

# Ensuring Student Success in Medical TBL: The Power of Performance Analytics

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TBL EDUCATION HUB

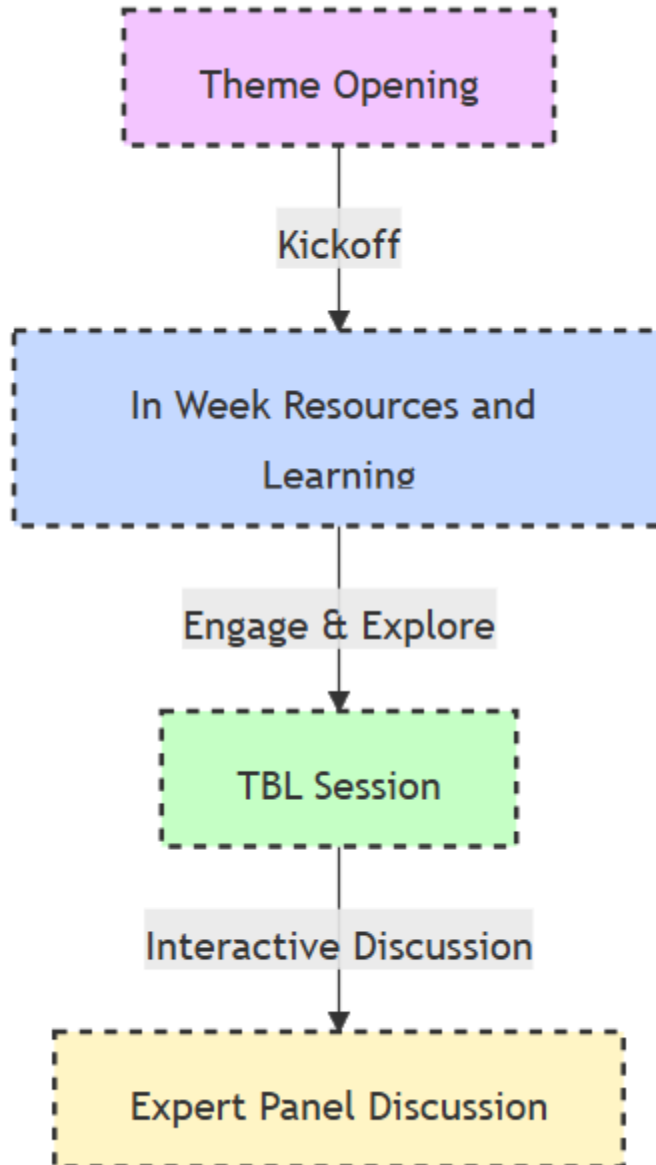
## Why the change ..?

Pedogeological drift

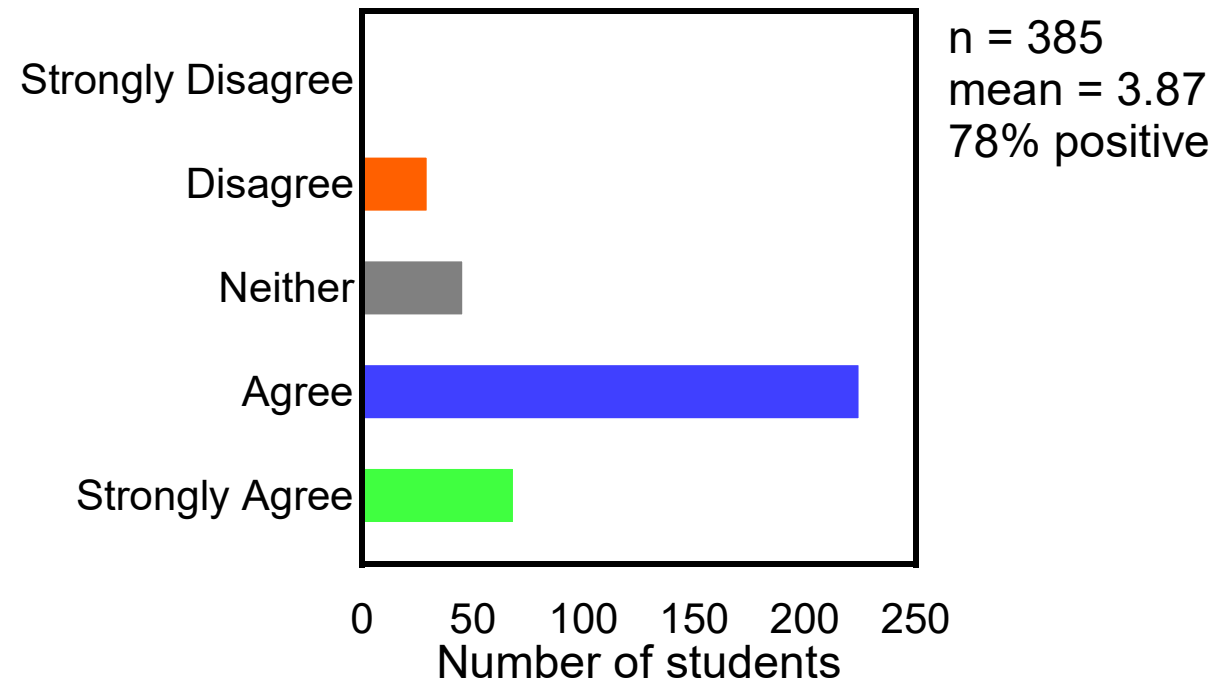
Inconsistent student experience

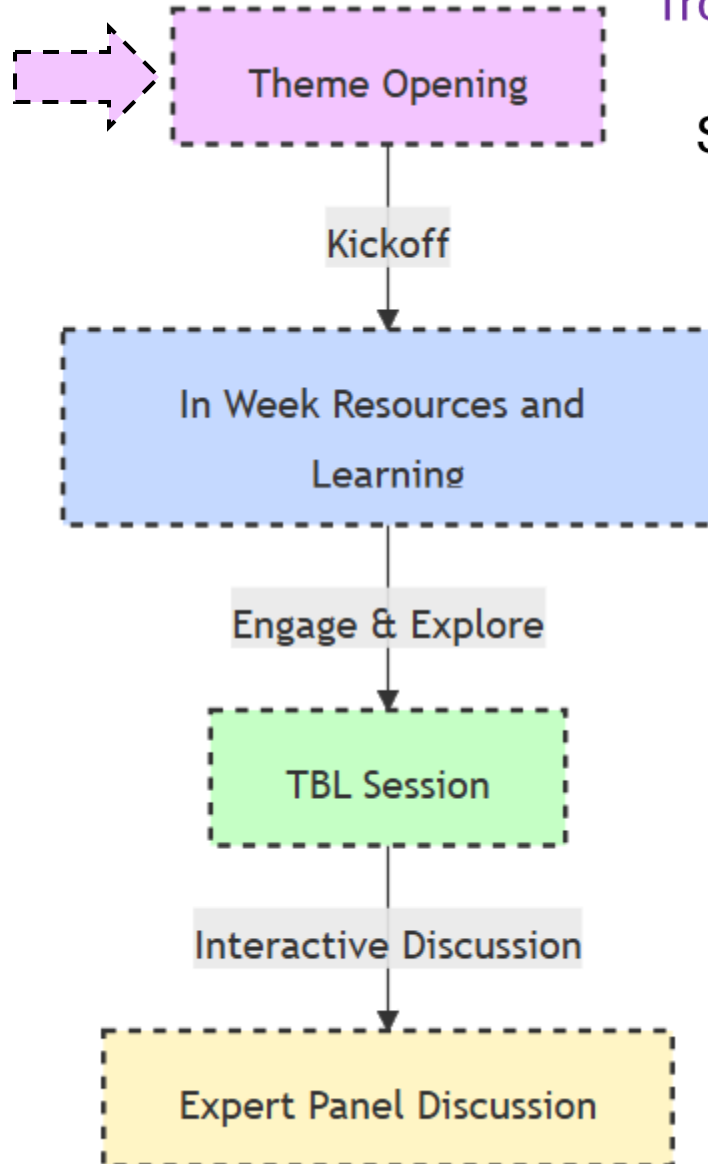
Poor scalability

More active participation and modernisation



Overall, I am satisfied with my Semester 1 learning experience:



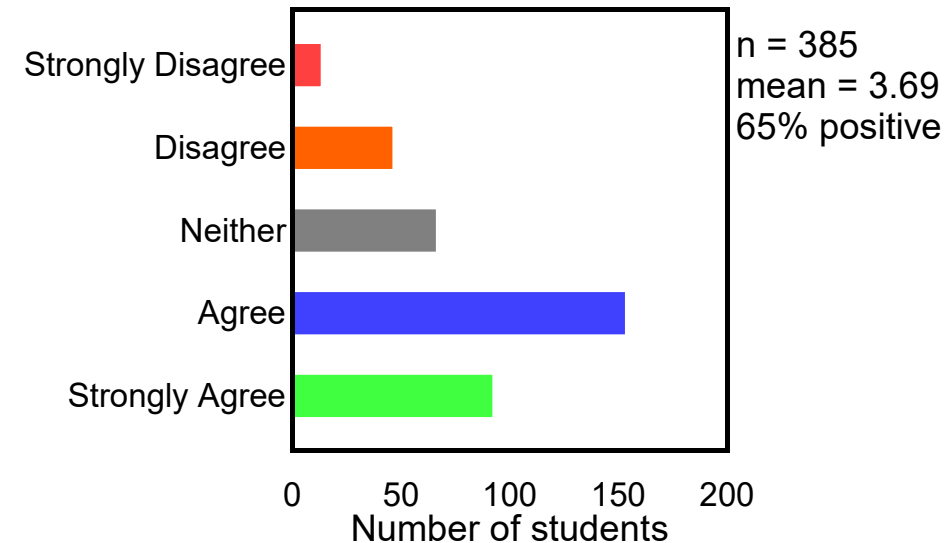


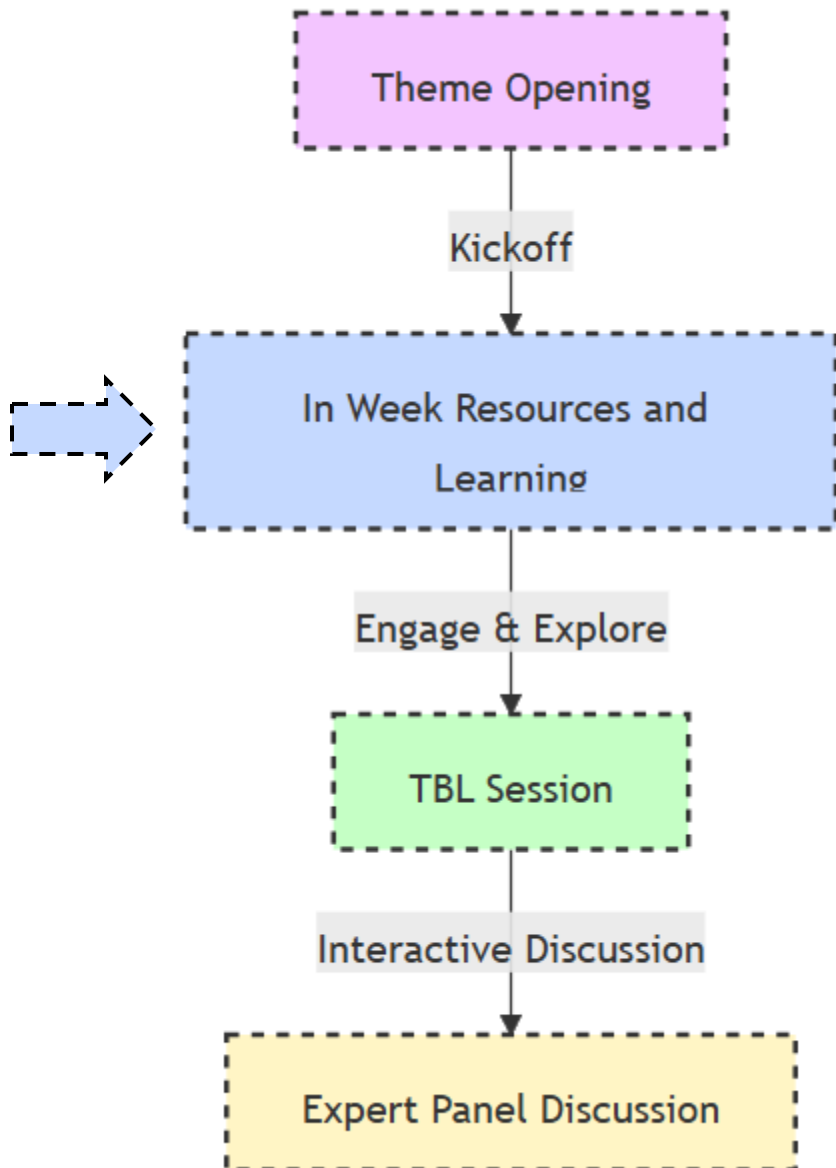
A range of different types of opening  
from audio, videos, Patient experts,  
simulated patients

Simulated patient suffering from  
asthma attack ->>>>>>



The opening sessions are an  
interesting and engaging way  
to put the weeks' theme in context:

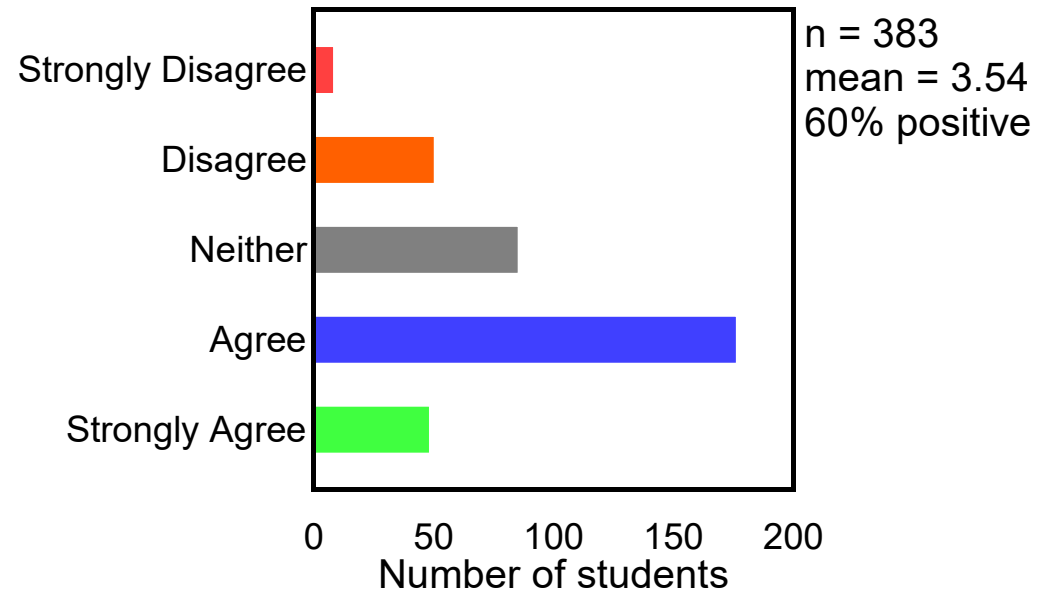




## Scaffolded Blended Learning

On-campus Learning  
Dissection,  
Phys/Pharm Labs,  
Consultation skills  
Lectures  
Asynchronous learning  
Early Clinical Experience  
Clinical Debrief

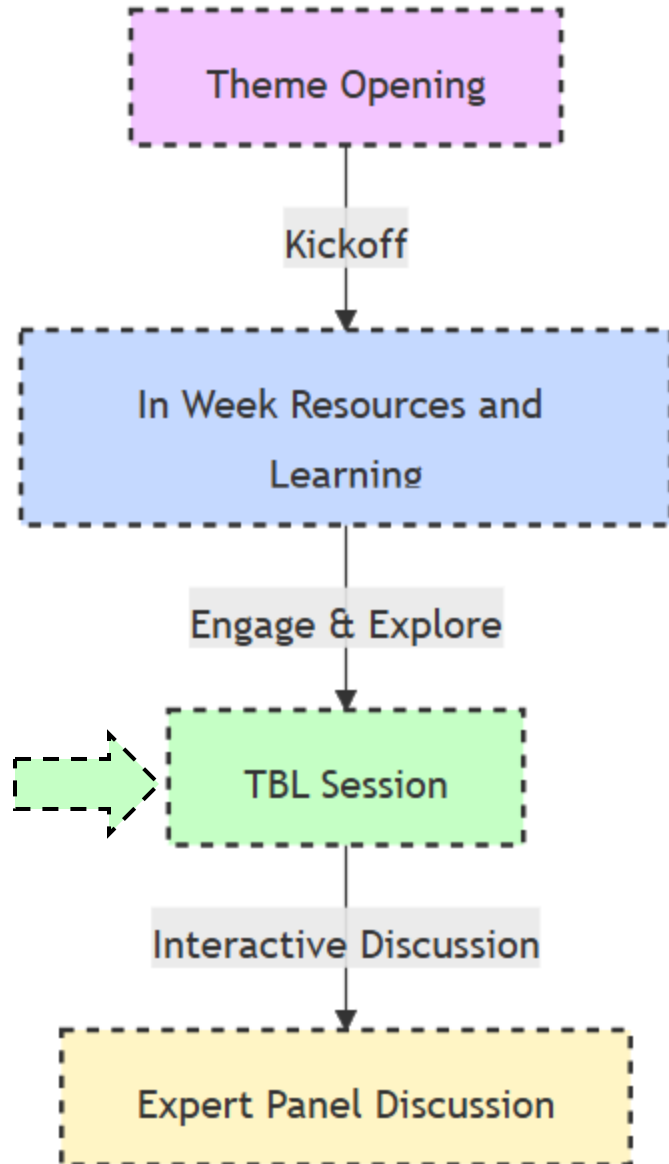
Overall each week's content had good alignment with the themes learning objectives:



Which of these is the most common mutation in the cystic fibrosis transmembrane conductance regulator (CFTR)?

a. F508del	97.87%
b. G542X	0.53%
c. N1303K	0%
d. G551D	0.53%
e. G542K	1.06%

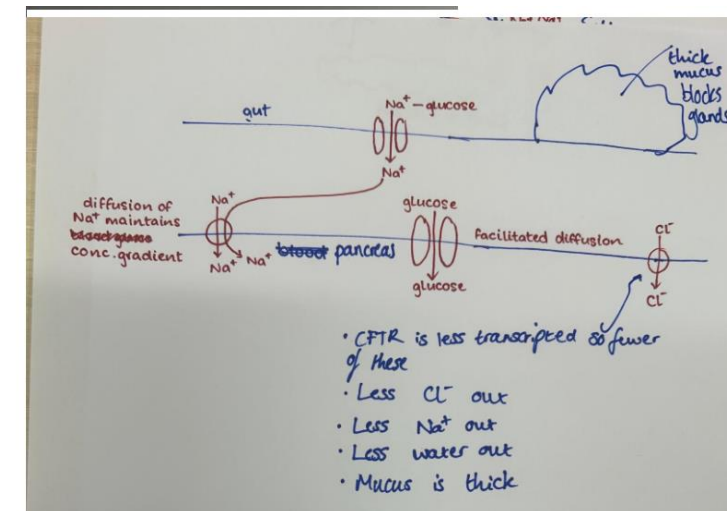
iRATs

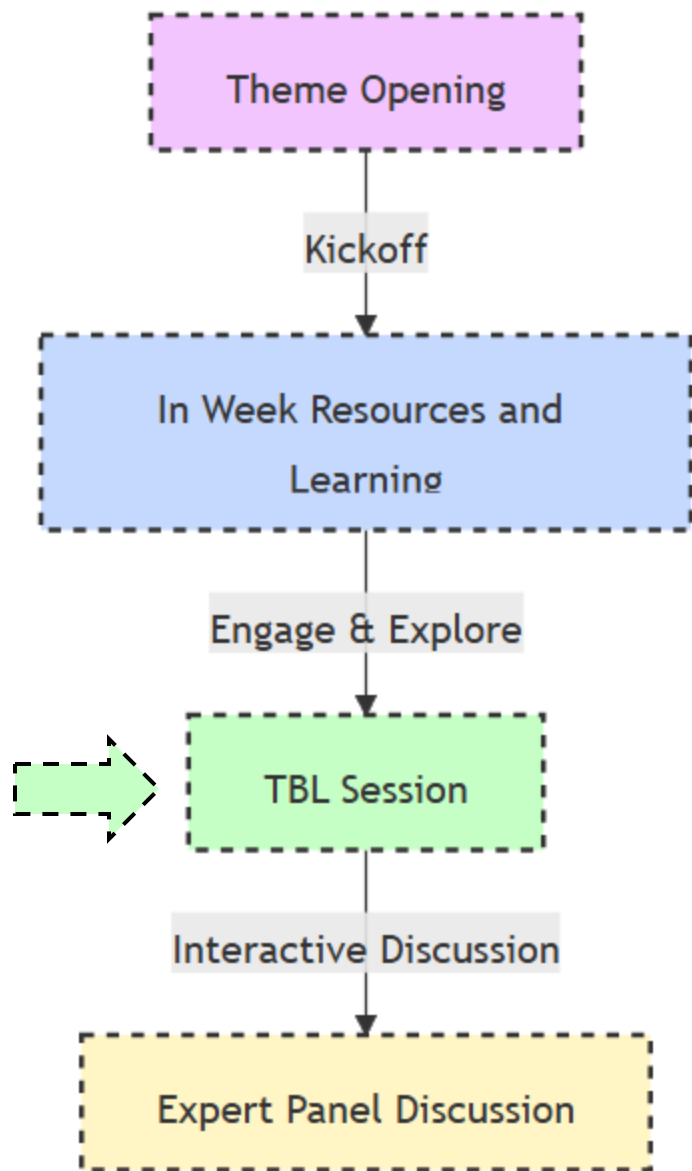


tRATs

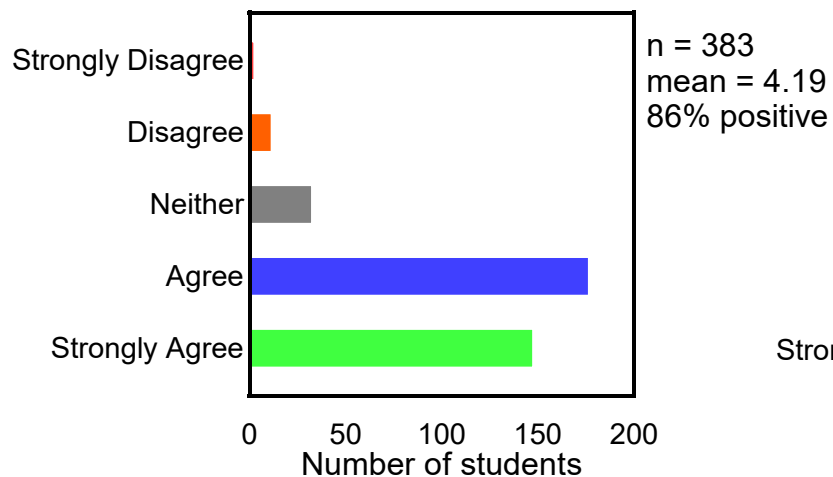
	Question1	Question2	Question3	Question4	Question5	Question6	Question7	Question8	Question9	Question10
Correct answer	D	B	C	C	E	B	A	D	C	D
Teams										
E41 ✓	D	B	C	C	E	B	A	D	D C	D
E42 ✓	A D	B	C	C	E	B	A	D	A D C	D
E43 ✓	A D	B	C	C	E	E B	A	D	C	D
E44 ✓	A D	C B	C	C	E	E B	A	D	B C	A B C D
E45 ✓	D	A D C B	C	C	E	B	A	D	E B C	D

