

Self-directed deep learning with a peer-to-peer challenge: evaluation of e-learning at HKUMed



BLENDED LEARNING APPROACH



Instructional
videos with
self-assessment
questions

Questions with
feedback



Interactive
Forum

Live active learning
sessions



Online Forum

Asynchronous forum
discussions on
Moodle (LMS)



Does a switch to
e-learning impact
student learning?





**What are the
main drawbacks
of e-learning?**



AIM:

Evaluate students' study process and experience in order to understand the impact of e-learning initiatives

METHODS



WHAT WE
DID...

- 1 SURFACE / DEEP LEARNING
(REVISED STUDY PROCESS
QUESTIONNAIRE, R-SPQ-2F)
- 2 LEARNING EXPERIENCE
(QUESTIONNAIRE)
- 3 LEARNING EXPERIENCE
(IN-DEPTH INTERVIEWS)



SURFACE/DEEP LEARNING



Revised Study Process
Questionnaire (R-SPQ-2F)

Start



End

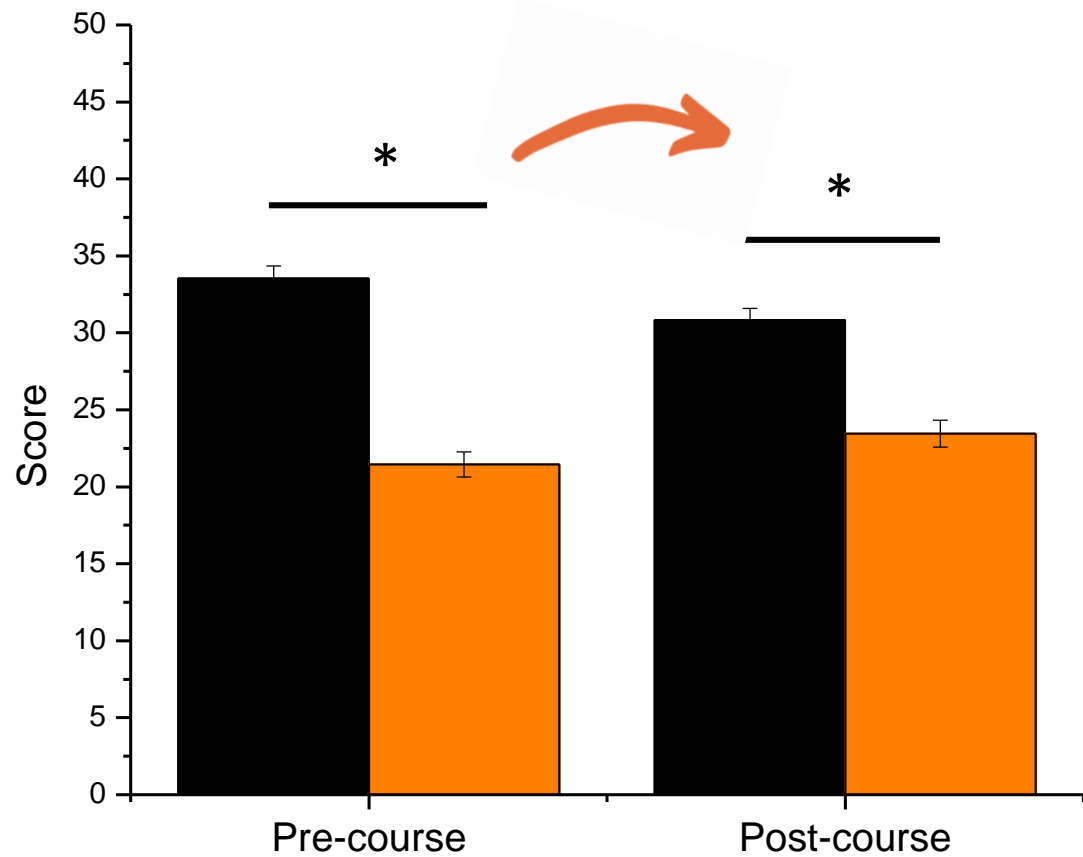
Blended Learning

*Year 1 MBBS students
(N=65)*

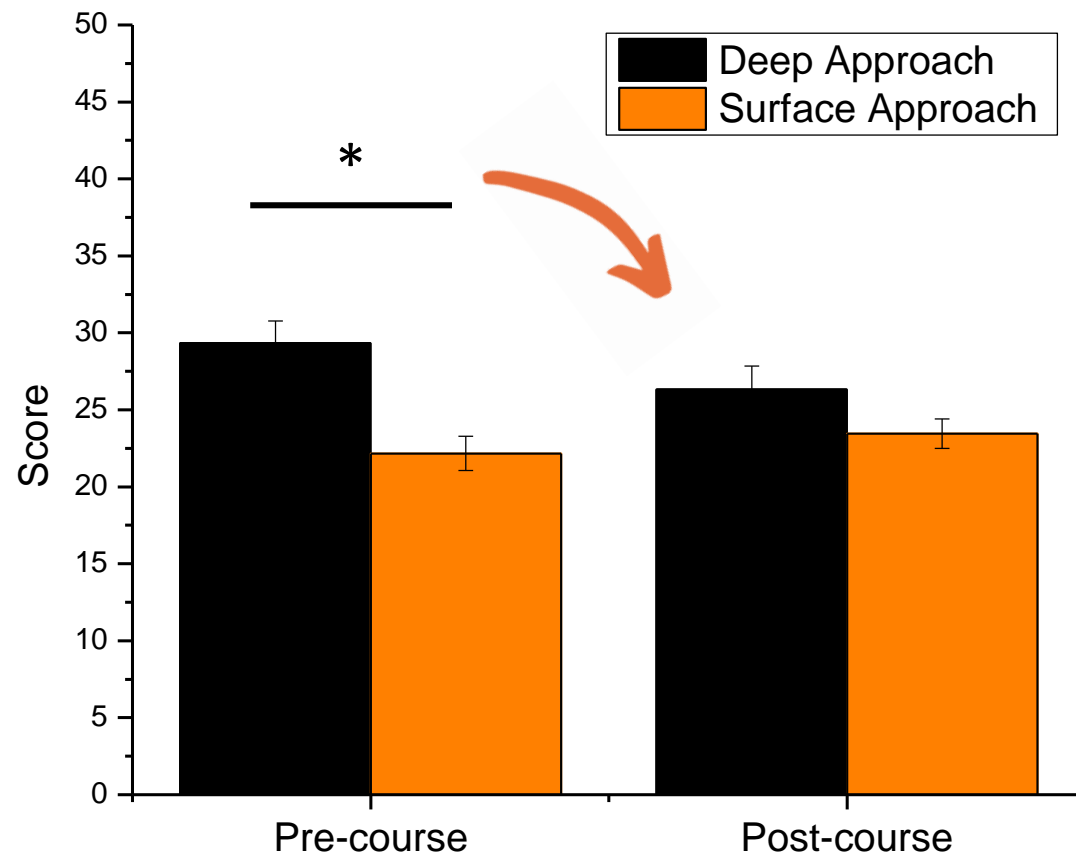
Traditional Classroom Learning

*Year 2 MBBS students
(N=24)*

Year 1 MBBS (Blended learning)



Year 2 MBBS (Traditional learning)



