

# Peer marking of written assessment

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Vision

# The Vision

- ***Reliable, valid*** and ***palatable*** peer marking of written work
- Peer Assisted Learning
- Improve accuracy & feedback
- Reduce marking anxiety
- Prepare students for giving feedback during their career



Background

## Benefits of Peer Marking

- ten Cate & Durning 2009
  - Alleviating faculty teaching burden
  - Enhancing intrinsic motivation
  - Preparing physicians for their future role as educators
  - Practice peer feedback as part of multi-source feedback
- Thomas 1999
  - Provide different information compared to faculty

# Duties of a Doctor

## **Good Medical Practice (2013)**

Teaching, training, supporting and assessing

*“You should be prepared to contribute to teaching and training doctors and students.”*

*“You must be honest and objective when writing references, and when appraising or assessing the performance of colleagues.”*

# Barriers to Effective Peer Marking

1. Lack of Experience (Thomas 1999)
2. Colleague/Friend Factor (Thomas 1999)
3. Anonymity (Epstein 2011)

## Research Questions

- Can students provide reliable marks?
- How many markers are required to provide an useful mark?
- Can students deliver useful peer feedback?



# Factors Affecting Assessment

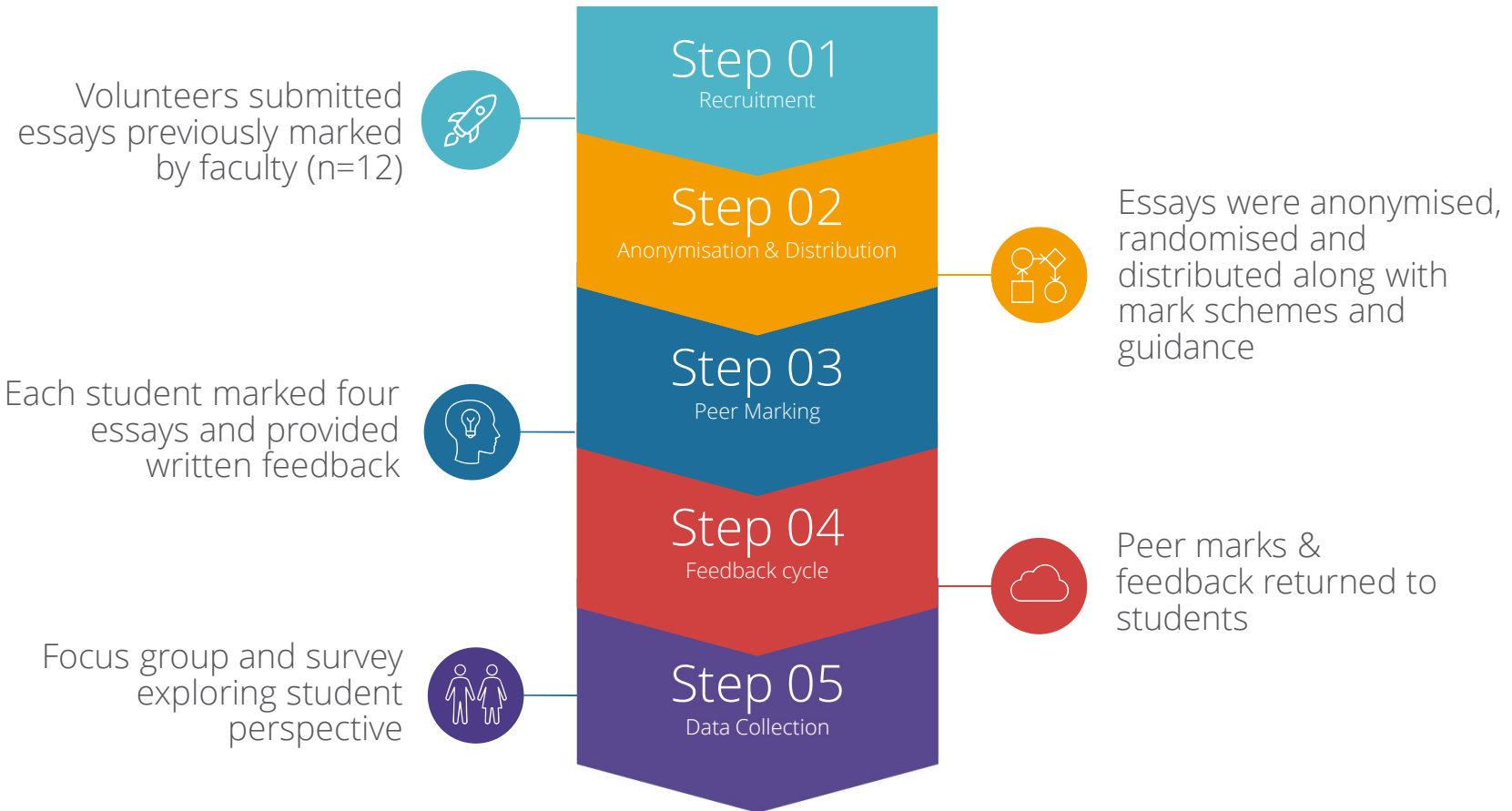
## Van der Vleuten (1999)