Application exercises

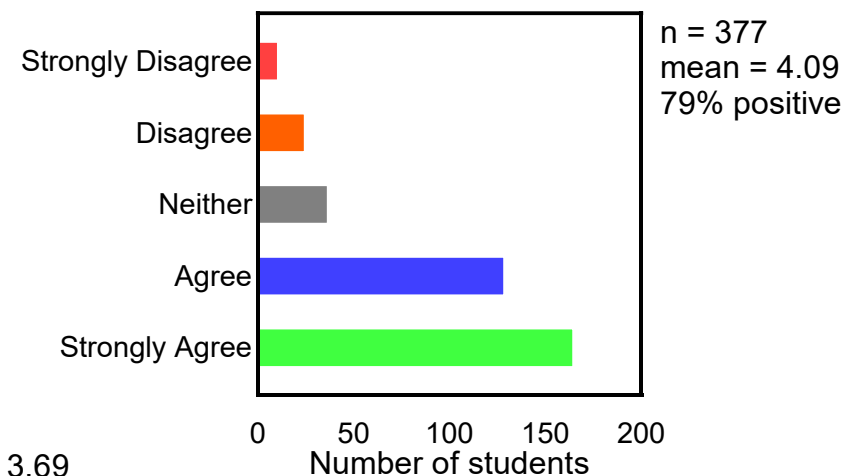




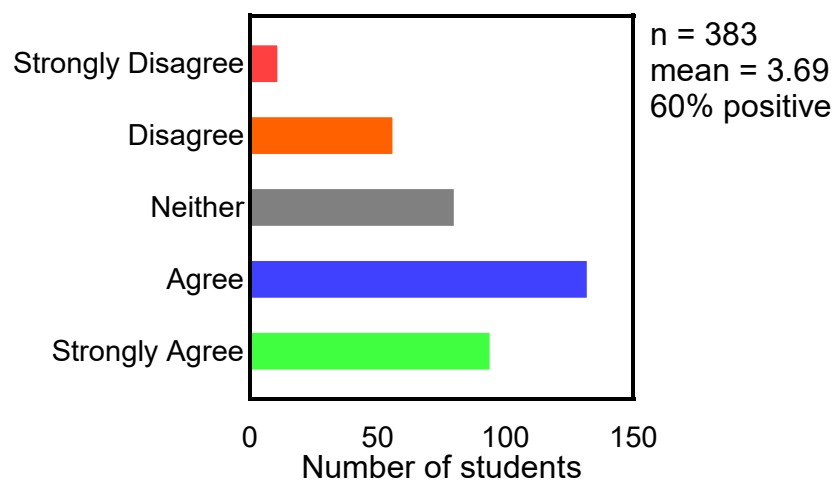
The TBL sessions have helped identify gaps in my learning:

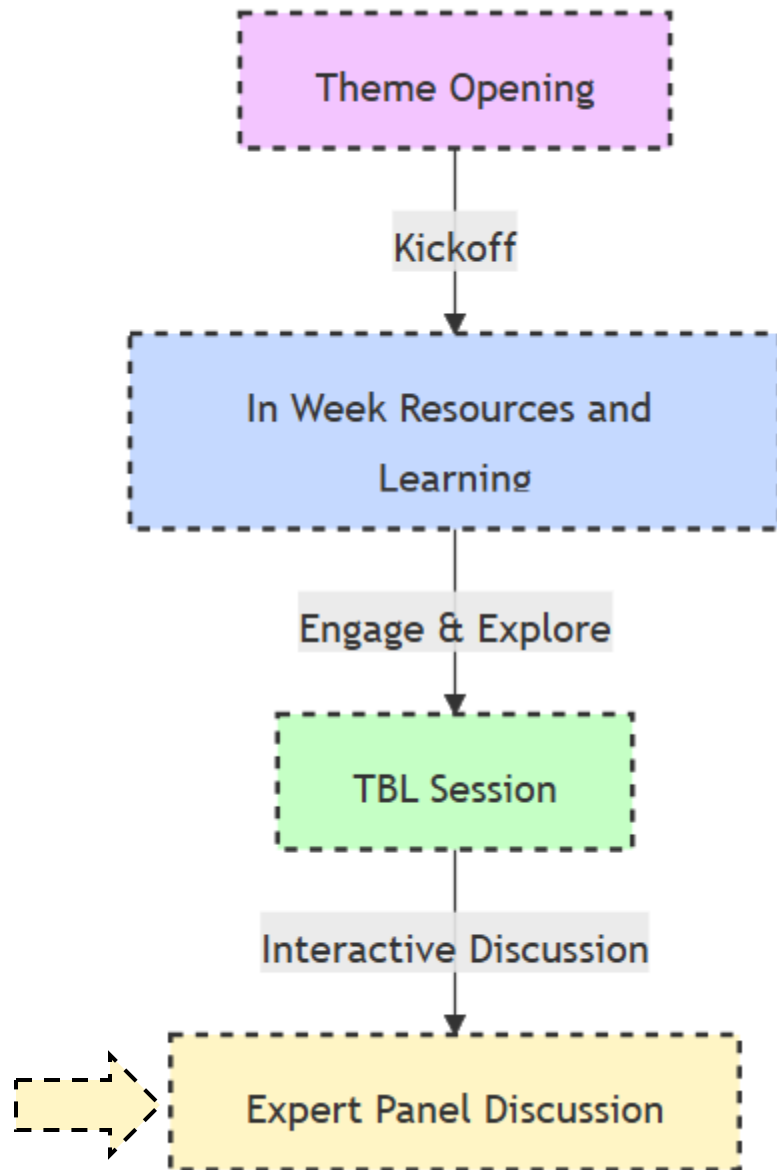


The TBL facilitators were good at guiding discussion in my room:

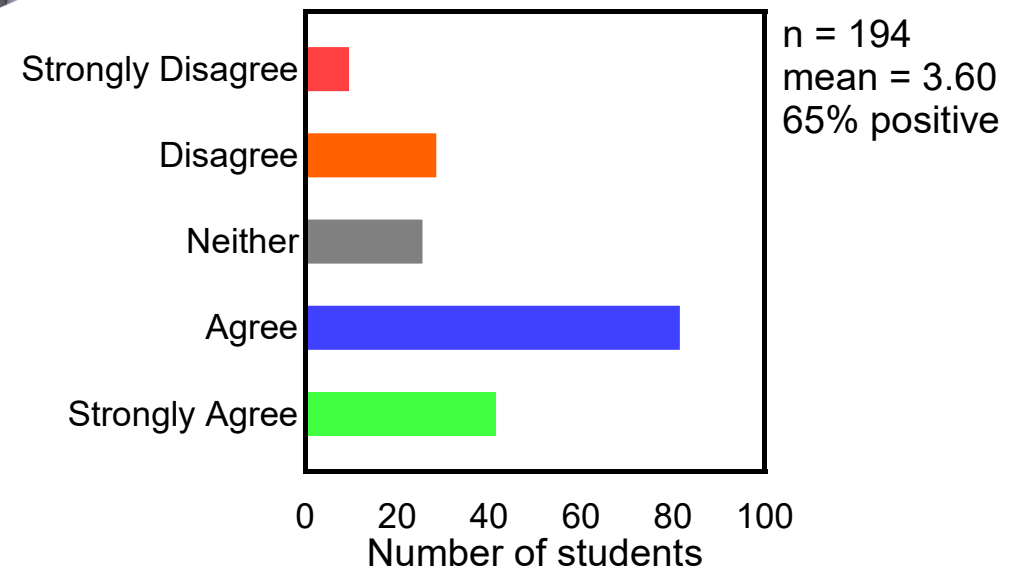


Overall I would rate the TBL sessions as excellent:

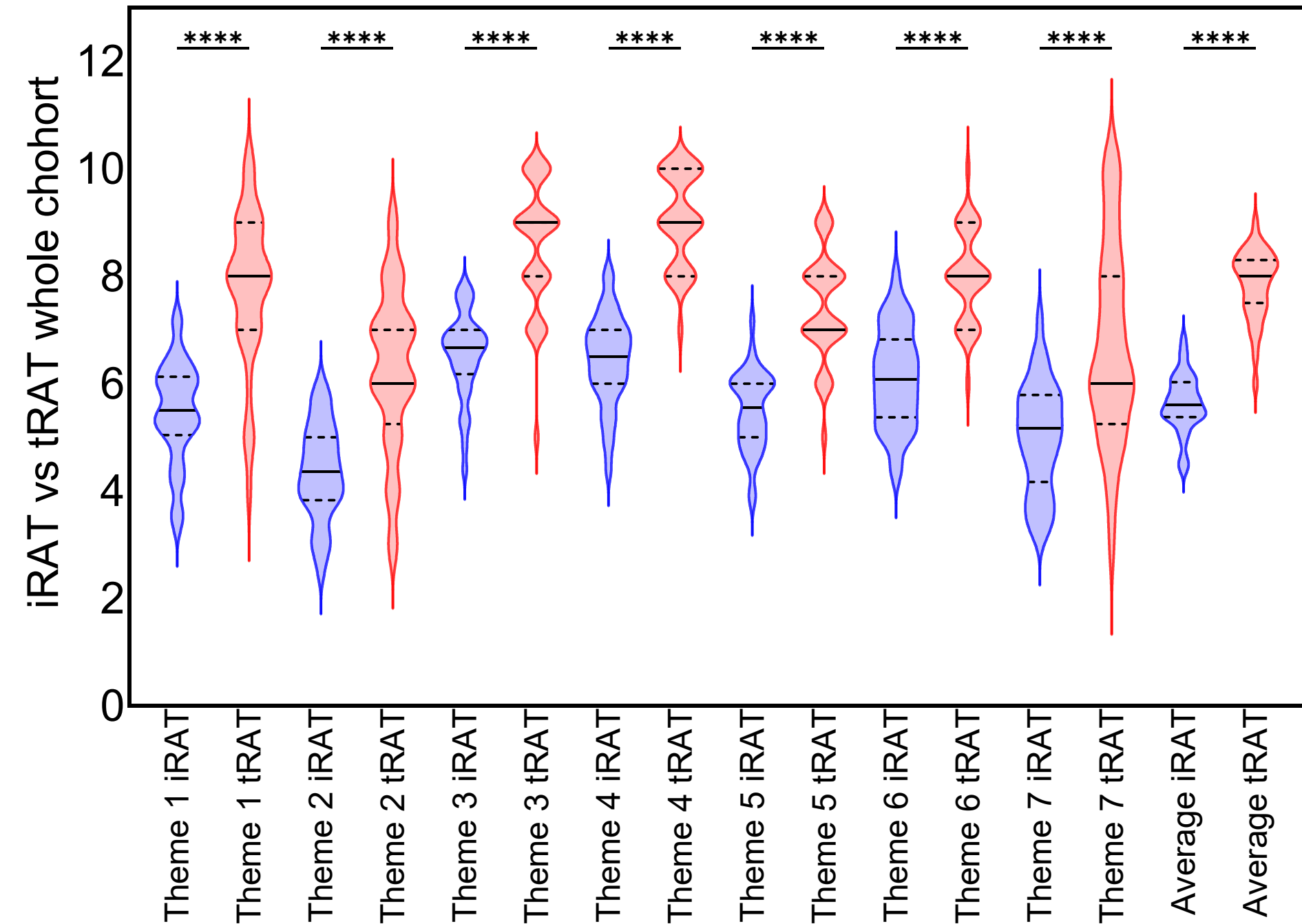




The expert panel was able to clarify my learning:





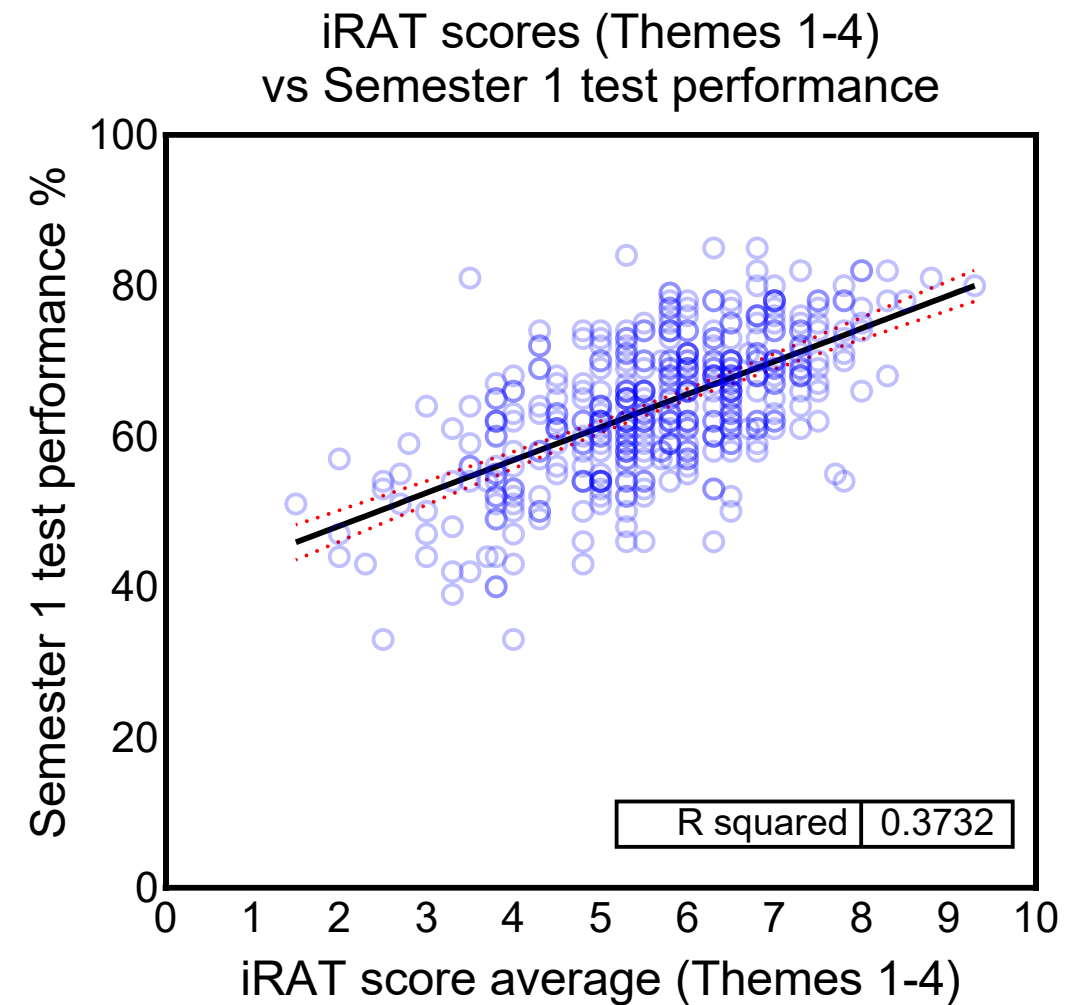
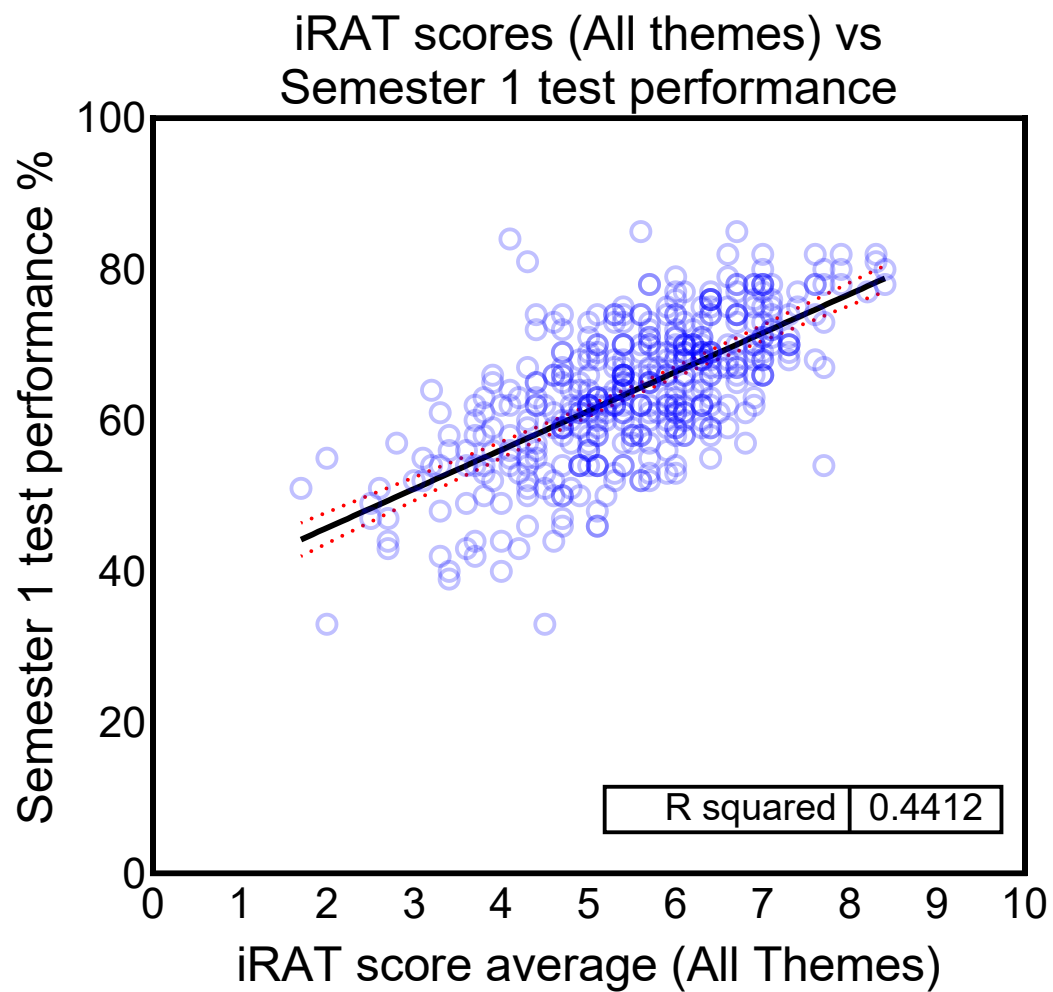


