

# Just Dance! Teaching Clinical Reasoning Using Innovative Teaching Methods

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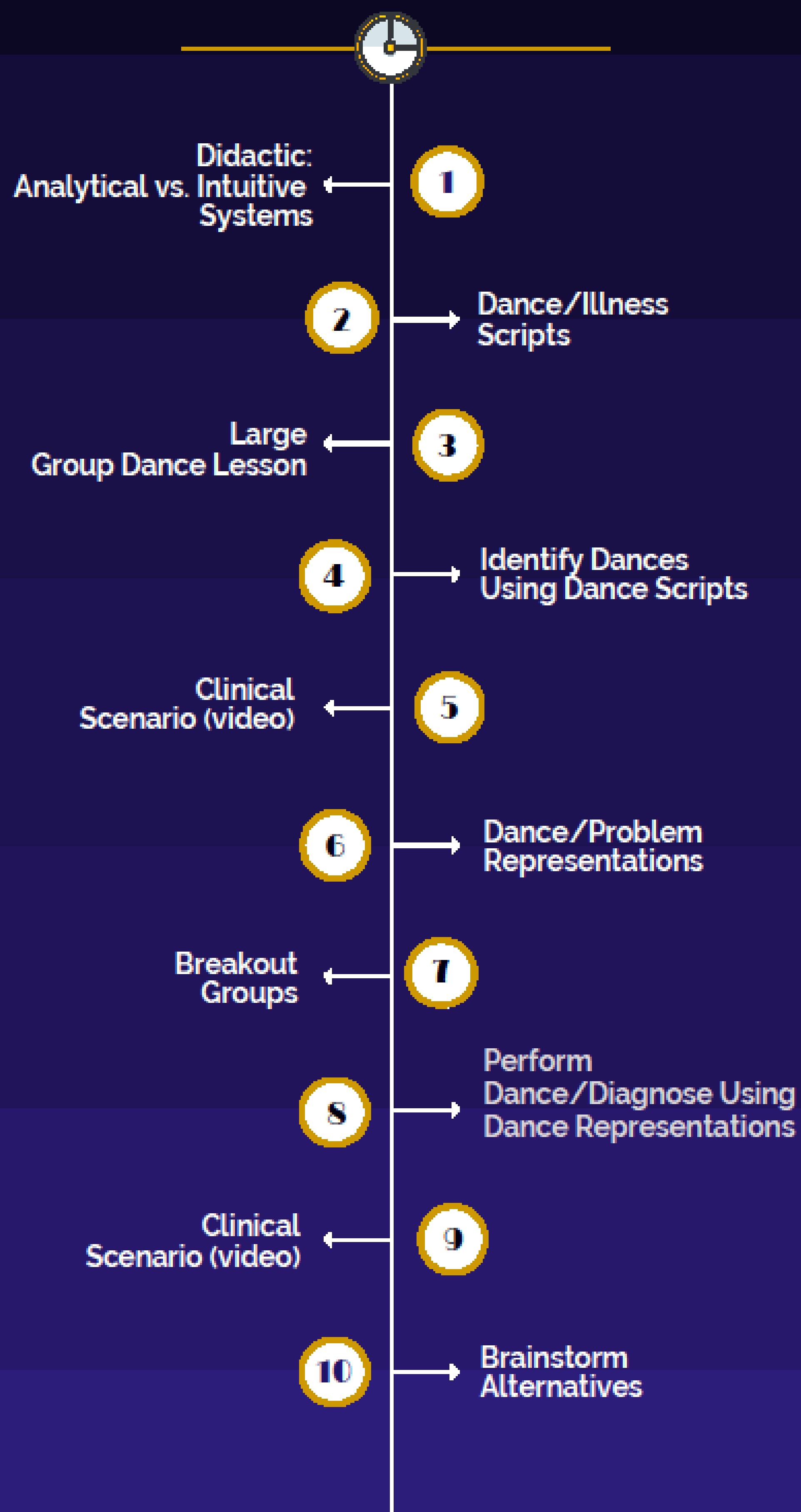
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## OBJECTIVES

