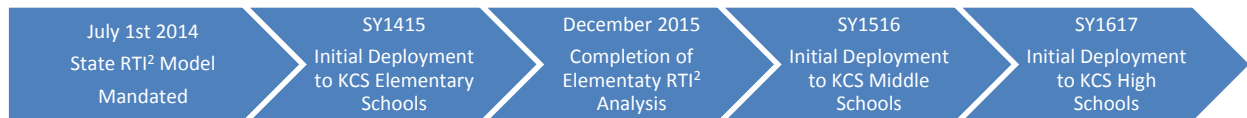


## The Implementation of RTI<sup>2</sup> in the Knox County Middle Schools

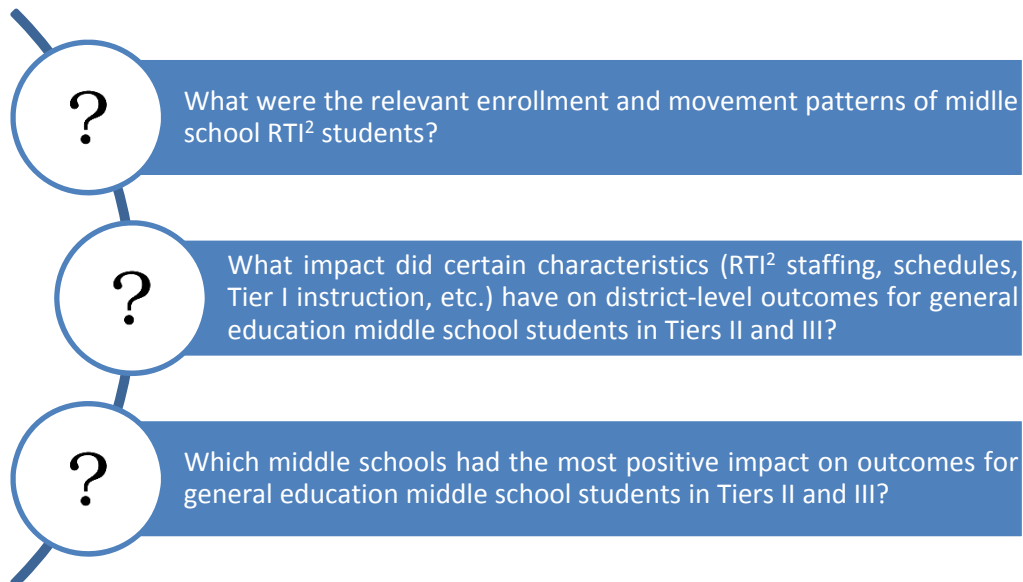
Clint Sattler, Supervisor of Research and Evaluation

### Overview

In the 2015-2016 school year (SY1516), the state of Tennessee mandated the expansion of their Response to Instruction and Intervention (RTI<sup>2</sup>) framework to the middle school level. The state RTI<sup>2</sup> framework was created in order to standardize the disparate practices that were being used across the state to provide enrichment to high performing students and support struggling students. The RTI<sup>2</sup> framework promotes individualization to meet student needs through core instruction and additional instruction provided in tiered intervention classes.



The effective implementation of academic interventions is a primary goal of the district's strategic plan, *Excellence for Every Child*. The district's RTI<sup>2</sup> leadership team defined the following research questions in order to determine if our strategic goals were effectively being met.





**What were the relevant enrollment and movement patterns of the students in the first year of the Knox County Schools' middle school RTI<sup>2</sup> initiative?**

Although the majority of middle school students who were enrolled in RTI<sup>2</sup> in SY1516 were receiving intervention instruction in Reading/Language Arts (RLA), the number of students served in math interventions increased in comparison to the elementary school level. This indicated a greater need for strong math intervention teachers at the secondary level.

The demographics of the students placed in Tiers II and III were highly variable across the schools of Knox County. The enrollment of English language learners and students with disabilities substantially increased at the middle school level and led to new challenges related to the implementation of RTI<sup>2</sup>. The district should ensure that middle school RTI<sup>2</sup> instructors have access to the appropriate resources and supports so that the unique needs of this diverse set of students is met.



**What impact did certain characteristics (RTI<sup>2</sup> staffing, schedules, Tier I instruction, etc.) have on district-level outcomes for general education middle school students in Tiers II and III?**

Quantitative studies indicated that there were characteristics of RTI<sup>2</sup> that had a significant impact on the rate of improvement of a subset of RTI<sup>2</sup> students (general education students with grade-level progress monitoring data points). The following student and intervention characteristics affected the observed rate of improvement, as measured by the available progress monitoring data, on all subjects and tiers:

- The higher a student's initial NCE on their progress monitoring assessment, the less positive the rate of improvement subsequently measured.
- The larger the intervention class, the more positive the rate of improvement on a student's progress monitoring assessment. There are real limits to class size, however, as imposed by state policy.
- Alternative block schedules correlated with less positive rates of improvement on students' progress monitoring assessment when compared to everyday intervention schedules. Although the results were less positive, this schedule allowed for increased numbers of students to be enrolled in intervention classes.



**Which middle schools had the most positive impact on outcomes for general education middle school students in Tiers II and III?**

A multiple measures system was used to identify RTI<sup>2</sup> exemplar schools. The metrics included 1) estimates of school effects on progress monitoring rates of improvement, 2) the percentage of students moving to less intensive tiers, and 3) qualitative judgement of content specialists. The methodology identified the following schools as district-level exemplars in Knox County:

**All content areas and tiers:** West Valley Middle School and Cedar Bluff Middle School

**RLA, all tiers:** Farragut Middle School

**Math, all tiers:** Powell Middle School

Additionally, Northwest Middle School was also identified by all content experts as a leading RTI<sup>2</sup> implementer even though their quantitative results did not place them among the highest performing group of schools.