What Is the Evidence for an Uninterrupted, 90-Minute Literacy Instruction Block?

EDUCATION NORTHWEST LITERACY BRIEF

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The purpose of this brief is to provide educators with the background, rationale, and evidence for implementing an uninterrupted, 90-minute literacy block as part of a comprehensive approach to teaching reading in elementary schools.

Since the adoption of Common Core State Standards in 2010 and passage of the Every Student Succeeds Act (ESSA) in 2015, schools across the country have been reevaluating their literacy practices in light of the best available evidence. One such practice is the use of an uninterrupted, 90-minute literacy block for early reading instruction. In the early 2000s this type of literacy block became a cornerstone of instruction for many elementary schools. In recent years, educators have questioned its use and have had difficulty tracing the origin of the practice and the evidence that supports it (U.S. Department of Education, Institute of Education Sciences, 2013; 2014). The purpose of this brief is to provide educators with the background, rationale, and evidence for implementing an uninterrupted, 90-minute literacy block as part of a comprehensive approach to teaching reading in elementary schools.

THE NATIONAL READING PANEL AND THE BIG 5

The first place one might expect to find evidence for this practice is in the seminal report of the National Reading Panel ([NRP], 2000), which established the importance of ensuring that high-quality literacy instruction includes the teaching of phonological awareness, phonics, fluency, vocabulary, and comprehension. In the years since the report was published, these five elements have become widely known as the Big 5. The Big 5 are the foundation of what is taught in the uninterrupted, 90-minute block, so it may seem surprising, then, that there is no mention of a specific recommendation for time allocation in the NRP report.

Prior to the NRP report there was very little national consensus about elementary-level reading instruction and the role of phonics. The curricular materials used by most public elementary schools did not cover all five elements consistently, and there was still ongoing debate about the relative benefits of phonics versus whole-language approaches to reading. The evidence
presented in the NRP report has been repeatedly supported in the years since it was published, however, and recent research has confirmed the generalizability of its findings to an “expanded range of students,” such as students who are both younger and older than K–3, as well as English language learners (Shanahan, 2017).

While the NRP did attempt to find a connection to overall instructional time, they reported that the available evidence was both inconsistent and inadequate (NRP, 2000, pp. 5–12). It’s important to note that the NRP only included findings from studies that used experimental and quasi-experimental designs. Under ESSA guidelines, these types of studies would be classified as the two highest levels of evidence (strong and moderate) of the four levels described as acceptable. In 2000, most of the studies that examined the effects of instructional time fell into the two lower levels of evidence (promising and demonstrates a rationale), which the NRP did not consider. The panel did provide one example of a study that found positive effects in kindergarten programs that implemented systematic phonics instruction “for 1 hour per day for 12 weeks during the latter half of kindergarten” (NRP, 2000, pp. 2–124), but that alone was not enough to warrant a specific recommendation.

**READING FIRST AND THE RISE OF MULTI-TIERED SYSTEMS OF SUPPORT**

The Reading First program (Title I-B of the No Child Left Behind Act of 2001) was established shortly after the release of the NRP report and was designed to reflect its findings (U.S. House of Representatives, 1999). After the program was established, guidance documents from the U.S. Department of Education were the first to codify the expectation of an uninterrupted, 90-minute reading block (U.S. Department of Education, 2002; University of Texas at Austin, 2005). This raises an important question, however: If general consensus had emerged among the nation’s most prominent literacy researchers regarding the content of what is necessary to improve literacy instruction in grades K–3 (i.e., the Big 5), but not the overall time allocation, how then did the recommendation for implementing an uninterrupted, 90-minute reading block arise?

The translation of research and policy into practice is always complex, and Reading First was no different. While federal and state policies kept the focus on the Big 5 instructional practices, on a practical level, educators had to grapple with how best to implement those practices. To do so, they often had to rely on lower levels of evidence.

In reviewing the evidence behind the practice of an uninterrupted, 90-minute block, it is important to note that the constructs of response to intervention (RTI) and multi-tiered systems of support (MTSS) were not as well established or widely known in the early 2000s. As such, the literature at the time rarely used terms—such as “core instruction” and “tiered interventions”—that are now associated with the 90-minute reading block.

During this time the fields of literacy, school improvement, and special education research were beginning to converge around the concepts of core instruction and early, intensive intervention. Research conducted up to that point undergirds the now well-established practices of MTSS,
including well-defined core instruction, additional tiers of support, data-based decision-making, and the use of diagnostic assessments and progress monitoring (American Institutes for Research, n.d.). Despite the fact that the early Reading First guidance did not use MTSS-type terminology, it appears that the evidence base for the 90-minute block arose from this complex, difficult-to-trace mix of research, expert opinion, and practitioner knowledge. Under ESSA, this evidence would be considered to meet the “demonstrates a rationale” level of rigor.