- Develop and implement a workshop to teach educational leaders the intuitive system of clinical reasoning using both clinical and non-clinical methods
- Assess participants' familiarity, comfort, and frequency of teaching intuitive reasoning before and after workshop attendance
- Facilitate participants' ability to design lesson plans to teach intuitive reasoning using additional non-clinical methods

## METHODOLOGY

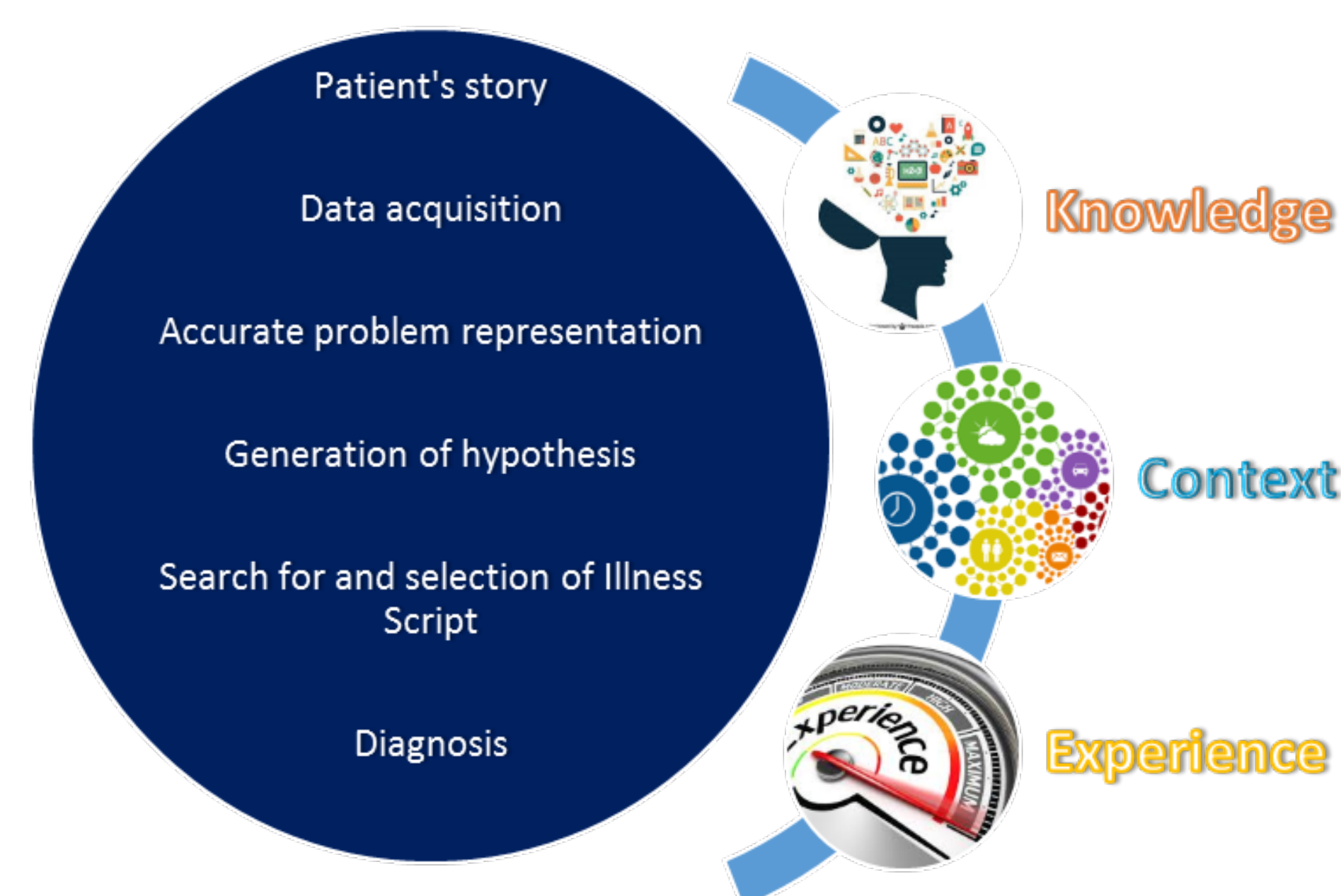
### WORKSHOP STRUCTURE



## Dual Reasoning System

**Analytical System** VS **Intuitive System**  
 "Think it through" VS "Gut feeling"  
 Data collection and analysis VS Pattern recognition  
 Time-consuming VS Rapid