1. Reliability
2. Validity
3. Educational impact
4. Cost
5. Acceptability to learners and faculty (Palatability)

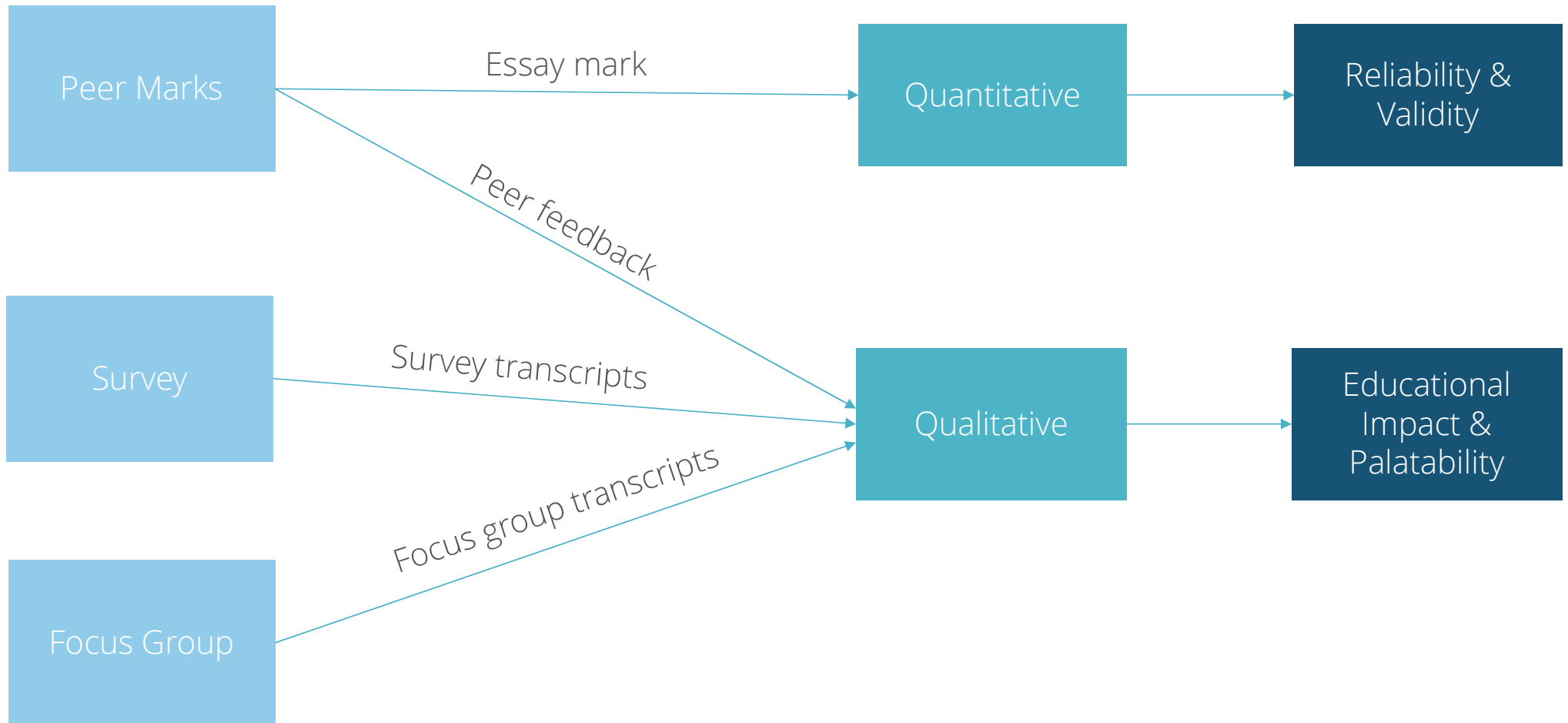


Methods

# Methods



# Data Analysis



# Data Analysis

Educational