**LITERACY BLOCKS IN THE EFFECTIVE SCHOOLS MOVEMENT**

In practice, many schools were already using uninterrupted, 90-minute literacy blocks in the 1990s. In the field of education research, the mid-1980s through 1990s are sometimes referred to as the Effective Schools Movement. Researchers were beginning to transition from descriptive research (describing what high- and low-performing schools seemed to be doing) to more causal implementation research (examining the cause-and-effect relationship between specific practices that were intended to improve low-performing schools) (Lezotte, 2009; Underwood, 2013). Various universities and organizations, including the Success for All Foundation, were designing methods to test how to turn around the performance trajectory of low-performing schools.

One outcome of the Effective Schools Movement was that literacy research was frequently linked to early efforts to scale up school improvement demonstration programs. Success for All, for example, was a school restructuring effort with a heavy focus on early literacy instruction. The program received significant attention and was ultimately the focus of several research studies (U.S. Department of Education, 2017; Burns, Griffin, & Snow, 1999; Snow et al., 1998). As a result, its use of a 90-minute literacy block was frequently mentioned as an example of how to prevent reading difficulties (Snow et al., 1998). While the early literature describing the Success for All literacy block does not use the term “uninterrupted,” the reports and descriptive information provided by participants in the case studies suggest that this was indeed how the approach was implemented.

The term “uninterrupted” seems to have been added by researchers, evaluators, and practitioners at the advent of Reading First to describe what the research community had uncovered as a “promising practice,” meaning it had a strong rationale and theory behind it. The term was likely intended to help practitioners translate the theory into practice. For example, Quartarola’s (1984) seminal work on “time on task” had shown strong evidence that the quality of instructional time was at least as important as the quantity of allocated instructional time (Florida State University, n.d.; REL Southeast, 2013). Time allocations were important, but they were not sufficient to establish an instructional program that met students’ needs. Rather, schools needed to attend more deeply to both the amount and quality of how instructional time was spent. This was summarized by another school effectiveness researcher:

> “Given the positive relationship between engaged time and learning, there is a clear logic behind the protected classroom time strategy—committing a larger portion of the school day to uninterrupted teaching increases the certainty of higher student achievement.” (Rosenholtz, 1985, emphasis added).
This reference to “uninterrupted teaching” appears to be the first mention in the literature, but the author was not talking specifically about literacy and was not attempting to define the ideal length of time for a literacy block.

Essentially, by the time the uninterrupted, 90-minute reading block came to be a requirement of Reading First, leading researchers had come to realize that schools frequently had schedules that allocated plenty of time to literacy, for example, but it was clear that the quality of instruction during that allocated time was frequently not conducive to high levels of learning. One reference to the quality of time can be found in the influential publication of *Preventing Reading Difficulties in Young Children* (Snow et al., 1998). The authors point out that the ways in which schools allocate and spend their time can have notable negative implications for literacy achievement. Nearly a decade earlier, a long-running school effectiveness study (Teddlie et al., 1989) had found that “classroom practices in ineffective schools (regardless of community SES)” demonstrated:

- Substantially less attention paid to student time on task
- Less delivery of high-quality instructional material
- A lack of belief among teachers that students could attain high academic expectations
- More frequent interruptions to instruction

Researchers had long known that schools with large populations of at-risk students (e.g., minority ethnic groups, low socioeconomic status, and students labeled as having learning disabilities) were more likely to be underperforming in literacy outcomes, but the school level factors identified in the school effectiveness studies were clearly under the control of educators.

By the late 1990s, researchers were finding schools that were effectively addressing these school-level factors and improving literacy outcomes against all odds. These schools were not only utilizing evidence-based instruction in each of the Big 5 areas but also attending to a few accompanying conditions related to the uninterrupted block. First, these schools implemented or restructured their primary literacy instruction (i.e., Tier I core instruction) into blocks that lasted from 90 to 120 minutes per day (Denton, Foorman, & Mathes, 2003; Burns, Griffin, & Snow, 1999; Snow et al., 1998). Second, these 90- or 120-minute literacy blocks were treated as “sacred time” (Burns, Griffin, & Snow, 1999) during which teachers delivered “uninterrupted reading instruction” so engaging that there were “virtually no discipline problems during the two-hour period” (Denton et al., 2003). Third, schools that beat the odds also provided intensive “early intervention” for students who were struggling (what is now commonly referred to as Tiers II and III instruction), which extended their literacy instruction by 30 to 60 minutes per day. When these interventions were not enough, schools often added even more instructional time either before or after school (Denton et al., 2003; Burns, Griffin, & Snow, 1999; Snow et al., 1998).
MISALIGNMENT BETWEEN TEACHER PERCEPTIONS, EVIDENCE, AND TIME

