

Just in Time Teaching and Peer Assisted Learning in Enhancing the Flipped Class Room

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SUMMARY

In this curriculum innovation project, 23 Phase III Part II were tutored in Family Planning and Contraception through Just-in Time Teaching (JiTT) and conceptests based Peer assisted Learning (PAL) enabled flipped class room sessions. The intervention resulted in increased student engagement with pre- class reading assignments, better self-reflection prior of learning prior to the in- class session. The class room sessions were more aligned to learner needs, allowed for greater collaboration and active learning in class room session, that reflected in better post PAL scores. Learners expressed extremely high satisfaction with both JiTT and PAL components of the intervention, and responded favourably to their over all effect on enhancing the flipped classroom.

BACK GROUND

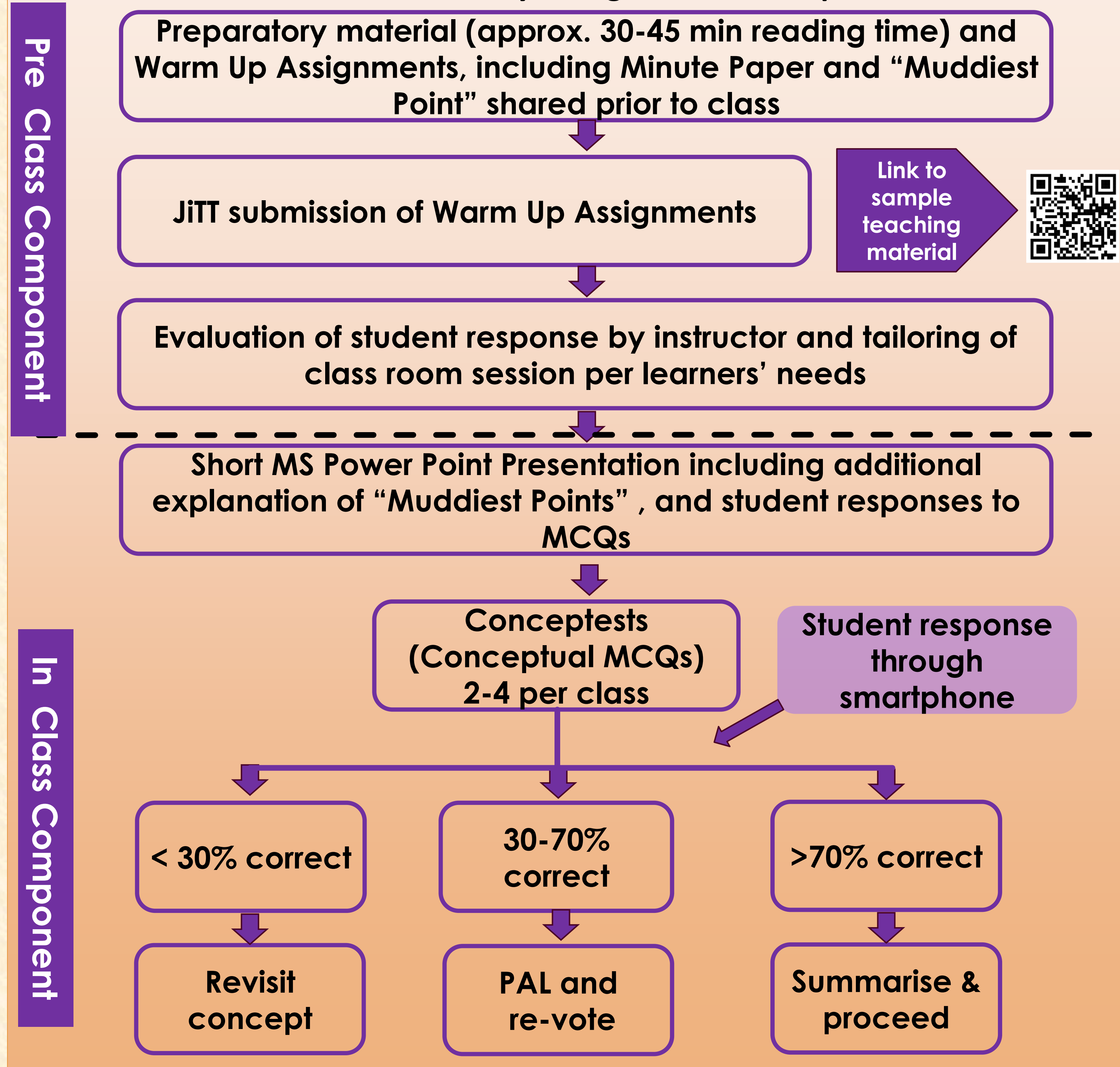
- The flipped class room allows for the use of in- class time for higher order thinking and problem solving, while basic knowledge and skills are acquired out of class.
- However, poor student engagement with pre- class assignments and lack of collaborative problem solving blunt its educational impact.
- JiTT and PAL are two interventions that can re-invigorate the flipped class room.