Key elements of the clinical diagnostic reasoning process

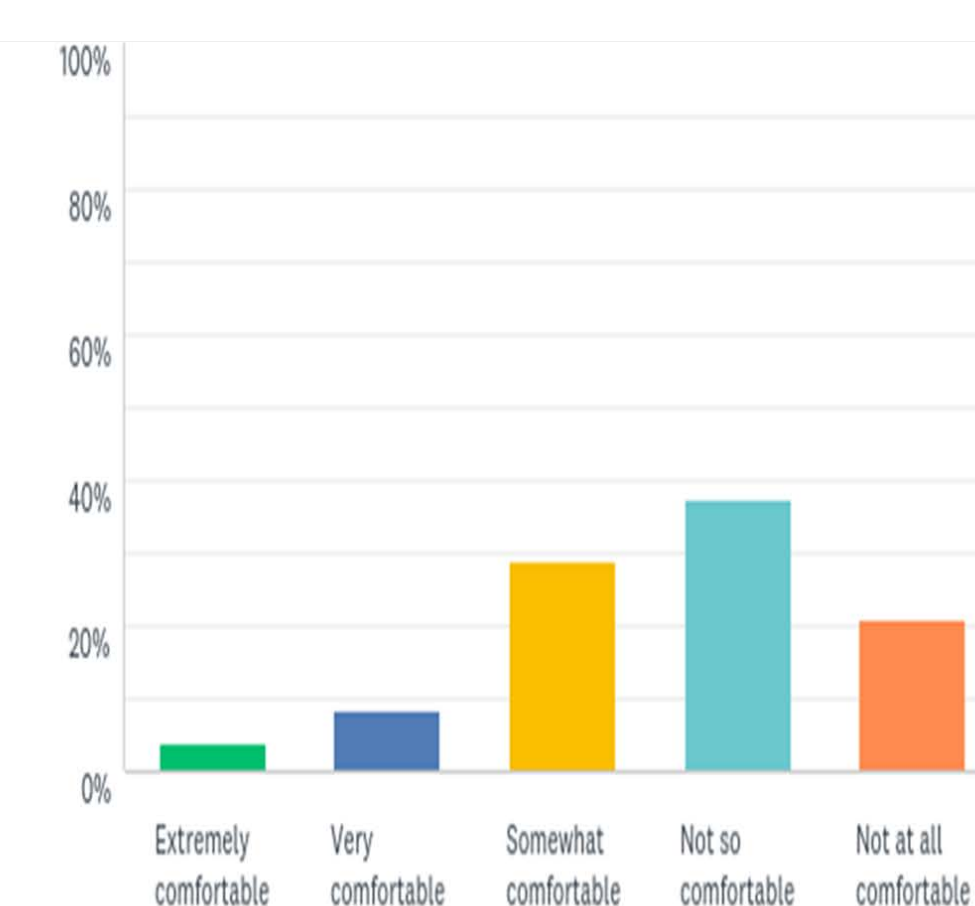


## RESULTS

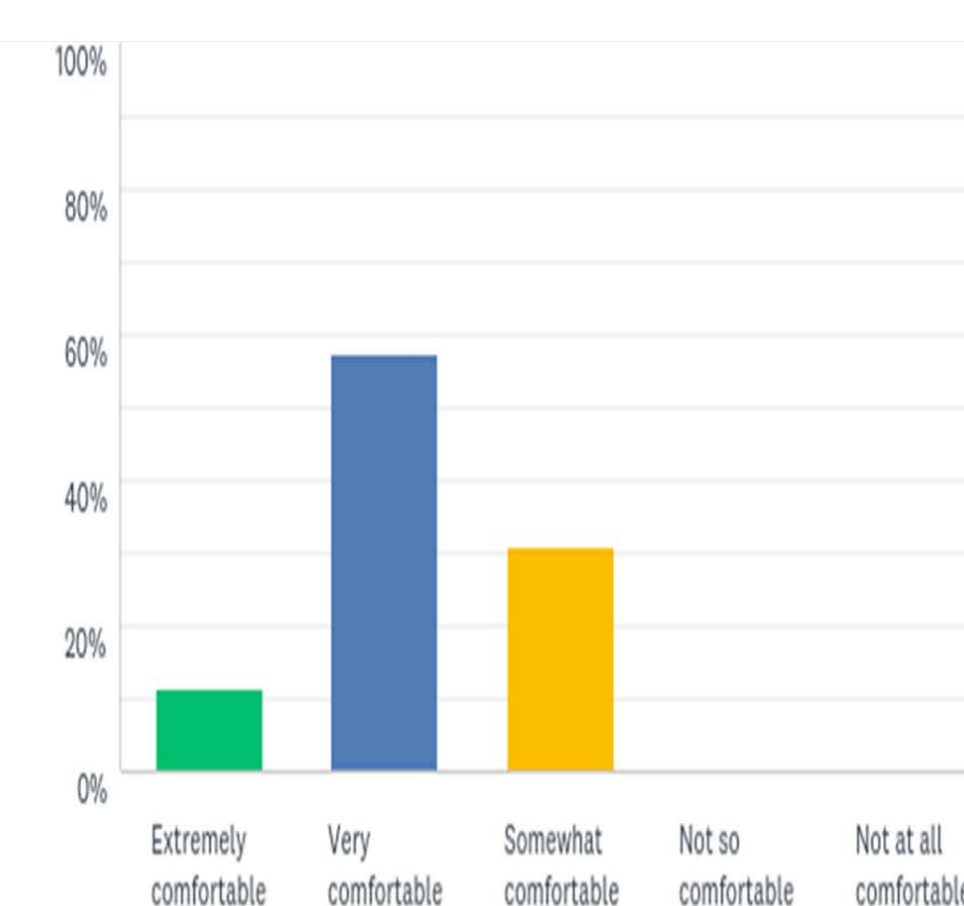
- The workshop was attended by 26 faculty and chief residents in March 2019.
- Comfort in teaching intuitive reasoning to students significantly improved following the workshop ( $P < 0.001$ , mean  $\pm$  standard deviation:  $2.04 \pm 0.53$ ) compared to before the intervention ( $3.38 \pm 1.01$ ).
- Comfort teaching intuitive reasoning to other faculty was also significantly improved after the intervention ( $p < 0.001$ , mean  $\pm$  standard deviation:  $2.19 \pm 0.63$ ) compared to before the intervention ( $3.63 \pm 1.06$ ).

How comfortable are you teaching intuitive reasoning to other faculty?