While the uninterrupted, 90-minute reading block became widely adopted in theory during the Reading First years (2003–2010), actual implementation varied deeply across states and schools. As Mitchell and colleagues (2008) established, the Reading First impact study (Gamse, Jacob, Horst, Boulay, & Unlu, 2008) was fundamentally flawed, and this led to the misinformed decision to end the program. Nonetheless, the Mitchell report highlights an interesting finding from the impact study, which has significant implications for how literacy blocks should be implemented in the future: In the schools that participated in the study, the average amount of time spent on reading increased, on average, to 59 minutes per day. This was a significant increase from previous practice, but fell well short of what was required under Reading First guidelines (90 minutes with additional 20–40 minutes of intervention).

After Reading First, researchers continued to raise other concerns about how teachers were allocating time for the literacy block. For example, Furry & Domaradzki (2010) noted that the Reading First impact study included another strange anomaly—teachers perceived they were allocating an average of 112 minutes of literacy instruction each day in grades 1 and 2, while trained observers had tallied just 59 minutes of actual time spent on the Big 5 in the same classrooms. In other words, most teachers had a misperception about the evidence on effective literacy practice—either they did not understand the importance of the full time allocation or they did not understand the importance of delivering it in an uninterrupted block, or both. As a result, their students received far less instruction than they needed.

This misalignment between evidence-based practices and actual time allocation has been confirmed by researchers in more recent years. For example, Spear-Swerling and Zibulsky (2014) concluded that teachers lack the depth of knowledge necessary to make evidence-based decisions related to time allocation for literacy instruction. Meanwhile, Cunningham and colleagues (2009) discovered that there is a mismatch between the evidence base and teacher beliefs regarding how they should devote their time for literacy instruction. In other words, teachers often privilege instructional practices that are at odds with current research. Spear-Swerling & Zibulsky (2014) further concluded that “the choice of an appropriate literacy curriculum is extremely high-stakes, because a poor selection may undermine many students’ achievement … therefore, the choice must be a well-informed one” that is subsequently implemented with fidelity (p. 1372). Such a curriculum would ideally be evidence-based with clear indications for how teachers should allocate their time.

In a separate analysis, Furry and Domaradzki (2010) examined the relationship of instructional time and pacing in K–3 reading. Their synthesis of Reading First evaluations in eight states and the Bureau of Indian Education supports the rationale of the 90-minute block, especially when combined with strong schoolwide use of pacing calendars. In most cases, the state evaluations found strong positive connections between time allocation, use of time, instructional pacing, and student outcomes. Additionally, the evaluations showed that by 2008 the majority of Reading First school leaders and coaches believed that maintaining the uninterrupted, 90-minute literacy block was important for continued success (Furry & Domaradzki, 2010).
STATE OF THE RESEARCH

It is worth questioning why there has been no strong, moderate, or promising evidence in the research base to validate the uninterrupted, 90-minute literacy block. It would seem that after Reading First was defunded in 2008, and the National Center for Reading Technical Assistance was closed in 2010, national efforts in literacy research substantially slowed. For example, there was a seven-year gap with no national center dedicated solely to literacy instruction until the National Center on Improving Literacy was founded in 2017, and that center has a narrow focus on supporting students with dyslexia and other reading disabilities.

Meanwhile, between 2008 and 2010, the federal investment of $1 billion per year that had gone into K–3 literacy instruction through Reading First shifted to school improvement in general as part of the School Improvement Grant (SIG) program. In this context, while there has been much research that has validated and expanded the findings of the NRP report, there have been no new studies that have specifically tested and validated the uninterrupted, 90-minute reading block.

CONCLUSION

As of 2017, the literature still suggests that an uninterrupted block of at least 90 minutes is still an effective practice for early literacy instruction, even though the practice still falls in the demonstrates a rationale evidence level of ESSA. The available research includes the pedagogy of literacy strategies that engage students; the descriptive and causal implementation research on school effectiveness in the 1990s; studies about the importance of time use and allocation balanced with the reality of misperceptions among teachers about how to best allocate time for literacy instruction; studies about the negative effects of interruptions on student outcomes; and the Reading First evaluations that report schools’ perceived successes with the uninterrupted, 90-minute literacy block.

All of this evidence substantiates the use of the block as a best practice in literacy instruction and meets the ESSA requirements for evidence that demonstrates a strong rationale. For this reason, we continue to recommend the use of an uninterrupted, 90-minute block as the Tier I foundation for a strong literacy program.
References


TO LEARN MORE

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