*P<0.005

STUDENT PERCEPTION



QUANTITATIVE
EVALUATION



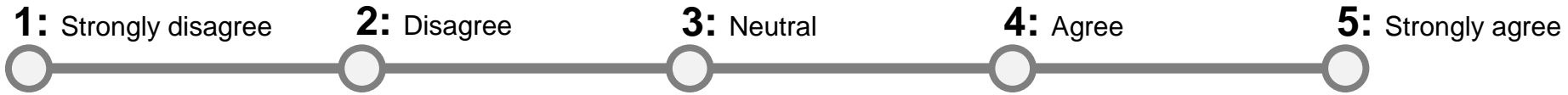
Learning Experience
Questionnaire

Blended Learning

*Year 1 MBBS students
(N=46)*

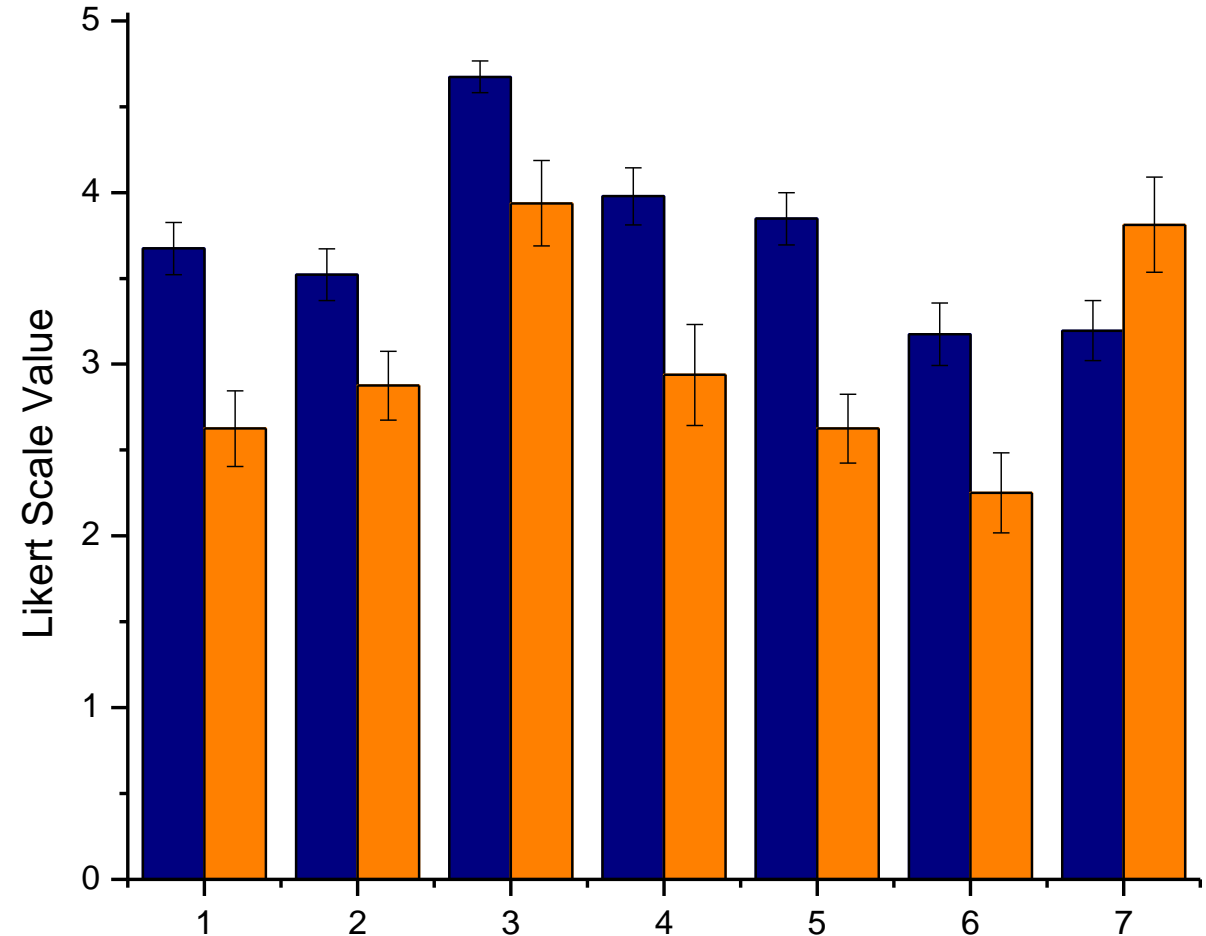
Traditional Classroom Learning

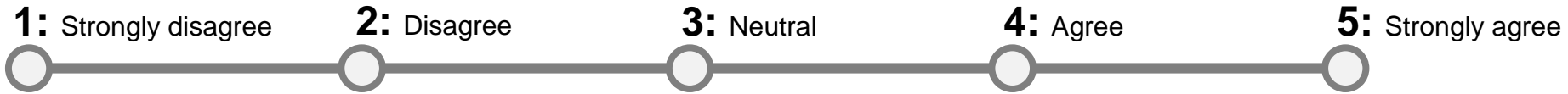
*Year 2 MBBS students
(N=16)*



Blended learning
Traditional learning