Pre-Workshop Survey

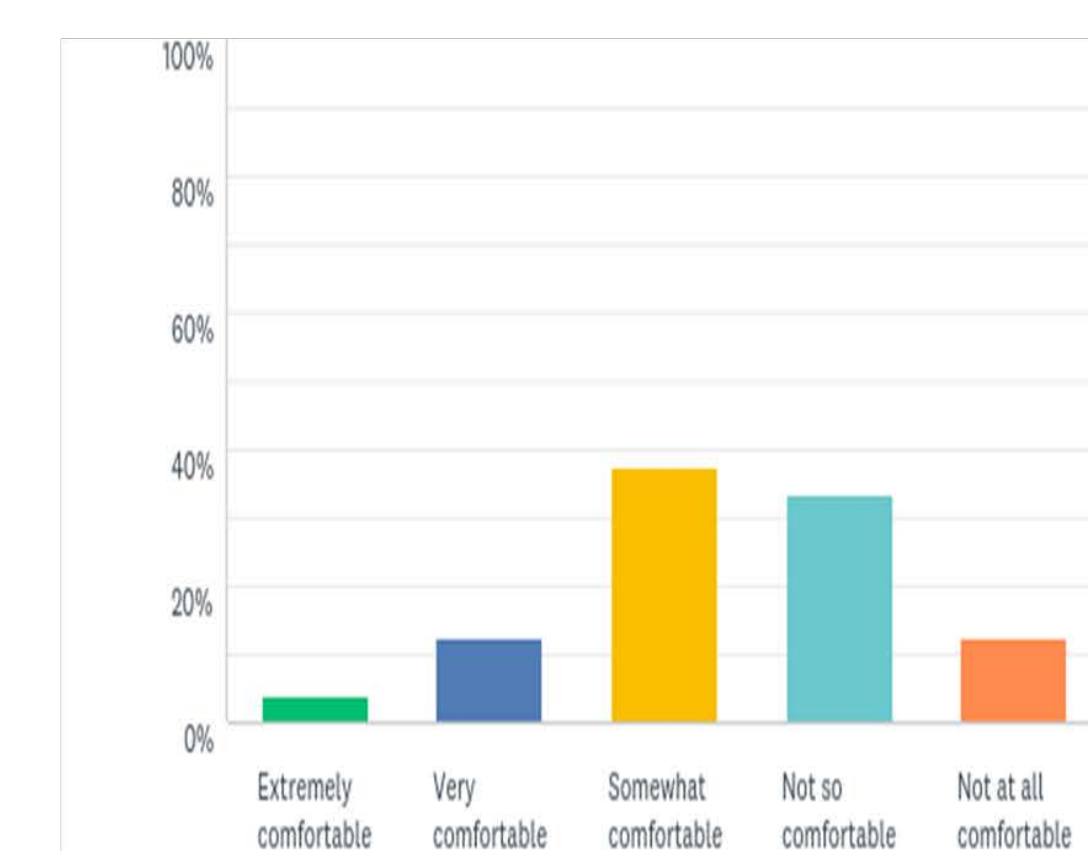


Post-Workshop Survey

