



Thank you for your request to our REL Reference Desk regarding evidence-based information about the 90-minute reading block. Ask A REL is a collaborative reference desk service provided by the ten regional educational laboratories (REL) that, by design, functions much in the same way as a technical reference library. It provides references, referrals, and brief responses in the form of citations on research based education questions.

The information below represents the most rigorous research available. Researchers consider the type of methodology and give priority to research reports that employ well described and thorough methods. The resources were also selected based on the date of the publication with a preference for research from the last ten years. Additional criteria for inclusion include the source and funder of the resource

Question: What is the research regarding the uninterrupted 90-minute reading block?

Search Process

Key words and search strings used in the search: *instructional time AND reading; instructional time AND elementary; 90-minute reading block AND elementary schools; allocated learning time AND reading; 90-minute reading block*

Search databases and websites:

1. ERIC, <http://www.eric.ed.gov/>
2. JSTOR, <http://www.jstor.org/action/showAdvancedSearch>
3. Google Scholar, www.google.com/scholar
4. Institute of Education Sciences (IES) Resources, <http://ies.ed.gov>
5. What Works Clearinghouse, <http://ies.ed.gov/ncee/wwc/>

Sample Citations Retrieved:

Abt Associates Inc. (2011, February). *Evaluation of the expanded learning time initiative year four integrated report: 2009-10 Annual Report: Volume I*. Retrieved from http://www.abtassociates.com/reports/FINAL_MA_ELT_Report_Volume_I%20_2_16_11.pdf

Summary/Abstract: The Massachusetts Department of Elementary and Secondary Education (ESE) has supported a multi-year study of the Expanded Learning Time (ELT) initiative to learn about the process and impact of ELT. Abt Associates Inc. is conducting this research. The study has two components: 1) a planning and implementation component that explores the decision-making phase and subsequent execution of ELT in funded schools; and 2) an outcomes component that examines the outcomes of ELT for schools, teachers, and students. The overall ELT evaluation is guided by three research questions: (1) How has expanded learning time been



implemented in schools that receive ELT grants?; (2) What are the outcomes of expanded learning time for schools, students, and teachers?; and (3) What is the relationship between implementation and outcomes?

Hong, G. & Hong, Y. (2009). Reading instruction time and homogeneous grouping in kindergarten: An application of marginal mean weighting through stratification. *Educational Evaluation and Policy*, 31(1), 54-81. doi: 10.3102/0162373708328259

Summary/Abstract: A kindergartner's opportunities to develop reading and language arts skills are constrained by the amount of time allocated to reading instruction. In the meantime, the student's engagement in learning tasks may increase if the instruction has been adapted to his or her prior ability through homogeneous grouping. This study investigates whether the grouping effects on kindergartners' reading growth depend on the amount of reading instruction time and the intensity of grouping. To answer the study's research questions requires causal inferences about concurrent multivalued instructional treatments. The authors develop a procedure of applying the method of marginal mean weighting through stratification to multilevel educational data. Results from the Early Childhood Longitudinal Study Kindergarten cohort data set lend support to the theoretical hypothesis that when teachers allocate a substantial amount of time to reading instruction, homogeneous grouping helps kindergartners to gain more in reading. The authors find no effect of homogeneous grouping when the total amount of reading time is limited. They also find that the benefit of increasing reading instruction time becomes evident only if kindergarten teachers adapt instruction through homogeneous grouping. (Contains 7 notes, 8 tables, and 3 figures.)

Foorman, B. R. & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice* 16, 203–212. doi: 10.1111/0938-8982.00020

Summary/Abstract: The components of effective reading instruction are the same whether the focus is prevention or intervention: phonemic awareness and phonemic decoding skills, fluency in word recognition and text processing, construction of meaning, vocabulary, spelling, and writing. Findings from evidence-based research show dramatic reductions in the incidence of reading failure when explicit instruction in these components is provided by the classroom teacher. To address the needs of children most at risk of reading failure, the same instructional components are relevant but they need to be made more explicit and comprehensive, more intensive, and more supportive in small-group or one-on-one formats. The argument is made that by coordinating research evidence from effective classroom reading instruction with effective small-group and one-on-one reading instruction we can meet the literacy needs of all children.



Gettinger, M. (1985). Time allocated and time spent relative to time needed for learning as determinants of achievement. *Journal of Educational Psychology*, 77, 3-11.

Summary/Abstract: Fourth and fifth grade students (N=171) participated in three reading tasks to assess time needed for learning, time spent in learning, and time allocated for learning. Results indicated that spending and/or allocating insufficient learning time have a direct negative effect on achievement.

Gettinger, M. (1984). Achievement as a function of time spent in learning and time needed for learning. *American Educational Research Journal*, 21, 617-628. doi: 10.3102/00028312021003617

Summary/Abstract: The causal effects of time spent in learning (TSL) and time needed for learning (TTL) on reading and spelling achievement, as measured by standardized achievement, criterion test accuracy and retention, and teacher rating were investigated. The subjects were 171 fourth and fifth grade students. TTL was evaluated as the number of trials needed to master a learning or spelling task to 100% criterion. TSL was evaluated using the same procedure, except that children self-determined the number of trials they spent on an alternate task for each skill area. Within the model proposed, TTL contributed significantly to achievement, and its direct effect was greater than that of TSL. The data were also analyzed in terms of Carroll's (1963) model of learning. Results supported this model in which degree of learning is postulated to be a function of the ratio of TSL to TTL.

