



**Considering Students' Perceptions of the Face Validity in
Formative Quizzes: A Proposal for a Mixed-Methods
Process for Analyzing Opinions on Content Value**

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1 Introduction

1.1 Follow Along



1.2 Motivation

- *Valid* classroom assessment is **hard**
- Student perceptions on evaluations are **unclear**
- Student's have opinions on the *instructor*, less on *content*
- How can I bring students into the **process** of how I “grade” them

1.3 Value of Student Buy-in

- Students may see assessment as accountability at best, irrelevant at worst ([Brown & Hirschfeld, 2008](#); [Fletcher et al., 2012](#))
 - Trust is important so they can learn from assessment ([Carless, 2009](#); [Chu et al., 2014](#); [Leighton & Bustos Gómez, 2018](#))
 - The right, little “moves” can help make that trust more tangible ([Felten et al., 2023](#))
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2 My Implementation

2.1 Assessment at Regular Interval

- I already had consistent weekly quizzes as a mainstay in my courses
- Associated with good effects on retention ([Haigh, 2007](#); [Thomas et al., 2020](#))
- When corrective feedback is fast, supports better self-correction ([Marcell, 2008](#))
- My existing structure was ripe for addition

2.2 Embed in the Assessment

- 10-question multiple-choice quiz, open-note, relatively low stakes
- Embed in 1 - 2 quant/qual questions to assess “accuracy” of quiz
- Aim to capture an immediate “state”-like feeling, knee-jerk reaction (similar to Spielberger ([2012](#)))

2.3 Format of the Question

- Research on face validity from the student perspective is sparse at times
- Does show it’s importance in maintaining relevance to the student ([Hollis-Sawyer & Sawyer, 2008](#); [Sato & Ikeda, 2015](#))
- Some examples:
 - “Rate how close this quiz was to what we learned in class last week (1 - 5)”
 - “Do you feel like this content was covered in class? (yes / no)”
 - “Explain whether you feel this was representative of what you know (open)”
 - “What other topic were you expecting to show up that didn’t (open)”

2.4 Debrief and Analysis

- If easily accessible through LMS, may display bar graphs on board for numerical questions
 - Look for common vocabulary in the open responses
 - Use the insights from the qualitative to follow-up on the quantitative
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3 Advice for Your Implementation

3.1 Things to Avoid

- Creating culture of arguing for points
 - Students aren't SMEs, you don't need to treat them like one!
 - Only using quant or qual - use both!
 - Trying to do too much!
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3.2 References

- Allaire, J., & Dervieux, C. (2025). *Quarto: R interface to quarto markdown publishing system*. <https://github.com/quarto-dev/quarto-r>
- Brown, G. T. L., & Hirschfeld, G. H. F. (2008). Students' conceptions of assessment: Links to outcomes. *Assessment in Education: Principles, Policy & Practice*, 15(1), 3–17. <https://doi.org/10.1080/09695940701876003>
- Carless, D. (2009). Trust, distrust and their impact on assessment reform. *Assessment & Evaluation in Higher Education*, 34(1), 79–89. <https://doi.org/10.1080/02602930801895786>
- Chu, M.-W., Guo, Q., & Leighton, J. P. (2014). Students' interpersonal trust and attitudes towards standardised tests: Exploring affective variables related to student assessment. *Assessment in Education: Principles, Policy & Practice*, 21(2), 167–192. <https://doi.org/10.1080/0969594X.2013.844094>
- Felten, P., Forsyth, R., & Sutherland, K. A. (2023). Building trust in the classroom: A conceptual model for teachers, scholars, and academic developers in higher education. *Teaching and Learning Inquiry*, 11. <https://doi.org/10.20343/teachlearningqu.11.20>
- Fletcher, R. B., Meyer, L. H., Anderson, H., Johnston, P., & Rees, M. (2012). Faculty and students conceptions of assessment in higher education. *Higher Education*, 64(1), 119–133. <https://doi.org/10.1007/s10734-011-9484-1>
- Haigh, M. (2007). Sustaining learning through assessment: An evaluation of the value of a weekly class quiz. *Assessment & Evaluation in Higher Education*, 32(4), 457–474. <https://doi.org/10.1080/02602930600898593>
- Hollis-Sawyer, L. A., & Sawyer, T. P. (2008). Potential stereotype threat and face validity effects on cognitive-based test performance in the classroom. *Educational Psychology*, 28(3), 291–304. <https://doi.org/10.1080/01443410701532313>
- Leighton, J. P., & Bustos Gómez, M. C. (2018). A pedagogical alliance for trust, wellbeing and the identification of errors for learning and formative assessment. *Educational Psychology*, 38(3), 381–406. <https://doi.org/10.1080/01443410.2017.1390073>
- Marcell, M. (2008). Effectiveness of regular online quizzing in increasing class participation and preparation. *International Journal for the Scholarship of Teaching and Learning*, 2(1). <https://doi.org/10.20429/ijsoitl.2008.020107>
- R Core Team. (2025). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Sato, T., & Ikeda, N. (2015). Test-taker perception of what test items measure: A potential impact of face validity on student learning. *Language Testing in Asia*, 5(1), 10. <https://doi.org/10.1186/s40468-015-0019-z>
- Spielberger, C. D. (2012). *State-trait anxiety inventory for adults*. <https://doi.org/10.1037/t06496-000>
- Thomas, A. K., Smith, A. M., Kamal, K., & Gordon, L. T. (2020). Should you use frequent quizzing in your college course? Giving up 20 minutes of lecture time may pay off. *Journal of Applied Research in Memory and Cognition*, 9(1), 83–95. <https://doi.org/10.1037/h0101845>
- Xie, Y. (2014). Knitr: A comprehensive tool for reproducible research in R. In V. Stodden,
-

F. Leisch, & R. D. Peng (Eds.), *Implementing reproducible computational research*. Chapman; Hall/CRC.

Xie, Y. (2015). *Dynamic documents with R and knitr* (2nd ed.). Chapman; Hall/CRC.
<https://yihui.org/knitr/>

Xie, Y. (2025). *Knitr: A general-purpose package for dynamic report generation in r*.
<https://yihui.org/knitr/>