Moving from Message to Action:
The role of the learner in feedback

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Roadmap

- History and definition of feedback
- Role of the receiver
- Role of the message
- Role of the external forces
- Redefining feedback and moving forward
- I am not here to tell you the words to use to provide feedback. That is the easy part.
- I am here to share with you data about factors critical to successful feedback in addition to the “message” itself.
Feedback

- 1860’s Industrial Revolution
  - Feedback used to describe the way outputs of energy, momentum, or signals are returned to the point of origin in an mechanical system

- 1909 the coupling and loops between components in an electronic circuit

- “information alone is not feedback unless translated into action” Scriven (1967) and Ramaprasad (1983)
“Feedback is about providing information ... with the intention of narrowing the gap between actual and desired performance.”

(Cantillon & Sargeant, 2008; Crommelnick & Anseel, 2013)
Feedback is ...

“... the process of making a connection to share information about observed strengths, perceived gaps, blind spots, and/or the impact of one’s behavior on others”
Feedback in medical education

1892 Johns Hopkins School of Medicine

- Required that all medical students must have earned a bachelor’s degree
- Medical degree would require a four-year course of study
- First class of 18 students were presented with a cadaver, a scalpel and the instructor, Dr. Mall, left
  - No lectures, no text, no instruction

“Students didn’t simply dislike Mall, they detested him”

Areas for Feedback in Medical Education

- **Clinical competence**
  Physical examinations, history taking, diagnostic and therapeutic plans, notes or discharge summaries

- **Communication competence**
  Patient/Client interactions; case presentation, team interactions

- **Professional competence**
  Punctuality, time management, coping with responsibility, organizational skills, showing interest in learning
Feedback Assumptions

- All feedback is good feedback
- More feedback is better
- One-way flow of information
- Feedback is complete when information is delivered
- One model of feedback for all learners and situations
Does feedback have an impact?

Factors that influence student achievement

1. Direct instruction
2. Reciprocal teaching
3. Feedback
4. Student’s prior cognitive ability

Effect size varies

- Greatest effect - associated with feedback about a task and how to do it more effectively

Hattie 1999
# Feedback in the Learning Environment

<table>
<thead>
<tr>
<th>With Feedback</th>
<th>Without Feedback</th>
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<tbody>
<tr>
<td>• Individuals have increased</td>
<td>• Individuals may</td>
</tr>
<tr>
<td>• Confidence and motivation</td>
<td>• <strong>Overestimate</strong> their abilities</td>
</tr>
<tr>
<td>• Interpersonal skills</td>
<td>• Lack reinforcement of effective performance</td>
</tr>
<tr>
<td>• Learner satisfaction</td>
<td>• Fail to correct poor performance</td>
</tr>
<tr>
<td>• Clinical performance</td>
<td>• Receive a false “<strong>positive</strong>” impression</td>
</tr>
<tr>
<td>• Accuracy of self-assessment</td>
<td></td>
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<tr>
<td>• Patient/client satisfaction</td>
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(Crommelineck & Anseel, 2013; Malloy & Boud 2013; Thomas & Arnold 2011; Davis et al 2006; Clynes & Rafery, 2008)

(Davis et al 2006; Ende 1995; Laidlaw 2004; Waitzkin 1985; Spickard, 2008; Cantillon, 2008)
“Lack of feedback is one of the most serious deficiencies in medical education practice.”
Some feedback has no effect on learning or performance

When students receive overly critical appraisals of their work, it can have a negative impact on learning

Kluger, A. N. and DeNisi, 1996; Hattie and Timperley, 2007
The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-Analysis, and a Preliminary Feedback Intervention Theory

Avraham N. Kluger
The Hebrew University of Jerusalem

Angelo DeNisi
Rutgers University

Effectiveness

Task

Self

Focus of Feedback

Psychological Bulletin 1996
Feedback – a gift?
Information/observation

Feedback message delivered = Success

Provided to the learner
Essential components of feedback

- Information on the goal of the performance
- Information on the executed performance
- Strategies to address the gap between task goal and task performance

Sadler DR. 1989  Instructional Science 18:119-144
Effective feedback answers three questions

Where am I going? (goals)  Feed up
How am I going?  Feed back
Where to next?  Feed forward

Hattie and Timperley 2007
The Role of the Recipient
(Deciding what to put in the box AND how to wrap it)
Role of the learner

- Learner
  - Thoughts
  - Experience
  - Not a machine or endocrine organ responding to a stimulus or hormone

