

## Prevention of errors and ensuring errorless learning in the classroom

**Errors “stick” in memory because of emotionality:** Errors seem to “stick” in memory more readily than correct responses for students with significant memory problems. This may be because errors are associated with embarrassment or anger or other strong emotions that “drive in” the incorrect response and make that response more likely the next time.

If the student does not remember that the response was an error – at the level of consciousness they may have forgotten the entire experience – then the error will continue to be produced and may be difficult to eradicate. This is one important reason to minimize errors in the learning experiences of students with memory impairment.

**Errors may “stick” in memory because they are self-generated:** Errors may “stick” more readily because erroneous responses are self-generated and self-generated responses may be more likely to be retained. This phenomenon creates an interesting challenge for teachers.

### Strategies for adopting errorless learning

**Adjust your expectations appropriately.** Do not ask for student responses unless you are at least 90% sure that the student is able to give the correct response.

**Make sure that students are completely clear about what is expected of them.**

Ensure instructions are very clear and well understood by the student

Working collaboratively with the student before asking them to do it by themselves

Gradually withdrawing your support – and being prepared to offer more support in the event of difficulty.

Complete a task collaboratively with the student. “Let’s do this together” is a better starting activity than “Let’s see if you can do this” for students who need errorless learning.

Or “Let’s figure out what this means” is a better orientation to a reading comprehension task than, “Now, explain to me what that passage means”

**Make the task doable** by either

- Breaking it into parts and teaching the parts separately
- Giving the student responsibility for only one or two components of a larger task while you do the rest. For example, the task of remembering a story that was read can be made doable by asking the student to listen for only one fact in the story and subsequently asking him to remember only that one fact.
- Alternatively, the teacher and the student can collaboratively retell the entire story, with the student contributing only one or two components. The advantage of the latter approach is that the meaning of the entire story is held together rather than being fragmented into parts. In either case, gradually add components as the student achieves mastery.

**Anticipate problems and “pre-correct”.** For example, if the student is reading and the next sentence has a word in it that you doubt the student can read, say something like, “I see a tricky word in the next sentence – the word is X – let me know if you need help when you get to that word.”

**Provide adequate cues.**

- **The cue can be the entire answer** (e.g., “I think these two numbers add up to 13; what do you think?”)
- **Or a sentence completion cue** (e.g., “The prime minister is David ... That’s right, Cameron”)
- **Or a semantic orienting cue** (e.g., a legislation is a law, so when we see a legislative position we know they are talking about laws and what is legal and illegal, we know this means what is within the law and what is against the law.
- **Multiple choice cuing may be helpful** (e.g., the prime minister at the time was a. Cameron, b. brown, or c. Thatcher).
- **The cue should be strong enough to elicit the correct response.** It would NOT be helpful, for example, to give a letter cue (e.g., “The capitol of England is LLLLLL...”) which might just produce an error response either spoken or just thought.

**Ensure large numbers of successful repetitions to ensure learning.** Students with significant memory problems may need to learn material much like we learn habits or rote procedures – with large amounts of successful repetition.