## Monitoring of student and team performance across themes identifies hard areas of study

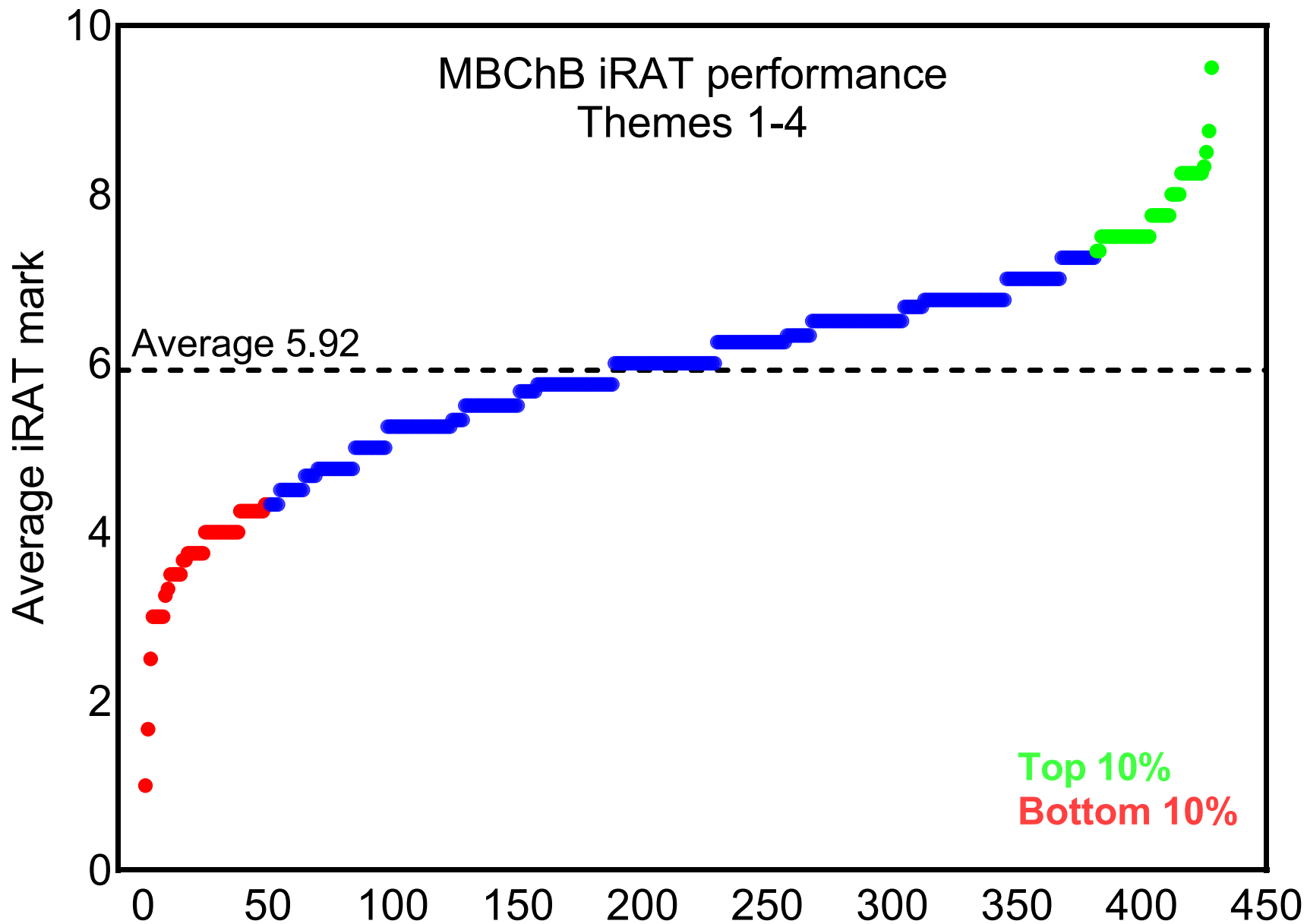
Theme 2 is the hardest TBL session, difficulty of questions?

Alignment of ILOs to learning content?





**In semester student performance in TBL sessions strongly correlated with semester test performance** this is true as early as theme 4

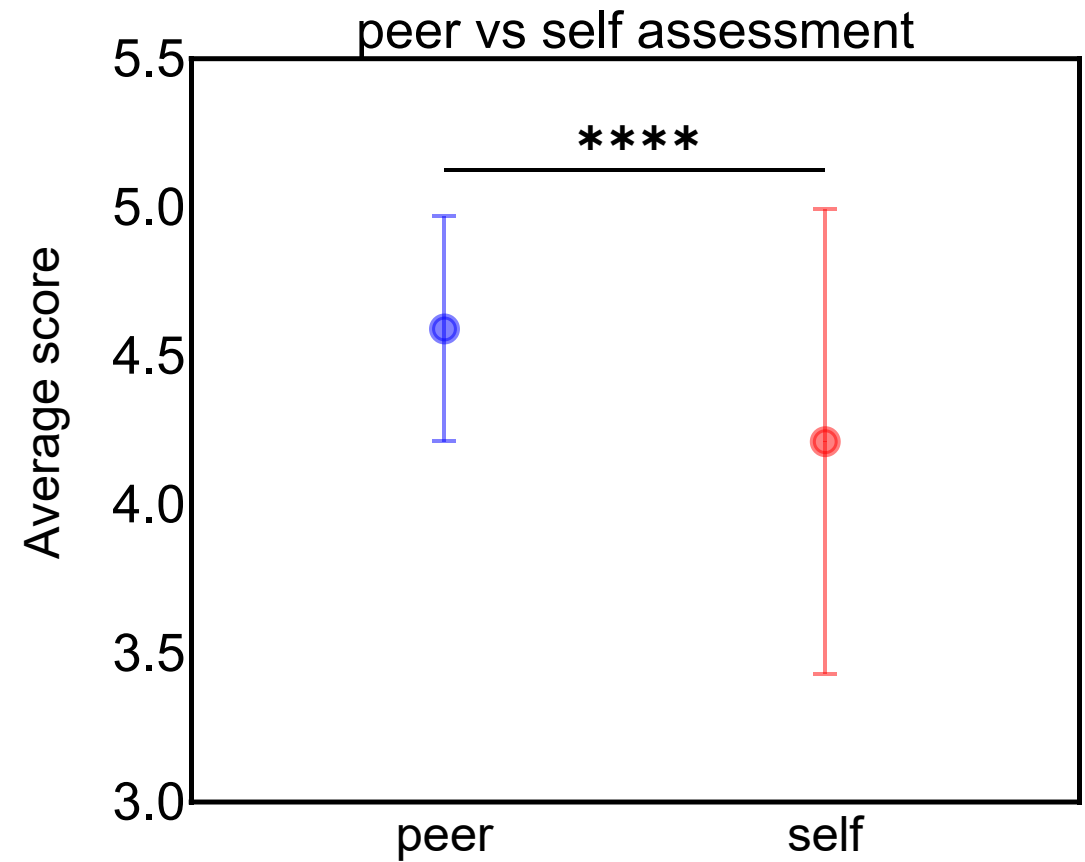
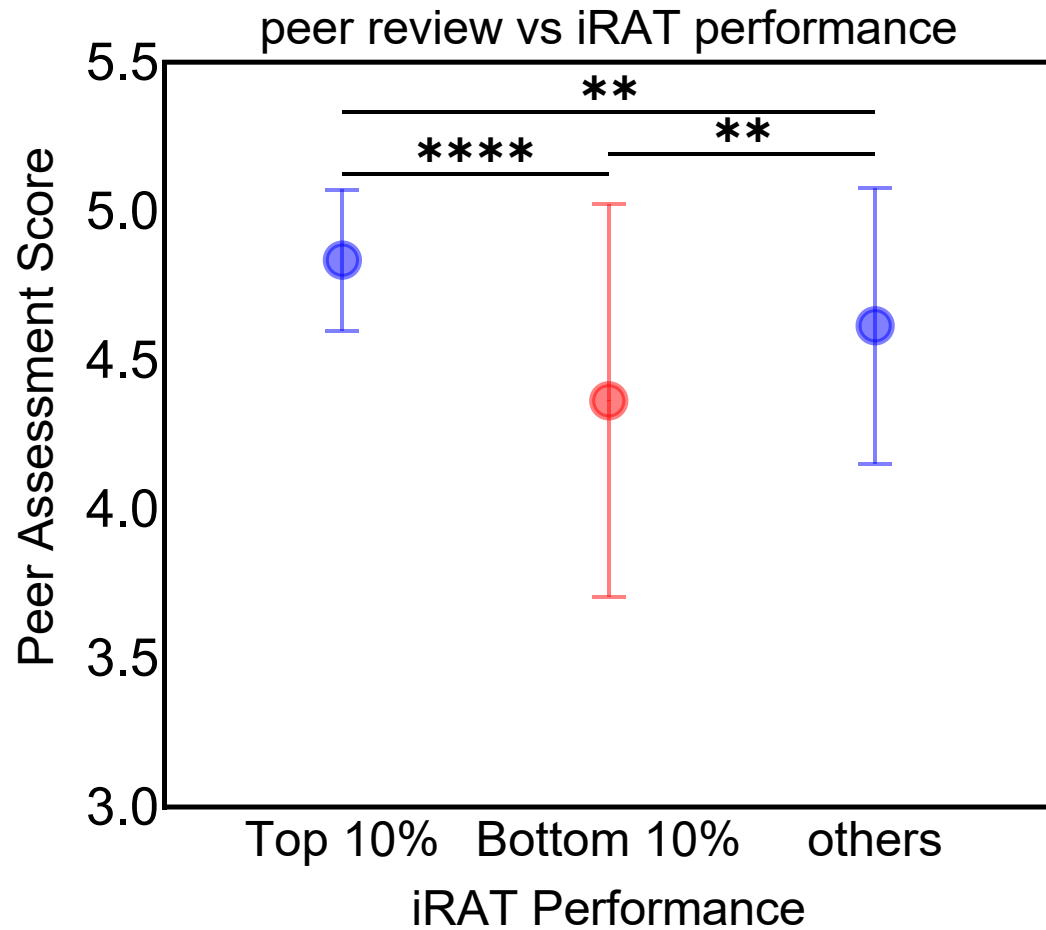