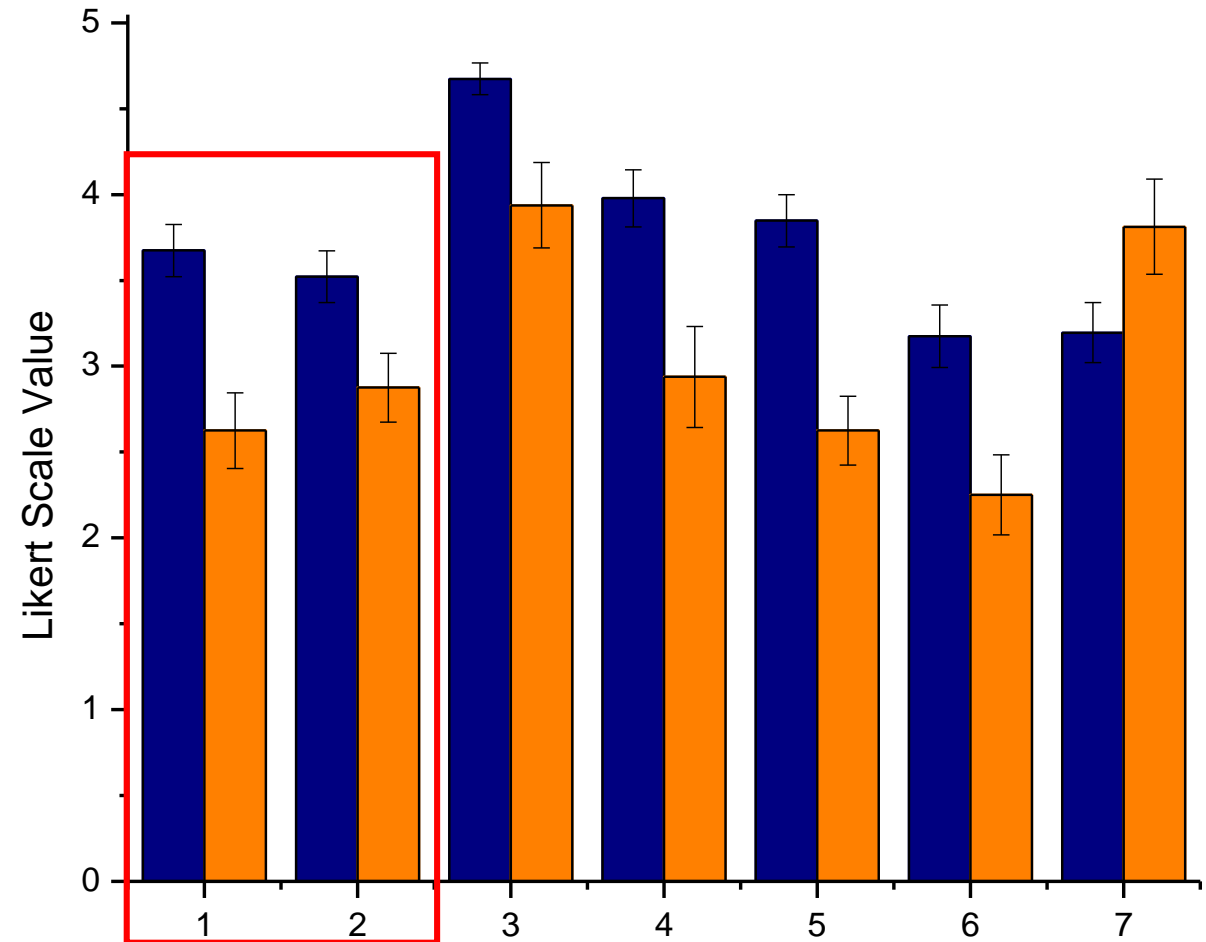
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2. Encouraged me to ask questions about issues and topics in this field.
3. Allows me to develop autonomy in learning.
4. Has a manageable workload.
5. Provides good quality feedback.
6. Provides good lecturer-student interactions.
7. Provides good student-student interactions.

