory guidance and when to refer

- All differences significant (p<0.05) except when denoted by ◊ ◊