- Learner must be able to “hear”, decode and utilize the information
Consideration of learner’s desired feedback

- Appreciation
  - Motivation and encouragement

- Coaching
  - Observations on performance with goal of providing strategies for moving closer to desired performance

- Evaluation
  - Identifies location relative to standards or performance of others
  - Aligns expectations
  - Informs decision making

Stone and Heen, 2014
“Educators must acknowledge the psychosocial needs of the recipient while ensuring that feedback is both honest and accurate”

Archer 2010
On average, positive and negative feedback are similar in their effects on performance. Feedback that threatens self is likely to debilitate recipients.
Factors influencing responsiveness to feedback: on the interplay between fear, confidence, and reasoning processes

- Self-perception and external feedback interact to influence professional development

- Factors that influence interpretation and uptake of feedback
  - Confidence
  - Experience
  - Fear of not appearing knowledgeable

- Responses indicated a paradox: individuals need to achieve a level of comfort, experience, and confidence prior to being prepared to ask for or receive corrective feedback
Impact of learner focus

- **Prevention focus**
  - Regulates avoidance of pain or punishment
  - Things we do because “we have to”

- **Promotion focus**
  - Regulates the achievement of pleasure or reward
  - Things we do because “we want to”

Kluger and Dijk 2010
Impact of learner focus

- Study findings
  - Prevention focus
    - Negative feedback causes in performance
    - Positive feedback causes in performance
  - Promotion focus
    - Positive feedback causes in performance
    - Negative feedback causes in performance

Kluger and Dijk 2010
“to determine which type of feedback is appropriate, we need to know not only which regulatory focus is salient, but also which aspect of motivation is stronger in each situation”

- Emphasis in medicine
  - avoid error, manage risk, minimize losses
    - prevention focus
    - avoid malpractice rather than improve patient health
Learner perception of feedback

- “I consider it important to get feedback on my work”
  96% positive responses
- “I think I receive enough feedback”
  58.8% positive responses
- “I know where to get more feedback from if I need it”
  35.8% positive responses

Maturational differences in undergraduate medical students’ perceptions about feedback
Deborah Murdoch-Eaton¹ & Joan Sargeant²

Medical Education 2012: 46: 711–721
Why don’t they just ask?

Feedback seeking

“The conscious devotion of effort towards determining the correctness and adequacy of one’s behaviors for attaining valued goals.”

Ashford SJ, 1986
Key aspects of feedback-seeking

- **Method**
  - Inquiry
    Direct ask for information
  - Monitoring
    In-depth observation of the situation and other people’s behavior in order to collect information about one’s own performance

- **Frequency**
- **Timing**
- **Characteristics of the “target”**
  - Greater expertise
  - Greater accessibility

- **Topic**

Crommelinck M and Anseel F. 2013
Feedback seeking

- Motives
  - Performance improvement
  - Ego bolstering
  - Image Building

- Personal characteristics
- Situational circumstances
- Perceived benefits and costs
Encouraging residents to seek feedback

DIANNE DELVA¹, JOAN SARGEANT², STEPHEN MILLER²,³, JOANNA HOLLAND⁴, PEGGY ALEXIADIS BROWN⁵, CONSTANCE LEBLANC²,⁴,⁶, KATHRYN LIGHTFOOT⁶ & KAREN MANN²

- **Culture**
  - Faculty and residents agree that culture normalizing feedback would open residents to seek feedback
  - Faculty feel residents expected to take responsibility for seeking feedback

- **Residents**
  - Lack of quality
  - Lack of observation
  - Infrequent feedback

- **Relationship**

- **Emotional response**
Lack of observation time

Poor quality of feedback

Perceived only as service providers

Comfort - Supportive vs intimidating

Time required to provide feedback

Time on rotation

Fear of receiving bad feedback and "shining light"

Resident responsibility to seek feedback

No insight regarding behaviors that encourage feedback-seeking

Concerned with defensive reactions
Feedback seeking related to personal and interpersonal factors

- Intentions and characteristics of the feedback provider
  - Good communicators
  - Provide feedback on observed learner performance
- Relationship between the feedback seeker and the provider
  - Longer history of working together
- Image and ego
  - More likely to seek feedback when it might have positive effect on image and ego
Information/observation