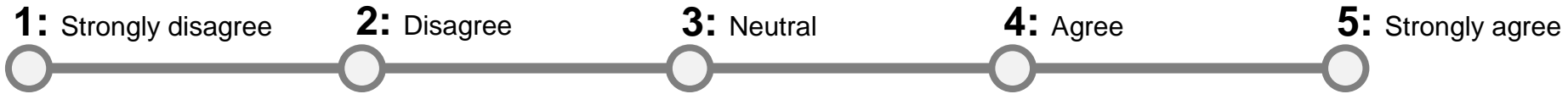




Blended learning
Traditional learning

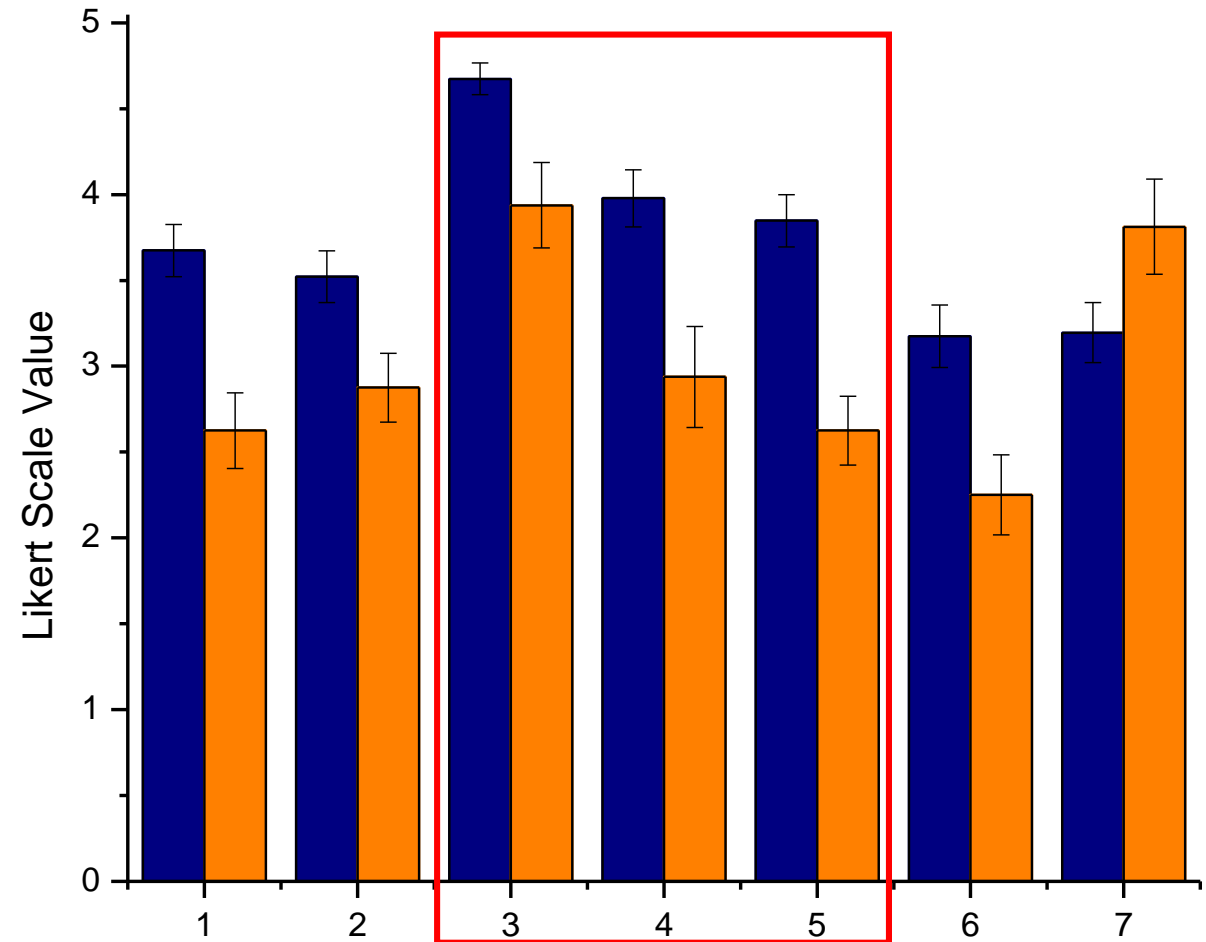
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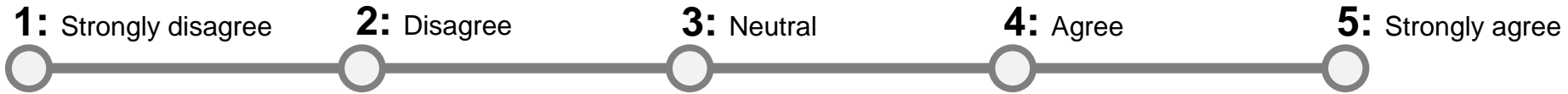




