



Clinical Teaching Tips: Assessment and Feedback

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Today's Presenters

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Disclosure



None of the speakers, nor any members of their immediate family have any financial interests to disclose related to the content of this webinar.



OBJECTIVES

At the completion of this session participants will be able to:

- ▶ Describe formative and summative assessment.
- ▶ Explain criterion referenced evaluation and how to use a rubric.
- ▶ Identify two best practices for providing feedback.

What is assessment?

“In education, the term **assessment** refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students.”

The Glossary of Educational Reform, 8/27/18
<https://www.edglossary.org/assessment/>



How's assessment different from evaluation?

Assessment and Evaluation are often used interchangeably, but there are subtle differences.

- ▶ **Evaluation** is the process of making judgments based on criteria and evidence.
- ▶ **Assessment** is generally broader – it documents what students are learning.
 - ▶ Several evaluations can be used in an assessment
 - ▶ Used for making improvements
 - ▶ Provide information for students, faculty, the school, CODA
 - ▶ Can be formative or summative.

Formative and Summative Assessment

Formative Assessment	Summative Assessment
Done at various points along learning process	Done at the end of unit, term or program
Assesses how student is progressing toward learning goals	Assesses student mastery or competency
Guides next steps in instruction/learning	Provides information regarding attainment of knowledge/skills
Helps students identify improvements needed	Helps students track achievement
Ongoing	Single or multiple (CODA)
Lower stakes	Higher stakes

Poll



Which of the following is/are NOT summative assessment?

- A. Daily evaluation in Perio
- B. Caries removal test case
- C. National Board Exam
- D. All are summative assessment

Types of Evaluation

- ▶ Norm-referenced
 - ▶ Measures students against a norm to rank students in comparison to each other
 - ▶ E.g.: DAT, National Board exam
- ▶ Criterion-referenced
 - ▶ Measures student performance against a standard or specific goals
 - ▶ E.g.: SOD test cases



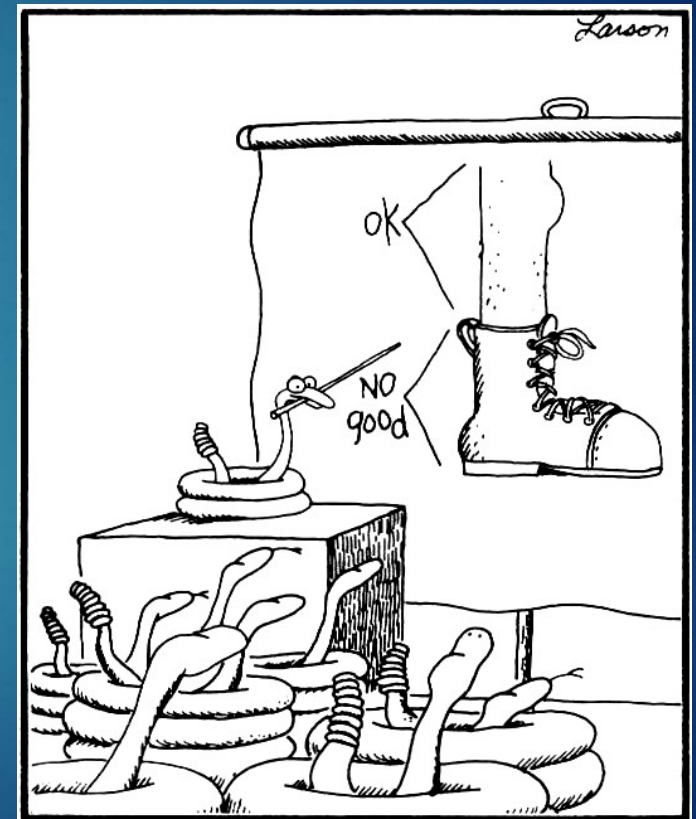
Most clinical evaluation is criterion-referenced

Why is that?



What makes for good criteria?