Frameworks and Theoretical Perspective



Good Medical Practice. GMC. (2013)



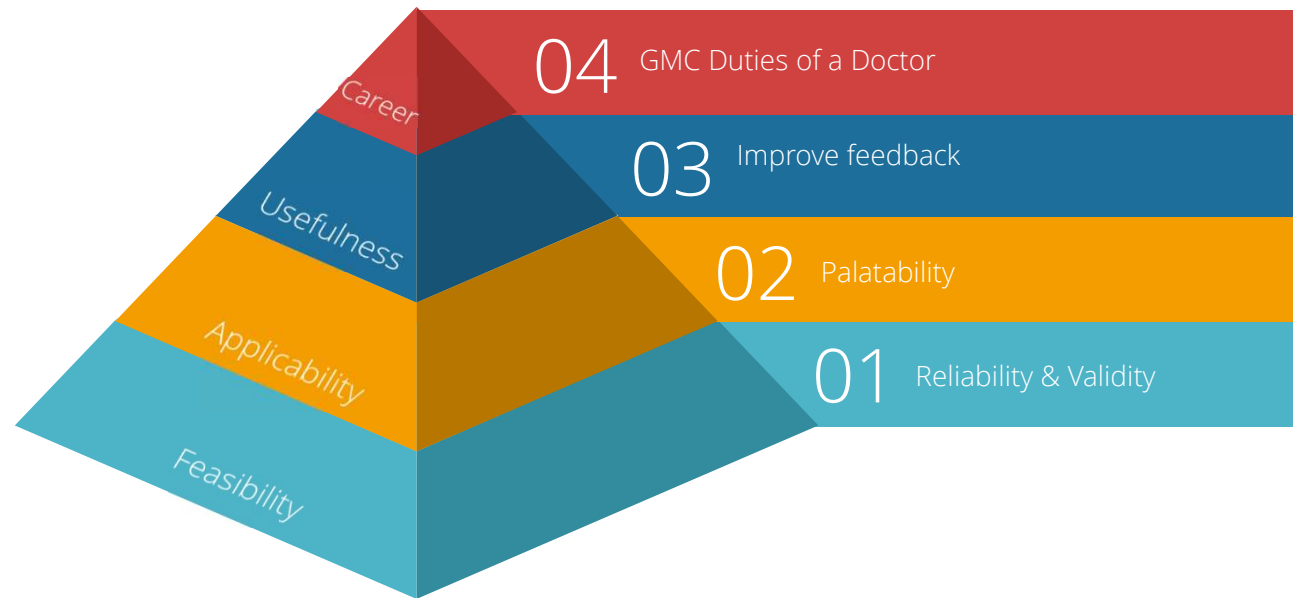
Assessment in Medical Education. Epstein. (2011)



Peer Teaching in Medical Education. Ten Cate. (2009)

