

# Chapter 19

## 3D Feedback: A Three-Dimensional Feedback Approach That Makes Students Feel, Think, and Act Big

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### ABSTRACT

*Feedback is a vital component of formative assessment processes. Criteria for providing effective feedback practices have been reinforced in governments' recent educational documents. The development of engaging feedback approaches that foster students' progress and maximize their motivation has gained increased popularity in both research and practice. This chapter aims to present a three-dimensional approach to providing feedback (3D feedback) that supports student engagement with feedback comprehensively—emotionally, cognitively, and behaviorally. Within this frame, an inclusive account of key indicators/activities reflecting the three dimensions of engagement with feedback is provided, along with their pedagogical implications. This is potentially useful to educators who are interested in adopting feedback interactions that are meaningful and stimulating to students, with clear purposes. The chapter also proposes guidelines for high-quality, engaging, and formative feedback, drawing on best practice principles and research findings.*

### INTRODUCTION

Learning is not a straightforward process because knowledge and understanding are constructed and reconstructed in a continual and progressive manner while being shaped through learning experiences (e.g., meaning-making, dialogue, and learning by doing), both within and between individuals (Dun-

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### **3D Feedback**

worth & Sanchez, 2016). A common practice that acts as a catalyst to drive this process of knowledge construction and reconstruction is ongoing formative assessment, also known as assessment for learning. It is the condition through which teachers elicit, analyze, and respond to the formative data they had obtained about their students' understanding (Strijbos et al., 2021) to identify the specific learning misconceptions, gaps, or struggles that need to be addressed while deciding on the next learning path for the students (Carless, 2019). Such responsive interventions are undertaken through diverse activities and strategies that often take place at the beginning, middle, or end of a lesson (Elsayed & Cakir, 2023).

The step that stands out as the most significant in the formative assessment process explained above is the teacher's response to the diagnostic data at hand by giving a quick and valuable piece of information—feedback—to acknowledge and enable the progress in the student's current performance (Price et al., 2010). In this regard, the prevalent general understanding found in the relevant educational literature represents feedback as “information provided by the teachers to the learners regarding some aspect(s) of their work or performance, to modify the learner's cognition, motivation and/or behavior for improvement” (Duijnhouwer et al., 2010, p. 16). Taking a broader view, all modes of communicative dialogues that support learning (Carless, 2022), both formal and informal, such as oral, visual, or text-based, are considered feedback (Sadler, 2010). For instance, facial expressions, body gestures, grades, advice, praise, or criticism are all types of post-response information and are considered feedback once they involve an element of assessment or evaluation (Wiggins, 2012). Generally, as an instructional tool, feedback intends to serve the following functions: confirm correct answers, address mistakes and weaknesses (criticism or critical feedback), rectify errors (corrective feedback), explain errors, demonstrate correct practices (e.g., ideal or model answer), engage students in critical thinking, challenge students' preconceptions, suggest further search, appreciate the strengths in students' work by giving them praise and encouragement (positive feedback), justify marks, and suggest approaches for future assignments (Alt et al., 2023; Sanford, 2018).

Irrespective of the function that the feedback strives to serve, the embedded information is considered formative when it highlights three major areas of students' learning (Hattie & Timperley, 2007):

1. ‘How are they doing?’ This provides students with information that can help them recognize the gap in their learning.
2. ‘Where should they aim at?’ This identifies specific goals of learning.
3. ‘What should they do next?’ This determines the action needed for closing the gap to help learners improve.

Ultimately, the impact of the communicated feedback information on the learner's improvement, whether in the short term or the long term, should become the end goal (Sadler, 2010). This shifts the attention from the input process, in terms of how the feedback is constructed, to the output that mainly involves the student's interaction with that information (Elsayed & Cakir, 2023). As such, equal importance is placed on the feedback provider (the teacher) and the feedback receiver (the student). Thereby, students are expected to fulfill their role in the feedback practice by seriously considering investing their time and effort in the uptake of the information from the received feedback to upgrade their learning (Ali et al., 2015; Carless, 2019; Nash & Winstone, 2017; Scott et al., 2011). In this sense, feedback without the students' active engagement is completely unproductive (Carless, 2019). Thus, the students' agency in the regulation of their own learning is crucial in making feedback effective for learning (Strijbos et al., 2021) and is the essence of sustainable feedback (Carless, 2022).

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