

Dosage for Learners in Grades K–5

Exact Path may be used in a variety of ways. Duration and frequency are both important in all cases.

- Duration: an investment of at least **20 minutes per session per subject area** enables the learner to experience a coherent portion of instruction, practice, or assessment (progress check or mastery).
- Frequency: a minimum of **two sessions per week per subject** activates learning that builds from one session to the next.

Dosage by Learning Goal and Implementation Model

Implementation	Goal	Dose per week per subject*
Tier 1 Differentiation	Support on-level learning, fill gaps, and provide reinforcement and extensions. Target completing a grade level's work in a year.	40–60 minutes per week per subject Examples: <ul style="list-style-type: none"> • 20 minutes two times per week • 20 minutes three times per week
Tier 2 or 3 Intervention	Repair foundations and fill gaps from previous years. Target completing 1.5 to 2 grade levels' work in a year.	90–150 minutes per week per subject Examples: <ul style="list-style-type: none"> • 30 minutes three times per week • 30 minutes five times per week

**Typical RTI/MTSS cycles are 8–20 or more weeks of instruction followed by re-evaluation of need, depending on Tier. Exact Path's diagnostic assessment is recommended for administration 3 times per academic calendar.*

Exact Path Implementations

- Tier 1 instruction is designed to include differentiation for all learners.
- Tier 2 and 3 instruction is designed to provide intensified instruction (smaller groups, additional instruction time) for learners who need more instructional support.
- Introduction or reteaching of grade-level concepts is another way Exact Path can be used. The dosage recommendations in this document do not address this implementation model.

The Science Behind the Recommendations

1. RTI Network Recommendations

The [RTI Network](#) recommends the following intervention time for each tier:

- Tier 2: Maximum of 30 minutes per day for 3–5 days per week, maximum of 150 minutes per week. Recommended maximum of 37.5 hours of intervention in a school year.
- Tier 3: Maximum of 120 minutes per day up to 5 days per week, maximum of 600 minutes per week. Recommended maximum of 360 hours of intervention in a school year.

2. IRIS Center Recommendations

The [IRIS Center](#) provides guidelines and predictions of student need.

- Traditionally 5–10% of learners do not respond to primary and targeted instruction and require intensive intervention (Tier 3). Due to the impact of COVID-19 on learning, the Center expects even more students to require Tier 3 individualized instruction.
- Research on elementary Tier 3 intervention efficacy suggests 8–16 weeks of 30–120 minutes per day.
- Recommended ways to intensify instruction for at-risk learners are to:
 - change length or frequency of sessions and/or the duration of the intervention.
 - manage the learning environment to increase attention and engagement.
 - modify delivery of instruction (for example, systematic, explicit instruction; frequent opportunities to respond and practice; including specific feedback).

3. Exact Path Efficacy Study

A 2018 [efficacy study](#) showed that students who completed at least 8 skills in the fall semester showed significant learning gains compared to learners who had no learning path activity. Completing 8 skills is possible using the dosage recommendations for Tier 1 learners.

Current Dosage Recommendations and Previous Dosage Recommendations

Dosage recommendations for Exact Path are being changed to reflect (a) expectations that Tier 1 students learn a least a year's worth of work over a 36-week school year and (b) current learning science recommendations for Tier 2 and 3 instruction. Previous dosage recommendations focused on a minimum dosage that would positively impact learners' achievement. The current recommendations break out dosage according to the *goal and implementation model* of product use: grade-level differentiation (Tier 1) and/or intervention/unfinished learning (Tiers 2 and 3). Increasing the previous 30-minute weekly dosage for Tier 1 learners to 40 minutes maintains the original goal of positive impact and also allows learners to accomplish one grade-level's scope and sequence within a 36-week school year. Similarly, increasing dosage for Tiers 2 and 3 students aligns with scientifically based research in the intervention field and allows these students to attain substantially *more* than one year's academic growth when coupled with individualized education plans and teacher intervention. In summary, increasing dosage for all learners allows students to build an appropriate trajectory of grade-level and/or intervention outcomes: a full year's worth of work in Tier 1 instruction and substantially more than one year's academic growth in Tiers 2 and 3.