Table 2

Formative Feedback Guidelines to Enhance Learning (Things to Do)

	Prescription	Description and references
1	Focus feedback on the task, not the learner.	Feedback to the learner should address specific features of the learner's work in relation to the task, with suggestions on how to improve (e.g., Butler, 1987; Corbett & Anderson, 2001; Kluger & DeNisi, 1996; Narciss & Huth, 2004).
2	Provide elaborated feedback to enhance learning.	Feedback should describe the what, how, and/or why of a given problem. This type of cognitive feedback is typically more effective than verification of results (e.g., Bangert-Drowns et al., 1991; Gilman, 1969; Mason & Bruning, 2001; Narciss & Huth, 2004; Shute, 2006).
3	Present elaborated feedback in manageable units.	Provide elaborated feedback in small enough pieces so that it is not overwhelming and/or discarded (Bransford et al., 2000; Sweller et al., 1998). Presenting too much information may not only result in a superficial learning, but also invoke cognitive overload (e.g., Mayer & Moreno, 2002; Phye & Bender, 1989). A stepwise presentation of feedback offers the possibility to control for mistakes and gives learners sufficient information to correct errors on their own.
4	Be specific and clear with feedback messages.	If feedback is not specific or clear, it can impede learning and can frustrate learners (e.g., Moreno, 2004; Williams, 1997). If possible, try to link feedback clearly and specifically to goals and performance (Hoska, 1993; Song & Keller, 2001).
5	Keep feedback as simple as possible but no simpler (based on learner needs and instructional constraints).	Simple feedback is generally based on one cue (e.g., verification or hint) and complex feedback on multiple cues (e.g., verification, correct response, error analysis). Keep feedback as simple and focused as possible. Generate only enough information to help students and not more. Kulhavy et al. (1985) found that feedback that was too complex did not promote learning compared to simpler feedback.
6	Reduce uncertainty between performance and goals.	Formative feedback should clarify goals and seek to reduce or remove uncertainty in relation to how well learners are performing on a task and what needs to be accomplished to attain the goal(s) (e.g., Ashford, Blatt, & VandeWalle, 2003; Bangert-Drowns et al., 1991).
7	Give unbiased, objective feedback, written or via computer.	Feedback from a trustworthy source will be considered more seriously than other feedback, which may be disregarded. This may explain why computer-based feedback is often better than human-delivered in some experiments in that perceived biases are eliminated (see Kluger & DeNisi, 1996).
8	Promote a learning goal orientation via feedback.	Formative feedback can be used to alter goal orientation—from a focus on performance to a focus on learning (Hoska, 1993). This can be facilitated by crafting feedback emphasizing that effort yields increased learning and performance and that mistakes are an important part of the learning process (Dweck, 1986).
9	Provide feedback after learners have attempted a solution.	Do not let learners see answers before trying to solve a problem on their own (i.e., presearch availability). Several studies that have controlled presearch availability show a benefit of feedback, while studies without such control show inconsistent results (Bangert-Drowns et al., 1991).