Mehta, P. D., Foorman, B. R., Branum-Martin, L., & Taylor, W. P. (2005). Literacy as a unidimensional multilevel construct: Validation, sources of influence, and implications in a longitudinal study in grades 1 to 4. *Scientific Studies of Reading*, 9, 85-116. doi: 10.1207/s1532799xssr0902_1

Summary/Abstract: This study examined the extent to which literacy is a unitary construct, the differences between literacy and general language competence, and the relative roles of teachers and students in predicting literacy outcomes. Much of past research failed to make a distinction between variability in outcomes for individual students and variability for outcomes in the classrooms students share (i.e., the classroom level). Utilizing data from 1,342 students in 127 classrooms in Grades 1 to 4 in 17 high-poverty schools, confirmatory factor models were fit with single- and two-factor structures at both student and classroom levels. Results support a unitary literacy factor for reading and spelling, with the role of phonological awareness as an indicator of literacy declining across the grades. Writing was the least related to the literacy factor but the most impacted by teacher effects. Language competence was distinct at the student level but



perfectly correlated with literacy at the classroom level. Implications for instruction and assessment of reading comprehension are discussed.

Moats, L., Foorman, B., & Taylor, P. (2006). How quality of writing instruction impacts high-risk fourth graders' writing. *Reading and Writing, 19*, 363-391. doi: 10.1007/s11145-005-4944-6

Summary/Abstract: From a larger longitudinal study of 610 fourth graders in 17 inner city schools, 40 students were randomly selected from 10 classrooms rated high (i.e., top quartile) or low (i.e., bottom quartile) in quality of writing instruction in grades 3 and 4. The written compositions of these students were scored in three ways: (1) according to a rating scale within a reliable scoring rubric, (2) according to countable surface features such as words correctly sequenced, and (3) according to the frequency of specific phonological, morphosyntactic, and orthographic errors in the children's writing. A multivariate analysis of variance was conducted to examine whether quality of writing instruction in grades 3 and 4 predicted students' writing performance at the end of grade 4. Students who received high quality instruction in fourth grade wrote longer compositions with more correctly spelled words than those who had poor quality writing instruction. There was a tendency for two years of quality instruction to be better than one, and, among students who had poor quality instruction in grade 3, compositions were longer in grade 4 when they received quality instruction in fourth grade. Foundational problems of language formulation, production and representation, however, were ubiquitous across the sample. Although these students were within the average range on standardized reading tests, spelling and writing were not developing at average levels. The study confirms the urgent need for more and better writing instruction for high risk, minority children.

Quartarola, B. (1984). *A research paper on time on task and the extended school day/year and their relationship to improving student achievement*. Burlingame, CA: Association of California School Administrators.

Summary/Abstract: A review of research on time on task and length of school day or year reveals that time is not the only variable significantly related to student achievement. Research indicates that increasing time in school will not automatically increase student achievement or raise standardized test scores. Other variables such as corrective and immediate feedback, attention to and transfer of prior learning, and active participation of the teacher with students are also important. Quality of time spent in the classroom, then, clearly bears a significant relationship to achievement.



Saunders, W. M, Foorman, B. R., Carlson, C. D. (2006). Is a separate block of time for oral English language development in programs for English learners needed? *The Elementary School Journal*, 107, 181-198. doi: 10.1086/510654

Summary/Abstract: The issue of whether to separate English language development (ELD) into a separate instructional block or whether to integrate it with reading/language arts instruction is an unanswered question with theoretical and practical implications. We addressed this question by observing instruction across the year in 85 kindergarten classrooms that varied in (a) whether ELD was a separate block and (b) whether the program was characterized as English immersion or bilingual. Observational data indicated that classrooms with separate ELD blocks had greater percentages of instructional time devoted to oral language and literacy activities for both types of programs. In comparison to English learners in classrooms without separate ELD blocks, English learners in classrooms with separate ELD blocks had modestly but significantly higher English oral language and literacy scores on the Woodcock Language Proficiency Battery, controlling for fall performance. Educational implications are discussed.

Referrals

Organizations:

National Center on Time & Learning: <http://www.timeandlearning.org>

Florida Center for Reading Research: <http://www.fcrr.org>

The Campaign for Grade-level Reading, <http://gradelevelreading.net/>

National Association of Elementary School Principals, <http://www.naesp.org/>

Federally Funded Resources:

- US Department of Education, Institute of Education Sciences (IES) Resources, <http://ies.ed.gov>
Publication search engine available at: <http://ies.ed.gov/pubsearch/>
- What Works Clearinghouse, <http://ies.ed.gov/ncee/wwc/>
- U.S. Department of Education: www.ed.gov

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