- ▶ Individually valid
 - ▶ Necessary for the procedure
- ▶ Collectively valid
 - ▶ Predictive of success if all are performed
- ▶ Non-compensatory
 - ▶ All independent of one another
- ▶ Sequenced according to actual clinical use
- ▶ As objective and clear as possible
- ▶ Measurable



Components of a Rubric

- ▶ Criteria
 - ▶ Aspects of performance broken down into components
 - ▶ Must describe the desired performance/outcome (goal)
 - ▶ Must describe what failure looks like
- ▶ Levels of performance
 - ▶ At least two
 - ▶ Can have more (e.g. RSTV)
- ▶ Demarcation between acceptable and unacceptable performance/outcome
- ▶ Scoring guide

Restorative		Caries Risk Case		
Student:	Patient ID#:	Date:	For (circle): D3 D4 S5 FA WN	
Test Case Rubric: Caries Risk Assessment				
Case Criteria:				
	R- Clinically Ideal	S- Clinically Acceptable	V- Critical Error = Retake Case	Comments (Required for V)
Preparedness	<ul style="list-style-type: none"> ● Seats patient on time ● Proper forms, equipment and setup ● Follows clinic attire guidelines 	One error	Two or more errors	
Patient Management	<ul style="list-style-type: none"> ● Follows HIPAA protocol ● Uses time efficiently ● Accurate and complete records ● Appropriate cultural sensitivity ● Patient comfort, anxiety and pain management. 	One error	Two or more errors or any HIPAA violation	
Infection Control	<ul style="list-style-type: none"> ● Follows OSHA protocol ● Appropriate PPE ● Appropriate cross-contamination control 	One error	Two or more errors or any OSHA violation	
Evidence-Based Care	<ul style="list-style-type: none"> ● Able to explain rationale for clinical decisions based on science and available evidence 	One error	Two or more errors	

Tips for Using a Rubric



- ▶ Review and understand the criteria
- ▶ Begin at the top and work your way down the list of criteria (provides a more accurate and systematic evaluation)
- ▶ Know what is unacceptable and acceptable
- ▶ Make comments for any unacceptable rating (T or V)
- ▶ Consult with other faculty when unsure (helps with standardization)
- ▶ Complete the rubric as soon as possible following the evaluation
- ▶ Provide verbal feedback to the student

Students are particularly sensitive to inconsistency between different evaluators.

- ▶ They describe the most effective clinical teachers as those who:
 - ▶ KNOW the evaluation criteria
 - ▶ USE them consistently
- ▶ Reviewing student performance by individually applying the criteria supports the learning process



Five common human errors affecting evaluation

- ▶ Halo effect
 - ▶ Judging the person, not the product
- ▶ Central tendency error
 - ▶ Top and bottom of the scale not used
- ▶ Generosity error
 - ▶ Assessments skewed at the top of the scale
- ▶ Severity error
 - ▶ Poor performance assumed based on inexperience
- ▶ Logical error
 - ▶ Connecting assessment to other known abilities



Poll

- ▶ Which, if any, of these errors have you experienced?
 - A. Halo Effect
 - B. Central Tendency Error
 - C. Generosity Error
 - D. Severity Error
 - E. Logical Error
 - F. None of the above

Feedback

Information about how one is doing in one's efforts to reach a goal.

- ▶ Informal or formal
- ▶ Between student and faculty, peer to peer, or self-evaluation
- ▶ Information related to the effect of a person's actions toward a goal.
- ▶ Essential to learning – “teach less, provide feedback more”
- ▶ Difference between feedback and advice

<http://www.ascd.org/publications/educational-leadership/sept12/vol70/num01/Seven-Keys-to-Effective-Feedback.aspx>



Feedback Best Practices

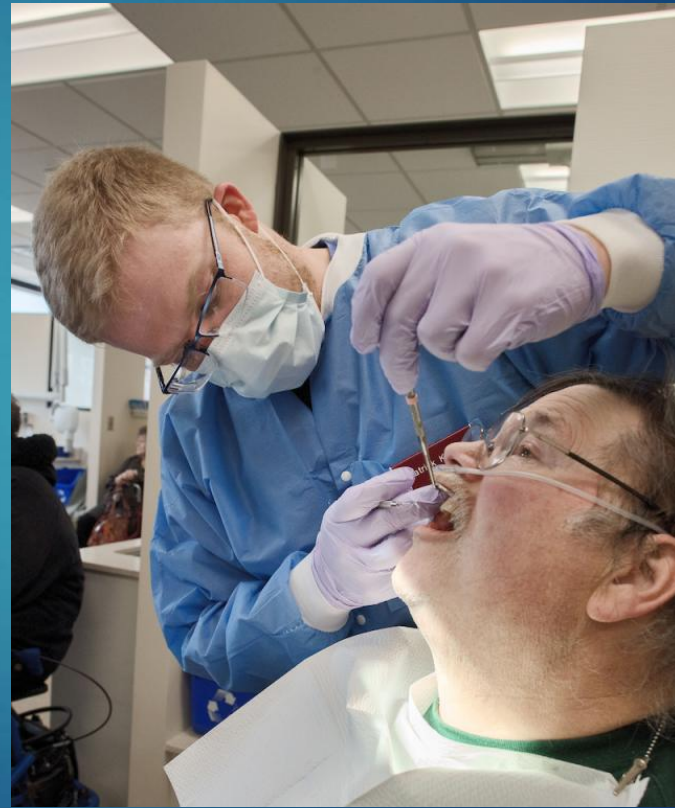
- ▶ Make sure to reference the goal
- ▶ Emphasize tangible and transparent results related to the goal
- ▶ Make it actionable
- ▶ Make it user-friendly
- ▶ Timely feedback is best
- ▶ Should be ongoing
- ▶ Be consistent
- ▶ Keep in mind progress toward the final goal
- ▶ Find time