Blended learning
Traditional learning

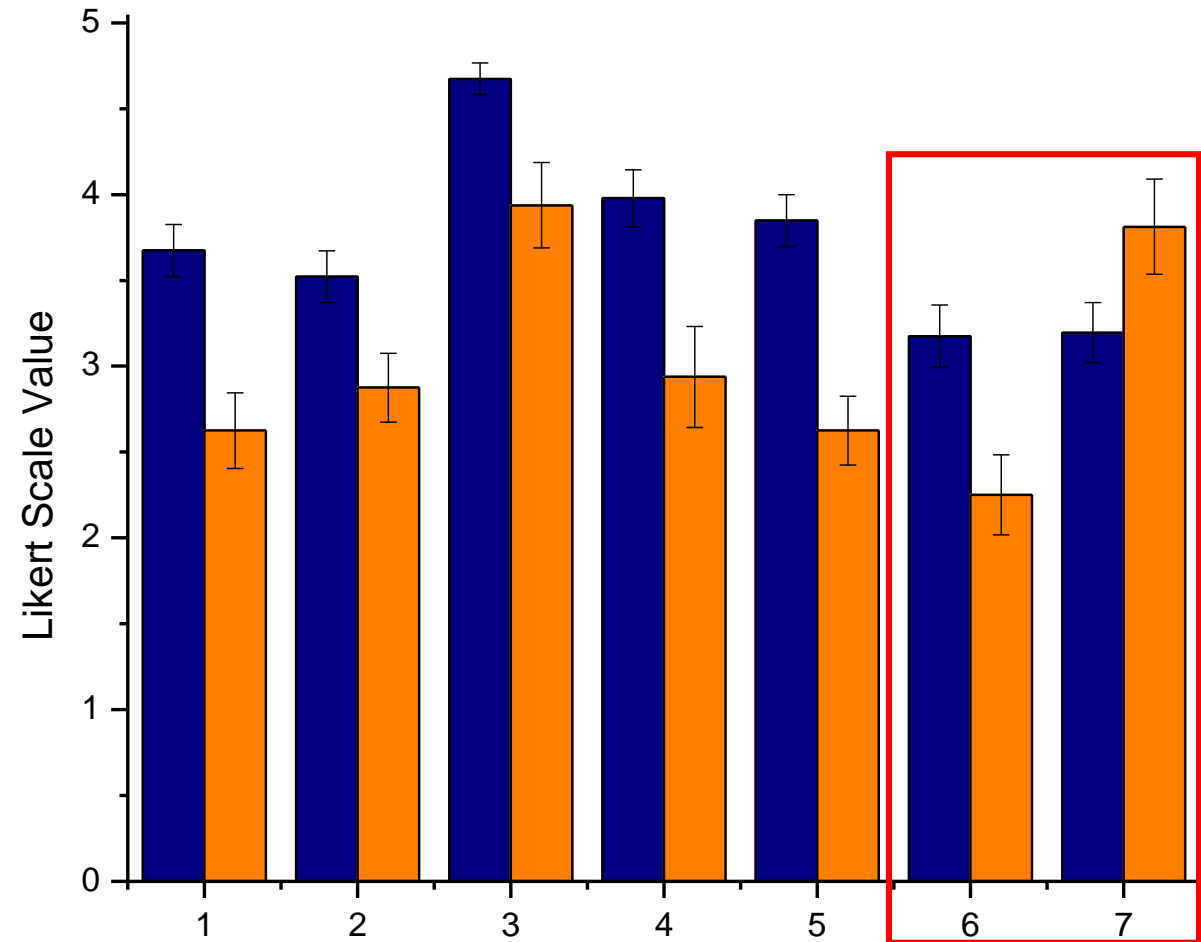
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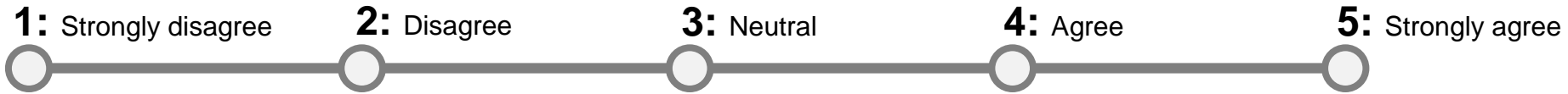




