

# Interleaving Study Plan Builder

Mix subjects and problem types for deeper understanding and better transfer

Interleaving means mixing different topics, subjects, or problem types within a single study session instead of practicing one thing over and over (blocked practice). It feels harder — and that's the point. The effort of switching forces the brain to identify which strategy applies to which problem, building flexible, transferable knowledge. Research by Rohrer and Taylor (2007) found interleaving improved math performance by 43% compared to blocked practice on a delayed test.

## Blocked vs. Interleaved Practice

### Blocked (Less Effective)

- ✓ 20 addition problems in a row
- ✓ Then 20 subtraction problems
- ✓ Then 20 multiplication problems
- ✓ Feels easier and more fluent
- ✓ Performance LOOKS better during practice
- ✓ But less is retained long-term

### Interleaved (More Effective)

- ✗ Addition, subtraction, multiplication mixed
- ✗ Child must identify which operation to use
- ✗ Constantly switching strategies
- ✗ Feels harder and more frustrating
- ✗ Performance LOOKS worse during practice
- ✗ But significantly more is retained

### IMPORTANT

Interleaving feels less productive than blocked practice. Your child will complain. Their practice scores may drop. This is normal. The learning is happening beneath the surface. Trust the process.

## How to Build an Interleaved Session

- 1 Pick 3–4 topics or problem types from the same subject area
- 2 Create or gather 4–5 practice items for each topic
- 3 Shuffle them into a random order (literally mix the cards or problems)
- 4 Work through the mixed set without grouping by type
- 5 After each item, note which topic it belongs to — this forces discrimination
- 6 Review errors by topic at the end to identify weak areas

## Interleaving Schedule Template

Plan each study session with 3–4 interleaved subjects or topics. Rotate which subjects appear together to create variety.

TIME BLOCK	MONDAY	WEDNESDAY	FRIDAY
Block 1 (15 min)	Math: mixed operations	Science: mixed concepts	Reading: mixed genres
Block 2 (15 min)	Science: mixed concepts	Language: grammar + vocab	Math: word problems + equations
Block 3 (15 min)	Language: grammar + vocab	Math: fractions + decimals	Science: mixed review
Break (5 min)	Movement break	Movement break	Movement break
Block 4 (15 min)	Mixed review: all subjects	Mixed review: all subjects	Mixed review: all subjects

## Subject-Specific Interleaving Ideas

SUBJECT	TOPICS TO INTERLEAVE
Math	Addition, subtraction, multiplication, division mixed in one problem set
Math (older)	Fractions, decimals, percentages, ratios in one worksheet
Reading	Fiction and non-fiction passages alternated; different question types mixed
Science	Biology, chemistry, and physics concepts within the same review session
History	Different time periods or civilizations compared within one session
Music	Alternate between scales, songs, sight-reading, and rhythm exercises
Foreign language	Vocabulary, grammar, listening, and speaking rotated every 10 minutes

Start interleaving only after initial learning has occurred. A child needs to understand each concept individually before mixing them. Use blocked practice to introduce new material, then switch to interleaved practice for review and reinforcement.

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