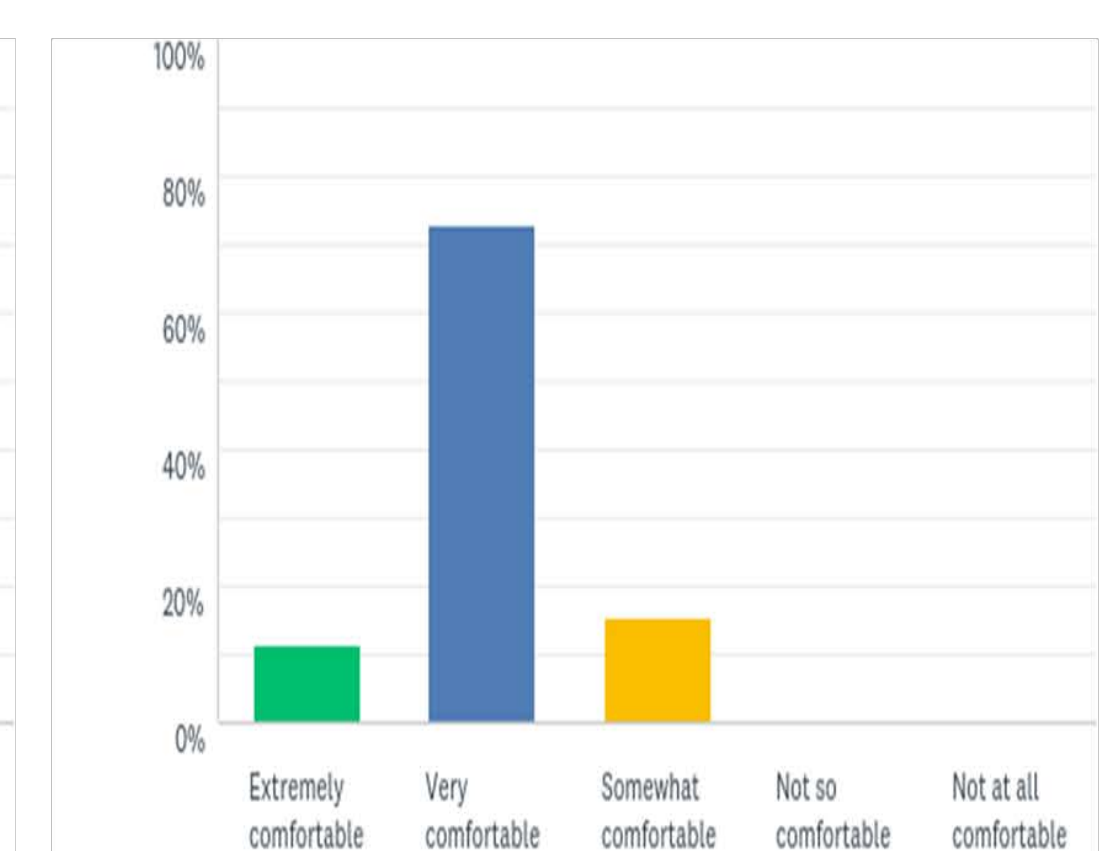


How comfortable are you teaching intuitive reasoning to your students?