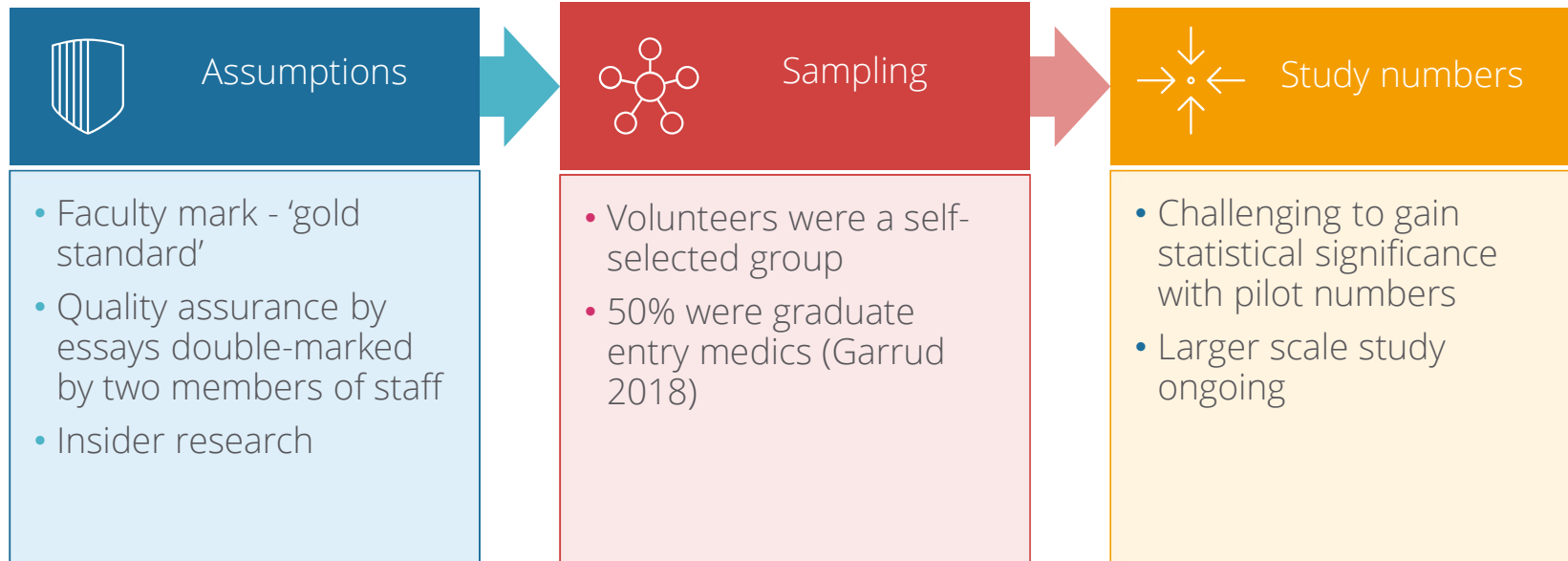


Assessment of competence. Van der Vleuten. (1999)



