

Supplemental digital content for Phinney LB, Fluet A, O'Brien BC, Seligman L, Hauer KE. Beyond checking boxes: Exploring tensions with use of a workplace-based assessment tool for formative assessment in clerkships. Acad Med.

Supplemental Digital Appendix 3

Number of Work-Based Assessments (WBAs) Completed by Rotation, Completer Role, and Observed Skill in Years 1 and 2

WBA completed by specialty rotation		
Rotation	Year 1 (2019)	Year 2 (2020)^a
Anesthesia (2 weeks)	306	571
Family Medicine (longitudinal)	305	1,347
Medicine (8 weeks)	1797	1,688
Neurology (4 weeks)	590	698
OBGYN (6 weeks)	520	1,136
Pediatrics (6 weeks)	1065	1,267
Psychiatry (4 weeks)	1044	741
Surgery (8 weeks)	1547	1,591
WBA completion by role		
Role	Year 1 (2019)	Year 2 (2020)
Supervisor	7174 (100%)	1633 (18%)
Student	0	7406 (82%)
WBA completion by skill observed		
Skill	Year 1 (2019)	Year 2 (2020)
Communication (Year 2 only)	0	762
History	2834 ^b	1399
Physical Exam		1032
Note Writing	1092	1447
Oral Presentation	2485	2748
Other	757	1641
Procedure (Year 2 only)	0	10
Not marked	6	0
Total	7174	9,039

a. Year 2 (2020) contained 4 month clerkship hiatus followed by condensed rotations due to Covid-19 pandemic

b. History and Physical combined in year 1

Supplemental Digital Appendix 4 Year 2 Interview Guide

Thank you for participating in this interview. We appreciate your willingness to share your perspective as an MS3 student. The study team includes myself, working with Dr. Bridget O'Brien and Dr. Karen Hauer from the School of Medicine. The goal of this study is to understand how the use of the BBOT tool for direct observations in core clerkships has affected student learning experiences. In this interview, I will be asking you questions about your experiences on your clerkships. However, any potential identifying information for you or any other students, residents, or attendings you mention will be removed from the transcript and will not be used in our analysis. Please only share what you feel comfortable sharing. You can choose not to answer any questions that you do not feel comfortable answering. Our recorded discussion will be de-identified, professionally transcribed, and then coded for common themes that arise across all student interviews conducted during this study. No part of our discussions will be used for the purposes of grading or evaluation of either you or your residents and attendings.

With your permission, I would like to record this interview for transcription. You can request that we stop this interview at any time should you feel uncomfortable. I also wanted to let you know that, during the interview, I will be trying to provide neutral responses to your statements, and this does not in any way represent approval or disapproval of your answers.

Do you have any questions before we begin the interview?

Thank you. I will now turn on the recorder.

[Begin recording]

This is interviewer *[name]*, interviewing *[study participant #]*, on *[date]*

1. Can you walk me through a recent time that you received useful observation and feedback with the BBOT during a core clerkship?

Prompts:

- a. What were you doing during the observation?
 - b. How was it decided when/what would be observed?
 - c. What setting were you in when you received this feedback?
 - i. Which rotation?
 - ii. Which site?
 - d. Who provided this feedback?
 - e. Can you tell me what feedback you received?
 - i. What task were you performing?
 - f. Who completed the BBOT? How often did you work with this person?
 - g. What made this experience useful?
2. Can you walk me through a recent time that you received observation and feedback that was not useful with the BBOT ?

Prompts:

- a. What were you doing during the observation?
- b. How was it decided when/what would be observed?
- c. What setting were you in when you received this feedback?
 - i. Which rotation?
 - ii. Which site?
- d. Who provided this feedback?
- e. Can you tell me what feedback you received?