Pre-Workshop Survey

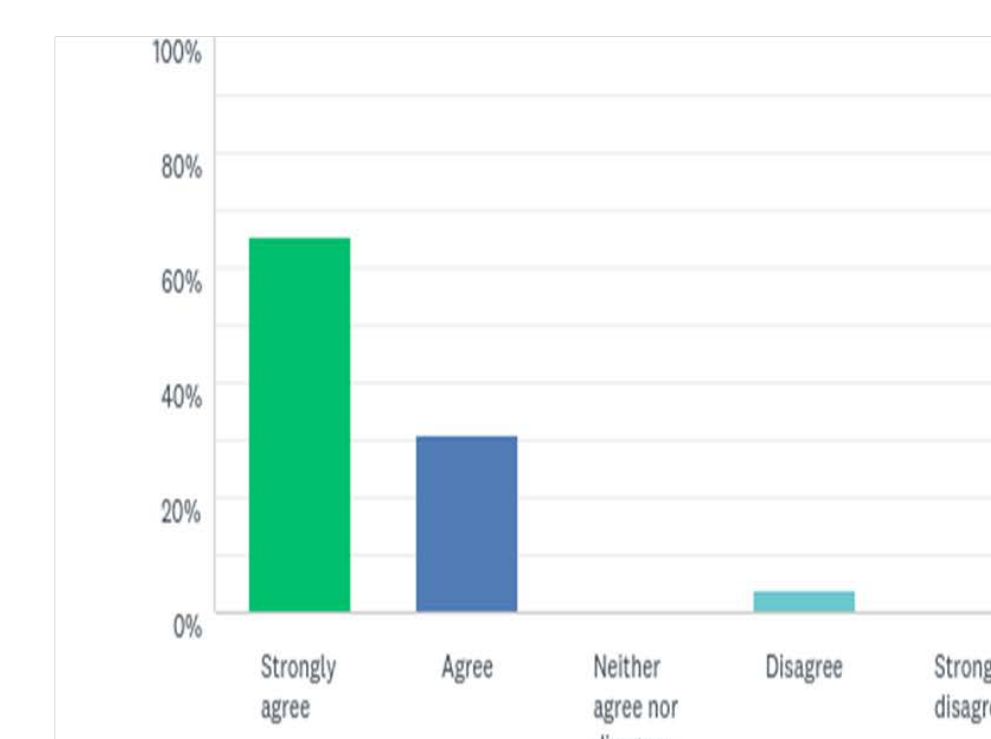


Post-Workshop Survey

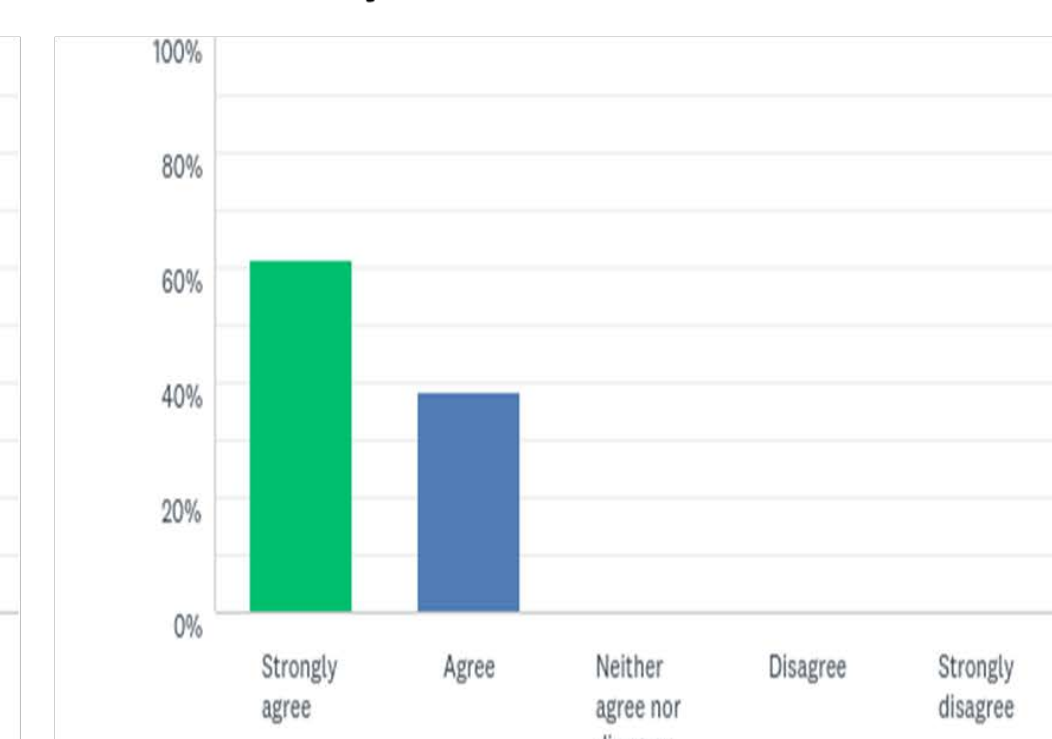


Post-Workshop Survey Results

The workshop provided new concepts.



I would recommend the workshop to other faculty.



## CONCLUSION

- Teaching clinical reasoning is a complex skill in which many educators are not trained. This is a key educator skill, however, as it is being increasingly scrutinized by the Liaison Committee on Medical Education (LCME) and is an essential component of the Core Entrustable Professional Activities (EPAs) for Entering Residency Project.
- Providing educators with a framework for teaching intuitive reasoning increases their comfort level in teaching it, ultimately benefiting the learners.
- Using non-clinical methods to teach this complex skill allows educators to generalize their teaching to any group of learners, from pre-clinical students through experienced faculty, in any field, without relying on prior medical knowledge.

## FUTURE DIRECTIONS

- To evaluate long-term changes, a six-month follow-up survey will be utilized to assess participants' continued use of, and comfort with, the techniques taught in the workshop.
- Qualitative feedback from the surveys will be used to refine the workshop for future presentation and publication as an educational tool.
- Workshop will be submitted to MedEd Portal for dissemination and use by other educators