

TABLE 1  
*Feedback types arrayed loosely by complexity*

Feedback type	Description
No feedback	Refers to conditions where the learner is presented a question and is required to respond, but there is no indication as to the correctness of the learner's response.
Verification	Also called "knowledge of results" or "knowledge of outcome." It informs the learners about the correctness of their responses (e.g., right-wrong, or overall percentage correct).
Correct response	Also known as "knowledge of correct response." Informs the learner of the correct answer to a specific problem, with no additional information.
Try again	Also known as "repeat-until-correct" feedback. It informs the learner about an incorrect response and allows the learner one or more attempts to answer it.
Error flagging	Also known as "location of mistakes." Error flagging highlights errors in a solution, without giving correct answer.
Elaborated	General term relating to the provision of an explanation about why a specific response was correct or not and may allow the learner to review part of the instruction. It may or may not present the correct answer (see below for six types of elaborated feedback).
Attribute isolation	Elaborated feedback that presents information addressing central attributes of the target concept or skill being studied.
Topic contingent	Elaborated feedback providing the learner with information relating to the target topic currently being studied. May entail simply reteaching material.
Response contingent	Elaborated feedback that focuses on the learner's specific response. It may describe why the incorrect answer is wrong and why the correct answer is correct. This does not use formal error analysis.
Hints/cues/prompts	Elaborated feedback guiding the learner in the right direction, e.g., strategic hint on what to do next or a worked example or demonstration. Avoids explicitly presenting the correct answer.
Bugs/misconceptions	Elaborated feedback requiring error analysis and diagnosis. It provides information about the learner's specific errors or misconceptions (e.g., what is wrong and why).
Informative tutoring	The most elaborated feedback (from Narciss & Huth, 2004), this presents verification feedback, error flagging, and strategic hints on how to proceed. The correct answer is not usually provided.

as "topic contingent" feedback), but Bunderson and Olsen (1983) found no difference between these two feedback approaches.

To untangle these conflicting findings, Sleeman et al. (1989) conducted three studies that explicitly compared error-specific or model-based remediation (MBR;