Education & Learning / Learning Acceleration

Identify specific learning gaps and prescribe targeted interventions — gap analysis for accelerated remediation.
Difficulty: Advanced
Model: GPT-4 / Claude / Gemini
Use Case: Gap Analysis, Remediation
Updated: June 2026
Why This Prompt Exists
Generic remediation wastes time. Students need specific gaps identified and targeted interventions. Most interventions are one-size-fits-all — and miss the root cause.

You get:

- reteaching entire units when only one skill is missing
- interventions that don’t address the actual gap
- students stuck on prerequisite skills (can’t move forward)
- no diagnosis before prescription (guessing, not knowing)
- wasted time on what students already know

But diagnostic prescriptive models have structure:

- diagnostic: pinpoint specific gaps (not just “struggling”)
- prerequisite chain: identify what skills are missing
- prescription: targeted intervention for each gap
- acceleration: path back to grade-level content
- progress monitoring: check if intervention worked

Without diagnosis, prescription is guessing.
This prompt identifies specific gaps and prescribes targeted interventions.

The Prompt

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Assume the role of a diagnostic prescriptive specialist who identifies learning gaps.

Your task is to pinpoint specific gaps and prescribe targeted interventions.

Generate:

1. STUDENT PERFORMANCE DATA
   - Grade level: [X]
   - Target skill/standard: [what they should know]
   - Assessment evidence: [what they got wrong]
   - Prior knowledge: [what they already know]

2. PREREQUISITE SKILL CHAIN

[Target skill]
    ↑ requires
[Prerequisite skill B]
    ↑ requires
[Prerequisite skill A]
    ↑ requires
[Foundational skill]

3. GAP ANALYSIS

| Skill | Status | Evidence | Root Cause |
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|-------|--------|----------|------------|
| Foundational skill | [Mastered / Partial / Missing] | [data] | [why]
|
| Prerequisite A | [Mastered / Partial / Missing] | [data] | [why] |
| Prerequisite B | [Mastered / Partial / Missing] | [data] | [why] |
| Target skill | [Mastered / Partial / Missing] | [data] | [why] |

4. DIAGNOSIS
   - Primary gap: [the missing skill preventing progress]
   - Secondary gaps: [related missing skills]
   - False mastery: [skills they appear to know but don't]

5. PRESCRIPTION (targeted interventions)

| Gap | Intervention Type | Activity | Duration | Success Criterion |
|-----|------------------|----------|----------|-------------------|
| [skill] | Direct instruction | [specific lesson] | X min | [measure]
|
| [skill] | Guided practice | [activity] | X min | [measure] |
| [skill] | Independent practice | [assignment] | X min | [measure] |

6. ACCELERATION PATHWAY

| Phase | Focus | Duration | Bridge to Grade Level |
|-------|-------|----------|----------------------|
| 1 | Foundational skill | X days | [how it connects] |
| 2 | Prerequisite A | X days | [how it connects] |
| 3 | Prerequisite B | X days | [how it connects] |
| 4 | Target skill | X days | Grade-level mastery |
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7. PROGRESS MONITORING

Checkpoint	Skill	Assessment	Success Criterion	Next Step
1	[skill]	[type]	[score]	Advance or re-teach
2	[skill]	[type]	[score]	Advance or re-teach

8. COMMON DIAGNOSTIC MISTAKES

Mistake	Why It Fails	Correct Approach
No prerequisite analysis	Missing root cause	Map prerequisite chain
Teaching grade-level content first	Student not ready	Backfill prerequisites
One intervention for all gaps	Misses specific needs	Targeted per gap
No progress monitoring	Don't know if it worked	Check after intervention
Skipping foundational skills	Gaps persist	Address root cause first

INPUTS:

Grade level:
[PASTE GRADE]

Target skill/standard:
[PASTE SKILL]

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Assessment evidence (what they got wrong):
[PASTE ERRORS]

Prior knowledge (what they already know):
[PASTE KNOWLEDGE]

Available intervention time:
[E.G., "30 min/day", "1 hour/week", "pull-out"]

RULES:
- Diagnose before prescribing (find the root cause gap)
- Map prerequisite chain (what must come before what)
- Address foundational skills first (gaps at lower levels block higher skills)
- Target interventions to specific gaps (not generic remediation)
- Include success criteria (know when the gap is closed)
- Monitor progress after intervention (did it work?)
- Bridge back to grade-level content (acceleration, not just remediation)
```

How To Use It

- Diagnose before prescribing — find the root cause gap, don’t guess.
- Map prerequisite chain — know what must come before what.
- Address foundational skills first — gaps at lower levels block higher skills.
- Target interventions to specific gaps — not generic remediation for everything.
- Include success criteria — know when the gap is actually closed.
- Monitor progress after intervention — did it work? If not, adjust.
- Bridge back to grade-level content — acceleration, not just remediation.

Example Input

Grade level: “5th grade”

Target skill/standard: “Multiply fractions (5.NF.4)”

Assessment evidence: “Student can multiply 1/2 × 1/3 but gets 2/3 × 3/4 wrong (answers 6/12 but doesn’t simplify; answers 5/7 when problem is 2/3 × 3/4)”

Prior knowledge: “Student understands basic multiplication facts, can identify numerator and denominator”

Available intervention time: “20 minutes daily for 2 weeks”

Why It Works
Generic remediation reteaches entire units when only one skill is missing. This wastes time and misses the root cause.

This framework improves outcomes by forcing:

- prerequisite skill chain mapping (what must come before the target)
- gap analysis per skill (mastered, partial, or missing)
- targeted prescription (specific intervention per gap)
- acceleration pathway (back to grade-level content)
- progress monitoring (checking if intervention worked)

Failure modes this prevents:

- reteaching entire units when only one skill is missing
- interventions that don’t address the actual gap
- students stuck on prerequisite skills (can’t move forward)
- no diagnosis before prescription (guessing, not knowing)

This improves on: Generic remediation. Diagnostic prescriptive models target the specific gap and accelerate learning.

Related to: LA-02 (Scaffolding) for just-in-time support; LA-05 (Intervention Tiers) for intensity matching.

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See also Just-in-Time Scaffolding