Qualitative analysis of data during collection

# Limitations

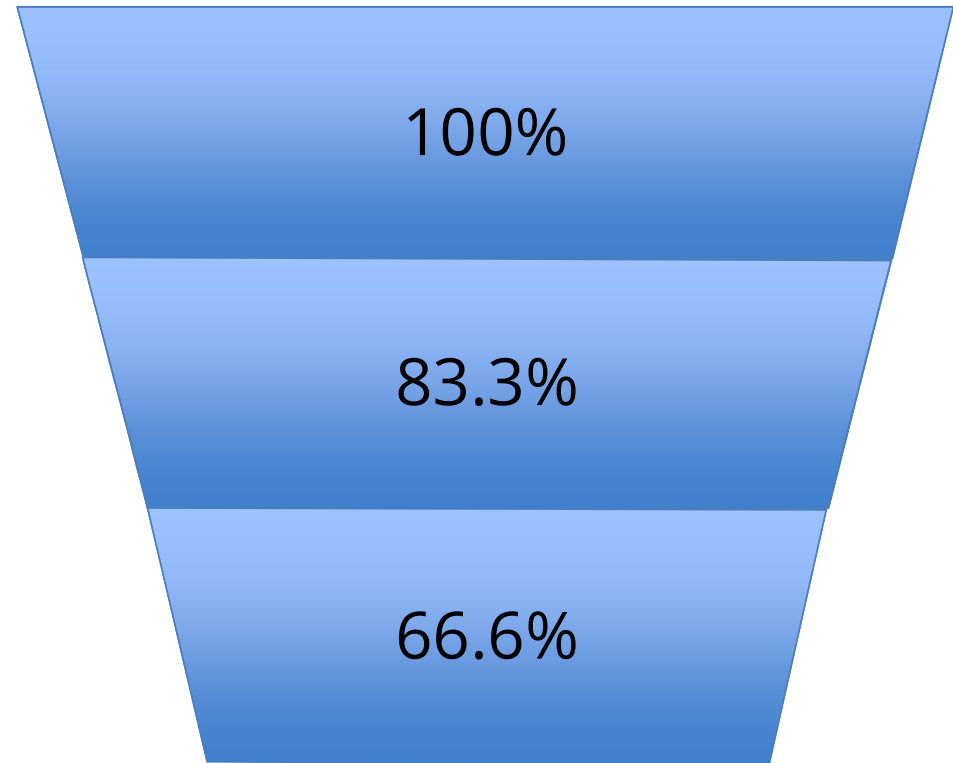




Results

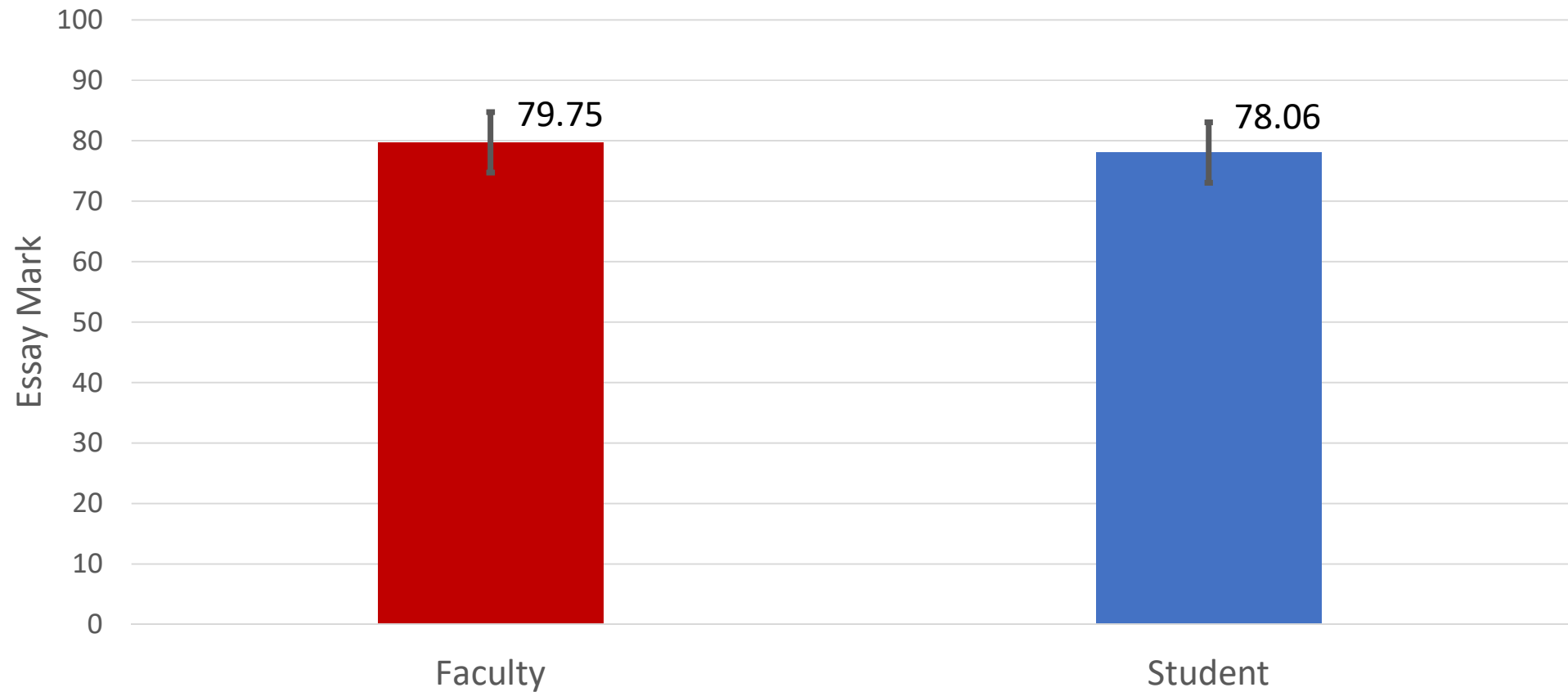
# Participation

- Marking essays and providing feedback
- Survey feedback on process
- Focus groups