Blended learning
Traditional learning

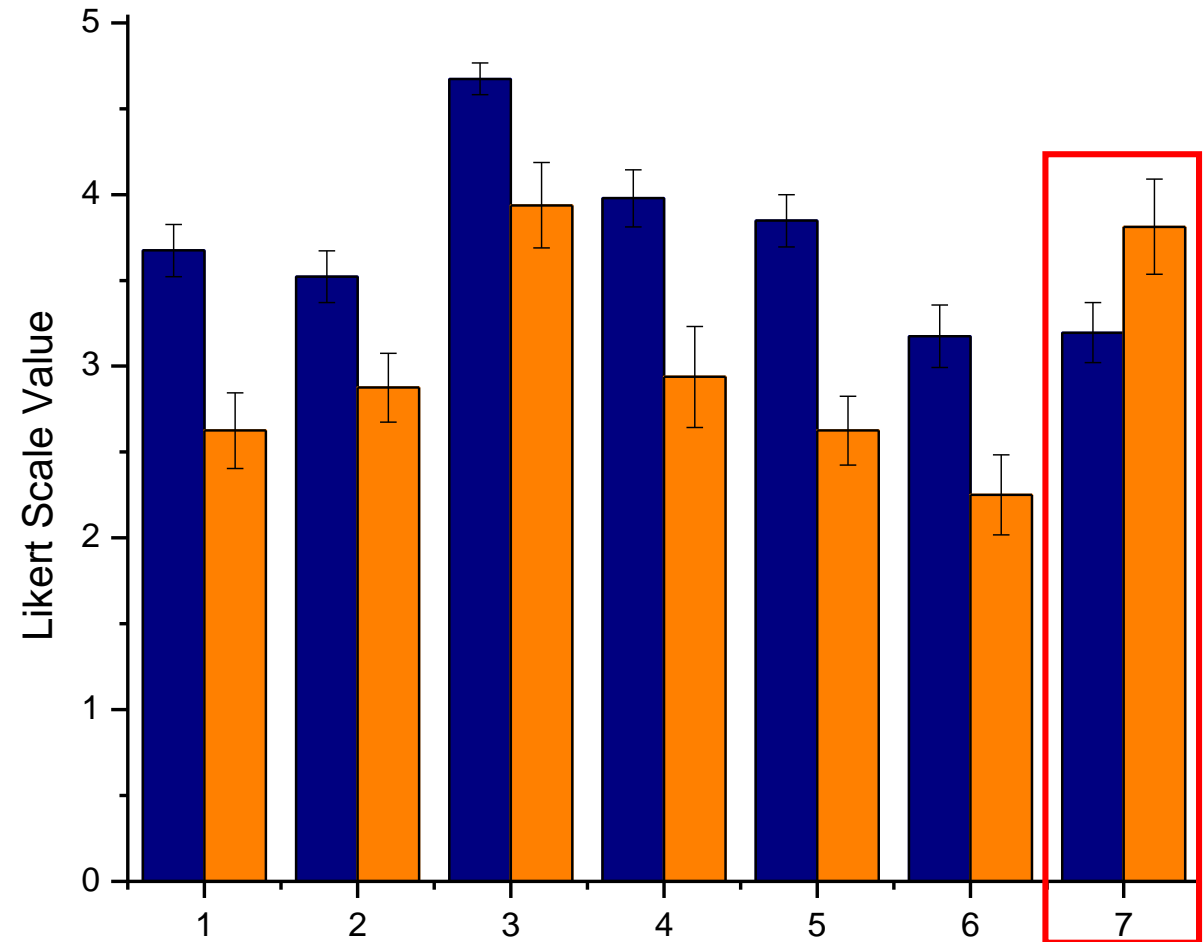
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Blended learning
Traditional learning

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STUDENT PERCEPTION



QUALITATIVE
EVALUATION



Learning Experience
In-Depth Interview




Interview till
saturation of themes
*(12 Year 1 MBBS
students)*



Transcript recorded
and validated



Data analyzed by
grounded theory and
thematic analysis



How does
switching to
e-learning impact
student learning?

FLEXIBILITY **ENABLES** DEEP LEARNING

- 1 Reviewing lecture videos for revision
- 2 Adjusting learning pace
- 3 Choosing optimal time to study
- 4 Consolidate notes and research while watching lecture videos



