

Student Perceptions on a Flipped Classroom Model for Pediatric Clerkship Didactics

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INTRODUCTION

How do students feel about flipped classroom didactic sessions during their third year Pediatric Clerkship?

- Flipped classroom methodology is an adult learning pedagogical approach where classroom time is used for integrated active learning and discussion after completion of pre-session work.¹
- The flipped classroom model has been described as well suited for medical education, as the pre-class assignment can create a framework of core knowledge, and the active learning exercise can then embed the knowledge in an interactive, compelling, and engaging format.²
- During the third year Pediatric Clerkship, students participate in four weekly case-based didactic sessions that last 2.5 hours. Students must complete pre-work prior to the session.

MATERIALS & METHODS

- Anonymous student evaluations of the Pediatric Clerkship didactic sessions from the past three years were gathered and consolidated.
- From these evaluations, the open-ended response sections from the sessions using a flipped classroom model were examined by three separate reviewers who analyzed and coded the data independently using a thematic analysis approach.
- Themes were established by identifying patterns among the codes generated and via consensus among the reviewers.
- Total surveys reviewed = 468

RESULTS

THEMES DERIVED FROM QUALITATIVE REVIEW:

Engaging

- “Enjoyed the format of this lecture. The round table discussion regarding the various topics was engaging and helped us think of broad differentials for common situations.”

Interactive

- “This format of discussion and interactive learning was extremely helpful and helped to not only retain the information but also really think about both what needs to be done with each stage of the child’s visits and why.”

Informative

- “This lecture was extremely useful and well organized. The case based presentation of basic and essential pediatric content was appreciated.”

Effective

- “I thought the didactic format and execution was an effective and comfortable way to review the topics and discuss.”

Efficient

- “Very to the point but packed with useful information! Excellent! Learned a lot!”

PRE-WORK PERCEPTIONS:

- “I like the format in answering questions ahead of time and then reviewing them together for key takeaways. It allows for more material to be covered.”
- “I really liked the prep work that we got to do beforehand. It was a lot and more time consuming than I thought it would be, but I like the opportunity to be able to sit down and really think through and look up what these patients might have.”

CONCERNS:

Session Leadership

- “Given varying difficulty of cases, felt a little odd to assign each case to one student, perhaps establish an order/rotation and ask students in order?”
- “...having one person present each case makes it difficult to stay engaged for the remainder of the cases that I didn’t present...”

Time Management

- “...We spent a lot of time on some of the earlier cases and did not devote as much time to the later ones. It would be great if the session was timed in a way where each case got the same enough time.”

Extending Knowledge

- “In general, I wish that there had been a little bit more content on the slides that wasn’t directly covered in the prep work – it just felt a little redundant to have to do a pretty lengthy prep assignment just to basically have the exact same things covered...I will add a disclaimer the prep assignment was actually super helpful...”

CONCLUSION

- The flipped classroom model appears to be perceived positively from third year medical students during their Pediatric Clerkship rotation.
- Students found the sessions to be an effective, engaging way of applying knowledge previously studied/reviewed prior to the in-person session.
- There was variability in how lecturers led the flipped classroom sessions with mixed reviews on what was most helpful.
- We can further enhance our didactic sessions by having presenters be more attentive to time management and be prepared to extend activities and conversations from the pre-work information delivery models.

NEXT STEPS

Using this data, we hope to:

- Directly survey student experiences on the flipped classroom model to further evaluate compared with other lecture styles.
- Assess lecturer presentation format and variations that may be positive or negative.
- Further evaluate what aspects of pre-work are seen as positive and which may have opportunities for improvement.
- Map case-based lectures to objectives from pre-work and objectives for presenter to better extend knowledge.

REFERENCES & ACKNOWLEDGEMENTS

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