OBJECTIVES OF THE STUDY

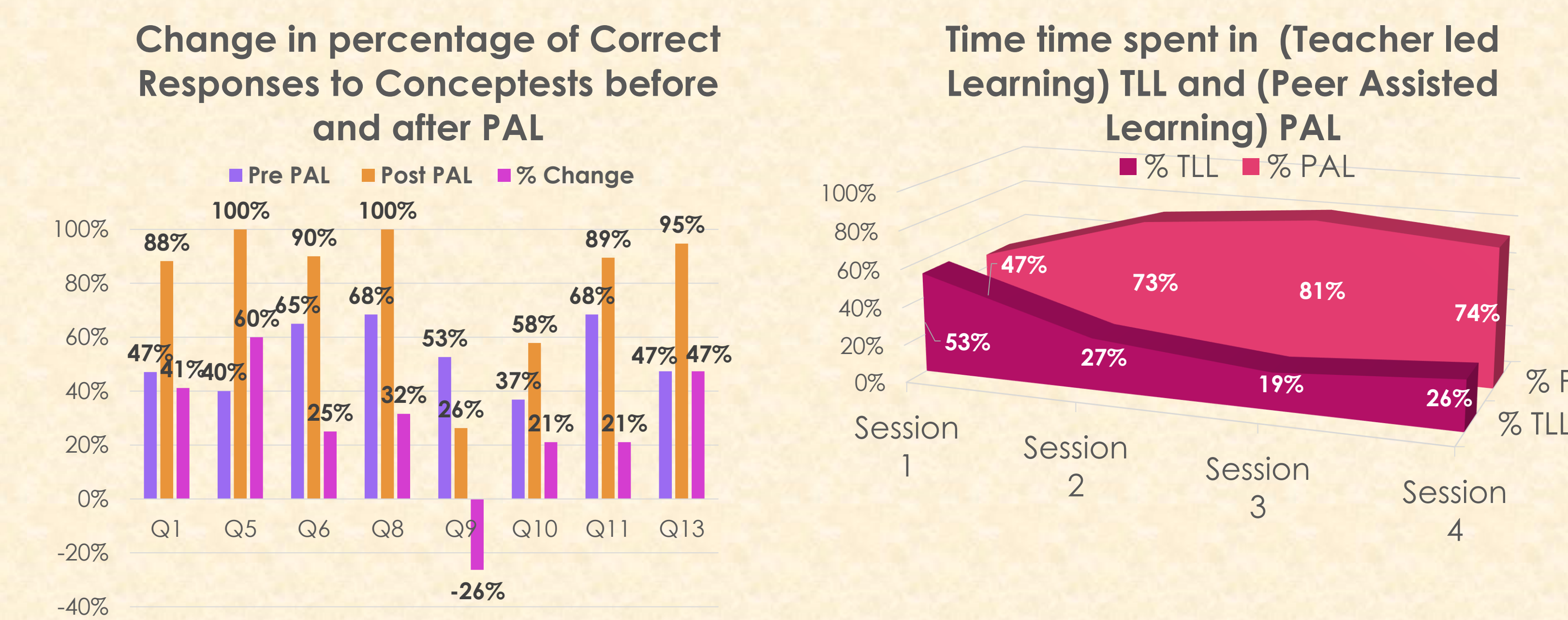
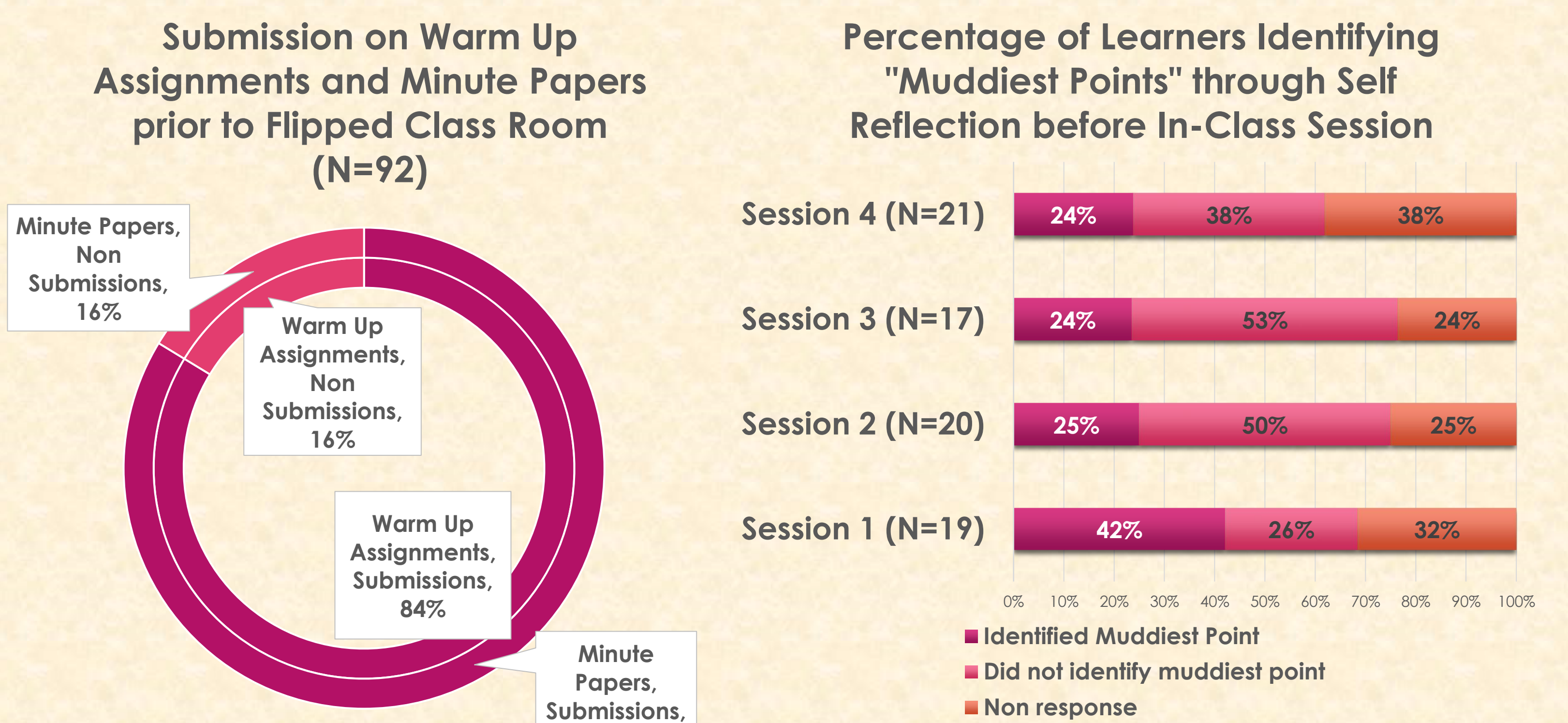
- To determine the impact of JiTT in learner engagement with pre class assignments, critical thinking, and self-reflection prior to a flipped class room session
- To determine the impact of Conceptests based PAL on learners' performance, problem solving and collaborative skills
- To determine learners' satisfaction with the JiTT- PAL Approach in the Flipped Class Room

METHODOLOGY

Study Site: Dept of OBGYN, ESIC Medical College & Hospital , Faridabad
23 Phase III Part II MBBS Students recruited for four JiTT PAL enabled Flipped Classroom Sessions on Family Planning and Contraception over 4 weeks. Student's satisfaction determined by rating- scale based questionnaire