E-LEARNING PROMPTS SELF-DIRECTED LEARNING

Autonomy in learning

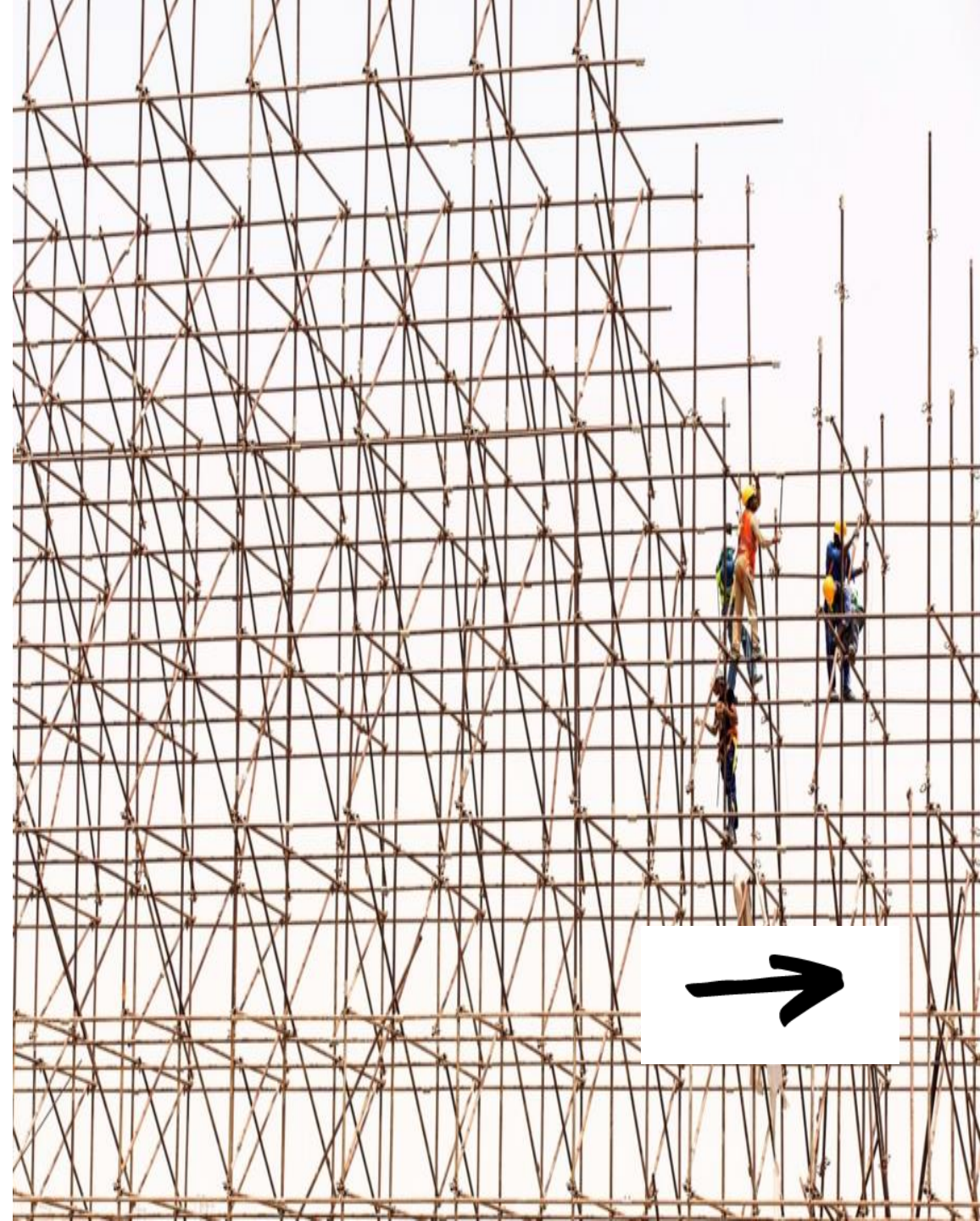


Learning challenges

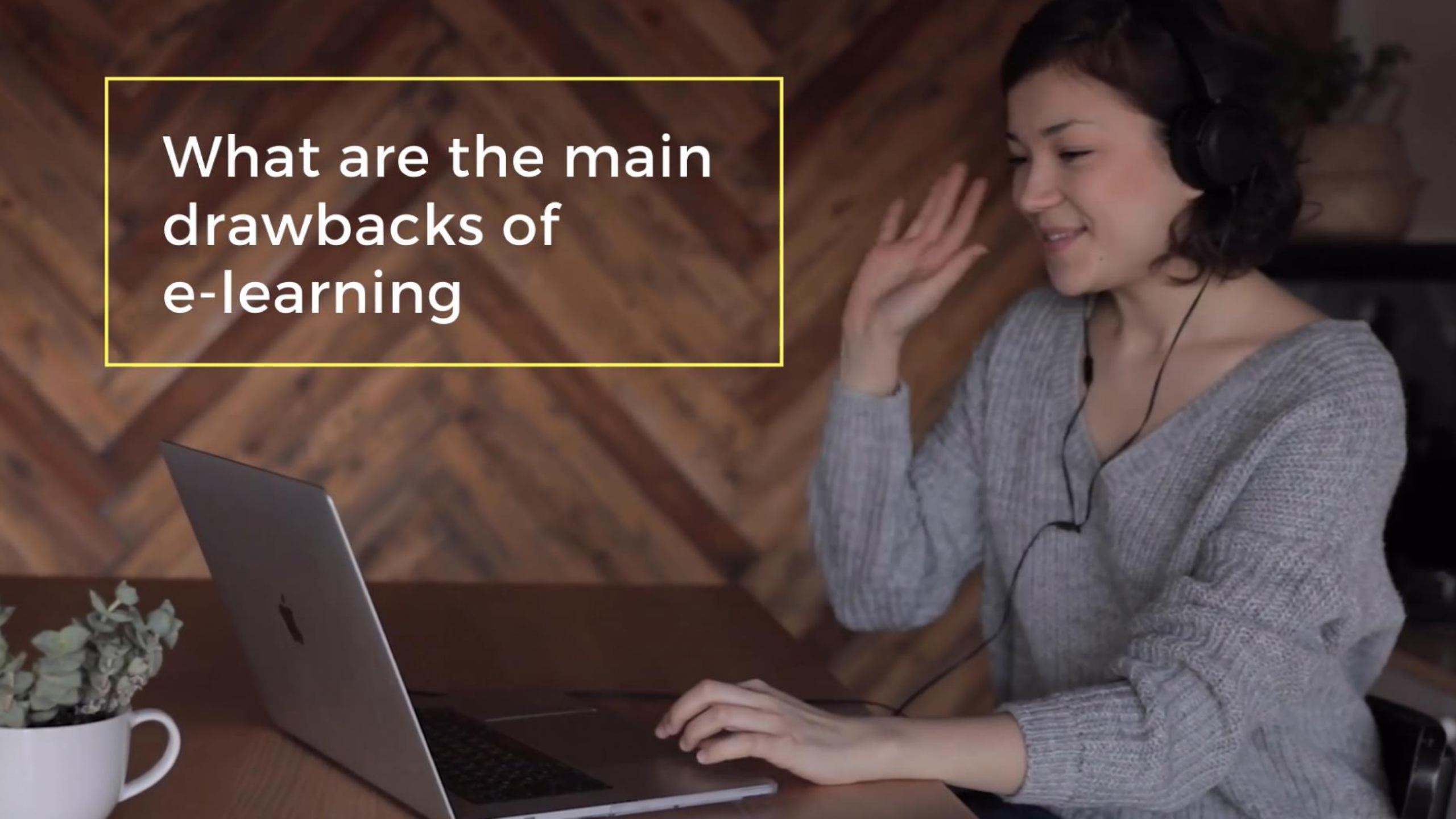


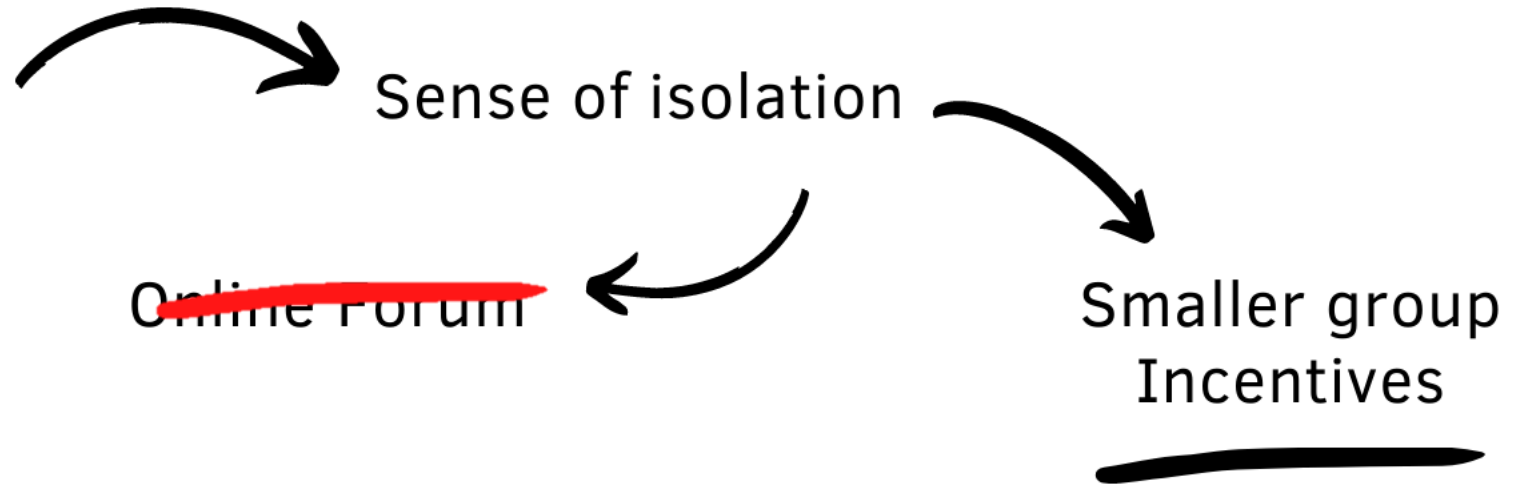
INSTRUCTIONAL SCAFFOLDING - FACILITATE STUDENT LEARNING

- 1 Clear learning order
- 2 Clear and specific learning outcomes
- 3 Clarity of lecture materials (captions, visual aids, etc.)
- 4 Extra learning resources
- 5 Technical support for online tools



What are the main drawbacks of e-learning





HOW TO FACILITATE STUDENT-STUDENT INTERACTIONS

Mutually supportive learning environment
Knowledge sharing
Supported by peers, seniors and teachers
Online wellbeing

CO-CREATING THE CURRICULUM

