



## Dosage for Learners in Grades K–8

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 20–30 minutes per session per subject area enables the K–8 learner to experience a coherent portion of instruction, practice, or assessment (progress check or mastery).

**Frequency:** at Grades K–5, a minimum of two sessions per week per subject activates learning that builds from one session to the next. Daily sessions are recommended at Grades 6–8, perhaps taking advantage of dedicated class periods that many middle schools have in place for intervention, enrichment, or study hall.

### Exact Path Implementations

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

## Dosage by Learning Goal and Implementation Model

Implementation	Goal	Grades K–5 dose per week per subject*	Grades 6–8 dose per week per subject
<b>Tier 1 Differentiation</b>	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 <b>Examples:</b> <ul style="list-style-type: none"> <li>• 20 minutes two times per week</li> <li>• 20 minutes three times per week</li> </ul>	
<b>Tier 2 or 3 Intervention</b>	Repair foundations and fill gaps from previous years.  Target completing 1.5 to 2 grade levels of work in a year.	90–150 minutes per week per subject <b>Examples:</b> <ul style="list-style-type: none"> <li>• 30 minutes three times per week</li> <li>• 30 minutes five times per week</li> </ul>	150–200 minutes per week per subject <b>Examples:</b> <ul style="list-style-type: none"> <li>• 30 minutes five times per week</li> <li>• 30 minutes five times per week</li> </ul>

\*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 three times per academic calendar year.

## The Science Behind the Recommendations

### RTI Network Recommendations

The RTI Network recommends the following intervention time for each tier:

- Tier 2, Grades K–5: 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, Grades K–5: 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.
- Tiers 2 and 3, Grades 6–8: Approximately 40 minutes each day, for a maximum of 20 weeks.

### 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 increase in unfinished 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 of remediation per day. Likewise, research suggests secondary students may need additional intervention time and duration to make progress.
- 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)

### 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 K–5 Dosage Recommendations and Previous Dosage Recommendations

Dosage recommendations for Exact Path Grades K–5 are being changed to reflect expectations for Tier 1 students and current learning science recommendations for Tier 2 and 3 instruction. The updated 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 dosage for Tier 1 learners 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 Tier 2 and 3 students allows these learners 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 them 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.