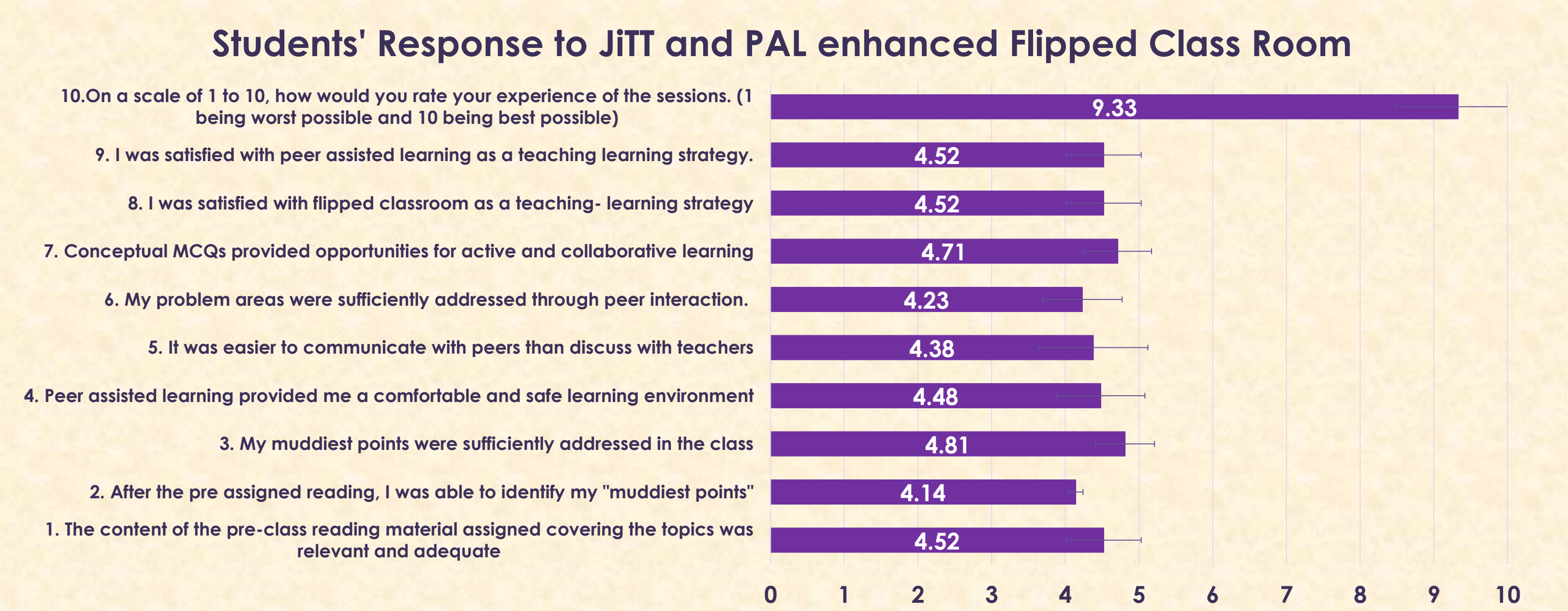


OBSERVATIONS AND RESULTS



Mean pre test scores	Mean Post test scores	P value
49.97% + 14.8%	87.21% + 10.1%	P<0.001

Average Normalised Gain → 0.75
Effect Size → 2.95



DISCUSSION

Benchmark standard	Observed outcome	Interpretation
> 70% submit warm up assignments	83.7% submitted warm up assignments	Good Learner engagement with pre-class assignment
> 70% submit Minute papers and Muddiest Points	83.7% - Minute papers 28.5% - "Muddiest Points"	Learners develop self- reflection skills. Self reflection of learning needs was lower than expected
>70% time spent in PAL	68% time spent in PAL (>74% for session 2,3 &4)	Greater Learner engagement in class
Improvement in test scores	Average normalised gain 0.75. Effect size 2.75	Improved learning through peer collaboration

Over all student satisfaction score → 9.33/10

CONCLUSION

The JiTT and Conceptests based PAL approach improves student engagement, peer collaboration, self-reflection, and critical thinking. It allows more efficient use of in- class time for higher order learning and problem solving.

REFERENCES

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