<http://www.ascd.org/publications/educational-leadership/sept12/vol70/num01/Seven-Keys-to-Effective-Feedback.aspx>



Practice providing feedback

Seth



Practice providing feedback



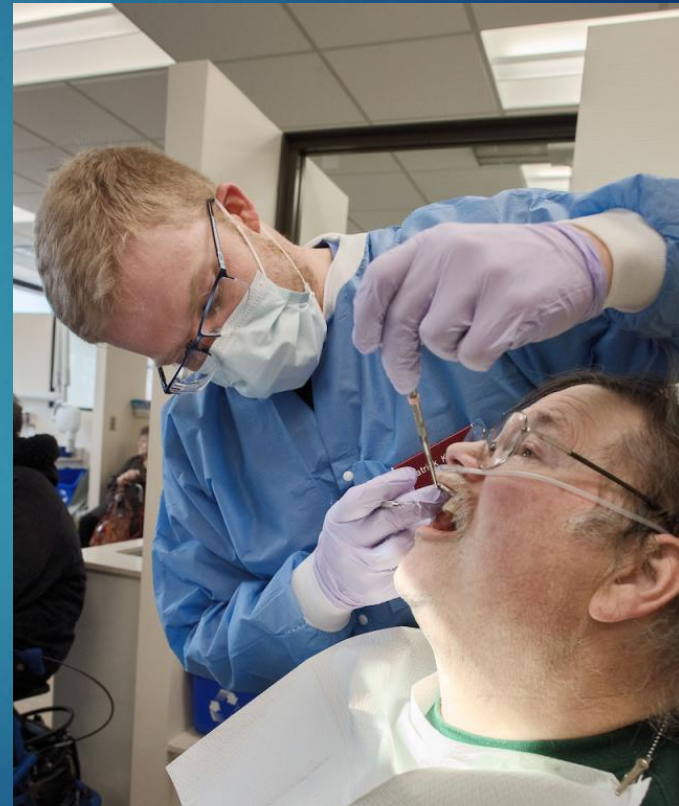
You've worked with Seth on a treatment plan today. He was more than a little disorganized, with dental problems and existing restorations scribbled all over the paper on the counter. He missed two obvious carious lesions and had to be prompted to complete the caries risk assessment.

However, he was very kind to his patient, who has early dementia, and developed good rapport with him and his wife.

It's been very busy in the clinic and you don't have much time to talk with Seth. Think of the most important thing you want to tell him and plan how you'd like to give him this feedback.

Feedback to Seth

Type your feedback into the comments box.



Let's Recap

- ▶ Evaluation and assessment
- ▶ Formative and summative evaluation in clinic
- ▶ Importance and use of criteria
- ▶ Humans and evaluation
- ▶ Feedback best practices



Questions

Type your question into the
Q&A box!



Special thanks to...

Our panelists:

- ▶ Don Heys
- ▶ Ron Heys

Supporting materials:

- ▶ Mark Fitzgerald



Thank you for participating in this webinar!

- ▶ A recording of this webinar will be available on MiTools
- ▶ Webinar evaluation
- ▶ Continuing education letter
- ▶ Upcoming programs are posted on MiTools



Resources

- ▶ A great explanation of assessment: [Edudemic](#)
- ▶ Fun illustration of [formative and summative evaluation](#) – the chef tasting the soup is formative and the customer tasting is summative
- ▶ Effective [Feedback](#)