What are the educational underpinnings of feedback?

For individuals to develop “as independent learners who are able to monitor, evaluate and regulate their own learning,”¹ feedback is indispensable. Feedback bridges “the gap between actual performance and the desired learning goal.”¹ Through feedback, learners receive information about their performance in a learning environment. Constructive and focused suggestions and comments enable learners to hone their strengths and improve on their weaknesses. Feedback is most effective as a continuous process that supports learning, rather than a series of unrelated snapshots.

What theories support using feedback for learning?

The literature pertaining to feedback shows a consensus about the “importance of holistic and iterative feedback designs.” This is primarily based on socio-constructivist theory,¹ which states that learners actively construct their own knowledge through interaction with others and their environment. Knowledge construction happens primarily through active learning: the ongoing, iterative, formation and testing of hypotheses and social interactions.³

How can I use this approach in my education practice?

Seven evidence-based feedback principles¹ are listed below with examples of effective and ineffective ways to offer feedback:

1. Formulate feedback specific to a task and for a learner’s performance of that task, not for the learner as a person.
   
   **Ineffective** “You are poor at history taking.”
   
   **Effective** “In taking the history of patient X, I observed you doing Y, which is an ineffective strategy.”

2. Focus feedback on the “what, how, and why of the task,” instead of simply indicating whether the performance meets inferred expectations or not.
   
   **Ineffective** “Good job taking the patient’s history.”
   
   **Effective** “The way you asked for follow-up questions with patient X, when he didn’t fully address your question, was a very good strategy.”

3. Use exemplars of good practice to provide concrete information about how to improve performance, rather than comparing a learner’s performance to the performance of others.
   
   **Ineffective** “In performing the physical exam on patient X, you forgot to listen for heart murmurs. Other interns always listen for heart murmurs in this type of patient.”

---

*About the author:*
Pieter Walstock, BA, BSc,
UCSF visiting student,
graduating MD 2016,
University of Groningen, The Netherlands
Effective “I noticed that you did not listen for heart murmurs while examining patient X. The hospital standard states that you should always listen for heart murmurs in this type of patient. You might want to check the standard again.

4. Give clear and focused feedback on how learners can improve their work. For continuing improvement and self-regulated learning, it is important to help identify areas where learners can further develop.

Ineffective “You are doing very well for a third-year student.”

Effective “You did a good job on X. To further your development towards the next level, you could focus on improving in area Y.”

5. Involve the learner in managing their learning trajectory by asking them to distill personal, concrete learning/action points from the feedback.

Ineffective “Next time I expect you to do better.”

Effective “Based on the feedback I just gave you, what are your take-away points and personal learning goals for next time?”

6. Provide comparative information about a learner’s past performance to indicate growth.

Ineffective “Just like last time, you are making the same mistakes.”

Effective “I think you did X a lot better than last time, but you still need to work a bit on improving Y.”

7. Motivate learners to support self-esteem and trust.

Ineffective “How can you make these mistakes?”

Effective “We all had to learn somehow and making mistakes is the best way to learn as long as you think about how you got into the situation and how you can improve.”

References