- i. What task were you performing?
 - f. Who completed the BBOT? How often did you work with this person?
 - g. What made this experience not useful?
3. Switching gears, what's been your general experience of the BBOT?
Prompts:
 - a. What is your approach to using the BBOT?
 - b. What barriers have you encountered in your use of the BBOT?
 - c. What aspects of the BBOT make it easy to use?
 - d. What patterns have you noticed of when or how you used the BBOT during a clerkship?
Do these patterns vary by clerkship or site? If so, how?
 - e. If LIC: How similar or different is your approach to the BBOT with LIC preceptors and inpatient preceptors?
 - i. LIC: Can you describe your relationship with your LIC preceptors versus inpatient preceptors
 - f. How has your approach to the BBOT changed over time, or not changed?
 - i. Has your approach to the BBOT been influenced by the Covid-19 pandemic?
4. Now I would like you ask more about what you have heard from other students. How are people generally using the BBOT?
Prompts:
 - a. Are there certain rules or conventions? These might be things you've been told or things you've noticed about when or how it's used.
 - b. In general, who initiates the BBOT? Who completes the BBOT?
 - i. If you complete the BBOT, does your preceptor look at the feedback you wrote before submitting?
 - c. We discussed before specific examples of BBOTs you received, but in general how is it decided when/what would be observed?
5. To what extent do you feel faculty are supportive of the BBOT? To what extent do you feel residents are supportive of the BBOT?
 - a. What did they say or do that helped you know that?
 - i. What differences did you notice across departments?
 - b. To what extent do you feel your peers are supportive of BBOT?
6. Have you used the information from the collection of BBOTs over time? For example, in discussion with your coach or in your dashboard? Why or why not?
 - a. Do you see any potential for this to be a useful practice? Why or why not?
7. Pulling all of your thoughts together, what did you see as the purpose of the BBOT in the context of the clerkship?
Prompts:
 - a. Does the BBOT fulfill that purpose?
 - b. How does the BBOT fit into or disrupt the workflow of the clerkship. What about asking for feedback without the BBOT?
 - c. How is feedback from the BBOT different from your formal evaluation?
 - d. How has the feedback from the BBOT influenced your learning?
 - e. How did the BBOT affect the overall quantity or quality of direct observation and feedback that you have had?
 - f. How is feedback similar or different with or without the BBOT.
 - g. How satisfied do you feel with the amount of direct observation and feedback you've received on your rotations so far?

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8. What would you change, if anything about the BBOT?
 - a. In what ways do you find it useful in its current form.
9. These are all of the questions that I had. What other last thoughts about direct observation and feedback that you would like to share?

I will now turn off the recorder.

[Turn off recorder; record following answers on paper labeled with participant #]

I would now like to ask you a few demographic questions, which we are asking to ensure that our data reflect diverse student experiences. Again, you are welcome to skip any of these questions if you so choose. These are free-response questions, so feel free to provide any answer you would like.

With what gender do you identify?

With what race and/or ethnicity do you identify?

Which core clerkships have you already taken, including your current clerkship?

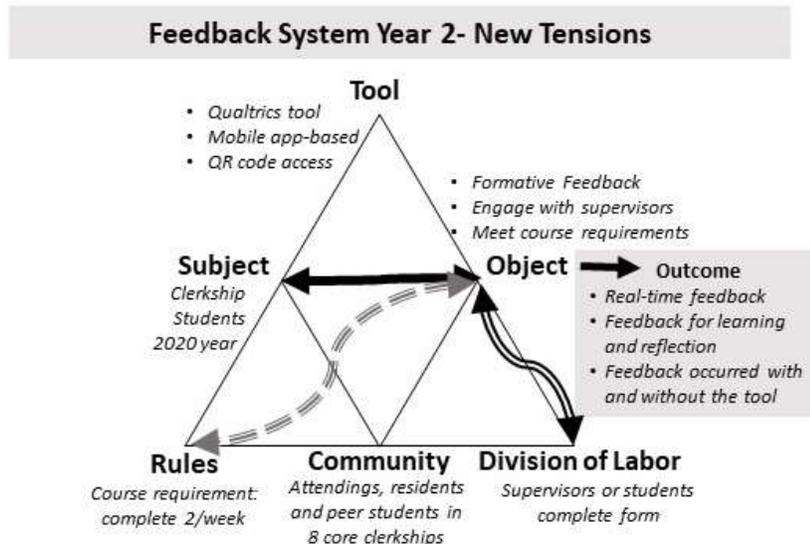
Do you have any ideas about what field you may want to go into?

Thank you. We will be sending you an electronic gift card as a thank you for your time. Please email me if you don't receive it within two weeks.

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Supplemental Digital Appendix 5

New Tensions Identified in Feedback Systems in Year 2 Through the Lens of Cultural-Historical Activity Theory



CHAT elements		New Tensions in Feedback System Year 2
Subject vs Object	↔	Despite greater clarity about WBA purpose, WBA content submitted by students may differ from that submitted by supervisors
Division of Labor vs Object	↔	Balance of autonomy and supervision in form completion may skew toward students and lessen supervisor participation
Rules vs Object	↔	Despite overall decreased feeling of burden in year 2, many students still view WBA as a checkbox activity

*Faded arrows demonstrate improvement in tensions from prior