**Performance before  
theme 4 has good  
normal distribution  
and identifies the  
lower and upper end  
of performance easily**

The bottom 50  
students and top 50  
students are  
highlighted



So, what else can you do with all that data?

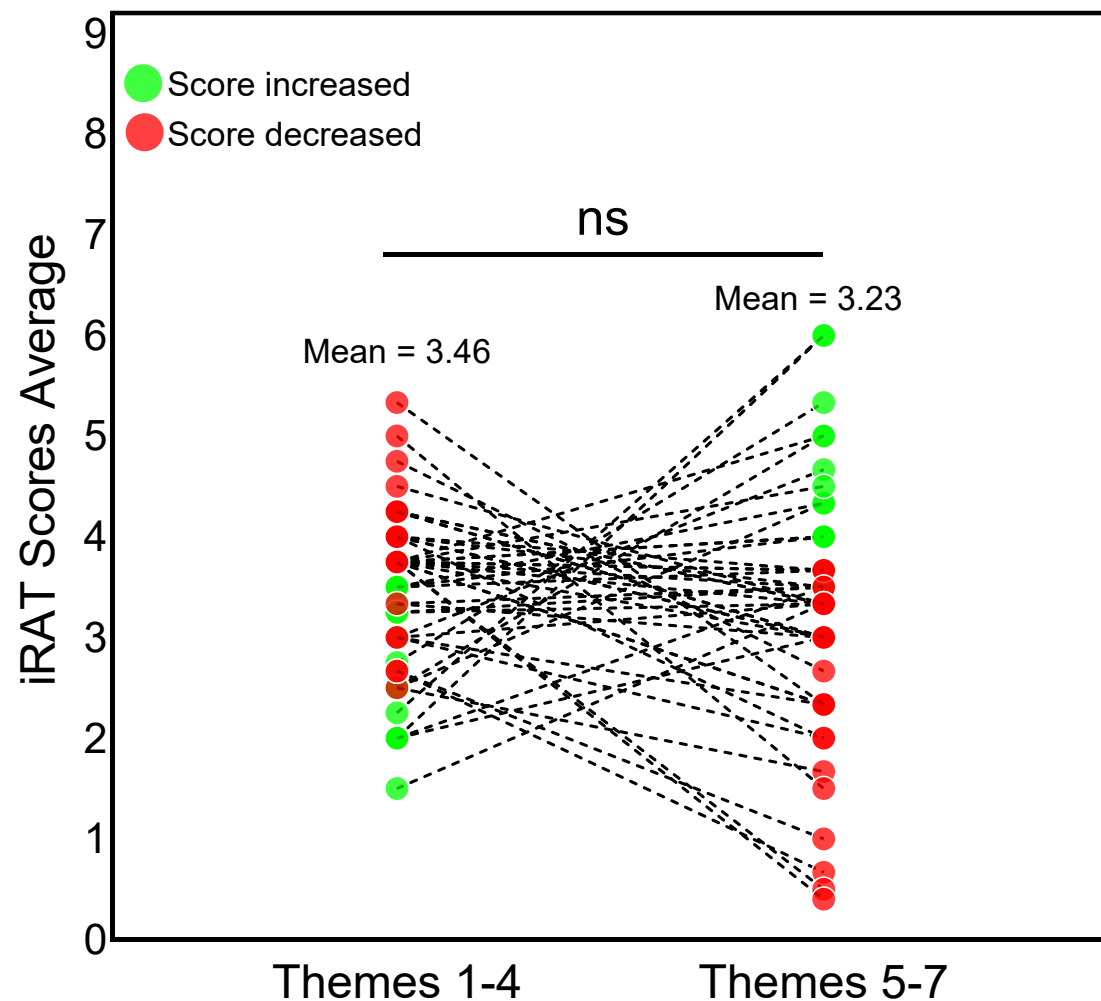


**The same bottom students and top performing students can be identified using peer assessment information** Students are significantly more self critical to themselves than towards judgements made to their peers

# Intervention

- Advisors informed of current underperformance
- Given signposting to a host of resources and help bespoke to them:
  - Study skills sessions
  - Library support
  - DASS referrals
  - Counselling
  - Mentorship

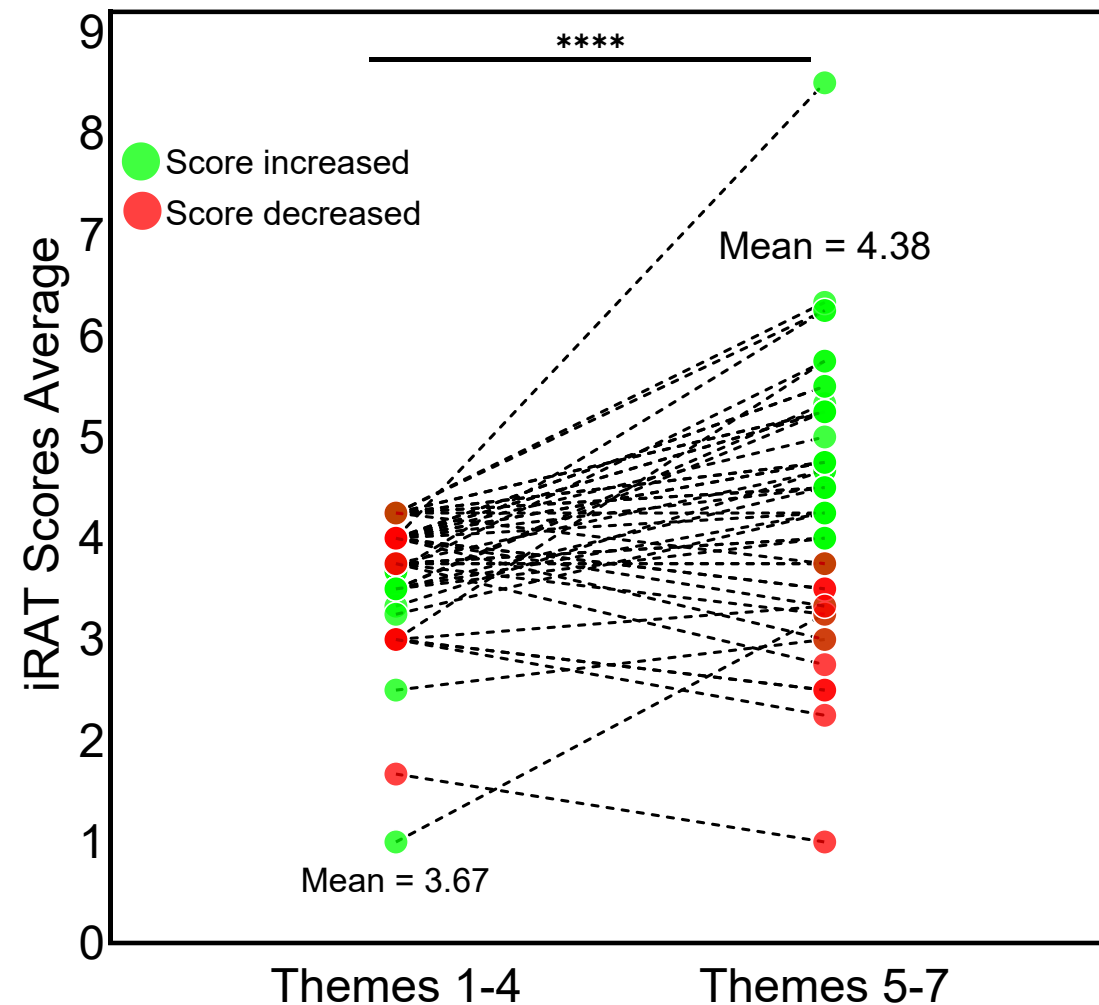
Bottom 50 students scores after no intervention 2024