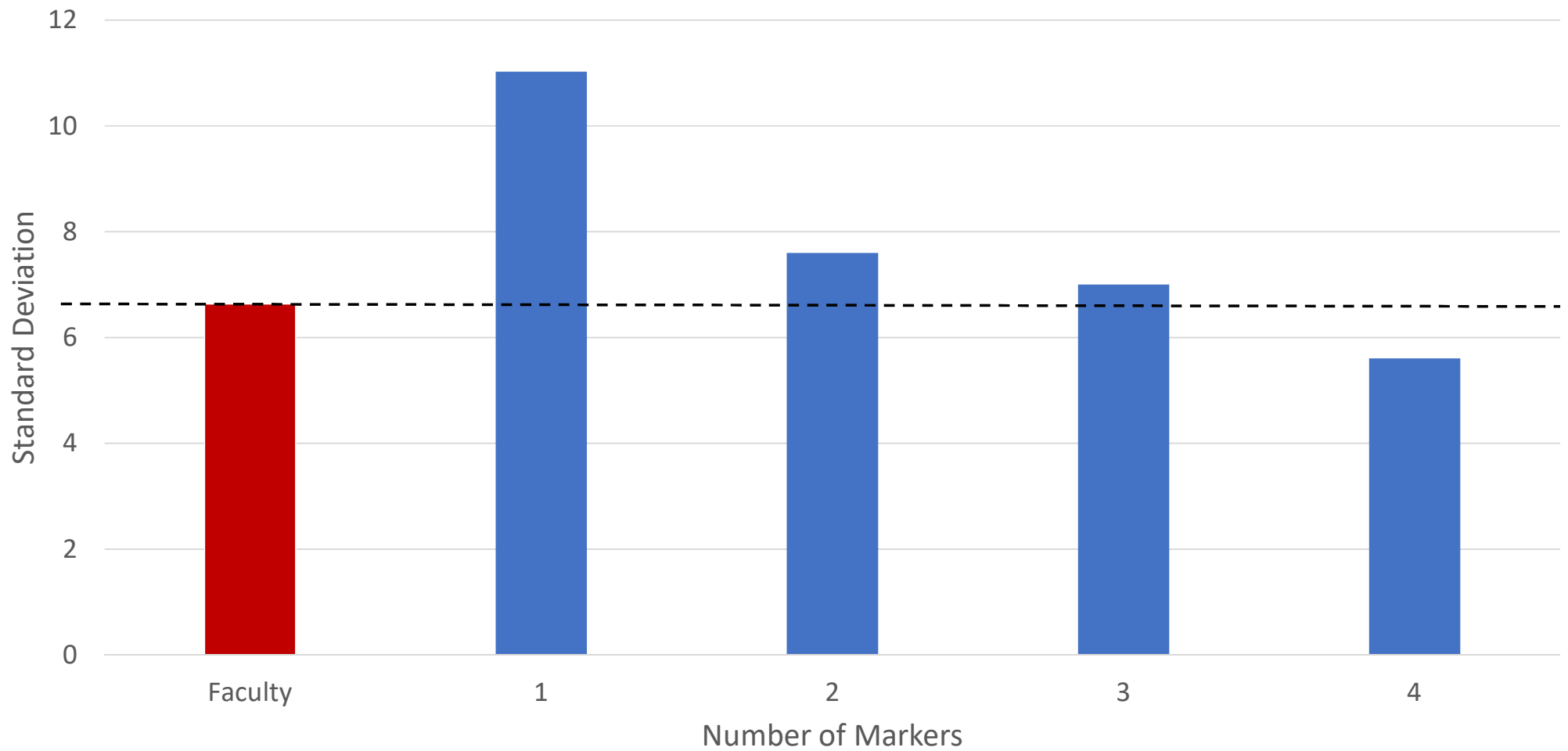




# Are peer marks as valid as faculty marks?



# How many peer markers?



# Thematic Analysis



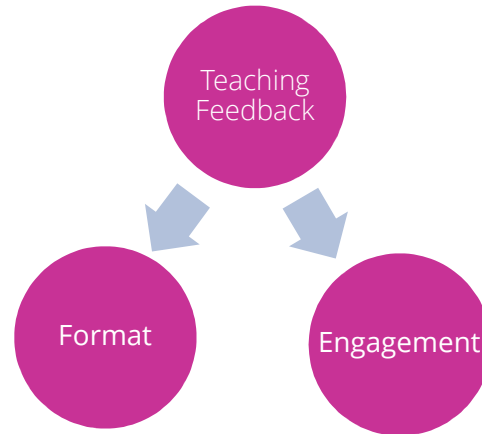
## Offending peers

*“Ultimately we are people pleasers, and we know that if you gave harsh feedback how would I would feel if I received it.”*



*“It felt watered down, like they’re trying to use a bunch of synonyms”*

# Teaching feedback



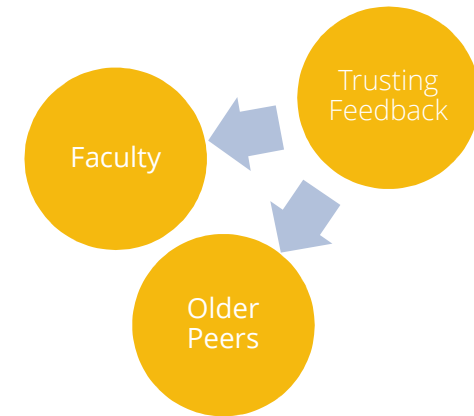
*"I think maybe like guidelines on a Word document or an online ten minute video would be a bit better"*

*"I don't know how many people would actually go to the lecture..."*

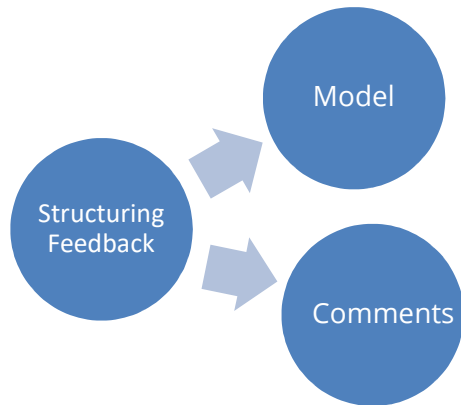
# Trust in feedback

*"It's a good thing if there was someone else marking it alongside the students"*

*"None of the students will have any credibility in me trusting your judgement over someone with 20 years experience in research"*



## Structuring feedback



*"I really liked how they told us to structure it, **good, not so good, good again**, and that's how I structured mine as well, and I liked how other people structured it in that way"*

*"Obviously you want good feedback, but **you learn most from the negative feedback**, that's what stays with you"*

