Anticipation-Facilitated Engagement in Learning

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GOALS

- This project aims to establish and demonstrate practical suggestions on how to optimize learning experience for residents and students through the implementation of anticipatory approach.

INTRODUCTION

- Adult education involves active learning and structuring knowledge processes. **Interactivity and engagement** are the essential components for active learning in groups
- Activities like retrieving information, correlating, justifying, applying, or using the previously mastered material to facilitate building new knowledge accelerate engagement and enhance active learning. These activities are typically encouraged by the moderators in group learning sessions or lectures
- Different engagement-enhancing approaches are available: the simplest and the most used approach is based on asking individual students direct questions. This method may create a stressful environment that impede best response and learning. Also, it could be demanding for teachers due to time constraints
- Moreover, varying educational skills of faculty members may lead to inadequate use of these active learning enhancing activities

METHOD

- The approach involves encouraging, simulating, and prompting learners to guide the learning activity through anticipating and constructing the next component of the content.
- Instead of passively receiving information, learners will actively examine content, verify, and build on to move to the next level.
- Learners use discussion platforms individually or in groups to actively structure their anticipated next component.
- We recommend using short educational prompts to stimulate residents and students to anticipate learning points. Phrases like “this is due to?”; “so what?”; “what comes next?”, “this implicates that …?”; can be easily and efficiently used.

EXAMPLE:

Faculty:

— The critical view of safety during lap cholecystectomy, after defining the borders and discussing the importance, what do you need to know more about; how to justify its importance? apply the concept in the OR?

Residents’ input:

— Knowing how to achieve critical view in the OR
— Learning technical pitfalls or difficulties
— Avoiding complications

RESULTS

- The anticipatory learning approach improves active learning, student engagement and their active participation.
- It helps learners anticipate new educational materials or other relevant content supplied via a digital platform that students may use during lectures to facilitate adult active learning.
- This approach also works well for student-directed independent learning (including online learning). The prompts stimulate students to anticipate next learning points, results, applications, correlations, connections, justifications, or conclusions to enhance engagement in thinking and proactive learning, while maintaining a relaxed environment.

DISCUSSION

- **Interactive learning** maximizes learning efficiency. It is focused on residents’ or students’ needs and turns them into active participants in various teaching activities: lectures or discussions. It is proven that active participation improves the delivery of core knowledge and helps to clarify difficult concepts.
- Educational technology can improve interactivity and foster a relaxed atmosphere. Polling with the help of audience response systems and quiz platforms are good examples of technologies that could be easily embedded into medical training.

CONCLUSION

- The simple and practical approach of anticipation-facilitated engagement in learning through intermittent short prompts helps improve attention, simplify interactive adult learning environment and outcomes.
- In our quest to improve the culture of surgical training, we believe that the interactive learning tips we suggest for help trainees master knowledge and feel support from the faculty.