Provided to the learner

CONTEXT + BEHAVIOR + IMPACT + NEXT STEPS
C-BIN Feedback Talking Points

**Context**
Describe the situation. Be as specific as possible as if you were watching a movie.

**Behavior**
Describe the behavior as clearly as possible as if you were watching a movie.

**Impact**
What were the results of this behavior? Positive or negative?

**Next Steps**
What specific behavior might be changed or repeated?

Why make this change? Check for understanding

Adapted from CCL, “Giving effective feedback,” 2003
“Early this morning, I listened to you gather a history from Mrs. Smith regarding her cat Bob. I noted that you listened carefully to her tell you that she was worried about him and his reported vomiting. You spoke with a calm voice and... I heard the client tell you that she appreciated you listening to her and your support. Your capacity to listen to clients and show empathy, even when you’re busy, is impressive. I really appreciate that you did that. It shows your commitment to our practice philosophy of compassionate care. I would like you to discuss this interaction in case rounds today so that others gain from your experience.”

Adapted from CCL, “Giving effective feedback,” 2003
Only 50% of feedback encounters in a medical education study included strategies for how the learner could improve

Fernando N. 2008 Medical Education 42:89-95
Feedback message delivered

success?
The Role of Culture and Relationship to the Individual Giving the Gift
Medical students describe feedback as:

- Happening “to” them rather than “with” them
Beyond individualism: professional culture and its influence on feedback

*Medical Education 2013: 47: 585–594*

Christopher Watling,¹ Erik Driessen,² Cees P M van der Vleuten,² Meredith Vanstone³ & Lorelei Lingard⁴

Study of how feedback is handled within different professional cultures and how the characteristics and values of a profession shape learners’ responses to feedback.

- **Music**
  Taught by the same teacher for many years

- **Teaching**
  Time limited intense practicum experiences

- **Medical education**
  Multiple expert preceptors for short periods of time

- **Context for learning influences how feedback was handled**

- **Credibility and constructiveness**
  - Essential for feedback to be perceived as meaningful
  - Incorporation of an action plan
Lack of observation time
Poor quality of feedback
Perceived only as service providers
Comfort Supportive vs intimidating
Time on rotation
Fear of receiving bad feedback and “shining light”
Time required to provide feedback
Resident responsibility to seek feedback
No insight regarding behaviors that encourage feedback-seeking
Concerned with defensive reactions
If one hopes to convey feedback that is perceived as credible an effort must be made to tailor feedback in a manner that will be interpretable and palatable through the lens of the recipient’s perceptions.

Feedback appears most likely to be perceived as worthy of attention and action when delivered from a clear position of beneficence that allows the learner to maintain their self-concept.
When, how, and by whom feedback is delivered matters ... and it is not received in a vacuum

How feedback is received is as important as how it is delivered

receiver’s view of:

world of practice
feedback provider
his/her own abilities
fears, motivations, expectations
Follow through
Putting the gift to work
"The process of feedback might be prompted by what teachers say or write, but the process is not concluded until action by students occurs."

Feedback in Higher and Professional Education: Understanding it and Doing it Well
Boud & Molloy 2013
“Learners must have an active role in feedback. If they are passive recipients of inputs from others, feedback for learning is not occurring. It is only the learner who can ultimately act to change what they do. Students must therefore develop the skills of engagement, including seeking feedback, self-evaluating, and making sense of internal and external judgments, at the earliest stage.”

Feedback in Higher and Professional Education: Understanding it and doing it well

David Boud and Elizabeth Molloy 2013
Standards of work and purpose of feedback defined

Student judges work

Student seeks feedback

Outside feedback

Student compares input

Plan generated for improved work

Activity 1

Student trust of instructor

Activity 2

Student awareness of self

Instructor delivery of message (CBIN)

Adapted from:
Feedback in Higher and Professional Education: Understanding it and Doing it Well

Boud and Malloy 2013
Reflective knowledge building

- A process of evaluation and knowledge building
  - Students given the opportunity to:
    - Reflect on and evaluate their own work in relation to feedback input from others or from self-review
    - Use the results of the evaluative processes to build better understanding

- Development of a skilled, self-aware learner

Roscoe and Chi 2008
Boud and Malloy 2013
Feedback is a process

- **Role of the learners**
  - Seek information about their work

  *Feedback contributes to the development of self-aware, feedback-seeking, lifelong learners*

- **Role of the educator**
  - Create a culture that values time and space for feedback
  - Build relationships with learners over time
  - Deliver the message effectively
Feedback contributes to the development of self-aware, feedback-seeking, lifelong learners
Questions?