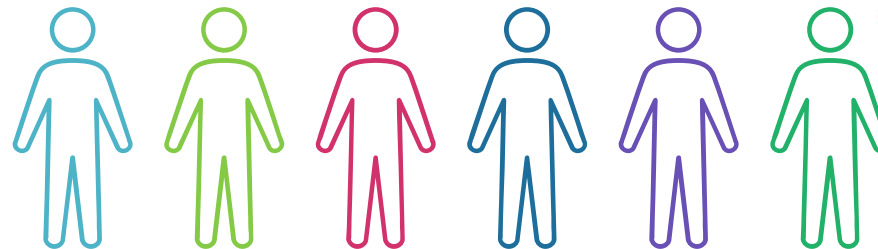
# Perceived Benefits

"As a doctor it will be important to take an active role in helping others improve in skills and knowledge"

"A very insightful and enlightening process!"

"It certainly became easier to mark as I went along"

"I didn't even get a sentence, just a mark (from faculty) whereas here I had paragraphs of useful feedback"





# Perceived Drawbacks

"Quite subjective and arbitrary. i.e. what's the difference between "critical" evaluation and "good level" of evaluation?"



"(feedback is useful) only if one is knowledgeable in that area"



"It is a difficult process, particularly on topics or formats that are unfamiliar"





Conclusions

# Conclusions

- Peer markers provide unique insight and higher quality qualitative feedback
- Could reduce faculty cost
- Providing example essays and structured feedback tools are helpful in giving students confidence to mark
- Impact if were to be used for summative assessment

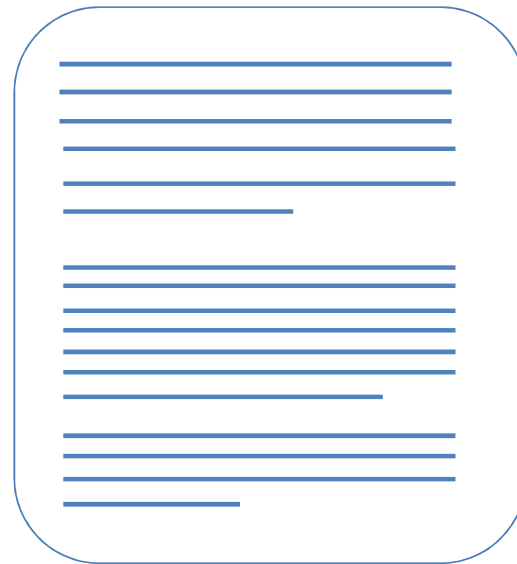
# Suggestions for Implementing Peer Marking

## Written Task

- ✓ Written advice on marking
- ✓ Structured mark schemes
- ✓ Example essays



## Written Task



## Analysis & Reflection

- Hawk-Dove analysis
- Reflection on peer feedback

Grade – average of 4 markers

Specific feedback

General feedback

# Acknowledgments



Dr Russell Hearn

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Questions or  
Feedback?

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Dr Russell Hearn  
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## References

1. Cate O Ten, Durning S,. **Peer teaching in medical education : twelve reasons to move from theory to practice.** 2009;
2. Thomas PA, Gebo KA, Hellmann DB. **A pilot study of peer review in residency training.** J Gen Intern Med [Internet]. 1999;14(9):551-4.
3. GMC **Good medical practice.** 2013
4. Thomas PA, Gebo KA, Hellmann DB. **A pilot study of peer review in residency training.** J Gen Intern Med [Internet]. 1999;14(9):551-4.
5. Epstein R. **Assessment in Medical Education.** N Engl J Med. 2011;841:7-64
6. der Vleuten V. **Assessment of competence** Adv Hea Sci Edu 1999.pdf.
7. Garrud P, McManus IC. **Impact of accelerated , graduate-entry medicine courses : a comparison of profile , success , and specialty destination between graduate entrants to accelerated or standard medicine courses in UK.** 2018;3:1-16.