# 10 things the best AI learning software does (and most apps don't)

Peabody blog · Learning science · updated 2026-11-13

A top 10 from the 2025 and 2026 trials: what the best adaptive learning software does for a child, from naming mistakes to checking a skill weeks later.

The best AI learning software does ten things most apps skip: it names the mistake behind a wrong answer, steps in right after that mistake without being asked, never gives the answer before a real try, keeps most answers as wins, gets easier as fast as it gets harder, changes approach when a child is stuck, brings skills back weeks later, checks itself by what a child can do alone, tells a grown-up one thing to try, and asks for as little about the child as it can. The list comes from the randomized trials of 2025 and 2026 and the learning science behind them. Peabody (peabody.kids), free through the end of 2026, is measured against each one at the end of its entry.

## The top 10

### 1. It knows which mistake a wrong answer shows

With three answer boxes, a wrong pick is the most useful thing a child does. If each wrong box is built from a known mistake (adding instead of taking away, b for d, the smaller digit from the bigger one), the app learns what went wrong, not just that it did. This idea goes back to the "bug libraries" of the 1970s and is what Eedi's diagnostic questions are built on.

Peabody: yes for maths facts, phonics and the upper maths rungs; not yet for number sense and sentence questions.

### 2. It steps in right after the mistake, without being asked

In a 6,000-student study, AI help did most for the very next try after a wrong answer (NBER, 2026). In a two-year trial, students opened an optional AI tutor in only 17% of the sessions where they made a mistake (NBER, 2026). Help that waits to be asked mostly isn't used.

Peabody: after every miss, one line says what the mistake was, with a picture of the model.

### 3. It never gives the answer before a real try

Students who practised with a chatbot that gave answers did up to 17% worse on an exam without it than students who never had it (PNAS, 2025). A hint should point at the step, not the result.

Peabody: the retry hint names the mistake and never the answer.

## 4. It keeps most answers as wins

A child learns fastest when about 80 to 85% of answers on new material are right: hard enough to stretch, easy enough to keep going. Our post on the 85% rule explains where the number comes from.

Peabody: the brain steps down after misses, and games ask few questions on the default Light dial.

## 5. It gets easier as fast as it gets harder

Many apps only ever move up. A child who guessed well early ends up stuck on work that's too hard, and nothing brings them back. Good software drops a level as readily as it climbs one.

Peabody: a game's level can drop three steps and climbs only one above grade. A rung a child once passed doesn't yet re-open on its own; that's next on our list.

## 6. It changes approach when a child is stuck

Ten tries without three right in a row is "wheel-spinning": more of the same won't help. The fix is a different way in, an easier step underneath, or a worked example. Our post on how adaptive learning knows where a child is stuck shows how this works.

Peabody: yes, in that order: another way, the rung below, then a worked example.

## 7. It brings skills back weeks later

Getting something right today says little about next month. Spacing (bringing a skill back after days, then weeks) is one of the strongest findings in learning science. Our spacing explainer compares the schedules apps use.

Peabody: a skill comes back with a fresh question about 3 days, 2 weeks and 2 months after its question retires.

## 8. It judges itself by what a child can do alone, later

Practice scores with help on screen can rise while real learning falls, which is what the OECD's Digital Education Outlook 2026 warns about. The honest measure is a later question, with no help, on something not practised that day.

Peabody: those spaced checks are what our internal learning page reports. We have no independent trial yet, and we say so.

## 9. It tells a grown-up one thing to try

A chart of minutes isn't help. One plain line ("solid on subtraction within 20; tens and ones is new; try bundles of ten with spoons") is. In the Tutor CoPilot trial, advice to the adult tutor helped the weakest tutors most.

Peabody: a free grown-up account shows "one thing to try tonight".

## 10. It asks for as little about the child as it can

Learning software doesn't need a child's real name, face or voice recordings to work. The amended US children's privacy rule now requires a parent's separate permission before children's data is used to train AI.

Peabody: children pick a made-up name, and practice records answers and timing only.

## What's not on the list

A chat window, a bigger AI model, and a streak counter. None of them showed up in what made the trials work. The common thread in the studies with real gains was structure: a bounded task, a known answer, help at the moment of the mistake, and often a person nearby.

## Try it

Take our three-minute quiz, what makes AI learning software work?, or use the nine-layer checklist on the app your child uses most. To see these ten in a game, start free in any browser, or open a story in the library.

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Free at peabody.kids/blog/top-10-things-the-best-ai-learning-software-does