**-7% reduction in performance**

from early struggling students in the last  
TBL sessions of the semester

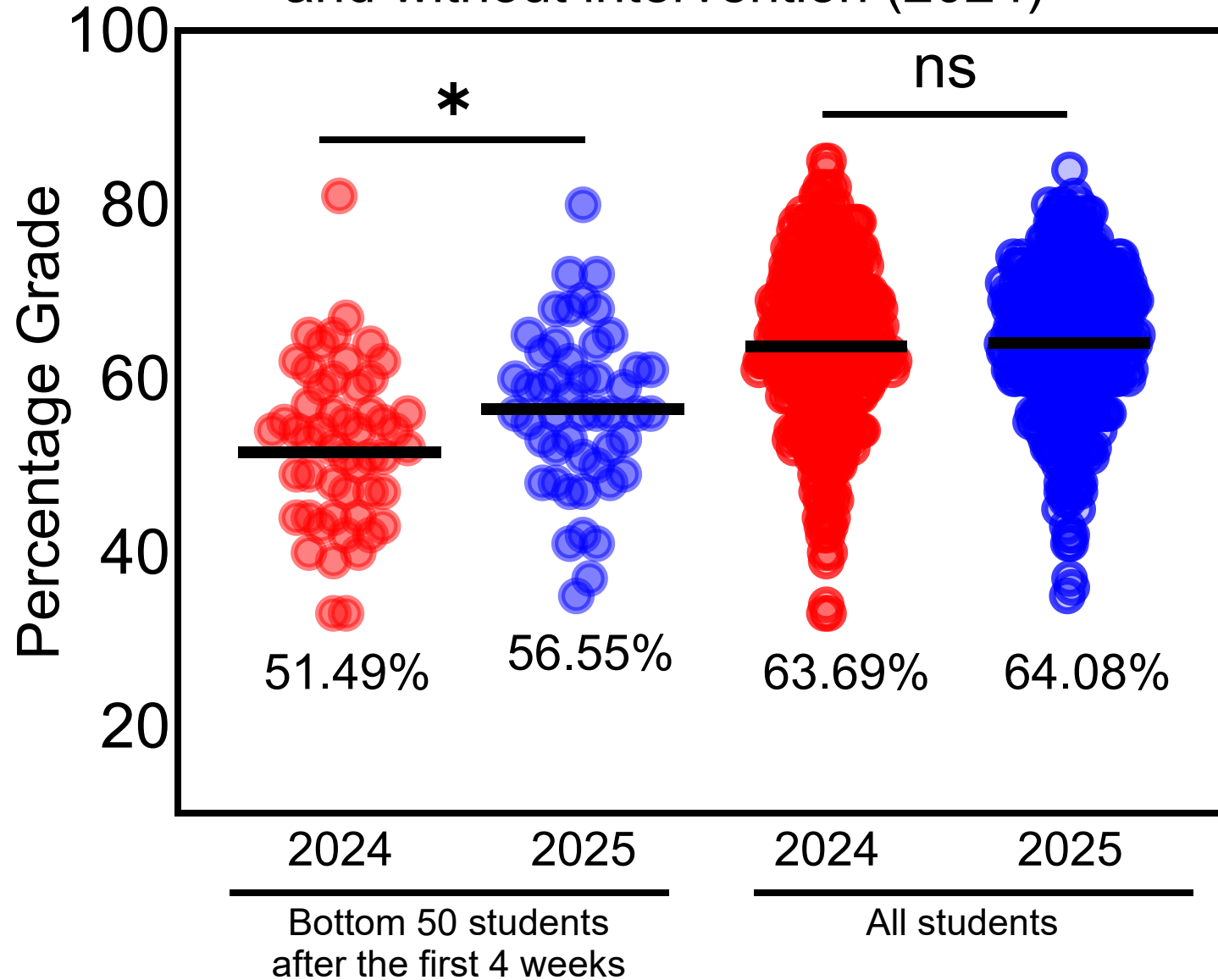
Bottom 50 students scores after intervention 2025



**+20% improvement in performance**

from early struggling students in the last TBL  
sessions of the semester

# Semester test performance with (2025) and without intervention (2024)

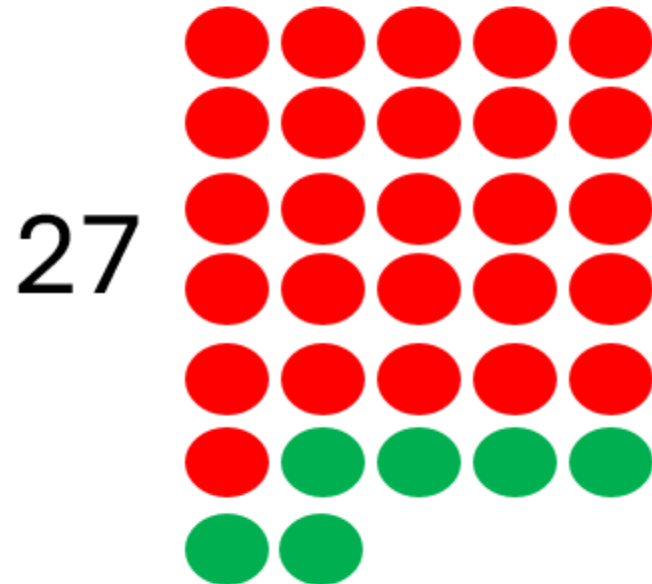


An improvement of half a traditional grade boundary (~5%) in the early struggling students taking semester test with intervention in place

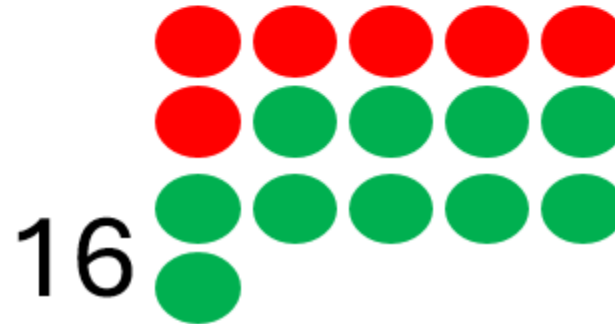


## Students failing Semester test



**2024**



**2025**



**72% reduction** in early struggling students failing the semester test with intervention in place

-  A bottom 50 student identified by theme 4
-  Not a bottom 50 student identified by theme 4

# Main conclusions

- The new TBL curriculum is well received, opening sessions and expert panels which are “Manchester additions” are well liked and serve a purpose
- Analysing student and team performance highlights potential issues in theme week resources and teaching alignment
- TBL performance correlates with semester performance
- Early TBL performance is predictive of semester performance
- Peer review also identifies stronger and weaker performing students
- Interventions made to early struggling students increased TBL and semester test performance.
- Early intervention decreased failure rates overall specifically in early struggling students.





Thanks to the Semester 1 and 2 TBL teams, FBMH eLearning team, and the Year 1 Students!

Any Questions?

